

**UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
WASHINGTON, D.C. 20549**

FORM 20-F

REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934

or

ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

For the fiscal year ended December 31, 2019

or

TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

or

SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934

Date of event requiring this shell company report: N/A

Commission file number 1-15224

COMPANHIA ENERGÉTICA DE MINAS GERAIS – CEMIG
(Exact name of Registrant as specified in its charter)

ENERGY CO OF MINAS GERAIS
(Translation of Registrant's name into English)

BRAZIL
(Jurisdiction of incorporation or organization)

1200, Avenida Barbacena; Belo Horizonte/MG, Brazil CEP 30190-131
(Address of principal executive offices)

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1200, Avenida Barbacena; Belo Horizonte/ MG, Brazil CEP 30190-131
(Name, Telephone, E-mail and/or Facsimile number and Address of Company Contact Person)

Securities registered or to be registered pursuant to Section 12(b) of the Act:

Title of each class:	Trading Symbol (s)	Name of exchange on which registered:
Preferred Shares, R\$5.00 par value	CIG	New York Stock Exchange*
American Depositary Shares, each representing 1 Preferred Share, without par value		New York Stock Exchange
Common Shares, R\$5.00 par value	CIG.C	New York Stock Exchange*
American Depositary Shares, each representing 1 Common Share, without par value		New York Stock Exchange

*Not for trading but only in connection with the registration of American Depositary Shares, pursuant to the requirements of the Securities and Exchange Commission.

Securities registered or to be registered pursuant to Section 12(g) of the Act: **None**

Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act: **None**

Indicate the number of outstanding shares of each of the issuer's classes of capital or common share as of the close of the period covered by the annual report:

487,614,213 Common Shares
971,138,388 Preferred Shares

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act.

Yes No

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934.

Yes No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports) and (2) has been subject to such filing requirements for the past 90 days.

Yes No

Indicate by check mark whether the registrant has submitted electronically every Interactive Data File required to be submitted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit such files).

Yes No

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of "accelerated filer and large accelerated filer" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer Accelerated filer Non accelerated filer Emerging growth company

If an emerging growth company that prepares its financial statements in accordance with U.S. GAAP, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards* provided pursuant to Section 13(a) of the Exchange Act.

* The term "new or revised financial accounting standard" refers to any update issued by the Financial Accounting Standards Board to its Accounting Standards Codification after April 5, 2012.

Indicate by check mark which basis of accounting the registrant has used to prepare the financial statements included in this filing:

U.S. GAAP International Financial Reporting Standards as issued by the International Accounting Standards Board Other

If "Other" has been checked in response to the previous question, indicate by check mark which financial statement item the registrant has elected to follow:

Item 17 Item 18

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act)

Yes No

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[Table of Contents](#)**RELIANCE ON THE SECURITIES AND EXCHANGE COMMISSION ORDER RELATING TO THE COVID-19 OUTBREAK**

On March 4, 2020, the U.S. Securities and Exchange Commission (the “SEC”) issued an order under Section 36 (Release No. 34-88318) of the Securities Exchange Act of 1934, as amended (“Exchange Act”), granting exemptions from specified provisions of the Exchange Act and certain rules thereunder. On March 25, 2020, the order was modified and superseded by a new SEC order (Release No. 34-88465), which provides conditional relief to public companies that are unable to timely comply with their filing obligations as a result of the novel coronavirus (“Covid-19”) outbreak (the “SEC Order”). The SEC Order provides that a registrant subject to the reporting requirements of Exchange Act Section 13(a) or 15(d), and any person required to make any filings with respect to such registrant, is exempt from any requirement to file or furnish materials with the Commission under Exchange Act Sections 13(a), 13(f), 13(g), 14(a), 14(c), 14(f), 15(d) and Regulations 13A, Regulation 13D-G (except for those provisions mandating the filing of Schedule 13D or amendments to Schedule 13D), 14A, 14C and 15D, and Exchange Act Rules 13f-1, and 14f-1, as applicable, if certain conditions are satisfied.

As set out in its 6-k form filed with the SEC on April 28, 2020 (File No.: 001-15224), Companhia Energética de Minas Gerais – CEMIG (the “Company”) relied on the SEC Order to delay the filing of its Annual Report on Form 20-F for the year ended December 31, 2019 (the “Report”) due to the circumstances related to Covid-19. In particular, Covid-19 has caused severe disruptions in travel and transportation and limited access to the Company’s facilities resulting in limited support from its staff. This has, in turn, delayed the Company’s ability to complete its annual review and prepare the Report.

[Table of Contents](#)**PRESENTATION OF FINANCIAL INFORMATION**

The **Companhia Energética de Minas Gerais – CEMIG** is a state-controlled mixed capital company (*sociedade por ações, de economia mista*) organized under the laws of the Federative Republic of Brazil, or Brazil. References in this annual report to “CEMIG,” the “CEMIG Group,” the “Company,” “we,” “us,” “our” and “ourselves” are to **Companhia Energética de Minas Gerais – CEMIG** and its consolidated subsidiaries, and references to “CEMIG Holding” are to **Companhia Energética de Minas Gerais – CEMIG** on an individual basis, except when the context otherwise requires. References to the “real,” “reais” or “RS” are to Brazilian *reais* (plural) and the Brazilian *real* (singular), the official currency of Brazil. References to “U.S. dollars,” “dollars” or “US\$” are to United States dollars.

We maintain our books and records in reais. We prepare our statutory financial statements in accordance with generally accepted accounting practices adopted in Brazil, and with International Financial Reporting Standards (“IFRS”), as issued by the International Accounting Standards Board (“IASB”). For purposes of this annual report, we prepared the consolidated statement of financial position as of December 31, 2019 and 2018 and the related consolidated statement of income and comprehensive income, changes in equity and cash flows for the years ended December 31 of 2019, 2018 and 2017, in reais in accordance with IFRS, as issued by the IASB.

Ernst & Young Auditores Independentes S.S. (“EY”) audited our consolidated financial statements as of and for the years ended December 31, 2019, 2018 and 2017. The financial statements of Madeira Energia S.A. as of and for the years ended December 31, 2019, 2018 and 2017 were audited by PricewaterhouseCoopers Auditores Independentes, whose reports related to those financial statements have been presented to EY and are the sole base for the opinion of EY on the financial statements of Madeira Energia S.A., which is an investment of the Company accounted for under the equity method.

This annual report contains translations of certain real amounts into U.S. dollars at specified rates solely for the convenience of the reader. Unless otherwise indicated, such U.S. dollar amounts have been translated from reais at an exchange rate of R\$4.0190 to US\$1.00, as certified for customs purposes by the U.S. Federal Reserve Board as of December 31, 2019. See “Item 3. Key Information – Exchange Rates” for additional information regarding exchange rates. We cannot guarantee that U.S. dollars can be converted into reais, or that reais can be converted into U.S. dollars, at the above rate or at any other rate.

[Table of Contents](#)**MARKET POSITION AND OTHER INFORMATION**

The information contained in this annual report regarding our market position is, unless otherwise indicated, presented for the year ended December 31, 2019. It is based on, or derived from, reports issued by the Brazilian National Electric Energy Agency (Agência Nacional de Energia Elétrica, or “ANEEL”), and by the Brazilian Electric Power Trading Chamber (Câmara de Comercialização de Energia Elétrica, or “CCEE”).

Certain terms are defined the first time they are used in this annual report. As used herein, all references to “GW” and “GWh” are to gigawatts and gigawatt hours, respectively, references to “MW” and “MWh” are to megawatts and megawatt-hours, respectively, and references to “kW” and “kWh” are to kilowatts and kilowatt-hours, respectively.

References in this annual report to the “common shares” and “preferred shares” are to our common shares and preferred shares, respectively. References to “Preferred American Depositary Shares” or “Preferred ADSs” are to American Depositary Shares, each representing one preferred share. References to “Common American Depositary Shares” or “Common ADSs” are to American Depositary Shares, each representing one common share. Our Preferred ADSs and Common ADSs are referred to collectively as “ADSs,” and our Preferred American Depositary Receipts, or Preferred ADRs, and Common American Depositary Receipts, or Common ADRs, are referred to collectively as “ADRs.”

The Preferred ADSs are evidenced by Preferred ADRs, issued pursuant to a Second Amended and Restated Deposit Agreement, dated as of August 10, 2001, as amended on June 11, 2007, by and among us, Citibank N.A., as depositary, and the holders and beneficial owners of Preferred ADSs evidenced by Preferred ADRs issued thereunder (the “Second Amended and Restated Deposit Agreement”). The Common ADSs are evidenced by Common ADRs, issued pursuant to a Deposit Agreement, dated as of June 12, 2007, by and among us, Citibank, N.A., as depositary, and the holders and beneficial owners of Common ADSs evidenced by Common ADRs issued thereunder (the “Common ADS Deposit Agreement” and, together with the Second Amended and Restated Deposit Agreement, the “Deposit Agreements”).

[Table of Contents](#)**FORWARD-LOOKING INFORMATION**

This annual report includes certain forward-looking statements, mainly in “Item 3. Key Information”, “Item 5. Operating and Financial Review and Prospects” and “Item 11. Quantitative and Qualitative Disclosures about Market Risk.” We have based these forward-looking statements largely on our current expectations and projections about future events and financial trends affecting our business. These forward-looking statements are subject to risks, uncertainties and contingencies including, but not limited to, the following:

- general economic, political and business conditions, principally in Brazil, the State of Minas Gerais (“Minas Gerais”), as well as other states in Brazil;
- inflation and fluctuations in exchange rates and in interest rates;
- increases in the costs of projects and delays or the failure to successfully complete projects;
- result in the failure of facilities to operate or generate income in accordance with our expectations;
- existing and future governmental regulation as to energy rates, energy usage, competition in our concession area and other matters;
- existing and future policies of the Federal Government of Brazil, which we refer to as the Federal Government;
- on-going high-profile anticorruption investigations in Brazil;
- our expectations and estimates concerning future financial performance and financing plans;
- our level, or maturity profile, of indebtedness;
- our ability to comply with financial covenants;
- the likelihood that we will receive payment in connection with accounts receivable;
- our capital expenditure plans;
- our ability to implement our divestment program;
- failure or hacking of our security and operational infrastructure or systems;
- our ability to renew our concessions, approvals and licenses on terms as favorable as those currently in effect or at all;
- our ability to integrate the operations of companies we have acquired and that we may acquire;
- changes in volumes and patterns of customer energy usage;
- competitive conditions in Brazil’s energy generation, transmission and distribution markets;
- trends in the energy generation, transmission and distribution industry in Brazil, particularly in Minas Gerais;
- changes in rainfall and the water levels in the reservoirs used to run our hydroelectric power generation facilities;
- existing and future policies of the government of Minas Gerais (the “State Government”), including policies affecting its investment in us and its plans for future expansion of energy generation, transmission and distribution in Minas Gerais;
- the duration and severity of the recent coronavirus (Covid-19) outbreak and its impacts on our business; and
- other risk factors identified in “Item 3. Key Information—Risk Factors.”

The words “believe,” “may,” “could,” “will,” “plan,” “estimate,” “continue,” “anticipate,” “seek,” “intend,” “expect” and similar words are intended to identify forward-looking statements. We do not undertake to publicly update or revise any forward-looking statements because of new information, future events or otherwise. Considering these risks and uncertainties, the forward-looking information, events and circumstances discussed in this annual report might not materialize as described. Our actual results and performance could differ substantially from those anticipated in our forward-looking statements.

[Table of Contents](#)**PART I****Item 1. Identity of Directors, Senior Management and Advisers**

Not applicable.

Item 2. Offer Statistics and Expected Timetable

Not applicable.

Item 3. Key Information***Selected Consolidated Financial Data******From January 1, 2019, we were required to adopt IFRS 16 – Leases (“IFRS 16”).***

IFRS 16, establishes principles for recognition, measurement, presentation and disclosure of leasing transactions and requires that lessees account all the leasing transactions in accordance with a single balance sheet model, similar to the accounting of finance leasing. At the leasing operation beginning date, the lessee recognizes a liability to make the payments (a lease liability) and an asset, representing the right of use the subject asset during the period of the leasing (a right-of-use asset). Lessees are required to recognize separately the interest expenses from the lease liability and the depreciation or amortization expense of the right-of-use asset.

Lessees are also required to revalue the lease liability when certain events occur (for example, change in the period of leasing, a change in the future payments of the leasing as a result of a change in an index, or a rate used to determine such payments). In general, the lessee will recognize the amount of the revaluation of the lease liability as an adjustment to the right-of-use asset.

The Company has performed an analysis of the initial adoption of IFRS 16 in their financial statements as from January 1, 2019, and elected to apply the recognition exemptions for short-term leases (contracts that, at the commencement date, have a lease term of 12 months or less and do not contain a purchase option), and leases for which the underlying asset is of low value.

We used the modified retrospective approach when adopting such standard; thus, we did not restate our financial statements as of and for the years ended December 31, 2018, 2017, 2016 and 2015 for the adoption of IFRS 16. Accordingly, our financial statements as of and for the year ended December 31, 2019 and our financial statements for the comparative periods are not directly comparable when it comes to such standard. For more information regarding the adoption of IFRS 16 and its effects on our financial statements, see note 2.4 to our Consolidated Financial Statements included in “Item 18. Financial Statements”.

From January 1, 2018, we were required to adopt IFRS 9 – Financial Instruments and IFRS 15 – Revenue from contracts with customers.

We are not required to retrospectively apply IFRS 9 and IFRS 15 to any periods prior to January 1, 2018. IFRS 9 introduced changes to the measurement and classification of financial instruments, as well as changes to the method for calculating impairment of financial instruments. IFRS 15 established a new method to recognize revenue from contracts with customers by applying a five-step analysis, including contract identification, performance obligation identification, transaction price determination, transaction price allocation and recognition of revenue. Our financial statements as of and for the years ended December 31, 2019 and 2018 reflect the adoption of IFRS 9 and IFRS 15. We used the modified retrospective approach when adopting such standards; thus, we did not restate our financial statements as of and for the years ended December 31, 2017, 2016 and 2015 for the adoption of IFRS 9 and IFRS 15. Accordingly, our financial statements as of and for the years ended December 31, 2019 and 2018 and our financial statements for the comparative periods are not directly comparable when it comes to such standards. For more information regarding the adoption of IFRS 9 and IFRS 15 see note 2.6 to our Consolidated Financial Statements included in “Item 18. Financial Statements”.

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The following tables present our selected consolidated financial and operating information prepared in accordance with IFRS as of the dates and for each of the periods indicated. You should read the following information together with our consolidated financial statements, including the notes thereto, included in this annual report and the information set forth in “Item 5. Operating and Financial Review and Prospects” and “Presentation of Financial Information”.

The selected consolidated financial data as of December 31, 2019 and 2018 and for each of the years ended December 31, 2019, 2018 and 2017, prepared in accordance with IFRS, has been derived from our audited consolidated financial statements and the notes thereto included elsewhere in this annual report. U.S. dollar amounts in the table below are presented for your convenience. Unless indicated otherwise, these U.S. dollar amounts have been translated from reais at R\$ 4.0190 per US\$ 1.00, the exchange rate as of December 31, 2019. The real has historically experienced high volatility. We cannot guarantee that U.S. dollars can or could have been converted into reais, or that reais can or could have been converted into U.S. dollars at the above rate or at any other rate. The selected consolidated financial data as of December 31, 2017, 2016 and 2015 and for each of the years ended December 31, 2016 and 2015 has been derived from our audited consolidated financial statements not included in this annual report on Form 20-F.

[Table of Contents](#)**Consolidated Statement of Income Data****Year Ended December 31,**

	2019	2019 (5)	2018 (4)	2017	2016	2015
	(in millions of US\$) (1)	(in millions of R\$ except per share/ADS data or otherwise indicated)				
Net operating revenue						
Energy sales to final customers	5,985	24,052	21,882	20,438	20,458	20,319
Revenue from wholesale supply to other concession holders	716	2,876	2,990	3,263	2,972	2,207
CVA (compensation for changes in 'Parcel A' items) and other financial components in tariff increases	14	58	1,973	988	(1,455)	1,704
Revenue from use of the energy distribution systems (TUSD)	677	2,722	2,045	1,611	1,705	1,465
Transmission concession revenue	125	504	411	371	312	261
Transmission assets - indemnity revenue	39	156	250	373	751	101
Generation assets - indemnity revenue	-	-	55	272	-	-
Adjustment to expectation of cash flow from indemnifiable Financial assets of the distribution concession	4	18	-	9	8	576
Revenue on financial updating of the Concession Grant Fee	79	318	321	317	300	—
Construction revenue	299	1,200	898	1,119	1,193	1,252
Energy transactions on the CCEE	107	432	217	860	161	2,425
Supply of gas	572	2,298	1,995	1,759	1,444	1,667
Fine for violation of service continuity indicator	(14)	(58)	(44)	-	-	-
Recovery of PIS/Pasep and Cofins taxes credits over ICMS	355	1,428	-	-	-	-
Other operating revenues	428	1,722	1,585	1,483	1,421	1,440
Deductions from revenue	(3,069)	(12,336)	(12,312)	(11,151)	(10,497)	(11,549)
Total net operating revenue	6,317	25,390	22,266	21,712	18,773	21,868
Operating costs and expenses						
Energy purchased for resale	(2,808)	(11,286)	(11,084)	(10,919)	(8,273)	(9,542)
Charges for use of the national grid	(355)	(1,426)	(1,479)	(1,174)	(947)	(999)
Depreciation and amortization	(238)	(958)	(835)	(850)	(834)	(835)
Personnel	(316)	(1,272)	(1,410)	(1,627)	(1,643)	(1,435)
Gas purchased for resale	(357)	(1,436)	(1,238)	(1,071)	(877)	(1,051)
Outsourced services	(308)	(1,239)	(1,087)	(974)	(867)	(899)
Post-employment obligations	(102)	(408)	(337)	229	(345)	(156)
Materials	(23)	(91)	(104)	(61)	(58)	(154)
Operating provisions (reversals)	(597)	(2,401)	(467)	(854)	(704)	(1,402)
Employee's and managers' profit sharing	(65)	(263)	(77)	(5)	(7)	(137)
Infrastructure construction costs	(299)	(1,200)	(897)	(1,119)	(1,193)	(1,252)
Other operating expenses, net	(124)	(499)	(405)	(393)	(155)	(426)
Total operating costs and expenses	(5,593)	(22,479)	(19,420)	(18,818)	(15,903)	(18,288)
Share of profit (loss), net, of affiliates and jointly-controlled entities	31	125	(104)	(252)	(302)	393
Dividends declared by investee classified as held for sale	18	73	-	-	-	-
Remeasurement of previously held equity interest in subsidiaries acquired	-	-	(119)	-	-	-
Impairment loss on Investments	-	-	(127)	-	(763)	-
Fair value gain on shareholding transaction	-	-	-	-	-	729

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Year Ended December 31,	2019	2019 (5)	2018 (4)	2017	2016	2015
Income before finance income (expenses) and taxes	774	3,109	2,496	2,642	1,805	4,702
Finance income (expenses), net	338	1,360	(518)	(996)	(1,437)	(1,340)
Income before income tax and social contribution tax	1,112	4,469	1,978	1,646	368	3,362
Income taxes expense	(389)	(1,565)	(599)	(644)	(34)	(893)
Net income for the year from continuing operations	723	2,904	1,379	1,002	334	2,469
Net income after tax from discontinued operations	56	224	363	-	-	-
Net income for the year	778	3,128	1,742	1,002	334	2,469
Non-controlling interests						
Non-controlling interests from continuing operations	-	(1)	(1)	(1)	-	-
Non-controlling interests from discontinued operations	-	-	(41)	-	-	-
Net income for the year attributed to equity holders of the parent	778	3,127	1,700	1,001	334	2,469
Net income for the year	778	3,128	1,742	1,002	334	2,469
Other comprehensive income (loss)	(263)	(1,055)	(463)	(302)	(553)	(307)
Comprehensive income for the year	516	2,073	1,279	700	(219)	2,162
Basic earnings:						
Per common share	0.53	2.14	1.17	0.37	0.10	1.96
Per preferred share	0.53	2.14	1.17	0.84	0.35	1.96
Per ADS common share	0.53	2.14	1.17	0.37	0.10	1.96
Per ADS preferred share	0.53	2.14	1.17	0.84	0.35	1.96
Diluted earnings:						
Per common share	0.53	2.14	1.17	0.37	0.07	1.96
Per preferred share	0.53	2.14	1.17	0.84	0.32	1.96
Per ADS common share	0.53	2.14	1.17	0.37	0.07	1.96
Per ADS preferred share	0.53	2.14	1.17	0.84	0.32	1.96

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	2019	2019 (5)	2018 (4)	2017	2016	2015
	in millions of US\$ (1)	in millions of R\$ except per share/ADS data or otherwise indicated				
Assets						
Assets classified as held for sale	313	1,258	19,446	-	-	-
Other current assets	2,210	8,880	8,350	8,537	8,285	9,377
Total current assets	2,522	10,138	27,796	8,537	8,285	9,377
Property, plant and equipment, net	610	2,450	2,662	2,762	3,775	3,940
Intangible assets	2,892	11,624	10,777	11,156	10,820	10,275
Concession financial assets	1,207	4,851	4,927	6,605	4,971	2,660
Other assets	5,191	20,863	13,693	13,180	14,185	14,605
Total assets	12,422	49,926	59,855	42,240	42,036	40,857
Liabilities						
Current loans, financing and debentures	683	2,747	2,198	2,371	4,837	6,300
Liabilities directly associated to assets held for sale	-	-	16,272	-	-	-
Other current liabilities	1,285	5,166	4,924	6,292	6,610	6,774
Total current liabilities	1,968	7,913	23,394	8,663	11,447	13,074
Non-current loans, financing and debentures	2,993	12,030	12,574	12,027	10,342	8,866
Non-current post-employment obligations	1,598	6,421	4,736	3,954	4,043	3,086
Other non-current liabilities	1,908	7,671	3,212	3,266	3,270	2,843
Total non-current liabilities	6,499	26,122	20,522	19,247	17,655	14,795
Share capital	1,815	7,294	7,294	6,294	6,294	6,294
Capital reserves	560	2,250	2,250	1,925	1,925	1,925
Profit reserves	2,177	8,750	6,362	5,729	5,200	4,663
Equity valuation adjustments	(599)	(2,407)	(1,327)	(837)	(489)	102
Subscription of shares to be capitalized	-	-	-	1,215	-	-
Equity attributable to non-controlling interest	1	4	1,360	4	4	4
Total equity	3,954	15,891	15,939	14,330	12,934	12,988
Total liabilities and equity	12,422	49,926	59,855	42,240	42,036	40,857

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	2019	2018	2017	2016	2015
Outstanding shares basic:					
Common (3)	487,614,144	487,614,144	487,614,144	420,764,639	420,764,639
Preferred (3)	970,577,739	970,577,739	970,577,739	837,516,297	837,516,297
Dividends per share:					
Common	R\$0.52	R\$0.59	R\$0.03	-	R\$0.50
Preferred	R\$0.52	R\$0.59	R\$0.50	R\$0.50	R\$0.50
Dividends per ADS common	R\$0.52	R\$0.59	R\$0.03	-	R\$0.50
Dividends per ADS preferred	R\$0.52	R\$0.59	R\$0.50	R\$0.50	R\$0.50
Dividends per share: (2)					
Common	US\$0.13	US\$0.15	US\$0.01	-	US\$0.13
Preferred	US\$0.13	US\$0.15	US\$0.15	US\$0.15	US\$0.13
Dividends per ADS (2) common	US\$0.13	US\$0.15	US\$0.01	-	US\$0.13
Dividends per ADS (2) preferred	US\$0.13	US\$0.15	US\$0.15	US\$0.15	US\$0.13
Outstanding shares—diluted:					
Common (3)	487,614,144	487,614,144	487,614,144	420,764,639	420,764,639
Preferred (3)	970,577,739	970,577,739	970,577,739	837,516,297	837,516,297
Dividends per share diluted:					
Common	R\$0.52	R\$0.59	R\$0.03	-	R\$0.50
Preferred	R\$0.52	R\$0.59	R\$0.50	R\$0.50	R\$0.50
Dividends per ADS diluted common	R\$0.52	R\$0.59	R\$0.03	-	R\$0.50
Dividends per ADS diluted preferred	R\$0.52	R\$0.59	R\$0.50	R\$0.50	R\$0.50
Dividends per share diluted: (2)					
Common	US\$0.13	US\$0.15	US\$0.01	-	US\$0.13
Preferred	US\$0.13	US\$0.15	US\$0.15	US\$0.15	US\$0.13
Dividends per ADS diluted common (2)	US\$0.13	US\$0.15	US\$0.01	-	US\$0.13
Dividends per ADS diluted preferred (2)	US\$0.13	US\$0.15	US\$0.15	US\$0.15	US\$0.13

(1) Converted at R\$4.0190/US\$, the exchange rate on December 31, 2019. See “– Exchange rates”.

(2) This information is presented in U.S. dollars at the exchange rate in effect as of the end of each year.

(3) For the year ended December 31, 2017 new shares issued through a capital increase were included. Please See “Item 4. Information on the Company”

(4) From January 1, 2018, we adopted IFRS 9 and IFRS 15. Since we used the modified retrospective approach when adopting such standards, we did not restate our financial statements as of and for the years ended December 31, 2017, 2016 and 2015.

(5) From January 1, 2019, we adopted IFRS 16. Since we used the modified retrospective approach when adopting such standard, we did not restate our financial statements as of and for the years ended December 31, 2018, 2017, 2016 and 2015.

Exchange Rates

On March 4, 2005, the National Monetary Council (Conselho Monetário Nacional, or “CMN”), consolidated the commercial rate exchange market and the floating rate market into a single exchange market. Such regulation, as restated in 2008, allows subject to certain procedures and specific regulatory provisions, the purchase and sale of foreign currency and the international transfer of reais by a foreign person or company, without restriction as to the amount. Additionally, all foreign exchange transactions must be carried out by financial institutions authorized by the Brazilian Central Bank (Banco Central do Brasil, or the “Central Bank”), to operate in this market.

Brazilian law provides that whenever there (i) is a significant deficit in Brazil’s balance of payments or (ii) are major reasons to foresee a significant deficit in Brazil’s balance of payments, temporary restrictions may be imposed on remittances of foreign capital abroad. In the past, the Central Bank has occasionally intervened to control unstable movements in foreign exchange rates. We cannot predict whether the Central Bank or the Federal Government will continue to let the reais float freely or will intervene in the exchange rate market. The reais may depreciate or appreciate against the U.S. dollar and other currencies substantially in the future. Exchange rate fluctuations may affect the U.S. dollar amounts received by the holders of Preferred ADSs or Common ADSs. We will make any distributions with respect to our preferred shares or common shares in reais and the depositary will convert these distributions into U.S. dollars for payment to the holders of Preferred ADSs and Common ADSs. We cannot make assurances that such measures will not be undertaken by the Brazilian Government in the future, which could prevent us from making payments to the holders of our ADSs. Exchange rate fluctuations may also affect the U.S. dollar equivalent of the reais price of the preferred shares or common shares on the Brazilian stock exchange on which they are traded. Exchange rate fluctuations may also affect our results of operations. For more information see “Risk Factors—Risks Relating to Brazil—Exchange rate instability may adversely affect our business, results of operations and financial condition and the market price of our shares, the Preferred ADSs and the Common ADSs”.

The table below sets forth, for the periods indicated the low, high, average and period-end exchange rates for reais, expressed in reais per US\$1.00.

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Year Ended December 31,	<i>Reais per US\$1.00</i>			Period-end
	Low	High	Average	
2015	2.5644	4.1638	3.3360	3.9593
2016	3.1142	4.1299	3.4839	3.2532
2017	3.0557	3.3823	3.1916	3.3121
2018	3.1470	4.2016	3.6513	3.8804
2019	3.6501	4.2594	3.9440	4.0190

Month	<i>Reais per US\$1.00</i>			Period-end
	Low	High	Average	
October 2019	3.9769	4.1624	4.0825	4.0130
November 2019	3.9756	4.2594	4.1558	4.2272
December 2019	4.0152	4.2200	4.1045	4.0190
January 2020	4.0378	4.2801	4.1512	4.2801
February 2020	4.2405	4.4906	4.3470	4.4906
March 2020	4.4782	5.1855	4.8862	5.1855
April 2020	5.0708	5.6858	5.3171	5.4296
May 2020 (through May 15, 2020)	5.4858	5.9204	5.7361	5.8235

Source: U.S. Federal Reserve Board.

Risk Factors

The investor should take into account the risks described below, and the other information contained in this Annual Report, when evaluating an investment in our Company.

Risks Relating to CEMIG***The Covid-19 pandemic and its possible effects could adversely affect our business, operational results and financial condition.***

The Company is closely monitoring the impacts of the Covid-19 pandemic on the Brazilian macroeconomic environment, especially in relation to its business and the market in which it operates, and deciding on actions to maintain the sustainability of its operations, mitigate economic and financial effects, and protect the health of its employees. The energy demand (load) measured by Brazilian Interconnected Power Grid (SIN) has decreased 18.3% since the second half of March, 2020, mainly in the residential and commercial customers categories. The effects for the Company are on a similar scale to these national effects, with a consequent decrease in revenue. We need to await the billing figures for the forthcoming periods to reach a conclusion as to whether this decrease in revenue had only a temporary effect or will represent a more prolonged impact on the Company's revenue from sale of energy, as well as to reach a conclusion as to our total expected credit losses.

The energy companies are discussing measures to support the sector with the regulator (Aneel) and the Mining and Energy Ministry (MME), with a view to ensure that companies maintain adequate liquidity, and are able to comply with contracts in the energy sector supply chain. This scenario results in the need for internal reassessment by the Company of its Investment Program, revision of the budgets for revenue and expenses, and alteration of the assumptions used in calculating the fair and recoverable value of certain financial and non-financial assets.

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Considering that the Company cannot foresee the duration of the economic retraction arising from social isolation, and its impact on its market and revenue, nor the effectiveness of the actions being discussed by the federal government and the regulator for mitigation of the effects of the crisis, it is not yet possible to make any accurate estimate of the possible impacts of this scenario on the Company's financial liquidity, results of operations and the market price of securities.

Additionally, while the potential economic impact brought by, and the duration of the Covid-19 pandemic is difficult to assess or predict, the impact of the Covid-19 pandemic on the global financial markets may reduce our ability to access capital, which could negatively impact our short-term and long-term liquidity. The ultimate impact of the Covid-19 pandemic is highly uncertain and subject to change. We do not yet know the full extent of potential delays or impacts on our business, financing or operations or the global economy as a whole. However, these effects could have a material impact on our liquidity, capital resources, operations and business and those of the third parties on which we rely.

We are not certain whether new concessions or authorizations, as applicable, will be obtained, nor that our present concessions or authorizations will be extended on terms similar to those currently in effect, nor that any compensation we receive in the event of non-extension will be sufficient to cover the full value of our investment.

We operate most of our power generation, transmission and distribution activities under concession agreements entered into with the Brazilian Federal Government or pursuant to authorizations granted to companies of the CEMIG Group. The Brazilian Constitution determines that all concessions related to public services must be granted through a bidding process. In 1995, in an effort to implement these constitutional provisions, the Brazilian Federal Government adopted certain laws and regulations, which are collectively known as the "Concessions Law," which governs bidding procedures in the electric power industry.

On September 11, 2012, the Brazilian Federal Government issued Provisional Act No. 579 ("PA 579"), later converted into Law No. 12,783 of January 11, 2013 ("Law No. 12,783/13"), which governs the extensions of concessions granted prior to Law No. 9,074/95. Law No. 12,783/13 determines that, as of September 12, 2012, concessions prior to Law No. 9,074/95 can be extended once, for up to 30 years, provided that the concession operators accept and meet certain conditions described in such Law. With respect to generation activities, the Company chose not to accept the mechanism offered to extend the generation concessions that would expire in the period from 2013 to 2017. These concessions are: Três Marias, Salto Grande, Itutinga, Volta Grande, Camargos, Peti, Piau, Gafanhoto, Tronqueiras, Joasal, Martins, Cajuru, Paciência, Marmelos, Dona Rita, Sumidouro, Poquim and Anil.

Following publication of the tender documents for Generation Auction No. 12/2015, on October 7, 2015 ("Auction 12/2015"), which was held under the revised regulatory structure for renewal of concessions of existing power plants as set forth in Law No. 13,203 of December 8, 2015 ("Law No. 13,203/15"), the Company's Board of Directors authorized CEMIG Geração e Transmissão S.A. ("CEMIG GT") to bid at an auction, held on November 25, 2015, in which CEMIG GT was successful. In the auction, CEMIG GT won the concessions for the 18-hydroelectrical plants comprising "Lot D", for 30 years: Três Marias, Salto Grande, Itutinga, Camargos, Cajuru, Gafanhoto, Martins, Marmelos, Joasal, Paciência, Piau, Coronel Domiciano, Tronqueiras, Peti, Dona Rita, Sinceridade, Neblina and Ervália. The total installed capacity of these plants is 699.5 MW, and their offtake guarantee is 420.2 MW average.

In relation to the Jaguará, São Simão and Miranda power plants, which the date of the first contractual extension of their concessions fell after the issuance of PA 579, the Company understood that the Generation Concession Contract No. 007/1997 enables the extension of the concessions of these power plants for 20 years, i.e. until 2033, 2035 and 2036 respectively, without any restrictions.

Based on this understanding, on February 21, 2017, CEMIG GT filed for a judicial order of mandamus against the actions of the Brazilian Mining and Energy Ministry ("MME") to safeguard its rights to an extension of the concession term for the Jaguará, São Simão and Miranda Hydroelectrical Power Plant, under the terms of Clause 4 of the Generation Concession Contract No. 007/1997, and in accordance with the original terms and conditions of that agreement, which was signed prior to Law No. 12,783/13.

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Nevertheless, on September 27, 2017, the Brazilian Federal Government auctioned the concessions of Jaguará, São Simão, Miranda and Volta Grande hydroelectrical power plants formerly owned by CEMIG GT with a total capacity of 2,922 MW for a total of R\$ 12.13 billion. In each case, the winning bidder of the concessions is unrelated to CEMIG. Volta Grande power plant concession was transferred to the winning bidder on November 30, 2017, Jaguará and Miranda power plants concession were transferred on December 30, 2017 and São Simão power plant concession was transferred on May 9, 2018.

The applications for mandamus relating to the Jaguará and Miranda hydroelectric plants have now reached final judgment against the Company and further appeal is not possible. Because of these judgments, the Company assesses that the chances of success in the application for mandamus in relation to the São Simão hydroelectric plant, which has not yet reached final judgment, is remote.

Despite the result of the auction, CEMIG plans to continue to make significant efforts to keep the concessions for the Emborcação and Nova Ponte plants – which have a maturity on July 23, 2025 – and for the Sá Carvalho hydroelectric plant, the concession for which is held by Empresa Sá Carvalho S.A., a wholly owned subsidiary of CEMIG. All the scenarios relating to continuation of operating of these concessions by the Companies are being studied.

In parallel to the discussions on extension of the generation concessions, because the concession for various plants operated by CEMIG under Concession Contract 007/1997 have expired, CEMIG GT has a right to be reimbursed for the assets not yet amortized, as set out in the concession contract. The accounting balances corresponding to these assets are recorded as financial assets, at fair value through profit or loss, and amount to R\$816 million as of December 31, 2019.

On August 31, 2018 CEMIG received R\$ 1,139 million as indemnification for the basic project of the São Simão and Miranda plants. This amount had been adjusted by the Selic rate up to the date of its receipt.

Regarding transmission activities, on December 4, 2012, the Company signed the second amendment to Transmission Concession Agreement No. 006/1997, extending the concession for 30 years from January 1, 2013. Under MME Ordinance No. 120/2016, as of July 2017, the transmission companies that extended their concession agreements will have the infrastructure not yet indemnified through the regulatory criteria, in up to approximately an 8 years term. For more information, see note 16 to our Consolidated Financial Statements included in “Item 16. Financial Statements.”

With respect to extension of the energy distribution concession, CEMIG Distribuição S.A. (“CEMIG D”), as per Decree No. 7,805/12 and Decree No. 8,461/15, accepted the extension of its concession contracts, and signed the Fifth Amendment to its Concession Contract in December 2015 (the “Fifth Amendment”). This extends the concession for a further 30 years from January 1, 2016, but requires compliance with even more rigid rules related to the quality of service provided and the economic and financial sustainability of the Company over the concession.

Considering the degree of discretion granted to the Brazilian Federal Government in relation to new concession contracts or new authorizations, as applicable, and renewal of existing concessions and authorizations, and due to Law No. 12,783/13 and amendments, for renewals of generation, transmission and distribution concession agreements, we cannot guarantee that: (i) new concessions and authorizations will be obtained; (ii) our existing concessions and authorizations will be extended on terms similar to those currently in effect; nor (iii) the compensation received in the event of non-extension of a concession or authorization will be in an amount sufficient to cover the full value of our investment. Our inability to obtain new or extended concessions or authorizations could have a material adverse effect on our business, results of operations and financial condition. For more information about the renewal of our concessions and authorizations, see “Item 8. Financial Information – Legal and Administrative Proceedings.”

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Our subsidiaries might suffer intervention by Brazilian public authorities to ensure adequate levels of service, or be sanctioned by ANEEL for non-compliance with their concession agreements, or the authorizations granted to them, which could result in fines, other penalties and/or, depending on the severity of the non-compliance, legal termination of concession agreements or revocation of authorizations.

We conduct our generation, transmission and distribution activities pursuant to concession agreements entered into with the Brazilian Federal Government, through ANEEL, and pursuant to authorizations granted to companies of the CEMIG Group, as the case may be.

ANEEL may impose penalties or revoke a concession or authorization if we fail to comply with any provision of the concession agreements or authorizations, including those relating to compliance with the established quality standards. Depending on the severity of the non-compliance, these penalties could include:

- fines for breach of contract of up to 2.0% of the concession holder's revenues in the financial year immediately prior to the date of the breach;
- injunctions related to the construction of new facilities and equipment;
- temporary suspension from participating in bidding processes for new concessions for a period of up to two years;
- intervention by ANEEL in the management of the concession holder that is in breach;
- revocation of the concession; and
- execution of the guarantees related to the concession.

Further, the Brazilian Federal Government can revoke any of our concessions or authorizations before the expiration of the concession term, in the event of bankruptcy or dissolution, or by legal termination, if determined to be in the public interest. It can also intervene in concessions to ensure adequate provision of the services, full compliance with the relevant provisions of agreements, authorizations, regulations and applicable law, and where it has concerns about the operations of the facilities of the Company.

Delays in the implementation and construction of new energy infrastructure can trigger the imposition of regulatory penalties by ANEEL, which, under ANEEL's Normative Resolution No. 846 of June 11, 2019, can vary from warnings to the termination of concessions or withdrawal of authorizations.

Any compensation we may receive upon rescission of the concession agreement or revocation of an authorization may not be sufficient to compensate us for the full value of certain investments. If we are responsible for the rescission of any concession agreement, the effective amount of compensation could be lower, due to fines or other penalties. The imposition of fines or penalties or the early termination or revocation by ANEEL of any of our concession agreements or authorizations, or any failure to receive sufficient compensation for investments we have made, may have a material adverse effect on our business, financial condition and results of operations, and on our ability to meet our payment obligations.

Rules under the Fifth Amendment to the distribution concession contract came into effect in 2016. They contain new targets for service quality, and requirements related to CEMIG D's economic and financial sustainability. These targets must be complied with over the 30 years of the concession. Compliance with these targets is assessed annually, and non-compliance could result in an obligation for CEMIG to inject capital into CEMIG D or a limitation on distribution of dividends or the payment of interest on equity by CEMIG D to CEMIG. According to ANEEL regulations, in case of failure to comply with global annual targets for collective continuity indicators for two consecutive years, or three times in five years, or at any time in the last five years of the agreement term, distribution of dividends or payment of interest on equity may be limited until compliance is resumed. Furthermore, in the first five years, non-compliance with a target for two consecutive years, or with any one of the targets in the fifth year will result in legal termination of the concession.

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We are subject to extensive and governmental legislation and regulation which may be subject to change, and any changes to such legislation and regulation could have a material adverse effect on our business, results of operations and financial situation.

Our operations are highly regulated and supervised by the Brazilian Federal Government, through the MME, ANEEL, the National System Operator (Operador Nacional do Sistema, or "ONS"), and other regulatory authorities. These authorities have a substantial degree of influence on our business. MME, ANEEL and ONS have discretionary authority to implement and change policies, interpretations and rules applicable to different aspects of our business, particularly operations, maintenance, health and safety, consideration to be received and inspection. Any significant regulatory measure implemented by such authorities may result in a significant burden on our activities, which may have a material adverse effect on our business, results of operations and financial condition.

The Brazilian Federal Government has been implementing policies that have a far-reaching impact on the Brazilian energy sector. As part of the restructuring, Law No. 10,848, of March 15, 2004 introduced a new regulatory regime for the Brazilian energy industry. This regulatory structure has undergone several changes in recent years, the most recent being the changes added by PA 579 (which was converted into Law No. 12,783/2013), which governs the extension of some concessions governed by Law No. 9,074/1995. Under this law, such concessions can, from September 12, 2012, be extended only once, for up to 30 years, at the option of the concession authority.

The Federal Government is currently considering changes in the legislation, arising from Public Consultation No. 33/2017, which includes some proposals for changes in the current regulatory model of the sector. These changes consist of subsidy reductions and revision of the allocation of costs, among others, creating the basis for a more open market. There is a possibility that the President may present this draft law to Congress for a vote.

Amendments in the legislation or regulations relating to the Brazilian energy industry could adversely affect our business strategy and the conduct of our activities if we are not able to anticipate the new conditions or if we are unable to absorb the new costs or pass them on to customers. In addition, we cannot guarantee that measures taken in the future by the Brazilian Federal Government, in relation to development of the Brazilian energy system, will not have a negative effect on our activities. Further, we are unable to predict to what extent such measures might affect us. If we are required to conduct our business and operations in a way that is substantially different from that specified in our business plan, our business, results of operations or financial position may be negatively affected.

Changes in Brazilian tax law or conflicts regarding its interpretation may adversely affect us.

The Brazilian Federal, state and municipal governments regularly implement changes in tax policies that affect us. These changes include the creation and alteration of taxes and charges, permanent or temporary, related to specific purposes of the government. Some of these governmental measures can increase our tax burden, which could affect our profitability, and consequently our financial situation. We cannot guarantee that we will be able to maintain our cash flow and profitability after an increase in taxes and charges that apply to us, and this might result in a material adverse effect on the Company.

[Table of Contents](#)***We are subject to restrictions on our ability to make capital investments and to incur indebtedness, which could adversely affect our business, results of operations and financial condition.***

Our ability to carry out our capital expenditure program is dependent upon a number of factors, including our ability to charge adequate rates for our services, access to the domestic and international capital markets, and a variety of operational and other factors. Further, our plans to expand our generation and transmission capacity are subject to compliance with competitive bidding processes. These bidding processes are governed by Law 13,303/2016 (the “State Companies Law”).

In relation to loans from third parties: (i) as a state-controlled company, we are subject to rules and limits relating to the level of credit applicable to the public sector, including rules established by the National Monetary Council (Conselho Monetário Nacional, or “CMN”), and by the Brazilian Central Bank; and (ii) we are subject to the rules and limits established by ANEEL that regulate indebtedness for companies in the energy sector. Also, although we may access both the international and local capital markets, we, as a state-controlled company, can only be financed with funds extended by local commercial banks if such debt is guaranteed by receivables, as well as with funds extended by Brazilian federal banks in transactions with the purpose of refinancing financial obligations contracted with entities of the Brazilian financial system.

Further, we are subject to certain contractual conditions under our existing debt instruments, and we may enter into new loans that contain restrictive covenants or similar clauses that could restrict our operational flexibility. These restrictions might also affect our ability to obtain new loans that are necessary for financing our activities and our growth strategy, and for meeting our future financial obligations when they become due, and this could adversely affect our ability to comply with our financial obligations. We have financing contracts and other debt obligations containing restrictive covenants, including Brazilian local market debentures and Eurobonds on international market.

We have approximately R\$ 10.7 billion of outstanding debt with financial covenant restrictions, and any breach could have severe negative consequences to us. See “– The Company has a considerable amount of debt, and it is exposed to limitations on its liquidity – a factor that might make it more difficult for the Company to obtain financing for investments that are planned and might negatively affect its financial condition and its results of operation.”

If, for example, we breach a financial covenant under the CEMIG GT’s 9.25% Senior Notes due 2024 (the “Eurobonds”), we would be subject to an interest increase or acceleration of certain debt as a result of cross-default provisions under certain of our outstanding debt agreements. Similarly, if the Company violates a covenant under our debenture issuance, the debenture holders may accelerate the maturity of the debt in a meeting organized by the Fiduciary Agent (Trustee), unless 75% of the debenture holders decide not to do so. Any acceleration of our outstanding debt could have a material adverse effect on our financial situation and may trigger cross-default clauses in other financial instruments.

In the event of a default and acceleration, our assets and cash flow might be insufficient to repay amounts due, or to comply with the servicing of such debt. In the past, we have, on certain occasions, failed to comply with certain financial covenants that had conditions that were more restrictive than those currently in place. Although we were able to obtain waivers from our creditors in relation to past non-compliance, we cannot guarantee that we will be successful in obtaining any particular waiver in the future.

[Table of Contents](#)***The Company could suffer adverse effects in connection with its minority interest in Renova Energia S.A. if such entity is unable to continue as a going concern***

We have a 36.23% investment in Renova, which is currently in a court-supervised reorganization, and has reported recurring losses, negative net working capital, equity deficit, and negative gross margin for the year ended December 31, 2019.

However, in view of the investee's equity deficit, the Company reduced the carrying value of its equity interests in Renova to zero. No further losses have been recognized, considering the non-existence of any legal or constructive obligations to the investee. Additionally, considering the worsening of Renova's financial conditions and a potential application for a court-supervised reorganization, the Company recorded, since June 30, 2019, an impairment of the full amount of credits with the jointly-controlled entity in the amount of R\$ 688 million as of December 31, 2019. These events indicate the existence of relevant uncertainty that may raise significant doubt about Renova's ability to continue as a going concern and led to the investee to apply for bankruptcy protection in the district of São Paulo.

Renova filed the court-supervised reorganization plan in court on December 17, 2019. Negotiations with the investee's creditors are taking place and the expectation for the approval of the in-court reorganization plan is for the first half of 2020. However, if the in-court reorganization plan is not approved or if its implementation is not successful, it may result in bankruptcy with further financial deterioration, which may negatively impact the Company.

Further, Renova is being investigated by the Civil Police of Minas Gerais State and the Brazilian Federal Police See risk factor "Anti-corruption investigations currently in progress in Brazil, which have received wide public exposure, and any allegations against CEMIG or anti-corruption investigations of CEMIG, could have adverse effects on perception of Brazil and of CEMIG".

Since the Company's investment in Renova is fully impaired at December 31, 2019, and since no contractual or constructive obligations in relation to the investee have been assumed by the Company, it is not expected that effects resulting from the court-supervised reorganization process (if the plan is approved and if its implementation is successful), or the investigations, or the operational activities of this investee can significantly impact the Company's financial statements. (Please refer to Note 18 to our consolidated financial statements for more detail).

Renova signed with the Company Debtor in Possession (DIP) loan agreements in the total amount of R\$ 37 million, comprising R\$20 million, R\$7 million and R\$10 million on January 28, 2020, December 27, 2019 and November 25, 2019, respectively. The funds of these loans, made under specific rules of court-supervised reorganization proceedings, are necessary to support the expenses of maintaining the activities of Renova, and were authorized by the second State of São Paulo Bankruptcy and the Court-supervised Reorganization Court. They are guaranteed by a fiduciary assignment of shares in a company owning assets of a wind power project owned by Renova, and they also have priority of receipt in the court-supervised reorganization process.

On May 2, 2020, the State of São Paulo Bankruptcy and Court-supervised reorganization Court issued a decision ordering that the DIP loan, in the total amount of R\$ 37 million, with asset guarantee, already constituted and registered, would be subscribed as a capital increase in Renova. Company has filed a Motion for Clarification, and, based on the opinion of its legal advisors, has classified the chance of loss in the action as 'possible' and limited to the total amount of the DIP loan.

[Table of Contents](#)***A reduction in our credit risk rating or in Brazil's sovereign credit ratings could adversely affect the availability of new financing and increase our cost of capital.***

The credit risk rating agencies Fitch Ratings, Moody's, and Standard and Poor's attribute a rating to the Company and its debt securities on a Brazilian basis, and also a rating for the Company on a global basis.

Ratings reflect, among other factors, the outlook for the Brazilian energy sector, the hydrological conditions of Brazil, the political and economic conditions, country risk, and the rating and outlook for the Company's controlling shareholder, the State of Minas Gerais.

In the event of a downgrade due to any external factors, our operational performance or high levels of debt, our cost of capital could increase and our ability to comply with existing financial covenants in the instruments that regulate our debt could be adversely affected. Further, our operating or financial results and the availability of future financing could be adversely affected.

In addition, probable reductions in Brazilian sovereign ratings could adversely affect the perception of risk in relation to securities of Brazilian issuers, and, as a result, increase the cost of any future issues of debt securities. Any reductions in our ratings or Brazil's sovereign ratings could adversely affect our operating and financial results, and our access to future financing.

Disruptions in the operation of, or deterioration of the quality of, our services, or those of our subsidiaries, could adversely affect our business, operating results and financial condition.

The operation of a complex system that interconnects numerous power generation plants with large transmission lines and distribution networks involves various risks, operational difficulties and unexpected interruptions, caused by accidents, equipment failure, underperformance or disasters (such as explosions, fires, climate events, floods, landslides, sabotage, terrorism, vandalism and other similar events). In the event of any such occurrence, the insurance coverage for operational risks may be insufficient to fully repay the asset damage or service interruption costs incurred. In addition, National Grid Operator decisions, Regulatory Agency acts, and Environmental Authority demands could adversely affect our business.

The Company's income is strongly dependent on equipment availability, service quality and regulatory compliance of the assets and facilities it builds, operates and maintains. Failing to comply may lead to business losses. For example, the distribution business may be penalized in the tariff revision process with a higher "X-factor", reducing its expected annual revenue requirement; the transmission business may have its annual permitted revenue reduced due to any asset unavailability; and the generation business may have its earnings affected if a power plant does not meet a minimum availability, since that when hydro generation is less than the previously contracted energy, the equivalent shortfall has to be acquired at the spot price, which is highly volatile.

Penalties and financial compensation are applicable depending on the scope, severity and duration of the service or equipment unavailability. Thus, disruptions in power plants, transmission and distribution facilities, substations or networks, may have a material adverse effect on our business, financial situation and operating results.

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We have a considerable amount of debt, and we are exposed to limitations on our liquidity – a factor that might make it more difficult for us to obtain financing for investments that are planned, and might negatively affect our financial condition and our results of operations.

In order to finance the capital expenditures needed to meet our long-term growth objectives, we have incurred a substantial amount of debt. As our cash flow from operations in recent years has not been sufficient to fund our capital expenditures, debt service and payment of dividends, our debt has increased from 2012 to 2019. As of December 31, 2019, our total loans, financing and debentures (including interest) was R\$14,777 million; an increase of 0.03% compared to the R\$14,772 million reported as of December 31, 2018 and an increase of 2.63% compared to R\$14,398 million reported as of December 31, 2017. Currently, 38.77 % of our existing loans, financing and debentures - totaling R\$ 5,729 million, have maturities in the next three years. To meet our growth objectives, maintain our ability to fund our operations and comply with scheduled debt maturities, we will need to raise debt capital from a range of funding sources. To service its debt after meeting the capital expenditure targets, the Company has relied upon a combination of cash flows provided by its operations, sale of assets, drawdowns under its available credit facilities, its cash and short-term financial investments balance and the incurrence of additional indebtedness. Any further lowering of its credit ratings may have adverse consequences on the Company's ability to obtain financing or may affect its cost of financing, also making it more difficult or costly to refinance maturing obligations. If, for any reason, the Company were to face difficulties in accessing debt financing, this could hamper its ability to make capital expenditures in the amounts needed to maintain its current level of investments or its long-term targets and could impair its ability to timely meet its principal and interest payment obligations with its creditors. A reduction in the Company's capital expenditure program or the sale of assets could significantly and adversely affect its results of operations.

Our divestment program depends on external factors that could impede its successful implementation.

Our Divestment Program was implemented in 2017 and contemplates a sale expectation of R\$ 8,046 million in assets. External factors, such as deterioration of Brazilian and global economic conditions, a Brazilian political crisis, or fluctuations in the exchange rate, could adversely affect our ability to sell these assets or might reduce their fair value. The sale of assets under our Divestment Program will allow us to invest in our core business or reduce our total indebtedness. However, such sales will result in a decrease in our cash flows from operations, which could have a material adverse effect on our long-term operating growth prospects and consequently our results of operations in the medium and long term. Since 2017, CEMIG had sold R\$ 2,071 million of assets.

We might be unable to implement the strategies in our long-term strategic planning within a desired time, or without incurring unforeseen costs, which could have adverse consequences for our business, results of operations and financial condition.

Our ability to meet strategic objectives depends, largely, on successful, cost-effective and timely implementation of our Long-term Strategy and our Multi-year Business Plan. The following are some of the factors that could negatively affect this implementation:

- Inability to generate cash flow, or obtain the future financing, necessary for implementation of the projects;
- Inability to obtain necessary governmental licenses and approvals;
- Unexpected engineering and environmental problems;
- Unexpected delays in the processes of eminent domain and establishment of servitude rights;
- Unavailability of the necessary workforce or of equipment;
- Labor strikes;
- Delay in delivery of equipment by suppliers;
- Delay resulting from failings of suppliers or third parties in compliance with their contractual obligations;
- Interference by climate factors, or environmental restrictions;
- Changes in the environmental legislation creating new obligations and causing additional costs for projects;
- Legal instability caused by political issues;
- Substantial changes in economic, regulatory, hydrological or other conditions; and
- The duration and severity of the recent coronavirus (Covid-19) outbreak and its impacts on our business.

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The occurrence of the above factors, separately or taken together, might lead to a significant increase of costs, and might delay or impede implementation of initiatives, and consequently compromise the execution of the strategic plan, negatively affecting our operating and financial results.

Furthermore, because we are a mixed-capital company controlled by the State of Minas Gerais, we are subject to changes to our board of directors and executive officers as a result of change in the political agents of the Executive Branch of government due to the electoral process and also due to political instability. These types of changes may adversely affect the continuity of the Company's strategy.

The operating and financial results of our subsidiaries, jointly-controlled entities and affiliates, minority investees or from those companies, which may be acquired in the future, might negatively affect our strategies, operating results and financial situation.

We own equity in and do business through various subsidiaries and investees, including companies with assets in energy generation, transmission and distribution. The future development of our subsidiaries, jointly-controlled entities and affiliates, such as Transmissora Aliança de Energia Elétrica S.A. ("TAESA"), Light S.A. ("Light") and Aliança Geração de Energia S.A. ("Aliança") as well as Renova Energia S.A. ("Renova"), Guanhões Energia S.A., Norte Energia S.A. ("Nesa") and Madeira Energia S.A. ("Mesa"), in which the Company has significant financial commitments, could have a significant impact on our business and operating results. The Company's ability to meet its financial obligations is correlated, in part, to the cash flow and the profits of its subsidiaries and investees, and the consequent distribution to the Company of such profits in the form of dividends or other advances or payments. If these companies' abilities to generate profit and cash flow are reduced, this might cause a reduction of dividends and interest on capital paid to the Company, which could have a material adverse effect on our results of operations and financial position.

In addition, the investees might not reach the results expected when they were acquired. The process of integration for any acquired business could subject the Company to certain risks, such as, for example, the following: (i) unexpected expenses; (ii) inability to integrate the activities of the companies acquired with a view to obtaining the expected economies of scale and efficiency gains; (iii) possible delays related to integration of the operations of companies; (iv) exposure to potential contingencies; and (v) legal claims made against the acquired business that were unknown at the moment of its acquisition, might negatively affect our strategies, operating results and financial situation. The Company might be unsuccessful in dealing with these or other risks, or problems related to any other operation of a future acquisition and be negatively affected by the companies acquired or which may be acquired in the future.

Further, some of our subsidiaries and investees might, in the future, enter into agreements with creditors that could restrict dividend payments or other transfers of funds to the Company.

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These subsidiaries are separate legal entities. Any right that we might have in relation to receipt of assets or other payments in the event of liquidation or reorganization of any subsidiary, will likely be in fact structurally subordinated to the demands of the creditors of such subsidiary (including tax authorities, commercial creditors and lenders to those subsidiaries).

Any deterioration in the operating results or financial conditions of these subsidiaries, and any sanctions or penalties imposed on them, could have a material adverse effect on the Company's results of operations or financial condition.

New investments and acquisitions will require additional capital, which might not be available to us on acceptable terms.

We will need funds to finance acquisitions and investments. However, we cannot guarantee that we will have our own funds or that we will be able to raise such funds in a timely manner and in the necessary amounts, or at competitive rates (by issuance of debt securities, or incurrence of loans). If we are unable to obtain funds as planned, we may be unable to meet our acquisition commitments, and our investment program could suffer delays or significant changes, which could adversely affect our business, financial condition, results of operations and future prospects.

Delayed completion of construction projects or late capitalization of new investments in our generation, transmission and distribution companies could adversely affect our business, operation results and financial condition.

We are constantly engaged in the construction and expansion of our plants, transmission lines, distribution networks and substations, and studying other potential load expansion projects. The company's capability to complete projects within deadlines and on budget, without adverse economic effects, is subject to various risks. For instance, we may encounter the following:

- Numerous complications in the planning and execution stages of load expansion projects and other new investments may occur, such as strikes, lagging suppliers of materials and services, delays in tender processes, embargos on work, unexpected geological and climate conditions, political and environmental uncertainties, financial instability of our partners, contractors and subcontractors;
- Regulatory or legal challenges that delay the date expansion projects are put into operation;
- New assets might operate below the planned capacity, or their operation/installation costs might be greater than planned;
- Difficulty to obtain adequate working capital to fund the expansion projects;
- The unintentional shutdown of the transmission assets during the execution of the load expansion projects can reduce the revenue of the Transmission business;
- ONS's (*Operador Nacional do Sistema*, Brazil's ISO) refusal to authorize the execution of work on the transmission grid, due to power system restrictions;
- Environmental demands and claims by local communities during construction of power generation plants, transmission lines, distribution lines, distribution networks and substations; and
- Depletion of the outage duration indicator limit (known as *Duração Equivalente de Interrupção por Unidade Consumidora* - DECI) forcing construction to halt. If DECI limit is violated (either by system fault, equipment failure or construction work) for two years in a row between 2016 and 2020, or violated specifically in the year 2020, this will result in the Regulator initiating a legal process for the termination of the concession agreement.

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If faced with any of these or similar issues related to the new investments or to the expansion of our generation, transmission or distribution capacity, the Company might incur increased costs or lower profitability than originally expected for the projects.

The level of default by our customers could adversely affect our business, operating results and/or financial situation as well as those of our subsidiaries.

On December 31, 2019, the total of our past-due receivables owed by customers, traders and power transport concession holders was approximately R\$ 1,635 million (R\$1,381 million in 2018), corresponding to 6.44% of our consolidated net revenue in 2019 (6.20% in 2018). We have recorded in 2019 an allowance for doubtful accounts in the amount of R\$810 million (R\$751 million in 2018). The possibility exists that we might be unable to collect amounts receivable from various customers, which are in arrears. If such debts are not totally or partially settled, we will suffer an adverse impact on our business, operation results and/or financial situation. Additionally, the amount of debts in arrears from our customers that exceeds the allowance could cause an adverse effect on our business, operating results and/or financial condition.

CEMIG D's economic and financial sustainability is directly related to the effectiveness of the actions to control energy losses, and the regulatory limits established for it. If CEMIG D fails in successfully controlling energy loss, its business, operations, profit and financial situation could be substantially and adversely affected.

The energy losses of a distribution company comprise two types of losses: technical losses and non-technical (commercial) losses. Technical losses are inherent to the process of transporting and transformation of electric power and occur in the cables and equipment of the energy system. Non-technical losses comprise energy that is supplied and not invoiced, which may be the result of illegal connections (theft), fraud, metering errors or failures in internal processes.

CEMIG's Total Losses Index as of December 31, 2019, using a 12-month window was 13.57%. This percentage is in relation to the total energy injected into the distribution system (the total volume of losses was 7,048 GWh). Of that percentage, 8.77% comprised technical losses, and 4.80% comprised non-technical losses. This result was 0.75 percentage points higher than the result for December 2018 (12.82%), and above the regulatory target set by ANEEL for 2019 (11.49%).

Since 2014, the adverse macroeconomic scenario in Brazil and successive tariff increases contributed to an increase in fraud in the energy supply in CEMIG's concession area.

From a regulatory point of view, ANEEL has been increasingly rigorous in establishing target caps for distribution losses. The target caps for non-technical losses are set based on a benchmarking model that compares using an index, which measures the social-economic complexity of each concession area and how efficient the distributors are in combating non-technical energy losses. For the targets for technical losses, ANEEL uses metering measurements and power flow software.

In light of this complex scenario, involving regulatory uncertainties, even with the implementation of a strategy to reduce technical and commercial losses, CEMIG cannot guarantee that the target caps for losses established by ANEEL will be met in the medium term, and this could affect the Company's financial situation and operating results, since the portion of a distribution company's power losses that exceeds the regulatory cap cannot be passed through to the customer as an expense in the form of an increase in tariffs.

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Dams are part of the critical and essential infrastructure in the Brazilian energy sector. Dam failures can cause serious damage to affected communities and to the Company.

There is an intrinsic risk of dam failure, due to factors that may be internal or external to the structure (such as, for example, failure of a dam upstream from the site). The scale, and nature, of the risk are not entirely predictable. Thus, we are subject to the risk of a dam failure that could have repercussions far greater than the loss of hydroelectrical generation capabilities. The failure of a dam could result in economic, social, regulatory, and environmental damage and potential loss of human life in the communities downstream from dams, which could have a material adverse effect on the Company's image, business, results of operations and financial condition.

We might be held responsible for impacts on our own workforce, on the population and the environment, due to accidents related to our generation, transmission and distribution systems and facilities.

Our operations, especially those related to transmission and distribution lines, present risks that may lead to accidents, such as electrocutions, explosions and fires. These accidents may be caused by natural occurrences, human errors, technical failures and other factors. As a significant part of our operations is conducted in urban areas, the population is a factor to be constantly considered. Any incident that occurs on our facilities or in human occupied areas, whether regularly or irregularly, can result in serious damages such as human losses, environmental and material damage, loss of production and liability in civil, criminal and environmental lawsuits. These events may also result in reputational damage, financial compensations, penalties for the Company and its officers and directors, and difficulties in obtaining or maintaining concession contracts and operating licenses.

Requirements and restrictions imposed by environmental agencies might require the Company to incur additional costs.

Our operations relating to generation, distribution and transmission of energy and distribution of natural gas are subject to various Federal, state and municipal laws and regulations, and to numerous requirements relating to the protection of health and the environment. Delays by the environmental authorities, or the refusal of license requests by them, or any inability on our part to meet the requirements set by these bodies during the environmental licensing process, may result in additional costs, or even, depending on the circumstances, prohibit or restrict the construction or maintenance of these projects.

Any non-compliance with environmental laws and regulations, such as construction and operation of a potentially polluting facility without a valid license or authorization, could give rise to the obligation to remedy any damages that are caused (third party liability) and result in criminal and administrative sanctions. Under Brazilian legislation, criminal penalties, such as imprisonment and restriction of rights, may be applied to individuals (including managers of legal entities), and penalties such as fines, restriction of rights or community service may be applied to companies. With respect to administrative sanctions, depending on the circumstances, the environmental authorities may: (i) impose warnings, or fines, ranging from R\$50,000 to R\$50 million; (ii) require partial or total suspension of activities; (iii) suspend or restrict tax benefits; (iv) cancel or suspend lines of credit from governmental financial institutions; or (v) prohibit us from contracting with governmental agencies, companies or authorities. Any of these actions could adversely affect our business, results of operations and financial condition.

We are also subject to Brazilian legislation that requires payment of compensation if our activities have polluting effects. According to Federal Law No. 9,985/2000, Federal Decree No. 6,848/2009, and Minas Gerais State Decree No. 45,175/2009, up to 0.5% of the total amount invested in the implementation of a project that causes significant environmental impact should be used to pay for offsetting, based on the project's specific level of pollution and environmental impact. State Decree 45,175/2009 ("Decree 45,175") also indicated that the compensation rate will be applied retroactively to projects implemented prior to promulgation of the present legislation.

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Among the provisions of law that can lead to operating investments and expenses, one is compliance with the Stockholm Convention on Persistent Organic Pollutants (the "Convention"), to which Brazil is a signatory, assuming the international commitment to withdraw the use of PCB by 2025, and its complete prohibition by 2028, through Decree No. 5,472, of June 20, 2005. The legislation to be enacted for this purpose could have a major effect on the energy industry and on CEMIG, due to the possibility of obligations to list, replace and dispose of equipment and materials containing substances included in the Convention such as Polychlorinated Biphenyls ("PCBs").

If we are unable to meet the technical requirements established by the environmental agencies during the process of licensing, this might prejudice the installation and operation of our projects, or make carrying out of our activities more difficult, which could negatively affect our results of operations.

Finally, the adoption or implementation of new safety, health and environmental laws, new interpretations of existing laws, increased rigidity in the application of the environmental laws, or other developments in the future might require us to make additional capital expenditure or incur additional operating expenses in order to maintain our current operations. They might also restrain our production activities or demand that we take other action that could have an adverse effect on our business, results of operations or financial condition.

Increases in energy purchase prices could cause an imbalance in CEMIG D's cash flows.

The expense on purchase of power from the distributors is currently strongly linked to the PLD price (Availability Contracts, Physical Guarantee quotas, and Itaipu Hydroelectric Plant quotas) and to MRE's adjustment factor (Physical Guarantee quotas, Itaipu quotas and Hydrological Risk of the plants that have been renegotiated).

In 2018, a combination of negative factors affected purchases by the distributors, including (i) an adverse period in terms of rainfall, resulting in high spot prices from May to October; and (ii) seasonalization of the physical guarantee of the MRE, allocating a large volume of energy in the second half of 2018, resulting in very low MRE adjustment factors between June and October. In 2019, the spot prices were not as high as in 2018.

The 'Flag Account' (Conta Centralizadora de Recursos de Bandeiras Tarifárias – CCRBT or 'Conta Bandeira') manages the funds that are collected from captive customers of distribution concession and permission holders operating in the national grid, and are paid, on behalf of the CDE, directly to the Flag Account. The resulting funds are passed through by the Brazilian Electric Power Trading Chamber (CCEE) to distribution agents, based on the difference between the realized amounts of costs of thermal generation and the exposure to short term market prices, and the amount covered by the tariff in force.

The first half of 2019 had a smaller deficit on the Tariff Flag account compared to same period in the previous year and, as of June, 2019, the account no longer presented a deficit and 2019 ended with an accumulated surplus of R\$ 745 million for all distribution companies in Brazil. This positive result was due to the better hydrological conditions of the system.

The methodology of the Tariff Flag system is reviewed every year, always seeking improvements, but under the present methodology, when very adverse situations occur the system cannot respond sufficiently, resulting in negative effects on the distributors' cash position. This factor could have an adverse effect on our business, operating results and financial condition.

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Brazil's supply of energy is heavily dependent on hydroelectrical plants, which in turn depend on climatic conditions to produce energy. Adverse hydrological conditions that result in lower generation of hydroelectrical power could adversely affect our business, results of operations and financial condition.

Hydroelectrical generation is predominant in Brazil. The advantages of hydroelectrical power have also been widely publicized due to it is a renewable resource and avoids substantial expenditures on fuels in thermal generation plants. At the same time, the main difficulty in the use of this resource arises from the variability of the flows to the plants. There are substantial seasonal variations in monthly and annual flows, which depend fundamentally on the volume of rain that falls in each rainy season. Adverse hydrological conditions in the Brazilian southeast region caused drought and water scarcity in the states of São Paulo, Minas Gerais and Rio de Janeiro in recent past. These conditions might become worse during the dry period, which occurs from April through September. This could cause rationing of water consumption and/or energy, which could have a material adverse effect on the Company's business and results of operations.

To deal with this difficulty, the Brazilian system has a complementary component of thermoelectric generation plants, and a growing portfolio of wind farms. It also has accumulation reservoirs, the purpose of which is to secure water from the rainy to the dry period and from one year to the next. However, these mechanisms are not able to absorb all the adverse consequences of a prolonged hydrological shortage, like the one that we have seen in the recent past.

The National Energy System Operator (Operador Nacional do Sistema, or "ONS") coordinates the operation of the Brazilian energy system. Its primary function is to achieve optimal operation of the resources available, minimizing operating cost, and the risks of shortage of energy. In periods when the hydrological situation is adverse, a decision by the ONS might, for example, reduce generation by hydroelectrical plants and increase thermal generation, which results in higher costs for the hydroelectrical generating agents, as happened in 2014. In the distributors, this increase in costs generates an increase in the purchase price of energy that is not always passed through to the customer at the same moment, generating mismatches in cash flows, with an adverse effect on the business and financial situation of those distributors. In addition, in extreme cases of scarcity of energy due to adverse hydrological situations, the system might undergo rationing, which could result principally in reduction of cash flow.

The Energy Reallocation Mechanism (Mecanismo de Realocação de Energia, or "MRE") aims to mitigate the impact of the variability of generation of the hydroelectrical plants. This mechanism shares the generation of all the hydroelectrical plants in the system in such a way as to supplement the shortage of generation of one plant with excess generation by another. However, this mechanism is not able to eliminate the risk of the generation players, because when there is an extremely unfavorable hydrological situation, to the extent that all the plants in aggregate are unable to reach the sum of their Physical Guarantee levels of energy output, this mechanism makes an adjustment to the Physical Guarantee of each plant through the Physical Guarantee Adjustment Factor (Fator de Ajuste da Garantia Física, or GSF), resulting in the generating companies being exposed to the short-term ("spot") market.

The company transferred to captive customers the hydrological risk related to Queimado and Irapé power plants (Regulated Market Contracts), in exchange for payment of a 'risk premium', while also receiving indemnity for the losses suffered in 2015 through.

In the free market, we do not have the same process, since even with the payment of the premium, generation companies would have had to continue assuming the hydrological risk at moments of critical hydrology. Thus, no plant that sells energy in the free market signed up for any renegotiation of hydrological risk.

Those operators that did not subscribe to the renegotiation continued to have injunctions preventing charging of the hydrological risk in full. These injunctions are causing a deficit of approximately R\$ 8.24 billion in the short-term market as of December 2019. This position increases the level of default calculated by the CCEE, thus reducing the amounts received by creditor agents in the short-term market. To avoid this effect, some creditor agents filed for further injunctions to acquire the right to priority in receipt. This effect leads to uncertainty in the market, reduction of liquidity, increase of default, and reduction in amounts received in the short-term market, representing a risk for the Company.

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Any substantial seasonal variation in the monthly flows and in the total of flows over the year could limit hydroelectrical generation, making it necessary to use alternative generation systems, which could have a significant adverse effect on the Company's costs, including court fees and expenses relating to the subject.

The draft law No. 33/2017, currently with the Brazilian Senate for approval, proposes certain modifications to the MRE, which includes the exclusion from the calculation of the MRE of the following items: (i) generation in disregard of the merit order which means dispatching energy to the grid in disregard of the ascending price ranking for energy generation, (ii) anticipation of delivery of firm energy to the system of relevant power plants, and (iii) restriction to the supply of energy to the grid due to delay in the transmission system. Other changes may be included in the bill during discussions in the Brazilian Congress.

The rules for energy trading and market conditions may affect the sale prices of energy.

Under applicable laws, our generation companies are not allowed to sell energy directly to distributors. Thus, the power generated by our companies is sold in the Regulated Market (Ambiente de Contratação Regulado, or ACR) – also referred to as the 'Pool' – through public auctions held by ANEEL, or through the Free Market (Ambiente de Contratação Livre, or ACL) through bilateral negotiations with customers and traders. The applicable legislation allows distributors that sign contracts for existing energy supply ("energia existente") with generation companies in the Regulated Market to reduce the quantity of energy contracted by up to 4%, per year, in relation to the amount of the original contract, for the entire period of the contract. This exposes our generation companies to the risk of not selling the de-contracted supply at adequate prices.

We conduct trading activities through power purchase and sale agreements, mainly in the Free Market, through our generation and trading companies. Contracts in the Free Market may be entered into with other generating entities, energy traders, or mainly, with "free customers." Free customers are customers with a demand of 3MW or more: they are allowed to choose their energy supplier. Some contracts have flexibility in the amount sold, allowing the customer to consume a higher or lower amount (5% on average) from our generating companies than the original amount contracted, which might cause an adverse impact on our business, operating results and/or financial situation.

Other contracts do not allow for this kind of flexibility in the purchase of energy, but increased competition in the Free Market could influence the occurrence of this type of arrangement in purchase contracts.

In addition to the free customers referred to above, there is a category of customers referred to as "Special Customers", which are those with contracted demand between 500kW and 3MW. Special Customers are eligible to participate in the Free Market provided they buy energy from incentive-bearing alternative sources, such as Small Hydroelectrical plants, biomass plants or wind farms. The Company has conducted sales transactions for this category of energy from specific energy resources in particular companies of the CEMIG Group and, since 2009; the volume of these sales has gradually increased. The Company has formed a portfolio of purchase contracts, which now occupies an important space in the Brazilian energy market for incentive-bearing alternative power sources. Contracts for the sale of energy to these customers have specific flexibilities to serve their needs, and these flexibilities of greater or lesser consumption are linked to the historic behavior of these loads. Higher or lower levels of consumption by these customers may cause purchase or sale exposures to spot prices, which can have an adverse impact on our business, operating results and/or financial situation. Market variations, such as variations of prices for signature of new contracts, and of volumes consumed by our customers in accordance with flexibilities previously contracted, can lead to spot market positions, which can potentially have a negative financial impact on our results.

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The MRE aims to reduce the exposure of generators of hydroelectrical power, such as our generation companies, to the uncertainties of hydrology. It functions as a pool of hydroelectrical Generation Companies, in which the generation of all the plants participating in the MRE is shared in such a way as to meet the demand of the pool. When the totality of the plants generates less than the amount demanded, the mechanism reduces the assured offtake levels of the plants, causing a negative exposure to the short-term ("spot") market and, as a consequence, the need to purchase power supply at the spot price. Correspondingly, when the total generation of the plants is higher than the volume demanded, the mechanism increases the guaranteed offtake level of the plants, leading to a positive exposure, permitting the liquidation of power at the PLD. In years of poor rainfall, the reduction factor, which applies to the assured energy levels, can reduce the levels of the hydroelectrical plants by 20% or more.

Low liquidity or volatility in future prices, due to market conditions and/or perceptions, could negatively affect our results of operations. Further, if we are unable to sell all the power that we have available (our own generation capacity plus contracts under which we have bought supply of power) in the regulated public auctions or in the Free Market, the unsold capacity will be sold in the CCEE at the PLD, which tends to be very volatile. If this occurs in periods of low spot prices, our revenues and results of operations could be adversely affected.

The PLD's value is calculated through the results of the optimization models of the operation of the national grid used by the ONS and by the CCEE. The PLD is currently published weekly by the CCEE for three load levels (light, medium and heavy). The models depend on entry data revised by the ONS at each period of four months, monthly, and weekly. In this system, there is the possibility that errors occur during the input of data into the model, which can lead to an unexpected change in the PLD. Alteration of these models, and errors in data input, constitute risks for the trading business, because they cause uncertainty in the market, reducing liquidity, and financial losses due to the unexpected change of price. To mitigate the risk of change of the models during the current year, the National Energy Policy Council (CNPE) published a note in 2016 which established that changes in the mathematical models used in the sector will need to be approved by the CPAMP (Comissão Permanente para Análise de Metodologias – Standing Committee for Methodologies Analysis and Energy Industry Computer Programs) by July 31 of each year in order to be in force in the subsequent year.

In 2021, the frequency of changes in the PLD are expected to be increased to once each hour. This change was to have taken place in 2019, but the process of model validation and entering of data was not ready. Therefore, the CPAMP postponed the date for the hourly PLD model to come into effect in 2021. Having an hourly PLD improves the PLD's adherence to the real operation of the system, which will then better capture the hourly changes in the intermittent sources (Solar and Wind). This better alignment of price with operation tends to reduce the System and Service Charges (ESS), and to remunerate the thermoelectric generation plants more efficiently when they are activated. On the other hand, the quality of the entry data when input on an hourly basis, especially for solar and wind sources, introduces one more element of uncertainty to the pricing of the market.

The anticorruption investigations currently in progress in Brazil, which have had large-scale public exposure, and any allegations against or anticorruption investigations of CEMIG, might have adverse effects on the perception of the country, and on us.

Certain anti-corruption investigations could have adverse effects on CEMIG or other companies of the CEMIG Group. Investors' perception about Brazil has been adversely affected by investigations of public corruption in large Brazilian companies, and by political events, which might represent potential risks to the social and economic outlooks for Brazil.

Among the Brazilian companies involved in these investigations are state-controlled companies in the oil and gas, electricity and infrastructure sectors, and private companies in the construction and equipment supplier sectors, which are being submitted to investigations due to accusations of corruption by the Brazilian Securities Commission (CVM), the Federal Police, the Brazilian Public Attorneys, the Federal Audit Board, the U.S. Securities and Exchange Commission (SEC) and the U.S. Department of Justice (DOJ).

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In the energy industry, Eletrobras has set up an independent internal investigation into possible non-compliances with law and/or regulations indicated by media reports that alleged illegal acts related to service providers of Norte Energia S.A. (“NESA”) and of Madeira Energia S.A. (“MESA”) for the construction of Belo Monte and Santo Antônio hydroelectrical plants, respectively and some other special purposes entities, in which Eletrobras holds a minority stake. There have been no direct findings against NESA or MESA nor against any of its managers or employees, and the supposed illegal acts are in fact alleged to have taken place before NESA was formed. The internal investigation, however, estimated the economic and financial impact of these alleged illegal acts, related to NESA’s service providers at R\$ 183 million, and this was considered by Eletrobras and by NESA in accounting analyses and conclusions for the year ended December 31, 2015. This total supposedly represents amounts estimated in excess for acquisition of machines, equipment, services, capitalized charges and administrative expenses, since the alleged improper payments were not made by NESA, but by contractors and suppliers of the Belo Monte hydroelectrical plant; and this impedes identification of the amount and precise periods of the payments.

CEMIG holds, through CEMIG GT, an 11.69% indirect minority stake in NESA, through the jointly-controlled entities Aliança Norte Energia Participações S.A. and Amazônia Energia S.A. and the estimated amount of losses has already been recorded in CEMIG’s consolidated financial statements as of and for the year ended December 31, 2015.

The independent internal investigation of MESA, concluded in February 2019, in the absence of any future developments such as any leniency agreements by third parties that may come to be signed or collaboration undertakings that may be signed by third parties with the Brazilian authorities, found no objective evidence enabling it to be affirmed that there were any supposed undue payments by MESA that should be considered for possible accounting write-off, pass-through or increase of costs to compensate undue advantages and/or linking of MESA with the acts of its suppliers, in the terms of the witness accusations and/or cooperation statements that have been made public.

Since 2017, Renova, a company in which CEMIG has a direct stake of 36.23%, is part of a formal investigation conducted by the Civil Police of Minas Gerais State in relation to certain injections of capital made by some of its controlling shareholders, including the Company, and capital injections made by Renova in certain projects under development in previous years.

On April 11, 2019, the Brazilian Federal Police commenced the ‘Operation E o Vento Levou’ as part of the Lava Jato Investigation, and executed a search and seizure warrant issued by a Federal Court of São Paulo at Renova’s head office in São Paulo, based on allegations and indications of misappropriation of funds harmful to the interests of Cemig. Based on the allegations being investigated, these events are alleged to have taken place before 2015. On July 25, 2019 the second phase of such investigation initiated.

The ‘Operation E o Vento Levou’ and the police investigation of the Minas Gerais State Civil Police have not yet been concluded. Thus, there is a possibility that material information may be revealed in the future. If a criminal action is filed against agents who could have damaged Renova, Renova intends to act as auxiliary to the prosecution in any criminal proceedings, and subsequently sue for civil reparation of the damages suffered.

In 2019 the tax authority had issued infraction notices against Renova, questioning the calculation of income tax and social contribution tax, and payment of withholding income, relating to contracts of services which allegedly did not have the due consideration, in the estimated amount of R\$89 million. Based on the opinion of its legal advisors, Renova provided for this amount as contingency on its financial statements.

Due to these third party investigations, the governance bodies of Renova have requested the opening of an internal investigation, conducted by an independent company with the support of an external law firm. The internal investigation was concluded on February 20, 2020, and according to a statement Renova issued at the time, no concrete evidences of acts of corruption or diversion of funds to political campaigns were identified.

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However, the independent investigators identified irregularities in the conducting of business and agreement of contracts by Renova, including: (i) payments without evidence of the consideration of services, in the total amount of approximately R\$ 40 million; (ii) payments not in accordance with the company's internal policies and best governance practices, in the total amount of approximately R\$ 137 million; and (iii) deficiencies in the internal controls of the investee.

As a result of the analysis of the above mentioned values, Renova concluded that R\$35 million relates to effective assets and therefore no impairment is necessary. The remaining amount of R\$142 million was already impaired in previous years, producing no impact on the consolidated financial statements for the year ended December 31, 2019.

In response to the irregularities found, and based on the recommendations of the Monitoring committee and legal advisers, the Board of Directors of Renova decided to take all the steps necessary to preserve the rights of the investee, continue with the measures to obtain reimbursement of the losses caused, and strengthen Renova's internal controls. Additionally, the Executive Board of Renova hired a Chief Officer for Governance, Risk and Compliance, who will be responsible, among other duties, for ensuring the efficiency of internal controls and compliance on Renova's processes.

Since our investment at Renova is fully impaired at December 31, 2019, and since no contractual or constructive obligations in relation to the investee have been assumed by the Company, it is not expected that effects resulting from the investigations can significantly impact the Company's financial statements, even if eventually not yet recorded by Renova.

In addition to the cases above, there are investigations being conducted by the Public Attorneys' Office of the State of Minas Gerais ("MPMG") and by the Civil Police of the State of Minas Gerais ("PCMG"), which aim to investigate possible irregularities in the investments made by CEMIG in Guanhães Energia S.A. and in MESA (Santo Antônio Energia S.A.). Additionally, on April 11, 2019 agents of the Brazilian Federal Police were in the Company's head office in Belo Horizonte to execute a search and seizure warrant issued by a São Paulo Federal Court in connection with the 'Operation E o Vento Levou', as described above. These proceedings are being investigated by reviewing of documents demanded by the respective authorities, and by hearing of witnesses. At present, it is not possible to determine what the results of the MPMG and PCMG's investigations will be.

Taking into account these investigations, we contracted a specialized independent company to analyze the internal procedures related to these investments, as well as the Company internal proceedings related to the acquisition of Ligth's interest in Enlighted (see Note 27 of the Consolidated Financial Statements). This specialized independent company's investigation was subject to oversight of an independent investigation committee whose creation was approved by our Board of Directors. The specialized independent company's investigation was completed in May, 2020. Considering the results of the internal investigation, no objective evidence was identified to affirm that there were illegal acts on the investments made by Company that were subject to the investigation, therefore, there was no impact in the consolidated financial statements as of December 31, 2019. Furthermore, CEMIG is and has been doing its best efforts to cooperate with all and any investigation and inspection of authorities that the Company is subjected to, whether in the United States or Brazil. For example, in July 2019, pursuant to the DOJ's Corporate Enforcement Policy, the Company disclosed the above-described investigation to the DOJ and the SEC and has been cooperating with those agencies. We cannot guarantee that CEMIG or companies of the CEMIG Group will not in the future become the target of legal actions based on these or future anti-corruption investigations, whether in the United States or Brazil.

Any future anti-corruption actions, which might find failures of conduct by the management of the Company or by third parties, might result in fines, penalties or significant negative postings in the accounts, or intangible damage, such as damage to reputation, and/or other significant, unforeseen, adverse effects.

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We may be exposed to behaviors that are incompatible with our standards of ethics and compliance, and we might be unable to prevent, detect or remedy them in time, which might cause material adverse effects on our business, results of operations, financial condition and reputation.

Our businesses, including our relationships with third parties, are oriented by ethical principles and rules of conduct. We have a range of internal rules that aim to orient our managers, employees and contractors, and to reinforce our ethical principles and rules of professional conduct. Due to the wide distribution and outsourcing of the production chains of our suppliers, we are unable to control all the possible irregularities of the latter. This means that we cannot guarantee that the financial, technical, commercial and legal evaluations that we use in our selection processes will be sufficient for preventing our suppliers from having problems related to employment law, or sustainability, or in the outsourcing of the production chain with inadequate safety conditions. We also cannot guarantee that these suppliers, or third parties related to them, will not involve themselves in irregular practices. If a significant number of our suppliers involve themselves in irregular practices, we might be adversely affected.

Further, we are subject to the risks that our employees, contractors or any person who may do business with us might become involved in activities of fraud, corruption or bribery, circumventing our internal controls and procedures, misappropriating or using our assets for private benefit to the detriment of the Company's interests. This risk is exacerbated by the fact that there are some affiliates, such as special-purpose companies and joint ventures, in which we do not have control.

Our internal controls systems to identify, monitor and mitigate risks may not be effective in all circumstances, especially in relation to companies that are not under our control. In the case of companies we have acquired, our internal controls systems might be incapable of identifying fraud, corruption or bribery that took place prior to the acquisition. Any failing in our capacity to prevent or detect non-compliance with the applicable rules of governance or of regulatory obligation could cause harm to our reputation, limit our capacity to obtain financing, or otherwise cause material adverse effects on our, business, results of operations, financial condition and reputation.

Two members of our board of directors are party to administrative and judicial proceedings and ongoing corruption investigations.

One member of our board of directors is a defendant in two "Civil Actions of Administrative Impropriety due to Damages to the Public Treasury" and another member of our board of directors is a defendant in a "Tax Evasion Action", all in pre-trial proceeding stage. For more information, see "Item 6. Significant Civil and Criminal Proceedings Involving Key Management Members." We cannot assure you that judicial and administrative proceedings, or even the commencement of new judicial and administrative proceedings against any members of our management or board of directors, will not impose limitations or restraints on the performance of the members of our management and board of directors that are a party to these proceedings. In addition, we cannot assure you that these limitations will not adversely affect us and our reputation.

The multiple uses of water and the various interests related to this natural resource might give rise to conflicts of interest between CEMIG and society as a whole, which might cause losses to our business, results of operations or financial condition.

At present, considering projects and companies that are jointly controlled, CEMIG has more than 70 hydroelectric power plants, with 5,895.31 MW and representing 98% of our installed capacity.

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Water is the main raw material for CEMIG's production of energy, and is a resource that is sensitive to climate change and vulnerable to the consequences of exploration of other natural resources, significantly impacted by human actions and subject to a regulatory environment.

CEMIG's operation of reservoirs for generation of hydroelectrical power essentially requires consideration of the multiple uses of water by other users in a river basin; and this in turn, leads to the need to take into account a range of constraints — environmental, safety, irrigation, human consumption, waterways and bridges, among others. In periods of severe drought, like those of 2013 until 2019, monitoring and forecasting the levels of reservoirs and the constant dialogue with the public authorities, civil society and users were essential for ensuring the generation of energy, and the other uses of this resource.

Finally, CEMIG uses a Risk Management System to analyze scenarios and determine the degree of financial exposure to risks, considering the probability of occurrence and its effect. In the scenarios relating to potential conflicts with other users, CEMIG evaluates both the effects arising from prolonged droughts, which can lead to an increase of competition between the energy sector and other users, and the effects of flood events occurring due to excessive rain. While CEMIG engages with other essential users, and takes steps to analyze community input and studies on issues relating to the impact of water use, competing interests relating to water use could, subject to certain minimum limits previously established by law, affect its availability to us for use in the operations of certain of our projects, which could adversely affect our business results of operations and financial condition.

We are controlled by the government of the State of Minas Gerais, which might have interests that are different from the interests of the other investors, or even of the Company.

As our controlling shareholder, the government of the State of Minas Gerais exercises substantial influence on the strategic orientation of our business. Currently it holds 51% of the common shares of CEMIG and as majority shareholder has full powers to decide on all business relating to the Company's objects as stated in the by-laws, and to adopt whatever decisions it deems to be necessary for the defense of its interests and development.

The government of the State of Minas Gerais can elect the majority of our senior management and has the competency to approve, among other subjects, matters that require a qualified quorum of shareholders. The latter include transactions with related parties, shareholding reorganizations and the date and payment of any dividends.

The government of the State of Minas Gerais, as our controlling shareholder, has the capacity to direct us to engage in activities and to make investments that promote the controlling shareholder's economic or social objectives, and these might not be strictly aligned with the Company's strategy, adversely affecting the direction of our business.

Our processes of governance, risk management, compliance and internal controls might fail to avoid regulatory penalties, damages to our reputation, or other adverse effects on our business, results of operations or financial condition.

Our Company is subject to various different regulatory structures, of which the following are examples: (a) laws and regulations of the Brazilian energy sector, such as Law No. 10,848/04 (on trading in energy), regulations by ANEEL; (b) the laws and regulations that apply to listed companies with securities traded on the Brazilian capital market, such as Law No. 6,404/76 (the "Corporate Law"), regulations of the CVM; (c) laws and regulations that apply to Brazilian companies with majority state-owned shareholdings, such as Law No. 8,666/93 (the "Tenders Law") and Law No. 13,303/2016 (the "State Companies Law"); and (d) laws and regulations that apply to Brazilian companies that have securities registered with the SEC, such as the Sarbanes-Oxley Act of 2002, the Foreign Corrupt Practices Act (FCPA) and regulations of the SEC, among others.

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Furthermore, Brazil has intensified and improved its legislation and structures relating to maintaining competition, combat of improbity and prevention of corrupt practices. For instance, Law No. 12,846/13 (the "Anticorruption Law") established objective liabilities for Brazilian companies that commit acts against Brazilian or foreign public administration, including acts relating to tender processes and administrative contracts, and established tough penalties for those companies that are punished.

The Company has a high number of administrative contracts with high values and a large number of suppliers and customers, which increases its exposure to risks of fraud and administrative impropriety.

Our Company has structures and policies for the prevention and combat of fraud and corruption, audit and internal controls, and has adopted the recommendations for Best Corporate Governance Practices recommended by the Brazilian Corporate Governance Institute (Instituto Brasileiro de Governança Corporativa, or "IBGC") and the framework of COSO (Committee of Sponsoring Organizations of the Treadway Commission). Furthermore, due to the majority interest held by the State Government in our shareholding structure, we are required to contract the greater part of our works, services, advertising, purchases, disposals and rentals, through competitive tenders and administrative contracts, which are ruled by the Tenders Law, State Companies Law and other complementary legislation.

However, our processes of governance, risk management and compliance might be unable to avoid future violations of the laws and regulations to which we are subject (regarding labor, tax, environment, energy, among others), or violations of our internal control mechanisms, our Declaration of Ethical Principles and Code of Professional Conduct, or the occurrence of fraudulent or dishonest behavior by employees, or individuals or legal entities that are contracted, or other agents that may represent the company in dealings with third parties, especially with the Public Authorities.

Our management has identified material weaknesses in internal control over financial reporting, and has concluded that our internal control over financial reporting was not effective on December 31, 2016, 2017, 2018 and 2019, which may have a material adverse effect on the Company's results of operations and financial condition.

Our management identified material weaknesses in our internal control over financial reporting for 2016, 2017, 2018 and 2019. For further information on the material weakness identified by our management, see "Item 15 - Controls and Procedures - Management's Annual Report on Internal Control over Financial Reporting". Because of the identified material weaknesses, our management concluded that our internal control over financial reporting was not effective as of December 31, 2016, 2017, 2018 and 2019. Although we have developed and implemented several measures to remedy these material weaknesses, we cannot be certain that we will remedy our existing material weakness or that there will be no other material weaknesses in our internal control over financial reporting in the future.

If our efforts to remediate the material weaknesses are not successful, we may be unable to report the Company's results of operations for future periods accurately and in a timely manner and make our required filings with government authorities, including the SEC and the CVM. Due to its inherent limitations, our internal control over financial reporting may not prevent or detect misstatements, and we cannot be certain that in the future additional material weaknesses will not exist or otherwise be discovered. Any of these occurrences could adversely affect our and the Company's business, results of operations and financial condition.

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Cyber-attacks, or violation of the security of our data might lead to an interruption of our operations, or a leak of confidential information either of the Company, or of our customers, third parties or interested parties, might cause financial losses, legal exposure, damage to reputation or other severe negative consequences for the Company.

We manage and store various proprietary information and sensitive or confidential data relating to our operations. We may be subject to breaches of the information technology systems we use for these purposes. Experienced computer programmers and hackers may be able to penetrate our network security and misappropriate or compromise our confidential information or that of third parties, create system disruptions, or cause shutdowns. Computer programmers and hackers also may be able to develop and deploy viruses, worms and other malicious software programs that attack our products or otherwise exploit any security vulnerabilities of our products.

In addition, sophisticated hardware and operating system software and applications that we produce or procure from third parties may contain defects in design or manufacture, including “bugs” and other problems that could unexpectedly interfere with the operation of the system.

The costs we may incur to eliminate or address the foregoing security problems and security vulnerabilities before or after a cyber-related incident could be significant. Our remediation efforts may not be successful and could result in interruptions, delays or cessation of service, and loss of existing or potential customers that may impede our critical functions.

In addition, breaches of our security measures and the dissemination of proprietary information or sensitive or confidential data about us or our customers or other third parties could expose us, our customers or other third parties affected to a risk of loss or misuse of this information, result in litigation and potential liability for us, damage our brand and reputation, or otherwise harm our business. In addition, we rely in certain limited capacities on third-party data management providers whose potential security problems and security vulnerabilities could have similar effects on us.

Failures in the security of our databases containing customer personal data, as well as events related to non-compliance with data privacy and protection legislation may have an adverse effect on our business, results of operation and reputation.

We have databases containing collected personal data from our customers, partners and collaborators. Any misuse of this data, or failures in the correct use of our security protocols may negatively affect the integrity of those databases. Unauthorized access to information concerning our customers, or unauthorized disclosure of sensitive information, may subject us to lawsuits, and as consequence, we might incur financial liabilities, penalties and reputational damage.

In 2018, Brazil approved the General Data Protection Act or Lei Geral de Proteção de Dados (“LGPD”). This law establishes rules and obligations regarding the collection, processing, storage and use of personal data and will affect all economic sectors including the relationship between customers and suppliers of goods and services, employees and employers and other relationships in which personal data is collected, whether in a digital or physical environment. The law will come into effect in August 2020.

The new legislation establishes penalties for non-compliance that include application of fines of up 2% of revenues, limited to R\$50 million.

[Table of Contents](#)***Potential shortages of skilled personnel in operational areas could adversely affect our business and results of operations.***

It is possible that we will experience shortages of qualified key personnel. In recent years, we have been carrying out voluntary severance incentive programs open to all of our employees. Such programs may reduce our employees' headcount by more than our ability to hire new ones to fill key positions. Our success depends on our ability to continue to successfully train our personnel so they can assume key positions in the organization. We cannot assure you that we will be able to properly train, qualify or retain key staff, or do so without costs or delays. Nor can we assure you that we will be able to hire new qualified personnel, in particular in operational areas, should the need arise. Any such failure could adversely affect our results of operations and our business.

Our ability to distribute dividends is subject to limitations.

Whether or not the investor receives dividends depends on whether our financial situation permits us to distribute dividends under Brazilian law, and whether our shareholders, on the recommendation of our Board of Directors, acting in their discretion, determine suspension, due to our financial circumstances, of the distribution of dividends in excess of the amount of mandatory distribution required under our by-laws in the case of the preferred shares.

Because we are a holding company with no revenue-producing operations other than those of our operating subsidiaries, we can only distribute dividends to shareholders if the Company receives dividends or other cash distributions from its operating subsidiaries. The dividends that our subsidiaries can distribute depend on our subsidiaries generating sufficient profit in any given fiscal year and on restrictive covenant clauses in contracts for loans and financing of these subsidiaries, which place limits upon their payments of dividends. Similarly, we have a limitation on the payment of dividends which cannot exceed the mandatory minimum of 50% of the net income for the business year, as contained in our by-laws, due to restrictive covenant clauses in the contracts for loans and financing of the subsidiaries in which we are guarantors. Dividends are calculated and paid in accordance with applicable Brazilian corporate law ("Brazilian Corporate Law") and the provisions of the by-laws of each of our regulated subsidiaries.

ANEEL has discretion to establish the rates that distributors charge their customers. These rates are determined by ANEEL in such a way as to preserve the economic and financial balance of concession contracts entered into with ANEEL.

Concession agreements and Brazilian law have established a mechanism that permits three types of rate adjustment: (a) the Annual Adjustment; (b) the Periodic Review; and (c) the Extraordinary Review. The purpose of the Annual Adjustment (*Reajuste Anual*) is to compensate for changes in costs that are beyond a company's control, such as the cost of energy for supply to customers, the sector charges that are set by the Federal Government, and charges for use of the transmission and distribution facilities of other companies. Manageable costs, on the other hand, are adjusted by the IPCA inflation index, less a productivity and efficiency factor, known as the X Factor, which considers aspects such as distribution productivity and service quality standards. Every five years, there is a Periodic Tariff Review (*Revisão Periódica Tarifária*, or RTP), the purpose of which is to: identify the variations in costs referred to above; provide an adequate return on the assets that the company has constructed during the period; and establish a factor based on economies of scale, which will be taken into account in the subsequent annual tariff adjustments. An Extraordinary Tariff Review takes place whenever there is any unforeseen development that significantly alters the economic/financial equilibrium of the concession. Thus, although CEMIG D's concession contracts specify preservation of their economic and financial balance, we cannot guarantee that ANEEL will set tariffs that do remunerate us adequately in relation to the investments made or the operating costs incurred due to the concession, and this might have a material adverse effect on our business, financial situation and operating results.

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ANEEL has discretion in setting the Permitted Annual Revenue (Receita Anual Permitida or "RAP") of our transmission companies; if any adjustments result in a reduction of the RAP, this could have a material adverse effect on our results of operations and financial condition.

The RAP that we receive through our transmission companies is determined by ANEEL, on behalf of the Federal Government. The concession contracts provide for two mechanisms for the adjustment of revenues: (a) the annual tariff adjustments; and (b) the Periodic Tariff Review (Revisão Tarifária Periódica). The annual tariff adjustment of our transmission revenues takes place annually in June and is effective in July of the same year. The annual tariff adjustments take into account the permitted revenues of the projects that have come into operation, and the revenue from the previous period is adjusted by the inflation index (IPCA for Contract No. 006/1997 and IGP-M for Contract No. 079/2000). The periodic tariff review previously took place every four years, but Law No. 12,783/2013 changed the tariff review period to five years. The next periodic tariff review was scheduled for July 2018, as stated in our transmission concession contract. However, the rules for the tariff review are still being discussed between ANEEL and the public via public hearings. As a result, this review was postponed to July 2020, with retroactive effects. During the periodic tariff review, the investments made by a concession holder in the period and the operating costs of the concession are analyzed by ANEEL, taking into account only investments that it deems to be prudent, and operating costs that it assesses as having been efficient, using a benchmarking methodology developed by employing an efficiency model which compares the data of the various transmission companies in Brazil. Thus, the tariff review mechanism is subject to some extent to the discretionary power of ANEEL, since it may omit investments that have been made, and could recognize revenues for operating costs lower than those actually incurred. This could result in a material adverse effect on our business results.

An Extraordinary Tariff Review takes place whenever there is any unforeseen development that significantly alters the economic/financial equilibrium of the concession. Thus, although our concession agreements specify that the economic and financial balance of the contract shall be preserved, we cannot guarantee that ANEEL will set tariffs that adequately compensate us in relation to the investments made or in relation to the operating costs incurred by reason of the concession, which may have a material adverse effect on our business, financial condition and results of operations.

We have strict liability for any damages caused to third parties resulting from inadequate provision of energy services.

Under Brazilian law, we are strictly liable for direct and indirect damages resulting from the inefficient rendering of energy generation, transmission and distribution services. In addition, when damages are caused to final customers as a result of outages or disturbances in the generation, transmission and distribution system, whenever these outages or disturbances are not attributed to an identifiable member of the ONS or to the ONS itself, the liability for such damages is shared among generation, distribution and transmission companies. Until a party with final responsibility has been identified, the liability for such damages will be shared in the proportion of 35.7% to the distribution agents, 28.6% to the transmission agents and 35.7% to the generation agents. The number of votes establishes these proportions that each of these types of energy concession holders receives in the general meetings of the ONS, and as such, are subject to change in the future. Consequently, our business, results of operations and financial condition might be adversely affected in the event we are held liable for any such damages.

[Table of Contents](#)***We may incur losses and reputational damage in connection with pending litigation.***

We are party to several legal and administrative proceedings relating to civil, administrative, environmental, tax, regulatory, labor and other claims. These claims involve a wide range of issues and seek indemnities and restitution in money and by specific performance. Several individual disputes account for a significant part of the total amount of claims against the Company. See "Item 8. Financial Information – Legal and Administrative Proceedings." Our consolidated financial statements include provisions for risks in a total amount of R\$ 1,888 million, as of December 31, 2019, for actions in which the chances of loss have been assessed as "probable".

One or more unfavorable decisions against us in any legal or administrative proceeding may have a material adverse effect on us. In addition to making provisions and the costs associated with legal fees, we may be required by the court to provide collateral for the proceedings, which may adversely affect our financial condition. In the event that our provisions for legal actions are insufficient, payments for actions in excess of the amounts provisioned could adversely affect our results of operations and financial condition.

In addition, certain members of our management are involved as defendants in criminal proceedings that are currently pending, which may distract our management and negatively affect us and our reputation. See "Item 6. Significant Civil and Criminal Proceedings Involving Key Management Members".

Environmental regulations require us to perform environmental impact studies on future projects and obtain regulatory permits.

For reasons of obligations imposed by Brazilian environmental law, we must conduct environmental impact studies and obtain regulatory and environmental permits and licenses for our current and future projects. We cannot assure that these environmental impact studies will be approved by environmental agencies, that environmental licenses will be issued, that public opposition will not result in delays or modifications to any proposed project, or that laws or regulations will not change or be interpreted in a manner that could materially adversely affect our operations or plans for the projects in which we have an investment. We believe that concern for environmental protection is also an increasing trend in our industry. Although we consider environmental protection when developing our business strategy, changes in environmental regulations, or changes in the policy of enforcement of existing environmental regulations, could have a material adverse effect on our results of operations and our financial condition by delaying the implementation of energy projects, increasing the costs of expansion.

Furthermore, the implementation of investments in the transmission sector has suffered delays due to the difficulty in obtaining the necessary regulatory and environmental permits and approvals. This has led to delays in investments in generation due to the lack of transmission lines to provide for the outflow of the energy generated. If we experience any of these or other unforeseen risks, we may not be able to generate, transmit and distribute energy in amounts consistent with our projections, which may have a material adverse effect on our financial condition and results of operations.

We operate without insurance policies against catastrophes and third-party liability.

Except for use of aircraft, we do not have third-party liability that covers accidents and we do not seek proposals for this type of insurance. CEMIG has not sought a proposal for, and has not contracted, insurance coverage against disasters, such as earthquakes or floods, that might affect our facilities. Any events of this type could generate unexpected additional costs, resulting in adverse effects on our business, results of operations and financial condition.

[Table of Contents](#)***The insurance contracted by us might be insufficient to reimburse costs of damage.***

Our business is normally subject to a range of risks, including industrial accidents, labor disputes, unexpected geological conditions, changes in the regulatory environment, environmental and climatic risks, and other natural phenomena. In addition, we and our subsidiaries might be found responsible for losses and damages caused to third parties as a result of failures to provide generation, transmission and/or distribution service.

We only maintain insurance for fire, risks involving our aircraft, and operational risks, as well as those types of insurance coverage that are required by law, such as transport insurance of goods belonging to legal entities.

We cannot guarantee that the insurance contracted by us will be sufficient to cover in full or at all any liabilities that may arise in the course of our business nor that these insurance policies will continue to be available in the future. The occurrence of claims in excess of the amount insured, or which are not covered by our insurance policies, might generate significant and unexpected additional costs, which could have an adverse effect on our business, results of operations and/or financial condition. Further, we cannot guarantee that we will be able to maintain our insurance coverage at favorable or acceptable commercial prices in the future.

Strikes, work stoppages or labor unrest by our employees or by the employees of our suppliers or contractors could adversely affect our results of operations and our business.

All of our employees are represented by labor unions. Disagreements on issues involving divestments or changes in our business strategy, reductions in our personnel, as well as potential employee contributions, could lead to labor unrest. We cannot ensure that strikes affecting our production levels will not occur in the future. Strikes, work stoppages or other forms of labor unrest at any of our major suppliers, contractors or their facilities could impair our ability to operate our business, complete major projects and adversely affect our ability to achieve our long-term objectives.

A substantial portion of the Company's assets is tied to the provision of public services and would not be available for liquidation in the event of our bankruptcy for attachment as collateral for the enforcement of any court decision.

A substantial portion of the Company's assets is tied to the provision of public services. These assets are not available for liquidation in the event of our bankruptcy nor can they be attached as collateral for the enforcement of any court decision because the assets revert to the concession-granting authority to ensure continuity in the provision of public services, according to applicable legislation and our concession agreements. Although the Brazilian Federal Government would be obligated to compensate us for early termination of our concessions, we cannot assure you that the amount ultimately paid by the Brazilian Federal Government would be equal to the market value of the reverted assets. These restrictions on liquidation may lower significantly the amounts available to holders of the notes in the event of our liquidation and may adversely affect our ability to obtain adequate financing.

The loss of the concession of our subsidiary Gasmig could cause losses in Gasmig's results.

In 1993, Gasmig obtained the concession for commercial operation of industrial, institutional and residential piped gas services in the state of Minas Gerais for a period of 30 years, ('the Concession Contract'). The concession was extended to January 10, 2053 under the Second Amendment to the Concession Contract, dated December 26, 2014.

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On September 19, 2019, Gasmig executed the Third Amendment to the Concession Contract, which replaced the obligation of Gasmig to build a gas pipeline from the city of Queluzito, in Minas Gerais, in the direction of the city of Uberaba, Minas Gerais, for a compensatory grant payment of R\$ 852 million to the State of Minas Gerais, and confirming the extension of the Concession Contract to January 10, 2053. Also, Gasmig committed to reach a total of 100,000 clients served by the end of 2022, and to build networks to serve the seven meso-regions of the State of Minas Gerais. Currently, Gasmig serves five of these meso-regions.

Under Article 35 of Law 8987 of February 13, 1995, as amended ('the Concessions Law'), the concession is subject to termination under certain circumstances, including the following: (i) expiration of the contractual term; (ii) the operation being taken over by the state; (iii) termination for other reasons, usually of time, arising from law; (iv) rescission of the contract (amicably, or by the courts); (v) annulment of the concession contract as a result of a failing or irregularity found in a tender or public bid procedure or in the manner of its grant; or (vi) bankruptcy or extinction of the concession holder. In any of these circumstances, the concession assets will revert to the Concession-granting Power, the state of Minas Gerais ('the Grantor'). In the event that Gasmig loses its concession by any reason, we cannot guarantee that any indemnity payable to Gasmig will be sufficient to compensate its investments, the implicit rate of return, nor the loss of future profits relating to the assets not yet totally amortized or depreciated.

The activities carried out by Gasmig are subject to interruptions, disturbances and risks in the distribution system, caused by accidents, operational difficulties, damage, failure of equipment or processes, natural causes or catastrophes (such as explosions, fires, floods, landslides, sabotage, terrorism, vandalism, and others), which might result in Gasmig having an obligation to indemnify clients that suffer damages and might expose it to administrative or court proceedings.

In addition, Gasmig may suffer the intervention of the Grantor in the event that, in the Grantor's opinion there is a risk of Gasmig failing to perform the services, or if Gasmig has failed to perform its obligations under the concession contract or the applicable law. In such events, the Grantor could also levy fines against Gasmig or revoke its concession.

Early termination of the Concession contract, and penalties in connection with such termination, would generate significant impacts on Gasmig's results, and affect its capacity to pay and comply with its financial obligations.

Gasmig's concession will expire in January 2053, and may be extended, at the sole discretion of the Grantor.

Changes in the methodology and parameters adopted by the regulatory authorities in connection with the tariff review cycles of Gasmig may adversely impact our operations and financial condition

The general parameters of tariff regulation are specified in the Concession Contract, which: (i) determines the general guidelines for adjustment of tariff; (ii) guarantees pass-through of the cost of acquisition of gas and of the tariff review; (iii) determines the distribution margin, which enables the economic and financial sustainability of Gasmig in accordance with the best practices used by Brazilian and international regulatory agencies for the natural gas distribution sector.

The concession contract also provides that the tariff will be reviewed if events occur that put the economic and financial equilibrium of the Contract at risk, in the form of and for the periods necessary to avoid losses due to tariffs becoming inadequate.

In November 2019 the Economic Development Department of Minas Gerais State ('SEDE'), a division of the Minas Gerais State Government, responsible for regulating the distribution of piped gas, completed the first tariff review cycle, in which the parameters for the remuneration rate, expectations of investments, costs and volumes for determining the tariffs in the 2018-2022 cycle were determined. Also, the SEDE included the impact of the payment of the Compensatory Grant in the tariffs and compensated the delay in the setting of tariffs, which should have been ready in January 2018 for this cycle.

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Changes in the tariff review cycles could cause a material adverse effect on Gasmig's activities, affecting its financial condition and the results of its operations. These changes may also impact on market conditions and the prices of securities in Brazil, consequently adversely affecting Gasmig, and could change the price of gas or increase the costs of it carrying out its activities.

Gasmig might not succeed in implementing the strategies in its long-term strategic plan at the desired moment, or without incurring unexpected costs, which could have adverse consequences for its business, operational results and financial condition.

Gasmig's capacity to comply with the strategic objectives depends, largely, on timely and successful implementation, with a good cost-benefit ratio, of its long-term strategy.

The following are some of the factors that could negatively affect this implementation:

- Substantial alterations in the economic conditions;
- Substantial alterations in regulatory matters;
- Capacity to generate cash flow, or obtain future financings, necessary for implementation of projects;
- Inability to obtain necessary governmental licenses and approvals;
- Unexpected engineering problems;
- Unexpected investments in environmental matters arising from alterations in legislation and/or incidents that demand indemnities for environment damage;
- Unexpected delays in the processes of expropriation and establishment of easements;
- Non-availability of the workforce or of the necessary equipment;
- Strikes;
- Delay in delivery of equipment by suppliers;
- Inappropriateness of the physical facilities and equipment for ensuring uninterrupted activities of the business and protecting the critical processes against failing and accidents;
- Delay resulting from failings by suppliers or third parties to comply with their contractual obligations;
- Interference by climate factors, or environmental restrictions;
- Significant variations of hydrological conditions from the historic average, that is to say, occurrence of rains in a volume or frequency not in accordance with the historic average;
- Changes in the environmental legislation, creating new obligations and causing additional costs for projects; and
- Legal instability caused by political issues.

Occurrence of any above factors could result in significant increases in costs, or delay or prevent implementation of initiatives, and consequently compromise the execution of Gasmig's strategic plan, with negative effect on the operational and financial results of Gasmig, and of the Company.

The existence of a single supplier of natural gas in Brazil affects competitiveness in the market in which Gasmig operates.

Petrobras holds a monopoly to supply and transport natural gas. Gasmig and Petrobras entered into a Purchase Agreement for the supply of natural gas under the 'Firm Inflexible' regime, specifying the quantity contracted, the price of gas, and other factors. The price of gas acquired from Petrobras follows a variation defined by a contractual formula, and is adjusted in accordance with changes in the price of Brent oil, and the US dollar exchange rate. In 2019 the price of acquisition for gas other than for thermoelectric power generation increased during the year by 3.4%, but later decreased, and was 0.48% higher at the end of 2019. However, if we consider the new pricing adopted by Petrobras, the price in January 2020 was reduced by 11.1%.

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The contract signed between the parties is for the period up to 2023, and the pricing of the molecule portion may be altered only by agreement between the parties. The price of the transportation of the natural gas is regulated and may be revised by the National Oil, Natural Gas and Biofuels Agency ("ANP") changes the pricing, the amount will be passed through to the distributors.

Changes in the prices and/or pricing policies of products that are substitutes for the product that Gasmig sells could affect the price of the energy products sold by Gasmig.

Petrobras also controls the prices of the principal energy substitutes which compete with natural gas. In 2017, Petrobras revised its pricing policy for energy sources that compete with natural gas. The prices of the LPG (liquefied petroleum gas) and the Fuel Oil fluctuated significantly in the last year. Note that the prices of these energy products also vary in accordance with the oil price, and the US dollar exchange rate, which could result in their maintaining their competitiveness in relation to gas.

Petrobras may revise its pricing policy at any time. Any changes could influence the market demand for natural gas and its competing fuels such as LPG, petroleum gas, and/or Fuel Oil. Therefore positively or negatively impacting Gasmig's operational results and financial situation.

Opening of the gas market or measures to encourage reduction of the price could affect the profitability of Gasmig.

In 2016 the Brazilian federal government launched the 'Gas para Crescer' ('Gas for Growth') program, with the objective of fostering the natural gas market in Brazil, through implementation of changes in the regulatory environment of the natural gas sector, preparing it for a reduction in the participation by Petrobras. The proposals of the Gas para Crescer program were incorporated into a draft law which has for some years been going through the Federal Congress. Also as a consequence of this program, the National Oil, Natural Gas and ANP issued a Request for Public Contributions, with a view to receiving contributions from agents in the natural gas chain to enable the entry of new players in the market.

The 'Gás para Crescer' program was succeeded by the 'Novo Mercado de Gás' ('New Gas Market') program. The main directives of the program are consolidated in CNPE Resolution 16/2019, which sets principles and objectives for the promotion of free competition in Brazil's natural gas market.

Among the directives, it is established that there should be an incentive for the States and the Federal District to adopt good regulatory practices that contribute to effective liberalization of the market, increase in transparency and efficiency, de-verticalization of the sector, and appropriate pricing in the supply of natural gas, by segment of users. This will likely also involve an incentive for the States and the Federal District to adopt reforms and structuring measures, including a possible amendment to concession contracts to reflect good regulatory practices, which include the regulatory principles for Free Consumers, Self-producers and Self-importers. Finally, there would be an incentive for the States to proceed to privatization of the local state piped gas concession holder.

In July 2019, Petrobras and the Brazilian Antitrust Authority CADE (*Economic Defense Administrative Council*) signed an Undertaking for Cessation (*Termo de Compromisso de Cessação* (TCC), under which Petrobras undertook to sell the holdings that it presently owns in the transporters Nova Transportadora do Sudeste S. A. - NTS (10%), Transportadora Associada de Gás S.A. - TAG, (10%) e TBG - Transportadora Brasileira Gasoduto Bolívia-Brasil S.A. (51%). Petrobras will also sell indirect equity interest in distributors, by either selling its shares in Gaspetro or Gaspetro's equity interests in the distributors. Petrobras also made an undertaking to adopt certain measures to give more transparency to the contracts for transport, and for third parties to have access to the capacity of the existing assets.

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These measures, if implemented, could affect Gasmig, and there could be a variation in the cost price of gas and in the competitiveness of natural gas compared to other energy sources, generating a possible devaluation of natural gas in the market and altering Gasmig's operational cash flow – i.e. it might have to pay a higher price than expected for the same product, generating negative financial consequences for Gasmig.

The renewal or extension of the gas supply contracts is not guaranteed, and the growth strategy might be adversely affected.

The gas supply contracts have specific periods of validity, and Gasmig might be adversely affected if this renewal and/or extension does not take place on terms that are favorable to Gasmig's growth strategy – this might occur in view of the possibility of entry of new agents into the gas market.

Further, Gasmig will have to comply with certain requirements for the renewal of the gas supply contract, and for this reason cannot guarantee that the supply contract will be renewed, or that it will be renewed on the same terms. If the supply contract is not renewed, or if it is renewed on less favorable terms, the business, financial situation and operational results of Gasmig could be negatively affected.

The volumes of natural gas supplied by Gasmig are concentrated in few sectors, and few clients.

The large-scale industrial market sustains the sales volume, and constituted 89.0% of the volume of gas not sold to thermal electricity generation plants in 2019. Gasmig's largest clients are in steel, metallurgy, mining, and manufacture of wood pulp.

In the event of reversal of expectations and/or an adverse economic scenario, continuity of the structure of the market served by Gasmig could have a negative effect on Gasmig's business, operational results and financial situation.

Discussions in progress on the new directives of public policies in relation to the gas market in Brazil could negatively affect Gasmig's business, if implemented.

Since the second half of 2016, Petrobras has been reducing its presence in the natural gas supply chain. In 2017 it sold 90% of its stockholding interest in Nova Transportadora do Sudeste S.A. – NTS, to the Canadian company Brookfield Infrastructure Partners, and in June 2019, completed the sale of 90% of its interest in Transportadora Associada de Gás S.A. – TAG, to the group comprising Engie and the Canadian fund Caisse de Dépôt et Placement du Québec (CPDQ).

Even with these divestitures, Petrobras continues to have a dominant position in the market, because it has a contract for the transport of gas from these assets, and continues to be the monopoly supplier in the Brazilian gas market.

Also, in 2016 the Brazilian federal government launched the 'Gás para Crescer' ('Gas for Growth') initiative, which aimed to foster the gas market in Brazil through changes in the regulatory environment of the natural gas industry, preparing it for the reduction of Petrobras's participation. The Federal Congress incorporated the proposals of the Gás para Crescer initiative into the draft law currently under analysis. Further, as a consequence of this program, the National Oil, Natural Gas and ANP issued Requests for Public Contribution, to receive contributions from agents of the natural gas production chain, with the aim of allowing the entry of new participants into the market.

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In 2019 the ‘Novo Mercado de Gás’ (‘New Gas Market’) program, developed by the Mining and Energy Ministry in partnership with the Economy Ministry, ANP, CADE and EPE, was instituted, with four sectors: Promotion of competition; Integration of natural gas with the electricity and industrial sectors; Harmonization of the state and federal regulations; and Removal of tax barriers. As practical results of the program, we highlight the Resolution 16 of June 24, 2019, enacted by the National Energy Policy Council (CNPE) and the signature of the Cessation Undertaking (TCC) between CADE (Conselho Administrativo de Defesa Econômica – the Competition Authority) and Petrobras. CNPE Resolution 16 details guidelines of energy policy to achieve the objectives of the ‘New Gas Market’, especially in relation to the promotion of competition. The TCC signed between CADE and Petrobras aims to stimulate competition in the sector and prevent future occurrence of anticompetitive conduct, covering total disposal of transport assets by the dominant agent, liberation of excess transport capacity to the market, and non-discriminatory negotiation of access for third parties to the infrastructures of outflow and processing of natural gas.

The proposed changes could contain negative impacts on the natural gas distribution business, and generate uncertainties on some aspects. The adoption of systems of entry and exit to the transport activity generates uncertainties in relation to the future cost of the service of transport. The incentive for the States to adopt harmonized regulatory principles for free agents (Self-producers, Self-importers and Free Consumers) could represent risks to the distribution concession holders of having to bear the burden of commitments to minimum withdrawals included in supply contracts, or even suffer physical bypass by the large consumers.

The regulatory agency responsible for the distribution of piped gas is controlled by the government of Minas Gerais State, and the interests of the government of Minas Gerais could conflict with those of the economic balance of the concession granted to Gasmig.

The Brazilian Federal Constitution lays down that the commercial operation of local piped gas services is a function of the States, directly or through concessions. Gasmig is indirectly controlled by the State of Minas Gerais, through the majority stockholding position held by CEMIG in Gasmig. The Minas Gerais Economic Development Department (“SEDE”) is a division of the state government responsible for the regulation of piped gas distribution services. Further, SEDE is also responsible for the promotion of sustainable development in Minas Gerais State.

As indirect controlling shareholder of Gasmig, and at the same time regulator of the public service, through SEDE, the government of Minas Gerais State has the authority to direct the efforts and investments of Gasmig in accordance with its own interests – political, economic or social, which could have a negative impact on the economic equilibrium of the concession.

Risks Relating to Brazil

Political and economic instability in Brazil could have effects on the economy and affect us.

Historically, the Brazilian political environment has influenced, and continues to influence, the performance of the country’s economy. Political crises have affected and continue to affect investor confidence and that of the general public, which resulted in economic deceleration and heightened volatility in the securities issued by Brazilian companies. The elected President Jair Messias Bolsonaro took office on January 1, 2019. The President of Brazil has power to determine the governmental policies and actions related to the Brazilian economy and, consequently, to affect the operations and financial performance of companies, including ours.

Further, Brazilian markets have experienced a high level of volatility due to the uncertainties derived from the on-going “Operação Lava Jato” investigation, and other similar investigations, which are being carried out by the Brazilian Federal Prosecutors, and their impact on the economy and on the Brazilian political environment. Such events could cause the trading value of our shares, preferred and common, of our preferred and common ADSs, and our other securities to be reduced, and could negatively affect our access to the international financial markets. Furthermore, any political instability resulting from such events, including upcoming political elections at the federal and state levels, if it affects the Brazilian economy, could cause us to re-evaluate our strategy.

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The Brazilian Federal Government has exercised, and continues to exercise, significant influence on the Brazilian economy. Political and economic conditions can have a direct impact on our business, financial condition, results of operations and prospects.

The Brazilian Federal Government frequently intervenes in the country's economy and occasionally makes significant changes in monetary, fiscal and regulatory policy. Our business, results of operations and financial condition may be adversely affected by changes in government policies, as well as other factors including, without limitation:

- fluctuations in the exchange rate;
- inflation;
- changes in interest rates;
- fiscal policy;
- other political, diplomatic, social and economic developments which may affect Brazil or the international markets;
- liquidity of the domestic markets for capital and loans;
- development of the energy sector;
- controls on foreign exchange and restrictions on remittances out of the country; and/or
- limits on international trade.

Uncertainty on whether the Brazilian Federal Government will make changes in policy or regulation that affect these or other factors in the future might contribute to the economic uncertainty in Brazil and to greater volatility of the Brazilian securities-markets and the markets for securities issued outside Brazil by companies. Measures by the Brazilian Federal Government to maintain economic stability, and speculation on any future acts of the Brazilian Federal Government, might generate uncertainties in the Brazilian economy, and increase the volatility of the domestic capital markets, adversely affecting our business, results of operations and financial condition. If the political and economic situations deteriorate, we may also face increased costs.

The stability of the Brazilian real is affected by its relationship with the U.S. dollar, inflation and Brazilian Federal Government policy regarding exchange rates. Our business could be adversely affected by any recurrence of volatility affecting our foreign currency-linked receivables and obligations as well as increases in prevailing market interest rates.

The Brazilian currency has experienced high degrees of volatility in the past. The Brazilian Federal Government has implemented several economic plans, and has used a wide range of foreign currency control mechanisms, including sudden devaluation, small periodic devaluation during which the occurrence of the changes varied from daily to monthly, floating exchange market systems, exchange controls and parallel exchange market. From time to time, there was a significant degree of fluctuation between the U.S. dollar and the Brazilian Real and other currencies. On December 31, 2019, the exchange rate between the Real and the US dollar was R\$ 4.0190 for US\$ 1.00. There is no guarantee that the Real will not depreciate, or appreciate, in relation to the US dollar, in the future.

The instability of the Brazilian Real/U.S. Dollar exchange rate could have a material adverse effect on us. Depreciation of the Real against the United States dollar and other principal foreign countries could create inflationary pressures in Brazil and cause increases in interest rates, which could negatively affect the growth of the Brazilian economy, and consequently, our growth. Depreciation of the Real could cause an increase in financial and operating costs, since we have payment obligations under financing contracts and import contracts indexed to exchange rate variations. In addition, depreciation of the Real could cause inflationary pressure that might result in abrupt increases in the inflation rate, which would increase our operating costs and expenses, which might adversely affect our business, results of operations, or outlook.

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We generally do not enter into derivative contracts or similar financial instruments or make other arrangements with third parties to hedge against the risk of an increase in interest rates. To the extent that such floating rates rise, we may incur additional expenses. Additionally, as we refinance our existing debt in the coming years, the mix of our indebtedness may change, specifically as it relates to the ratio of fixed to floating interest rates, the ratio of short-term to long-term debt, and the currencies in which our debt is denominated or to which it is indexed. Changes that affect the composition of our debt and cause rises in short or long-term interest rates may increase our debt service payments, which could have an adverse effect on our results of operations and financial condition.

Inflation and certain government measures aimed to control it might contribute significantly to economic uncertainty in Brazil, and could have a material adverse effect on our business, results of operations, financial condition and the market price of our shares.

Brazil has historically experienced extremely high rates of inflation. Inflation, and some of the Federal Government's measures taken in an attempt to curb inflation, have had significant negative effects on the Brazilian economy. Since the introduction of the Real in 1994, Brazil's inflation rate has been substantially lower than in previous periods. Brazilian annual inflation as measured by the IPCA index in the years 2017, 2018 and 2019 was, respectively, 2.95%, 3.75% and 4.31%. No assurance can be given that inflation will remain at these levels.

Future measures taken by the Federal Government, including increases in interest rates, intervention in the foreign exchange market or actions intended to adjust the value of the Real, might cause an increase in the rate of inflation, and consequently, have an adverse economic impact on our business, results of operations and financial condition. If Brazil experiences high inflation rates in the future, we might be unable to adjust the rates we charge our customers to offset the effects of inflation on our cost structure.

A significant increase in interest rates or inflation would have an adverse effect on our finance expenses and financial results as a whole. At the same time, a significant reduction in the CDI rate, or in inflation, could negatively affect the revenue generated by our financial investments, but also have the positive effect of revaluing adjustments to the balances of our concession financial assets. Substantially all of our cash operating expenses are denominated in *Reais* and tend to increase with Brazilian inflation. Inflationary pressures might also hinder our ability to access foreign financial markets or might lead to further government intervention in the economy, including the introduction of government policies that could harm our business, results of operations and financial condition or adversely affect the market value of our shares and as a result, of our preferred ADSs, common ADSs and other securities.

Risks Relating to the Preferred and Common Shares, and the Preferred and Common ADSs

Instability of the exchange rate could adversely affect the value of remittances of dividends outside Brazil, and the market price of the ADSs.

Many Brazilian and global macroeconomic factors have an influence on the exchange rate. In this context, the Brazilian Federal Government, through the Central Bank, has in the past occasionally intervened for the purpose of controlling unstable variations in exchange rates. We cannot predict whether the Central Bank or the Federal Government will continue to allow the real to float freely or whether it will intervene through a system involving an exchange rate band, or the use of other measures.

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This being so, the real might fluctuate substantially in relation to the United States dollar, and other currencies, in the future. That instability could adversely affect the equivalent in US dollars of the market price of our shares, and as a result the prices of our ADSs, common and preferred, and also outward dividends remittances from Brazil. For more information, see “Item 3. Key Information – Exchange Rates”.

Changes in economic and market conditions in other countries, especially Latin American and emerging market countries, may adversely affect our business, results of operations and financial condition, as well as the market price of our shares, preferred ADS and common ADSs.

The market value of the securities of Brazilian companies is affected to varying degrees by economic and market conditions in other countries, including other Latin American countries and emerging market countries. Although the economic conditions of such countries may differ significantly from the economic conditions of Brazil, the reactions of investors to events in those countries may have an adverse effect on the market value of the securities of Brazilian issuers. Crises in other emerging market countries might reduce investors’ interest in the securities of Brazilian issuers, including our Company. In the future, this could make it more difficult for us to access the capital markets and finance our operations on acceptable terms or at all. Due to the characteristics of the Brazilian power industry (which requires significant investments in operating assets) and due to our financing needs, if access to the capital and credit markets is limited, we could face difficulties in completing our investment plans and the refinancing our obligations, and this could adversely affect our business, results of operations and financial condition.

The relative volatility and illiquidity of the Brazilian securities market may adversely affect our shareholders.

Investing in Latin American securities, such as the preferred shares, common shares, preferred ADSs or common ADSs, involves a higher degree of risk than investing in securities of issuers from countries with more stable political and economic environments and such investments are generally considered speculative in nature. These investments are subject to certain economic and political risks, including, as examples, the following:

- changes to the regulatory, tax, economic and political environment that may affect the ability of investors to receive payment, in whole or in part, related to their investments; and
- restrictions on foreign investment and on repatriation of capital invested.

The Brazilian securities market is substantially smaller, less liquid, more concentrated and more volatile than the major securities markets in the United States. This might substantially limit an investor’s ability to sell the shares underlying his preferred or common ADSs for the desired price and within the desired period. In 2019, the São Paulo Stock Exchange (Brasil, Bolsa, Balcão S.A or B3), the only stock exchange in Brazil on which our shares are traded, had an annual market capitalization of approximately R\$ 4.77 trillion, and average daily trading volume of approximately R\$ 17.2 billion.

Holders of the preferred and common ADSs, and holders of our shares, may have different shareholders’ rights than holders of shares in U.S. companies.

Our corporate governance, disclosure requirements and accounting practices are governed by our by-laws, by the Level 1 Differentiated Corporate Governance Practices Regulations (Regulamento de Práticas Diferenciadas de Governança Corporativa Nível 1) of the B3 (the main Brazilian stock exchange) by the Brazilian Corporate Law (Federal Law No. 6,404/76) and by the rules issued by the CVM. These regulations may differ from the legal principles that would apply if our Company were incorporated in a jurisdiction in the United States, such as Delaware or New York, or in other jurisdictions outside Brazil. In addition, the rights of an ADS holder, which are derived from the rights of holders of our common or preferred shares, as the case may be, to have his interests protected in relation to decisions by our board of directors or our controlling shareholder, may be different under the Brazilian Corporate Law from the rules of other jurisdictions. Rules against insider trading and self-dealing and other rules for the preservation of shareholder interests may also be different in Brazil if compared to the United States rules, potentially establishing a disadvantage for holders of the preferred shares, common shares, or preferred or common ADSs.

[Table of Contents](#)***Exchange controls and restrictions on remittances from Brazil might adversely affect holders of preferred and common ADSs.***

The investor may be adversely affected by the imposition of restrictions on the remittance to foreign investors of the proceeds of their investments in Brazil and the conversion from reais (R\$) into foreign currencies. Restrictions of this type would hinder or prevent the conversion of dividends, distributions or the proceeds from any sale of preferred shares or common shares from reais (R\$) into U.S. dollars (US\$). We cannot guarantee that the Federal Government will not take restrictive measures in the future.

Foreign shareholders may be unable to enforce judgments given in non-Brazilian courts against the Company, or against members of its Board of Directors or Executive Board.

All of our directors and officers reside in Brazil. Our assets, as well as the assets of these individuals, are located mostly in Brazil. As a result, it may not be possible for foreign shareholders to effect service of process on them within the United States or other jurisdictions outside Brazil, or to attach their assets, or to enforce against them, or against the Company in United States courts, or in the courts of other jurisdictions outside Brazil, judgments that are predicated upon the civil liability provisions of the securities laws of the United States or the respective laws of such other jurisdictions.

In order to have a judgment rendered outside of Brazil enforced in Brazil, the party seeking enforcement would need to be recognized in the courts of Brazil (to the extent that Brazilian courts may have jurisdiction) and such courts would enforce such judgment without any retrial or reexamination of the merits of the original action only if such judgment had been previously ratified by the STJ, in accordance with Articles 216-A to 216-X of the Internal Regulations of the STJ (RISTJ), introduced by Regulatory Amendment No. 18/2014. Notwithstanding the foregoing, no assurance can be given that ratification will be obtained.

Exchange of preferred ADSs or common ADSs for underlying shares may have adverse consequences.

The Brazilian custodian for the preferred shares and common shares must obtain an electronic certificate of foreign capital registration from the Central Bank to remit U.S. dollars from Brazil to other countries for payments of dividends, or any other cash distributions, or to remit the proceeds of a sale of shares.

If the investor decides to exchange his preferred ADSs or common ADSs for the underlying shares, the investor will be able to continue to rely, for five business days from the date of the exchange, on the depositary bank's electronic certificate of registration in order to receive any proceeds distributed in connection with the shares. After that period, the investor may not be able to obtain and remit U.S. dollars abroad upon sale of our common/preferred shares, or distributions relating to our common/preferred shares, unless he or she obtains his or her own certificate of registration or registers the investment under CMN Resolution No. 4,373/2014, dated September 29, 2014, which entitles registered foreign investors ("Resolution No. 4,373/2014") to buy and sell on a Brazilian stock exchange. If the investor does not obtain a certificate of registration or register under Resolution No. 4,373/2014, the investor will generally be subject to less favorable tax treatment on gains with respect to our common shares.

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If an investor attempts to obtain his or her own certificate of registration, the investor may incur expenses or suffer delays in the application process, which could delay his or her ability to receive dividends or distributions relating to our common shares or the return of his or her capital in a timely manner. The custodian's certificate of registration or any foreign capital registration obtained by an investor may be affected by future legislative changes, and additional restrictions applicable to the investor, the disposition of the underlying common/preferred shares or the repatriation of the proceeds of disposition may be imposed in the future.

If the investor decides to exchange his preferred or common shares back into preferred ADSs or common ADSs, respectively, once he has registered his investment in preferred shares or common shares, he may deposit his preferred or common shares with the custodian and rely on the depository bank's registration certificate, subject to certain conditions. We cannot guarantee that the depository bank's certificate of registry or any certificate of foreign capital registration obtained by an investor may not be affected by future legislative or other regulatory changes, nor that additional Brazilian restrictions applicable to the investor, or to the sale of the underlying preferred shares, or to repatriation of the proceeds from the sale, will not be imposed in the future.

An investor of our common shares and ADSs might be unable to exercise preemptive rights and tag-along rights with respect to the common shares.

U.S. investors of common shares and ADSs may not be able to exercise the preemptive rights and tag-along rights relating to common shares unless a registration statement under the U.S. Securities Act of 1933, as amended, or the Securities Act, is effective with respect to those rights or an exemption from the registration requirements of the Securities Act is available. We are not obligated to file a registration statement with respect to our common shares relating to these rights, and we cannot assure you that we will file any such registration statement. Unless we file a registration statement or an exemption from registration is available, an ADR investor may receive only the net proceeds from the sale of his or her preemptive rights and tag-along rights or, if these rights cannot be sold, they will lapse and the ADR investor will receive only the net proceeds from the sale of his or her preemptive rights and tag-along rights or, if these rights cannot be sold, they will lapse and the ADR holder will receive no value for them.

Judgments of Brazilian courts with respect to our shares will be payable only in Reais.

If proceedings are brought in the courts of Brazil seeking to enforce our obligations in respect of our common shares, we will not be required to discharge any such obligations in a currency other than Reais (R\$). Under Brazilian exchange control limitations, an obligation in Brazil to pay amounts denominated in a currency other than Reais (R\$) may only be satisfied in Brazilian currency at the exchange rate, as determined by the Central Bank, in effect on the date the judgment is obtained, and any such amounts are then adjusted to reflect exchange rate variations through the effective payment date. The then prevailing exchange rate may not afford non-Brazilian investors full compensation for any claim arising out of, or related to, our obligations under our common shares.

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Sales of a substantial number of shares, or the perception that such sales might take place, could adversely affect the prevailing market price of our shares, or of the preferred or common ADSs.

As a consequence of the issuance of new shares, sales of shares by existing share investors, or the perception that such a sale might occur, the market price of our shares and, by extension, of the preferred and/or common ADSs, may decrease significantly.

The preferred shares and preferred ADSs generally do not have voting rights, and the common ADSs can only be voted by proxy by providing voting instructions to the depository.

Under the Brazilian Corporate Law and our by-laws, holders of our preferred shares, and, consequently, holders of our ADSs representing preferred shares, are not entitled to vote at our shareholders' meetings, except in very specific circumstances.

Holders of our preferred ADSs may also encounter difficulties in the exercise of certain rights, including the limited voting rights. Holders of the ADSs for our common shares do not have automatic entitlement to vote in our General Meetings of Shareholders, other than by power of attorney, by sending a voting instruction to the depository. Where there is not enough time to send the form with voting instructions to the depository, or in the event of omission to send the voting instruction, the holders of ADSs for CEMIG's preferred and common shares may be unable to vote by means of instructions to the depository.

Future equity issuances may dilute the holdings of current holders of our common shares or ADSs and could materially affect the market price for those securities.

We may in the future decide to offer additional equity to raise capital or for other purposes. Any such future equity offering could reduce the proportionate ownership and voting interests of holders of our common shares and ADSs, as well as our earnings and net equity value per common share or ADS. Any offering of shares and ADSs by us or our main shareholders, or a perception that any such offering is imminent, could have an adverse effect on the market price of these securities.

The Brazilian Government may assert that the ADS taxation for Non- Resident Holders shall be payable in Brazil.

Pursuant to Section 26 of Law No. 10,833, published on December 29, 2003, the sale of property located in Brazil involving non-resident investors is subject to Brazilian income tax as of February 1, 2004. Currently, the Company understands that ADSs do not qualify as property located in Brazil and, thus, should not be subject to the Brazilian withholding tax; nevertheless, the Brazilian Tax Authorities may try to assert Brazilian tax jurisdiction in such situation, incurring on the payment of tax income in Brazil for the Non-Resident Holders.

[Table of Contents](#)**Item 4. Information on the Company*****Organizational and Historical Background***

Companhia Energética de Minas Gerais – CEMIG (“CEMIG”) is a state-controlled mixed capital company (sociedade por ações de economia mista) incorporated on May 22, 1952, organized and existing under the laws of Brazil and the State of Minas Gerais. CEMIG has its registered office located at Avenida Barbacena, 1200, Belo Horizonte, Minas Gerais, Brazil.

CEMIG built its first three hydroelectric power plants in the 1950s and commenced its energy transmission and distribution operations in 1960. In the 1970s, CEMIG took over the distribution of energy in the region of the city of Belo Horizonte, commissioned the *São Simão* hydroelectric power plant and advanced the transmission of energy with the construction of 6,000 km of power lines.

In the 1980s, a partnership between CEMIG, Eletrobras (*Centrais Elétricas Brasileiras S.A.*) and the Brazilian Federal Government launched the Minas-Luz Program, to expand service to low-income populations in rural areas and outer urban suburbs, including the shantytowns. The *Emborcação* hydroelectric power plant, at the Paranaíba River, started operating in 1982. At that time, together with the *São Simão* plant, the *Emborcação* plant tripled the Company’s generation capacity. In 1983, CEMIG created its Ecological Program Coordination Management Unit, which is responsible for planning and developing the Company’s environmental policies. This new unit fostered the research of alternative energy sources, such as wind power and solar generation, biomass and natural gas. Since then, the Company has focused its research projects on such alternative energy sources.

In 1986, CEMIG’s subsidiary *Companhia de Gas de Minas Gerais*—Gasmig, a natural gas distribution company, was incorporated. By the end of the 1980s, CEMIG’s energy distribution business had a market share in the State of Minas Gerais of 96%.

In 2000, CEMIG was listed in the Dow Jones Sustainability Index for the first time and continues to be listed since then. We believe this to confirm our dedication to the balance between the economic, environmental and social pillars of corporate sustainability. In 2001, CEMIG’s ADRs representing its preferred shares were upgraded to Level 2 on the New York Stock Exchange. In 2004, due to new legal and regulatory requirements, CEMIG transferred its operations to two wholly-owned subsidiaries: the energy generation and transmission company CEMIG Geração e Transmissão S.A. and the energy distribution company CEMIG Distribuição S.A.

In 2006, CEMIG began to operate in other states, with the acquisition of a significant interest in Light S.A. (“Light”), which concession is in the state of Rio de Janeiro, and Transmissoras Brasileiras de Energia – TBE, which owned transmission lines in Northern, Midwest and Southern Brazil. In 2008, CEMIG initiated its participation in the UHE Santo Antônio generation project at the Madeira River. In April 2009, CEMIG GT acquired Terna Participações S.A., now called Transmissora Aliança de Energia Elétrica S.A. (“TAESA”). In May 2013, it increased its holdings in the energy transmission sector with the acquisition of equity interests in five other transmission companies. This increased CEMIG’s market share in Brazilian energy transmission from 5.4% to 12.6% at that time. In 2011, CEMIG GT expanded its participation in relevant generation and transmission assets, including the acquisition, by Amazônia Energia S.A. (in which CEMIG and Light have, respectively, 74.5% and 25.5% of the total capital) of a 9.77% stake in Norte Energia S.A. (“NESA”), the owner of the concession for the construction and operation of Belo Monte Hydroelectrical Power Plant, in Xingu River, State of Pará. The transaction added 818 MW of generation capacity to our total activities and increased Light’s total generation capacity by 280 MW. Also in 2011, CEMIG acquired a controlling stake in Renova Energia S.A. (“Renova”), which has been working with Small Hydroelectric Power Plants (“SHPs”) and wind farms for over a decade. In 2015, the association between Vale S.A. (“Vale”) and CEMIG GT to form Aliança Geração de Energia (“Aliança”) was concluded. The two companies subscribed shares issued by Aliança which were paid in by means of the equity interests they held in the following energy generation assets: Porto Estrela, Igarapava, Funil, Capim Branco I, Capim Branco II, Aimorés and Candonga; plus a 100% interest in the following wind generation SPEs: Central Eólica Garrote Ltda., Central Eólica Santo Inácio III Ltda., Central Eólica Santo Inácio IV Ltda. and Central Eólica São Raimundo Ltda. CEMIG GT won the concession for Lot D in ANEEL’s Auction No. 012/2015, for placement of concessions for hydroelectric plants under a regime of allocation of generating capacity and physical offtake guarantees. Lot D is comprised of 13 plants that were previously owned by CEMIG, and an additional five plants which were owned by Furnas Centrais Elétricas S.A. The aggregate installed generation capacity of these 18 plants is 699.57 MW.

[Table of Contents](#)**2018 Capital Increase**

On April 23, 2018, the Shareholders' Extraordinary General Meeting approved an increase in the Company's capital, of R\$ 1,000 million, from R\$ 6,294 million to R\$ 7,294 million, through issuance of 199,910,947 new shares, each with nominal value of R\$ 5.00, comprising 66,849,505 common shares and 133,061,442, preferred shares. The shares that were subscribed in the capital increase of April 23, 2018, were considered in full in the calculation of basic and diluted profit for 2017, since the proposal for subscription of new shares was decided in an Extraordinary Shareholders' Meeting on October 26, 2017, and these new shares already had potential for subscription since that date, as decided by the shareholders.

CEMIG's Capital Increase – Proposal by management

Considering that on December 31, 2019 the profit reserves, with the exclusion of the Tax Incentive reserves, exceeded the registered share capital by R\$ 537 million, the Board of Directors will submit to the Annual General Meeting of Shareholders a proposal for increase of the registered share capital to R\$7,594 million, as per Article 199 of the Brazilian Corporate Law through the issuance of new shares through a stock dividend available only to the Company's existing shareholders, with the following terms and conditions (the "Capital Increase"):

- Amount of the Capital Increase through stock dividend: R\$ 300 million through the issuance of 60,000,000 new shares (20,056,076 nominal common shares and 39,943,924 nominal preferred shares) each with nominal value of R\$ 5.00, for both common and preferred shares;
- The new shares have the same rights of the shares of the same class, including with respect to dividends and/or distributions on equity that may be declared by the Company.

Auction of Former CEMIG GT Generation Concessions and Indemnification

The concessions of the Jaguará, São Simão, Miranda and Volta Grande hydroelectric plants, operated by CEMIG GT, expired in August 2013, January 2015, December 2016 and February 2017, respectively.

As per the original terms of the concession contracts of Jaguará, São Simão and Miranda plants, CEMIG GT believed that it had the right for the renewal of such concessions and filed administrative and court proceedings requesting for the extension the contracts. These requests, however, were rejected by the MME on the view that the request was made out of time in relation to the period/rules set by Law 12,783/13.

As part of the court decision, in March 2017 the preliminary injunctions that had maintained CEMIG GT in possession and operation of the concessions of the Jaguará and Miranda plants were revoked. CEMIG GT remained in control of the assets, and recognized revenues from the sale of energy and the operating costs of the assets through the date that the preliminary injunction was revoked. From that date onwards, CEMIG GT ceased to recognize any depreciation on the assets and began to recognize revenues relating to the provision of services of operation and maintenance of these plants in accordance with the regime of quotas specified by Law 12,783/13 (the "Quotas Regime"). As ordered by the MME Order 432/2015, the São Simão plant was operated under the Quotas Regime since September 2015.

Despite the ongoing court legal proceedings involving the São Simão, Jaguará and Miranda plants, on September 27, 2017, the Brazilian Federal Government tendered the concessions for the São Simão, Jaguará, Miranda and Volta Grande plants. The Volta Grande plant concession contract expired in February 2017. These plants have total generation capacity of 2,922 MW, and the concession price in the bid amounted to R\$12,131 million. The parties that won these concessions are not related to CEMIG.

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The new concession contracts were signed on November 10, 2017, and on this date extension of the periods in which CEMIG GT was engaged to temporarily continue to operate the assets was agreed upon as follows:

- Volta Grande plant: until November 30, 2017.
- Jaguará and Miranda plants: until December 28, 2017.
- São Simão plant: until May 9, 2018.

Annual Generation Revenue (Receita Anual de Geração, or RAG) of these plants was recognized in the amount of R\$136 million in 2018 (R\$462 million in 2017 and R\$319 million in 2016).

On August 3, 2017, the MME Order 291/17 determined the amount payable to CEMIG GT for the residual value of the infrastructure assets of the São Simão and Miranda plants at the end of the contract, at R\$1,028 million, of which R\$244 million relates to the residual value of the São Simão Plant, and R\$784 million for the residual value of the Miranda Plant – these amounts being expressed in Reais as of September 2015 and December 2016, respectively. The amounts had been adjusted by the Brazilian Selic rate for federal securities, and the total adjustment recognized in 2018 as an operating income amounted to R\$ 55 million. On August 31, 2018, CEMIG GT received the amounts of reimbursement relating to the assets not previously amortized or depreciated in the basic plans of the São Simão and Miranda hydroelectric plants, as specified in MME Order 291/2017. The total amount received was R\$1,139 million.

The MME has not yet established indemnification amounts with respect to the Jaguará and Volta Grande power plants.

As of December 31, 2019, investments made after the Jaguará, São Simão and Miranda plants came into operation, in the amounts of R\$174 million, R\$2.7 million and R\$23 million, respectively, are recorded as concession financial assets, and the final determination of the amounts to be paid to CEMIG GT are under discussions with the regulator. Management does not expect losses in the realization of these amounts.

The following describe certain activities relating to CEMIG subsidiaries, jointly-controlled entities and associates during 2019, 2018 and 2017 (aggregated by business):

RENOVA GROUP***Renova receives binding offer for Alto Sertão III Wind Complex***

On March 20, 2020, the Board of Directors of Renova accepted a binding offer made by ARC Capital Ltda. ('ARC'), jointly with G5 Administradora de Recursos Ltda ('G5'), and XP Vista Asset Management Ltda. ('XP') for financing to conclude the works of Phase A of the Alto Sertão III wind farms complex, and to fund the current operational expenses of Renova. The offer is in the phase of diligence, and still pending conclusion.

Change in control of Renova

On October 15, 2019, Light sold, for R\$1.00, the totality of its shares in the jointly controlled entity Renova, equivalent in total to 17.17% of the share capital of the company, to CG I Fundo de Investimento em Participações Multiestratégia, namely 7,163,074 shares and 98 preferred shares. Additionally, Lightcom Comercializadora de Energia S.A. signed an Assignment Agreement through which it assigned all the credits held against Renova to CG I. With the expiry of the period specified in the Shareholders' Agreement of Renova, the subsidiary Cemig GT did not exercise its right of first refusal nor its right of joint sale, and thus there has been no change in its direct equity interest in Renova.

[Table of Contents](#)***Application by Renova for a court-supervised reorganization plan***

On October 16, 2019, the second State of São Paulo Bankruptcy and Court-supervised reorganization Court granted the application for in-court reorganization applied for by Renova, and by the other companies of the group ("the Renova Group"), and determined, among other measures, the following: (i) Appointment of an independent company to act as judicial administrator; (ii) Suspension of actions and executions against the companies of the Renova Group for 180 days, under Article 6 of Law 11,101/2005; (iii) Presentation of accounts by the 30th of each month, while the in-court reorganization proceedings continue, on penalty of the controlling shareholders of the companies of the Renova Group being removed, and replaced by administrator, under Article 52, IV, of Law 11,101/2005; (iv) Waiver to present tax debt clearance certificates so that the companies of the Renova Group can carry on with their activities; and (v) Order to publish a list of creditors, with 15 day term for presentation of qualifications and/or divergences of credits in relation to the court-supervised reorganization.

On December 17, 2019, Renova filed its a court-supervised reorganization plan, which has to be approved by the General Meeting of Creditors according with the terms and conditions established by Law 11,101/2005. The jointly-controlled entity is in the process of discussing such plan and until the present date has not measured the possible effects on its accounting balances.

In this context, Renova signed with the Company Debtor in Possession (DIP) loan agreements in the total amount of R\$37 million, comprising R\$17 million in 2019 and R\$20 million on January 28, 2020. The funds of these loans, made under specific rules of in-court reorganization proceedings, are necessary to support the expenses of maintaining the activities of Renova, and were authorized by the second State of São Paulo Bankruptcy and Court-supervised reorganization Court. They are guaranteed by a fiduciary assignment of shares in a company owning assets of a wind power project owned by Renova, and they also have priority of receipt in the in-court reorganization process.

On May 2, 2020, the State of São Paulo Bankruptcy and Court-supervised reorganization Court issued a decision ordering that the DIP loan, in the total amount of R\$ 37 million, with asset guarantee, already constituted and registered, would be subscribed as a capital increase in Renova. Company has filed a Motion for Clarification, and, based on the opinion of its legal advisors, has classified the chance of loss in the action as 'possible' and limited to the total amount of the DIP loan.

Sale of Alto Sertão II Wind Farm Complex by Renova

On August 3, 2017, Renova sold to AES Tietê Energia ("AES Tietê") all of its equity interest in Nova Energia Holding S.A. ("Nova Energia"). Nova Energia is the indirect owner of the Alto Sertão II Wind Farm Complex (the "Complex"). As of December 31, 2016, the purchase price totaled R\$1.15 billion, subject to price adjustments based on certain variations in working capital and net debt relating to the Complex. The purchase price may also increase by up to R\$100 million under an earn-out provision, depending on the performance of the Complex as measured over a period of five years from completion of the transaction. Renova allocated R\$364.6 million of the purchase price to the extraordinary amortization of its Third Issue of Nonconvertible Debentures (Unsecured, with Additional Asset Guarantee, for Public Distribution, in a Single Series, with Restricted Distribution Efforts), paying the outstanding balance of principal and remuneratory interest owed by Renova under such offering.

Increase in Capital of Renova

CEMIG GT increased its stake in Renova in the amount of R\$56 million through a capital increase that was ratified on June 19, 2017, in the total amount of R\$112.8 million by means of a issuance of 50,888,993 common shares and 5,492,938 preferred shares, subscribed and paid up to the issuance price of R\$2.00 per share (common or preferred) and R\$6.00 per unit.

[Table of Contents](#)***Divestiture of TerraForm Global Inc.***

On May 26, 2017, Renova entered into a Share Purchase Agreement to sell its equity interests in TerraForm Global Inc. to Orion US Holding 1 L.P., a vehicle of Brookfield Asset Management (“Brookfield”). The price for the acquisition was set to be US\$92.8 million paid to Renova in cash. Also on the same date, Renova and Terraform Global signed an agreement for the parties to terminate certain arbitration proceedings, upon payment of compensation to Renova of US\$15.0 million. The transaction closed on July 3, 2017.

Renova’s management has stated that the transaction is aligned with its new directional strategy, the goals of which are the (i) restoration of the balance of its capital structure; and (ii) sustainability of the business in the long term.

LIGHT***Divestiture of Light***

On June 21, 2017, CEMIG started a process to sell all its equity interest in Light S.A. (“Light”). On July 14, 2017, Rio Minas Energia Participações S.A. (“RME”) and Luce Empreendimentos e Participações S.A. (“Lepsa”) also decided to start a process to sell all their interest in Light. This formalized the joint decision of CEMIG, RME and Lepsa to divest of their aggregate 52.12% controlling interest in Light at the time.

On November 27, 2018, RME sold 4,350,000 of its common shares in Light, reducing its holding to 10.90% of Light, thus reducing the combined interest of CEMIG, RME and LEPSA from 52.12% to 49.99% of Light's share capital.

On July 17, 2019, Light announced the closing of the primary and secondary public offering of common, nominative and book-entry shares issued by Light, with no par value, free and unencumbered of any charges or liens. In the context of the offering, there were (i) 100,000,000 (one hundred million) newly issued shares of Light, following an increase in Light’s capital stock, and (ii) 33,333,333 (thirty-three million, three hundred thirty-three thousand, three hundred thirty-three) shares held by CEMIG at a price per share of R\$18.75.

With the settlement of the restricted offering, the Company’s equity interest in the total share capital of Light was reduced from 49.99% to 22.58%, limiting its voting rights in Shareholders’ Meetings and, as a result, its ability to direct the relevant activities of the investee.

Thus, as from that date, the Company no longer has power that gives it control of this investee. In accordance with IFRS 10 – Consolidated financial statements, the investee is no longer considered a subsidiary, and therefore is no longer consolidated in the Company’s financial statements.

Since the Company continues to have a firm commitment to dispose of the remaining interest in Light, the investment continues to be classified as an asset held for sale, in accordance with IFRS 5 – Non-current assets held for sale, and discontinued operations.

Light signed a Purchase and Sale Agreement

On October 15, 2019, Light sold, for R\$1.00, the totality of its shares held in the jointly-controlled entity Renova, equivalent in total to 17.17% of the share capital of the investee, to CG I Fundo de Investimento em Participações Multiestratégia. Additionally, Lightcom Comercializadora de Energia S.A. signed an Assignment Agreement through which it assigned all the credits held against Renova to CG I. With the expiry of the period specified in the Shareholders’ Agreement of Renova, the Company did not exercise its right of first refusal nor its right of joint sale, and thus there has been no change in its direct equity interest in Renova.

[Table of Contents](#)**Merger of the wholly-owned subsidiaries Rio Minas Energia Participações S.A. ('RME') and Luce Empreendimentos e Participações S.A. ('Lepsa')**

On April 24, 2019, the merger of the following two companies into CEMIG was completed: (i) Luce Empreendimentos e Participações S.A. ('Lepsa'); and (ii) Rio Minas Energia Participações S.A. ('RME'). With extinction of RME and Lepsa, the shareholders' agreement of Light, signed December 30, 2009 and amended November 13, 2018, immediately ceases to exist, loses its object, and obligations under it are terminated. Since this was a merger of wholly-owned subsidiaries, there was no capital increase nor issuance of new shares. Also this merger did not change the aggregate percentage equity interest in Light held by CEMIG.

TAESA**Aquisition of 11.624% of the shares of Brasnorte Transmissora de Energia S.A. ("Brasnorte")**

On August 30, 2019, Taesa concluded the acquisition of 11.624% of Brasnorte increasing its equity interest from 88.376% to 100.00%. For the acquisition, Taesa will pay to the seller R\$18,024 million.

Aquisition by Taesa of 100% of the shares of Rialma Transmissora de Energia 1 S.A. ("Rialma")

On March 6, 2020, Taesa concluded the acquisition of 100% of the shares of Rialma. The asset located in the State of Rio Grande do Norte, interconnected with one of Taesa's substations – SE Lagoa Nova of Paraíso Açu Transmissora de Energia S.A., will allow operational advantages in maintaining the new asset, and consequently contributing to Taesa's growth plan and its consolidation in the Brazilian transmission sector. Rialma comprises the transmission line LT Lagoa Nova 11 – Currais Novos 11, voltage of 230 kV, double circuit, with an extension of 28 km and Annual Permitted Revenues (RAP) of R\$12.6 million (2019-2020 cycle).

For the acquisition, Taesa will pay to the seller R\$56,717 million, subject to positive or negative adjustments resulting from the variation between the net debt and the working capital between the base date and the closing date, as well as other adjustments after the closing.

Taesa – Closing of Eletrobras Auction Process

On January 15, 2019, Taesa was informed about the formal closing of the process of Eletrobras Auction No. 01/2018, regarding the lots L, N and P, for which it placed the minimum bid. Through a notice, the Sale Committee of the Eletrobras Auction No. 01/2018 stated that, on January 14, 2019, Eletrobras's Executive Board unanimously approved, without any reservations the ratification of Eletrobras Auction No. 01/2018, referring to lot L (Brasnorte) and lot N (ETAU). Concerning Lot P (Centroeste), CEMIG, which was already a shareholder along with Eletrobras, exercised its right of first refusal, as detailed along this document.

On April 29, 2019, Taesa concluded the acquisition of shares of ETAU, with the payment of R\$32.9 million.

On May 31, 2019, Taesa concluded the acquisition of Brasnorte with payment of R\$75.6 million and of Transmineiras, with payment of R\$77.5 million.

Taesa wins dispute for Lot 12

On December 20, 2018, Taesa won the dispute for the lot 12 related to the Transmission Auction 004/2018, promoted on this date by ANEEL. The volume of investments (CAPEX) and the construction period mentioned above are based on the call notice of the auction published by ANEEL. However, Taesa expects a reduction in the estimated volume of investments as well as in the period to conclude and energize the project.

	Lot 12
Winning RAP	R\$ 58,956,000.00
Discount	38.8%
Location	State of Rio Grande do Sul
Extension	587 km
Substations	5
CAPEX ANEEL	R\$ 610 million
Construction Period (month)	48 months

[Table of Contents](#)***Taesa signs an SPA for the acquisition of four operational transmission assets***

On December 17, 2018, Taesa entered into a Sales and Purchase Agreement with Âmbar Energia Ltda. (“Âmbar”) and Fundo de Investimento em Participações Multiestratégia Milão (“FIP” and, together with Âmbar, the “Sellers”), for the acquisition by Taesa of (i) all shares representing the total and voting capital of São João Transmissora de Energia S.A. (“SJT”) and São Pedro Transmissora de Energia S.A. (“SPT”), and (ii) of 51% of the shares representing the total and voting capital of Triangulo Mineiro Transmissora de Energia S.A. (“TMT”) and Vale do São Bartolomeu Transmissora de Energia S.A. (“VSB”).

For the acquisition, Taesa would pay R\$942.5 million subject to: (i) monetary adjustment by the variation of the Interbank Deposit Certificate (CDI) rate from the base date until the closing date, (ii) to positive or negative adjustments resulting from, among others, the variation between the net debt and the working capital between the base date and the closing date, and (iii) other adjustments after the closing. The agreement provides for the possibility of different closing dates under certain conditions.

On January 3, 2019, Taesa’s Extraordinary General Meeting approved the acquisition of SJT, SPT, TMT and VSB. The completion of the acquisition is subject to certain conditions precedent, including, among others: (i) regulatory authorizations of ANEEL and CADE; (ii) the non-exercise of the preemptive right by Furnas Centrais Elétricas S.A. (“Furnas”) in relation to shares issued by TMT and the non-exercise of the preemptive right by Furnas and CELG Geração e Transmissão S.A. in relation to shares issued by VSB; (iii) confirmation of fulfillment of the obligations set forth in the Leniency Agreement signed by J&F Investimentos S.A. and the Sellers, including the commitment that no indemnifying or sanctioning measures be proposed against the purchaser; and (iv) non-occurrence of any material adverse effect.

On February 14, 2020, Taesa completed the acquisitions of SJT and SPT for an adjusted amount of R\$753.2 million. The conclusion of the TMT and VSB acquisitions remains pending the fulfillment of condition precedent.

Taesa – Eletrobras ratifies Lot M (‘Transmineiras’) auction

On November 26, 2018, Taesa received notification from the Disposals Committee of Eletrobrás Auction 01/2018 stating that the Executive Board of Eletrobrás decided unanimously, without reservations, to ratify award of Lot M of the Auction to the external shareholder Taesa, which exercised its first refusal right, on the whole of Eletrobras’s shareholding, in accordance with the Shareholders’ Agreement of the SPEs.

Taesa - Right of First Refusal - Lot M (Transmineiras) - Eletrobras Notification

On October 4, 2018, Taesa notified Eletrobras that it would exercise its right of first refusal over the shares in the SPEs related to lot M, object of Eletrobras Auction No. 01/2018, as stipulated by the auction notice and the terms of Transmineiras’ shareholders’ agreements.

Taesa – Eletrobras Auction

On September 27, 2018, Taesa submitted bids for lots L (Brasnorte), M (Transmineiras), N (ETAU) and P (Centroeste), object of Eletrobras Auction No. 01/2018 held on such date, relating to shareholdings in the Special-Purpose Entities (“SPEs”) held by Centrais Elétricas Brasileiras S/A (“Eletrobras”).

Taesa placed the minimum bid for each lot mentioned above. For lots L, N and P, there were no higher bids. According to the rules of the auction notice, Taesa should now wait for the other shareholders of each SPE to express interest concerning their first right of refusal. Regarding lot M see below.

[Table of Contents](#)**CEMIG sold 34 million Units in TAESA**

On November 24, 2017, CEMIG sold by auction at the B3 exchange 34,000,000 Units in TAESA (TAEE11) for R\$21.10 per Unit. This reduced CEMIG's equity interest in TAESA from 31.54% to 21.68%. CEMIG now owns 218,370,005 common shares in TAESA, equal to 36.97% of TAESA's total common shares and 5,646,184 preferred shares in TAESA, equal to 1.28% of TAESA's total preferred shares. The controlling shareholding block of TAESA remains unchanged, since the shares sold were not bound by the Shareholders' Agreement. CEMIG held the sale proceeds in an escrow account for payment of the put option granted by CEMIG to the shareholders of RME and LEPSA.

Transfer of transmission companies to TAESA

On July 13, 2017, CEMIG GT entered into an agreement providing for the transfer to TAESA of the equity interests held by CEMIG in the following public energy transmission concession holders (together, "Transmineiras Companies"): Companhia Transleste de Transmissão S.A. ("Transleste"), Companhia Transudeste de Transmissão S.A. ("Transudeste") and Companhia Transirapé de Transmissão S.A. ("Transirapé").

The initial value of the transaction was approximately R\$76 million, payable on the date of closing. This amount was subject to adjustment for (i) accumulated variation of the IPCA inflation index as from January 1, 2017, inclusive, up to the day immediately prior to the date of signature of the agreement; and (ii) accumulated variation resulting from application of 100% of the CDI rate, from the date of signature, inclusive, up to the day immediately prior to the date of closing and was subject to discounting of any amounts of dividends and/or interest on capital declared as from January 1, 2017 (inclusive) by the Transmineiras Companies in favor of CEMIG GT, whether paid or not, up to the date of closing, duly updated by the accumulated variation of the IPCA inflation index from the date of the payment to the day immediately prior to the date of closing.

Under the terms of the agreement, an additional amount of up to R\$11.7 million may be shared by TAESA and CEMIG GT, contingent on the Transmineiras Companies obtaining a favorable judgment in certain legal proceedings which are in progress. This additional amount will be updated by the accumulated variation resulting from the application of 100% of the CDI rate from January 1, 2017, inclusive, to the day immediately preceding the day of payment.

The transaction was closed on November 30, 2017, following its approval by the Brazilian antitrust authority CADE (Conselho Administrativo de Defesa Econômica), ANEEL (the Brazilian electricity regulatory agency), and the financing banks. CEMIG received R\$56 million in connection with this transaction, including amounts relating to monetary adjustments.

TAESA – Columbia Consortium

On April 24, 2017, the Columbia Consortium formed by TAESA and Companhia de Transmissão de Energia Elétrica Paulista ("CTEEP") won the bid for Branch 1 of the Transmission Auction No. 5/2016, carried out by ANEEL by offering R\$267 million of Annual Allowable Revenue (RAP). The project, which requires a R\$1,936 million investment, comprises (i) 525 kV Guaira - Sarandi transmission lines, extending them 266.3 kilometers; (ii) Foz do Iguaçu – Guaira transmission lines, extending them 173 kilometers; (iii) Londrina – Sarandi transmission lines, extending them 75.5 kilometers; and (iv) the 230 kV Sarandi - Paranavaí Norte line, extending it 85 kilometers, plus constructing and operating three substations (Guaira, Sarandi and Paranavaí Norte), located in Paraná. The deadline for execution of the work is 60 months and the commercial operation start is scheduled for August, 2022.

[Table of Contents](#)**CEMIG SIM****Launch of Cemig Soluções Inteligentes em Energia – CEMIG SIM**

On October 08, 2019, Cemig Soluções Inteligentes em Energia – CEMIG SIM was launched. It comprises the activities developed by Efficientia and Cemig Geração Distribuída - CEMIG GD, using Efficientia's CNPJ. Efficientia's by laws were modified in order to adapt to the new object of CEMIG SIM and change of corporate name. The proposal is for CEMIG SIM to act, in this first moment, but not limited, in the following segments: distributed generation, account services, cogeneration, energy efficiency (with PEE resources), and supply and storage management.

CEMIG Telecomunicações S.A.**The merger of CEMIG Telecomunicações S.A. into CEMIG**

On February 28, 2018, the merger of CEMIG Telecom into CEMIG received the relevant corporate approvals and on March 31, 2018, was consummated.

Following the merger of CEMIG Telecom, on May 25, 2018, CEMIG announced an auction for the sale of the telecommunications assets not within its core business, as well as the assignment of the contractual positions associated with those assets.

On August 8, 2018, CEMIG held a Public Auction to sell certain telecommunications assets, as specified in Tender Announcement 500-Y12121.

- The winning bid for Lot 1, presented by American Tower do Brasil – Internet das Coisas Ltda., was R\$ 571 million, 70.41% above the minimum sale value specified in the Tender Announcement;
- The winning bid for Lot 2, presented by Algar Soluções em TIC S.A., was R\$ 77.9 million, 139.86% above the minimum sale value specified in the Tender Announcement.

Following compliance with the suspensive conditions, including approval by the Brazilian Monopolies Authority (“CADE”), on November 1, 2018, CEMIG concluded all these sale transactions.

Wind Farms in the State of Ceará

On May 17, 2018, CEMIG GT signed an agreement with Energimp S.A. (“Energimp”). This transaction has the objective of eliminating the cross holdings between CEMIG GT and Energimp in the following companies: Central Eólica Praias de Parajuru S.A. (“Parajuru”), Central Eólica Volta do Rio S.A. (“Volta do Rio”) and Central Eólica Praias do Morgado S.A. (“Morgado”), as well as to terminate the corporate partnership between CEMIG GT and Energimp.

On December 20, 2018, following compliance with the conditions specified in the transaction agreement, CEMIG GT and Energimp signed the related Memorandum of Conclusion of Elimination of Cross-holdings. With the signature of this document: (i) elimination is completed of the cross-holdings previously existing between the parties in Parajuru, Volta do Rio and Morgado; (ii) all shareholding partnership between the parties no longer exists; and (iii) CEMIG GT now owns 100% of the share capital of Parajuru and Volta do Rio, and Energimp owns 100% of the share capital of Morgado.

[Table of Contents](#)**CENTROESTE**

On December 20, 2018, CEMIG notified Eletrobras stating its interest in exercising its right of first refusal to acquire the interest held by Eletrobras in Companhia Transmission Centroeste de Minas Gerais S.A. - Centroeste, which constituted Lot P of Eletrobras Auction 01/2018. As officially reported by Eletrobras on October 22, 2018, the winning bid was for R\$43.2 million.

The first refusal right was exercised on the same terms as contained in the Auction Announcement. The amount stated above will be adjusted by the accumulated variation in the Selic rate over the period from the reference date to the closing date of this transaction, less dividends and/or interest on capital paid or declared in favor of Eletrobras in the period.

On January 15, 2019, CEMIG announced that it had been informed of the acceptance and ratification by Eletrobras of the exercise by CEMIG of its right of first refusal.

On January 13, 2020, Centroeste became a wholly own subsidiary of the Company through the acquisition of the remaining equity interest of 49% held by Eletrobras.

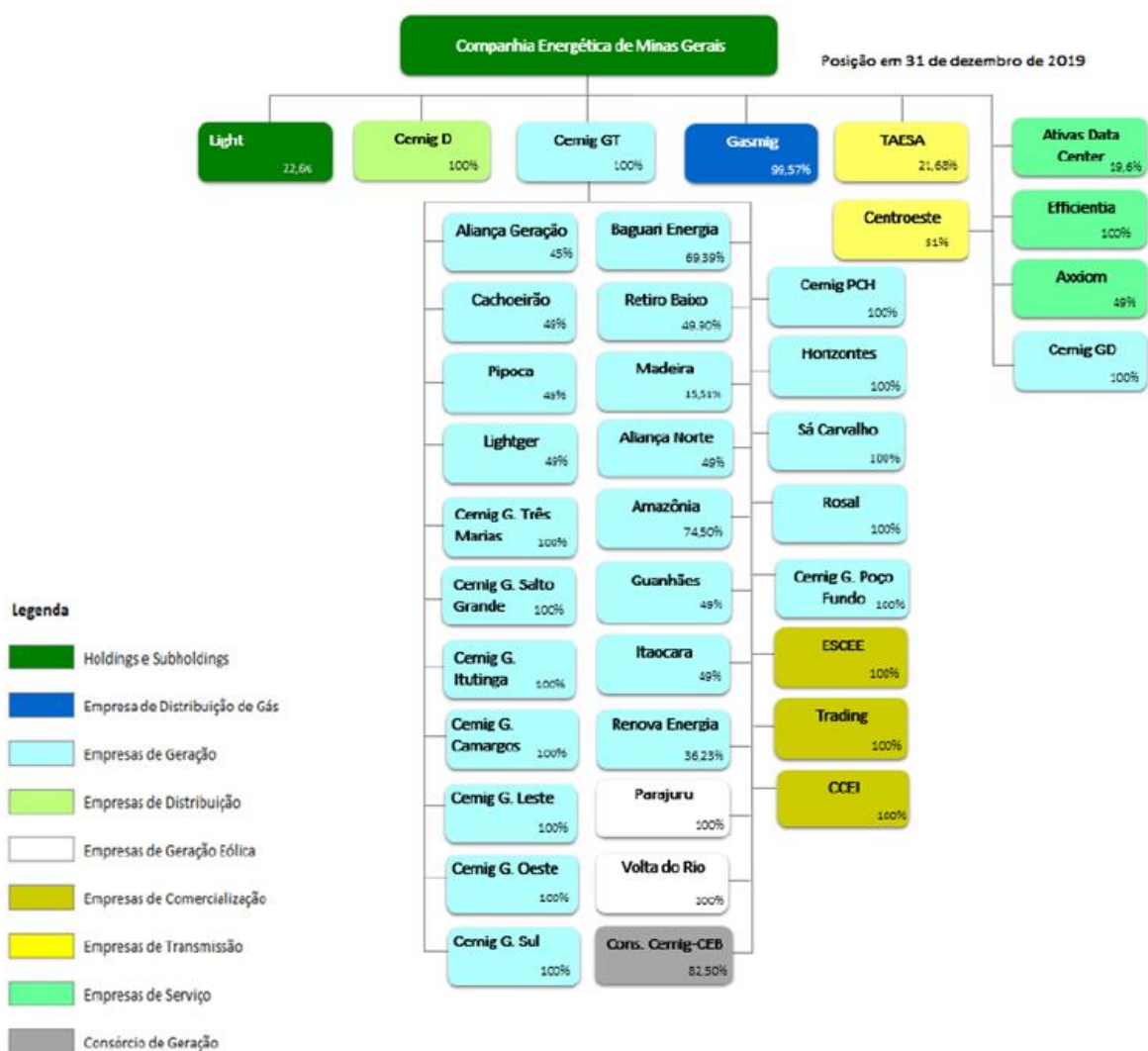
Centroeste operates in construction, operation and maintenance of the transmission facilities of the Furnas-Pimenta transmission line – part of the national grid.

The cash consideration paid amounts to R\$45 million, which was the price in the Tender Announcement, adjusted by the accumulated variation of the Selic rate up to the date of conclusion of the transaction and adjusted by the dividends and/or Interest on Equity paid or declared by Centroeste in favor of Eletrobras in the period.

Prior to the acquisition above and as of December 31, 2019, the Company held a 51% share of the investee, and did not control, the entity according to its shareholders agreement, therefore, the investments in Centroeste was accounted for under the the equity method. See more information on Note 18 to our consolidated financial statement - Investments.

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The companies incorporated in Brazil described below are our major subsidiaries and affiliates. The subsidiary companies were recorded under the equity method:



CEMIG’s main subsidiaries and jointly controlled entities and affiliates include the following:

- CEMIG Geração e Transmissão S.A. (“CEMIG GT”) – 100% owned: operates in energy generation and transmission;
- CEMIG Distribuição S.A. (“CEMIG D”) – 100% owned: operates in energy distribution;
- Companhia de Gás de Minas Gerais (“Gasmig”) – 99.57% owned: acquires, transports, distributes and sells natural gas;
- Transmissora Aliança de Energia Elétrica S.A. (“TAESA”) – jointly-controlled entity, with ownership of 36.97% of the voting stock and 21.68% of the total stock: construction, operation and maintenance of energy transmission facilities in 17 states of Brazil and in the Federal District;
- Light S.A. (“Light”) – affiliate, with a direct holding of 22.58% of total stock: energy generation, transmission, trading and distribution, and other related services; direct or indirect holding of interests in companies operating in these areas;
- Aliança Geração de Energia S.A. (“Aliança”) – jointly controlled entity, with direct ownership of 45% of the voting and total share. Aliança is privately owned and operates as a platform for consolidation of generation assets and investments in future generation projects;

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- SPEs of Lot D – 100% owned: Geração Camargos S.A., CEMIG Geração Itutinga S.A., CEMIG Geração Leste S.A., CEMIG Geração Oeste S.A., CEMIG Geração Salto Grande S.A., CEMIG Geração Sul S.A. and CEMIG Geração Três Marias S.A.; Lot D is comprised of 13 plants, previously owned by CEMIG, and an additional 5 plants, which were owned by Furnas Centrais Elétricas S.A. The aggregate installed generation capacity of these 18 plants is 699.57 MW.
- Investment in the Belo Monte Plant through Amazônia Energia S.A. and Aliança Norte: Amazônia Energia S.A. and Aliança Norte are shareholders in Norte Energia S.A.-NESA, which holds the concession to operate the Belo Monte Hydroelectric Plant, on the Xingu River, in the State of Pará. Through the jointly-controlled entities referred to above, CEMIG GT owns an indirect equity interest in NESA of 11.69%. After its completion, with the installation of its 18th turbine, on November 2019, the installed capacity of the dam complex is 11,233 megawatts (MW). Belo Monte Hydroelectric Plant is the largest 100% Brazilian hydroelectric plant and one of the largest in the world.
- Investment in the Santo Antônio Plant through Madeira Energia S.A. (“MESA”) which owns 100% of Santo Antônio Energia S.A., hydroelectric plant in the Madeira River in the state of Rondônia with an installed capacity of 3,568 megawatts (MW). CEMIG GT's holds 15.51% of MESA's total shares.

Investment in the Belo Monte Plant through Amazônia Energia S.A. and Aliança Norte

Amazônia Energia S.A. and Aliança Norte are shareholders in Norte Energia S.A.-NESA, which holds the concession to operate the Belo Monte Hydroelectric Plant, on the Xingu River, in the State of Pará.

Through the jointly-controlled entities referred to above, CEMIG GT owns an indirect equity interest in NESA of 11.7%. NESA will still require significant funds for organizational, developmental, pre-operational and operating costs for the completion of the plant. According to estimates and forecasts, these costs will be repaid by the revenues from future operations.

For more details see Note 18 to our consolidated financial statements - Investments.

Long-Term Strategic Plan

The long-term strategy and the multiannual business plan, reviewed and approved by the Board of Directors in 2018, defined that our mission is to provide integrated solutions for clean power, accessible to society, in an innovative, sustainable and competitive way.

Additionally, the Board of Directors establish that our vision is to be among the three best-integrated groups in electric power in Brazil as for governance, financial health, asset performance and customer satisfaction.

In 2019 the Board of Directors approved a revision of the strategic plan for 2020 – 2025. The principal guidelines and directives include the following:

- Execute the program of divestment of non-core assets, assets that do not provide returns, assets in which holdings are non-material in scale, and assets with liquidity, to leverage new investment;
- Invest to strengthen the core business;
- Achieve optimized levels of debt and capital structure;
- Ensure operational efficiency of the businesses;
- Consolidate competencies, increase productivity and optimize personnel costs;
- Consolidate Health and Safety as a value;
- Ensure efficient governance and raise the level of compliance and internal controls;
- Be innovative in the quest for technological solutions for the businesses;
- Comply with the regulatory requirements; and
- Ensure excellence in client relationship and customer service.

[Table of Contents](#)**Capital Expenditures**

Capital expenditures for the years ended December 31, 2019, 2018 and 2017 in millions of *reais*, were as follows:

	Year ended December 31,		
	2019	2018	2017
Distribution network	986	861	1,083
Power Generation (1)	26	479	308
Transmission network (2)	223	96	25
Others	68	79	104
Total capital expenditures (3)	1,303	1,515	1,520

- (1) Includes borrowing costs, capitalized in the amount of R\$23 million, R\$31 million and R\$71 million in 2019, 2018 and 2017. Includes the consideration paid for a 51% interest in Parajuru and Volta do Rio in the amount of R\$ 166 million in 2018.
- (2) Includes additions in transmission financial assets in the amount of R\$223 million, R\$96 million and R\$25 million in 2019, 2018 and 2017.
- (3) The capital expenditures are presented in our Consolidated Statement of Cash Flow mainly on account lines related to Contract Assets, Acquisition of equity investees, capital contributions in investees, PP&E, acquisition of subsidiaries and intangible assets.

For 2020, we planned to make capital investments in relation to our fixed assets in the amount of approximately R\$ 2,042 million, corresponding to our basic program. We expect to allocate these expenditures primarily to the expansion of our distribution system. We will also allocate R\$ 295 million for injection of capital into subsidiaries in 2020, to meet specific capital needs. Considering that the economic contraction due to the impact of Covid-19 might have a negative effect on the Company's liquidity, we are reviewing our program of investments and expenses in order to postpone R\$266 million (13%) of those capital investments to 2021, being R\$168 million, R\$17 million and R\$81 million originally budgeted to be applied on the distribution, generation and transmission segments, respectively. The amounts planned for 2020 do not include investments in acquisitions, and other projects, that are not remunerated by the concession-granting power – which are not recognized in the calculations of tariffs made by ANEEL.

We expect to fund our capital expenditures in 2020 mainly from the cash flow from operations and, to a lesser extent, through financing. We expect to finance our expansion and projects from commercial bank loans through debt rollover and from the issuance of promissory notes and debentures in the local market.

Business Overview**General**

Our business involves the generation, transmission, distribution and sale of energy, gas distribution, telecommunications and to provide of energy solutions.

CEMIG

We are engaged in transactions to buy and sell energy through our subsidiaries. The total volume of energy resourced in December 31, 2019 was 81,993 GWh or 2.2% more than in 2018 of 80,190 GWh or 2.9 % less than in 2017 of 82,479GWh. The amount of energy produced by us in 2019 was 6,756 GWh or 38.8% more than the 4,871 GWh produced in 2018, which was 26.3% less than the 6,606 GWh produced in 2017. The amount of energy purchased by us in 2019 was 75,237 GWh or 0.1% less than the 75,319 GWh purchased in 2018, which was 0.7% less than the 75,873 GWh purchased in 2017. These figures include 5,659 GWh purchased from Itaipu in 2019, 5,738 GWh in 2018 and 6,230 GWh in 2017, and through the Brazilian Electric Power Trading Chamber (*Câmara de Comercialização de Energia Elétrica*, or CCEE) and from other companies, we purchased 69,577 GWh in 2019, 69,581 GWh in 2018 and 69,632 GWh in 2017.

The energy traded in 2019 totaled 81,993 GWh, an amount 2.2% more than 2018 in which, 52% of that volume (42,397 GWh) was traded to final customers, both captive and free. Total losses of energy in the core and distribution networks in 2019 totaled 7,554 GWh, which corresponds to 9% of total resources and 9.8% more than the 6,881 GWh loss in 2018. The table below presents the breakdown of resources and power requirements by CEMIG traded in the last three years:

[Table of Contents](#)**CEMIG'S ELECTRIC ENERGY BALANCE**

(GWh)	2019	2018	2017
RESOURCES	81,993	80,190	82,479
Energy generated by CEMIG	5,533	3,770	5,708
Energy generated by Sá Carvalho	295	326	214
Energy generated by Horizontes	48	61	64
Energy generated by CEMIG PCH	96	81	94
Energy generated by Rosal Energia	192	182	128
Energy generated by SPE	592	451	398
Energy bought from Itaipu	5,659	5,738	6,230
Energy bought from CCEE and other companies	69,577	69,581	69,643
REQUIREMENTS	81,993	80,190	82,479
Energy delivered to final customers	42,397	42,707	40,147
Energy delivered by Sá Carvalho	472	472	461
Energy delivered by Horizontes	89	87	79
Energy delivered by CEMIG PCH	121	124	65
Energy delivered by Rosal Energia	213	235	213
Energy delivered by SPEs	706	882	788
Energy delivered to the CCEE and other companies	30,441	28,802	33,605
Losses (1)	7,554	6,881	7,121

(1) Discounting the losses attributed to generation (135 GWh in 2019) and the internal consumption of the generating plants.

Generation

The electric power generation business consists of the generation of energy using renewable energy sources (water, wind, sun and biomass), or non-renewable sources (fossil and nuclear fuels).

According to ANEEL, as of December 31, 2019, we were the fourth largest energy generation group in Brazil, by total installed capacity. As of that date, we were generating energy at over 80 hydroelectric plants (small hydroelectric power plants ("PCH") and hydroelectric power plants ("UHE"), thermoelectric plants, wind and solar plants, with total installed capacity of over 6,000 MW, with plants present in 10 states of Brazil. The vast majority of our capacity is generated at hydroelectric plants (96.6% of installed capacity), with the remaining being generated by thermal and wind plants.

Our top five power plants accounted for over 65% of our installed energy generation capacity in 2019 are:

Rank (Installed Capacity)	Generation Power Plant	CEMIG Group Company Holding Stake	Restricted / Unrestricted Group	Installed Capacity (MW)	Start of Comm. Operations	Expiration of Concession or Authorization	Type of Power Plant	CEMIG's Stake
1 st	Belo Monte	Norte Energia	Unrestricted	1,376	2016	08/26/2045	UHE	11.69%
2 nd	Emborcação	CEMIG GT	Restricted	1,192	1982	07/23/2025	UHE	100%
3 rd	Santo Antônio	SAESA	Unrestricted	553	2012	06/12/2043	UHE	15.51%
4 th	Nova Ponte	CEMIG GT	Restricted	510	1994	07/23/2025	UHE	100%
5 th	Irapé	CEMIG GT	Restricted	399	2006	02/28/2035	UHE	100%
Sub-Total (Top 5)				4,030				
Total (All Plants)				6,183				

[Table of Contents](#)**Transmission**

The transmission business consists of transporting energy power from the facilities where it is generated to points of consumption, distribution networks and free customers (which are customers with demand equal to or greater than 3 MW, or customers with demand equal to or greater than 500 kW from alternative energy sources, such as wind, biomass or small hydroelectric plants). Its revenue depends directly on the availability of its assets. The transmission network comprises energy transmission lines and substations with voltage of 230 kV or more, and is part of the Brazilian Grid regulated by ANEEL and operated by the ONS. See "The Brazilian Power Industry". On March 31, 2020, CEMIG GT and other CEMIG transmission networks had approximately 4,250 miles of lines, as follows:

Classification	CEMIG GT	Other CEMIG Group Companies (proportional to CEMIG's stake in the relevant concession)
> 525 kV Lines	-	59 miles
500 kV Lines	1,355 miles	685 miles
440 kV Lines	-	68 miles
345 kV Lines	1,231 miles	67 miles
230 kV Lines	478 miles	307 miles
220 kV Lines	-	-
Total	3,064 miles	1,186 miles

Distribution

Within the CEMIG Group, energy distribution activities are conducted by a wholly owned subsidiary, CEMIG Distribution ("CEMIG D"), in addition to the investee Light S.A. ("Light"), in which CEMIG has a 22.58 % interest.

CEMIG D has four public service energy distribution concession contracts in the State of Minas Gerais, granting rights to the commercial operation of services related to the supply of energy to customers in the regulated market (*Ambiente de Contratação Regulada-ACR*, the "Regulated Market") in municipalities in its concession area, including customers that may be eligible, under the legislation, to become customers in the free market (*Ambiente de Contratação Livre-ACL*, the "Free Market").

CEMIG D's concession area covers approximately 219,105 square miles, or 96.7% of the territory of the State of Minas Gerais. On December 31, 2019, CEMIG D's energy system comprised 335,421 miles of distribution lines, through which it supplied 25,562 GWh to 8,537,040 regulated customers and transported 19,351 GWh to 1,441 free customers that use our distribution networks. The total volume of energy distributed was 44,951 GWh, of which 44.7% was distributed to regulate and free industrial customers, 14.5% to regulate and free commercial customers, 23.4% to regulated residential customers, and 17.4% to other regulated and free customers.

Other Businesses

While our main business consists of the generation, transmission and distribution of energy, we also engage in the following businesses: (i) distributed generation, account services, cogeneration, energy efficiency (with PEE resources), supply and storage management, through our recently launched subsidiary CEMIG Soluções Inteligentes em Energia-CEMIG SIM.; (ii) sale and trading of energy, through structuring and intermediation of purchase and sale transactions, trading energy in the Free Market, through our wholly-owned subsidiaries CEMIG Trading S.A., Empresa de Serviços de Comercialização de Energia Elétrica S.A. and CEMIG Comercializadora de Energia Incentivada S.A.; (iii) acquisition, transport and distribution of gas and its subproducts and derivatives through Companhia de Gás de Minas Gerais (Gasmig); and (iv) technology systems and systems for operational management of public service concessions, including companies operating in energy, gas, water and sewerage and other utility companies, through Axxiom Soluções Tecnológicas S.A..

[Table of Contents](#)**Revenue Sources**

The following table illustrates the revenues attributable to each of our principal revenue sources, in millions of *reais*, for the periods indicated:

	Year ended December 31,		
	2019	2018	2017
Energy sales to final customers	24,052	21,882	20,439
Revenue from wholesale supply to other concession holders	2,876	2,990	3,263
CVA (compensation for changes in 'Parcel A' items) and other financial components	58	1,973	988
Revenue from use of the electricity distribution systems – TUSD	2,722	2,045	1,611
Revenue from use of the concession transmission system	504	411	371
Transmission assets - indemnity revenue	156	250	373
Generation assets - indemnity revenue	-	55	271
Adjustment to expectation of cash flow from the indemnifiable financial assets of the distribution concession	18	-	9
Revenue on financial updating of the Concession Grant Fee	318	321	317
Construction revenues	1,200	898	1,118
Energy transactions on the CCEE	432	217	860
Supply of gas	2,298	1,995	1,759
Fine for violation of service continuity indicator	(58)	(44)	-
Recovery of PIS/Pasep and Cofins taxes credits over ICMS	1,428	-	-
Other operating revenues	1,722	1,585	1,484
Deductions from revenue	(12,336)	(12,312)	(11,151)
Total net operating revenues	25,390	22,266	21,712

Power Generation and Trading**Overview**

CEMIG's top five power plants accounted for over 65% of its installed energy generation capacity as of December 31, 2019.

On September 27, 2017, the Brazilian Federal Government auctioned to third parties the concessions of four of CEMIG's top ten power plants (São Simão, Jaguará, Miranda and Volta Grande power plants) with a total capacity of 2,922MW.

CEMIG's market consists of sales of energy to:

- Regulated customers in CEMIG's concession area in the State of Minas Gerais;
- Free customers both in the State of Minas Gerais and other States of Brazil, through the Free Market;
- Other agents of the energy sector – traders, generators and independent power producers, also in the Free Market;
- Distributors in the Regulated Market; and
- CCEE (eliminating transactions between companies of the CEMIG Group).

The total volume of transactions in energy in 2019 was 81,993 GWh, an increase of 2.2% in comparison to the 80,190 GWh in 2018.

[Table of Contents](#)**Generation Assets**

As of the date of this annual report, the subsidiaries, jointly-controlled entities and affiliates of CEMIG operated 90 plants, totaling 6.182,6 MW.

We have incorporated subsidiaries in the State of *Minas Gerais* and other states in Brazil to operate certain of our generation facilities and to hold the related concessions.

The following are companies in which CEMIG GT owns 100% of the equity:

- CEMIG Geração Camargos S.A., CEMIG Geração Itutinga S.A., CEMIG Geração Leste S.A., CEMIG Geração Oeste S.A., CEMIG Geração Salto Grande S.A., CEMIG Geração Sul S.A. and CEMIG Geração Três Marias S.A.; CEMIG GT incorporated these companies in 2016 to hold the concession contracts for 18 hydroelectrical plants won in the auction the year before. The total installed generation capacity secured to CEMIG GT's portfolio was 699,6 MW;
- CEMIG PCH S.A. – Independent power producer, operating the *Pai Joaquim* small hydroelectrical power plant;
- Horizontes Energia S.A. – An independent power producer, operating the *Machado Mineiro* and *Salto do Paraopeba SHPs* in *Minas Gerais*; and the *Salto do Voltão* and *Salto do Passo Velho* hydroelectrical plants, in the State of Santa Catarina;
- Rosal Energia S.A. – Concession holder operating the *Rosal* hydro plant, on the border between the States of *Rio de Janeiro* and *Espirito Santo*;
- Sá Carvalho S.A. – Production and sale of energy as a public energy service concession holder, through the *Sá Carvalho* hydroelectrical power plant.

The generation companies in which CEMIG GT has joint control are:

- Aliança Geração de Energia S.A. (45%) – Platform of growth and consolidation of generation assets held by CEMIG GT and Vale (55%). The assets involved in the formation of the Aliança include the Aimorés and Funil hydroelectrical plants and the following generation consortia: Porto Estrela, Igarapava, Capim Branco I, Capim Branco II and Candonga. In addition to the hydroelectrical plants in operation, there are four wind plants, which will compose the Complexo Eólico Santo Inácio in northeastern Brazil. The company has installed capacity of 1,257 MW in operation, and will be responsible for investments in future projects of energy generation;
- Aliança Norte Energia Participações S.A. (49%) – Together with Vale (51%), the company holds participation of 9% of Norte Energia S.A., holder of the concession to operate the Belo Monte hydroelectrical plant, corresponding to an indirect equity interest of 4.41% and representing an installed capacity of 495 MW;
- Amazônia Energia Participações S.A. (49% of voting share, 74.5% of total capital) – Owned jointly with Light (25.5%), holds 9.77% of Norte Energia S.A., representing an installed capacity of 818 MW indirectly held by CEMIG GT;
- Renova (45.83% of voting stock, 36.23% of total capital) – As of December 31, 2019, Renova had generation supply contracts totaling 628.2 MW of generation capacity, of which 190.2 MW were already in commercial operation;
- Baguari Energia S.A. (69.39%) – The Company operates the Baguari Hydroelectrical Plant through the Baguari Hydro Plant Consortium, together with Furnas Centrais Elétricas S.A. (30.61%). Baguari Energia S.A. owns 49% of the plant in partnership with Neoenergia, which owns the remaining 51%, through Baguari I Geração de Energia Elétrica;
- Retiro Baixo Energética S.A. (49.9%) – Holds the concession for the operation of the hydroelectrical power plant Retiro Baixo, located in the lower course of the Paraopeba River in the State of Minas Gerais, which has installed capacity of 83.66 MW and assured energy of 36.6 MW;
- Hidrelétrica Cachoeirão S.A. (49%) – An independent power producer operating the Cachoeirão SHP, located at Pocrane, in the State of Minas Gerais. The other 51% is held by Santa Maria Energética;
- Hidrelétrica Pipoca S.A. (49%) – An independent power producer that built and operates the Pipoca SHP, on the Manhuaçu River, in the municipalities of Caratinga and Ipanema, in the State of Minas Gerais. The other 51% is held by Asteri Energia S.A.;
- Lightger S.A. (49%) – Independent power producer, formed to build and operate the Paracambi SHP (or PCH), on the Ribeirão das Lages river in the county of Paracambi, in the state of Rio de Janeiro. The remaining 51% shareholding is owned by Light;
- Madeira Energia S.A. (“MESA”) (8.54%) – MESA owns 100% of Santo Antônio Energia S.A., hydroelectric plant in the Madeira River in the state of Rondônia. CEMIG GT's indirect holding in MESA amounts to 6.97% and takes place through the following companies: SAAG, FIP Melbourne (33.12%), Parma (56.75%) and FIP Malbec (49.92%).

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CEMIG also controls the following entity that operate generation assets:

- Light 22.58% – Owns 25.5% of Amazônia Energia Participações S.A, 51% of Lightger S.A. (other 49% owned by CEMIG GT), 100% of Itaocara Energia Ltda. Light Energia has investments in several jointly-controlled entities – for example 51% of Guanhães Energia S.A. (other 49% owned by CEMIG GT); and 100% of Lajes Energia S.A., São Judas Tadeu and Fontainha. Light has a total installed generation capacity of 1,187 MW, and an assured energy of 872 average MW, including proportional stakes in associates.

CEMIG GT has joint participation in the following company with plants under construction:

- Queimado Hydroelectrical Power Plant – We hold an 82.5% interest in this entity and our partner in this project is CEB Participações S.A. (“CEBPar”), a subsidiary of Companhia Energética de Brasília (“CEB”), a state-controlled energy company, which owns 17.5% equity interest in the plant;
- Guanhães Energia S.A. (49%) – This Company owns 100% of *Dores de Guanhães SHP*, *Senhora do Porto SHP*, *Jacaré SHP* and *Fortuna II SHP*. These companies are responsible for construction and commercial operation of four SHPs. Light owns the remaining 51% equity interest in Guanhães Energia S.A.;
- Usina Hidrelétrica Itaocara S.A. (49%) – Independent power producer, formed to build and operate the *Itaocara I* hydroelectrical plant. Itaocara Energy Ltd. (100% owned by Light) owns the remaining 51%. On July 5, 2016, the concession contract (Concession Contract No. 01/2015) of *Itaocara I* hydroelectrical plant was transferred from the Consortium UHE Itaocara to Usina Hidrelétrica Itaocara S.A.

The following consortia were established to develop future projects:

- Tapajós Consortium – The Tapajós Consortium was created to develop technical and environmental feasibility studies of hydro plants in the *Tapajos* river basin. Technical studies have already been finished and sent to ANEEL for analysis while environmental studies depend on certain licenses to be concluded;
- Davinópolis Hydroelectric Plant (49%) – This consortium was established with Neoenergia (51%) to conduct a feasibility study of the project.

Wind Farms

Wind farms have become one of the most promising power generation sources in Brazil. In addition to their low environmental impact, this source of energy is completely renewable and widely available in Brazil, according to numerous studies of potential wind power. Its rapid technical development over recent decades has successfully reduced costs per MWh in comparison to other power generation sources. CEMIG has monitored and observed the rapid evolution of wind energy and its inclusion in the range of Brazilian energy supply sources.

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CEMIG GT owns 100% of the equity in the following companies with wind farms investments:

- Central Eólica Praia de Parajuru S.A and Central Eólica Volta do Rio - Wind farms located in the State of Ceará with a total installed capacity of 70.8 MW.

CEMIG GT has joint participation in the following companies with wind farms investments:

- Renova (45.83% of voting share and 36.23% of total capital);
- Aliança Geração de Energia S.A. (45%) – Four wind farms, which compose the Santo Inácio Wind Project. The project, located at Icapuí, in the State of Ceará, started its commercial operation in December of 2017 and has an installed capacity of 98.7 MW.

Expansion of Generation Capacity

Guanhães Project: Guanhães Energia S.A. is jointly-controlled entity, which has four wholly-owned subsidiaries – PCH Dores de Guanhães S.A., PCH Senhora do Porto S.A., PCH Jacaré S.A. and PCH Fortuna II S.A.. Guanhães Energia S.A. is engaged in commercial operation of these four SHPs. Three of them – Dores de Guanhães, Senhora do Porto and Jacaré – are in the municipality of Dores de Guanhães; and one, Fortuna II, is in the municipalities of Virginópolis and Guanhães, all in the State of Minas Gerais. In July 2019, the project reached its 44MW aggregate installed capacity, 44 MW.

Belo Monte Project: Norte Energia S.A. (NESA) is a special-purpose company which holds the concession to build, operate and maintain the Belo Monte hydroelectrical plant, located on the Xingu River, in the Amazon Region, in the North of Brazil. CEMIG GT has an indirect interest in NESA of 11.7% through Amazônia Energia S.A. and Aliança Norte Energia Participações S.A., shareholders of Norte Energia S.A.. In November 2019, the hydroelectrical plant has completed its total capacity of 11,233 MW, which represents one of the largest hydroelectrical power plants in the world.

On April 30, 2015, the Consortium UHE Itaocara (“Consortium”), in which CEMIG GT has 49% and Itaocara Energia Ltda., a SPC owned by Light, has 51%, won the concession of Itaocara I, a 150-MW hydroelectrical plant, to be constructed on the Paraíba do Sul River, between the municipalities of Itaocara and Aperibé, in the State of Rio de Janeiro. The energy of this power plant is to be delivered on January 1, 2020 and the concession period is 35 years. On July 5, 2016, ANEEL transferred the concession of Itaocara I power plant from the Consortium to Usina Hidrelétrica Itaocara S.A., a special purpose company held by CEMIG GT (49%) and Itaocara Energia Ltda (51%). Due to the worsening of Brazilian macroeconomic conditions in recent years, construction has not started yet and the project is currently being reevaluated.

Transmission

Overview

The transmission business consists of the transfer of energy from generation power plants to customers directly connected to the basic transmission grid, free customers and distributors. The transmission system comprises transmission lines and step-down substations with voltages ranging from 230 kV to 500 kV.

All the basic transmission grid users, including generators, distributors, free customers, and others, execute contracts for the use of the transmission system – CUST with the ONS, and make payments to the transmission companies for making available the use of their basic transmission grid equipment. See “The Brazilian Power Industry” and “Item 5. Operating and Financial Review and Prospects.”

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The following tables give operating information on our transmission capacity for the dates indicated:

Voltage of Transmission Lines

500 kV	1,355	1,355	1,355
345 kV	1,231	1,231	1,231
230 kV	478	478	478
Total	3,064	3,064	3,064

**Circuit Length of Transmission Lines
in Miles
as of December 31,**

2019	2018	2017
1,355	1,355	1,355
1,231	1,231	1,231
478	478	478
3,064	3,064	3,064

Substations

Number of transmission substations (2)
MVA

**Transformation Capacity (1) of
Transmission Substations
as of December 31,**

2019	2018	2017
38	38	38
17,425	17,615	17,615

- (1) Transformation capacity refers to the ability of a transformer to receive energy at a certain voltage and release it at a reduced voltage for further distribution.
(2) Shared substations are not included.

The tables below present operational information on the transmission capacity of the joint venture (subsidiaries and affiliates transmission CEMIG), proportional to the equity interest held by the CEMIG Group in each case, on the dates indicated:

Voltage of Transmission Lines

>525 kV	59	59	59
500 kV	685	654	674
440 kV	68	68	68
345 kV	67	31	31
230 kV	307	258	263
220 kV	-	-	-
Total	1,186	1,070	1,095

**Transmission Network Extension in
Miles
as of December 31,**

2019	2018	2017
59	59	59
685	654	674
68	68	68
67	31	31
307	258	263
-	-	-
1,186	1,070	1,095

Transmission assets

Furnas–Pimenta Transmission Line (Companhia de Transmissão Centroeste de Minas - Centroeste) – In September 2004, a consortium formed by Furnas and CEMIG, holding 49% and 51%, respectively, won the bid for the concession of the Furnas–Pimenta transmission line. As required by the tender rules, the partners formed a company, Companhia de Transmissão Centroeste de Minas S.A., which is responsible for the construction and operation of the transmission line. This 345-kV transmission line extending for approximately 39 miles, connects the substation of the Furnas hydroelectrical plant to a substation at Pimenta, a city in the Center-West region of Minas Gerais. It began commercial operation in March 2010 and the concession expires in March 2035. On January 13, 2020, the Company concluded the acquisition of 49% of the share capital held by Eletrobras in Centroeste, becoming the sole owner of the investee since then.

Transmissora Aliança de Energia Elétrica S.A. – TAESA is a private company jointly controlled by CEMIG, which holds 36.97% of the voting capital and 21.68% of the total capital of TAESA, and by ISA *Investimentos e Participações do Brasil S.A.* which holds 14.88% of the total capital. TAESA has led CEMIG's growth vector in the transmission segment, dedicated to the construction, operation and maintenance of transmission lines in all regions of the country. It represents the main interest that we have in one Transmission Company in the Brazilian electric sector.

[Table of Contents](#)**Distribution and Purchase of Electric Power****Overview**

Our distribution operation consists of transfers of energy from distribution substations to final customers. Our distribution network comprises a widespread network of overhead and underground lines and substations with voltages lower than 230 kV. We supply energy to small industrial customers, at the higher end of the voltage range, and to residential and commercial customers at the lower end of the range.

In 2019, we invested approximately R\$ 916 million in the construction and acquisition of the property, plant and equipment needed to supply energy to our customers, expand and increase the capacity of our distribution system.

The following tables provide certain operating information pertaining to our distribution system, on the dates indicated:

Voltage of distribution lines

161 kV
138 kV
69 kV
34.5 kV + Others
Total

Circuit length of distribution lines in miles – High voltage (from distribution substations to final customers)

As of December 31,		
2019	2018	2017
30.25	30.25	30.12
7,970.98	7,945.68	7,879.51
2,221.78	2,221.78	2,228.23
633.75	633.75	606.59
10,856.76	10,831.46	10,744.45

Voltage of distribution network

Overhead urban distribution lines
Underground urban distribution lines
Overhead rural distribution lines
Total

Circuit length of distribution lines in miles – Medium and low voltage (from distribution substations to final customers)

As of December 31,		
2019	2018	2017
66,223.50	65,999.52	65,734.68
1,539.70	1,535.05	1,530.63
256,819.88	255,024.50	251,925.70
324,583.08	322,559.07	319,191.01

Number of substations
MVA

Step-down transformation capacity (1) of distribution substations as of December 31,

2019	2018	2017
409	405	404
10,742.00	10,681.35	10,585.91

(1) Step-down transformation capacity refers to the ability of a transformer to receive energy at a certain voltage and release it at a reduced voltage for further distribution.

Expansion of Distribution Capacity

Our distribution expansion plan for the next five years, counting from 2018/2022, is based on projections of market growth. In order to accommodate this growth, we plan to add on distribution lines, up to 7,673 miles of medium and low-voltage, and 1,838 miles of high-voltage; 80 step-down substations, adding 2,150 MVA to our distribution network.

Purchase of Electric Power

During the year ended December 31, 2019, we purchased 5,659 GWh of energy from Itaipu, which represented approximately 13% of the energy we sold to final users, and 616 GWh (1.5% of energy from PROINFA). We also purchased 1,063 GWh under Nuclear Energy Quota Contracts - *Contratos de Cotas de Energia Nuclear*, or “CCENs”. (2.5%) and 7,472 GWh of energy under Assured Energy Quota Contracts - *Contratos de Cota de Garantia Fisica*, or “CCGFs”. (18%). In addition to this compulsory purchase, we have two other types of supply arrangements: (i) purchases through public auctions, which accounted for approximately 24% of the energy purchased for resale during the year ended December 31, 2019; and (ii) long-term agreements existing prior to the New Industry Model Law, which represented approximately 2% of the energy purchased in 2019.

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Itaipu — Itaipu is one of the largest operational hydroelectrical plants in the world, with an installed capacity of 14,000 MW. Centrais Elétricas Brasileiras S.A., or Eletrobrás, a holding company controlled by the Federal Government, owns a 50% interest in Itaipu, while the government of Paraguay owns the remaining 50%. Brazil, pursuant to its 1973 treaty with Paraguay, has the option to purchase all of the energy generated by Itaipu that is not consumed by Paraguay. Brazil generally purchases more than 95% of the energy generated by Itaipu.

We are one of the power distributors operating in the south, southeast and west-central regions of Brazil that are jointly required to purchase all of Brazil's portion of the energy generated by Itaipu, in accordance with the Law No. 5,899/1973. The Federal Government allocates Brazil's portion of Itaipu's power among these energy companies in amounts proportionate to their respective historical market share of total energy sales. ANEEL enacted Resolution No. 2,178/2016, which set 10.39% as the percentage of Itaipu's power production bestowed upon CCEE that CEMIG D would have to purchase in 2017. For 2018, Resolution No. 2355/2017 set it at 10.09% and for 2019; it was set at 10.03% (Resolution No. 2500/2018). These rates are fixed to defray Itaipu's operating expenses and payments of principal and interest on Itaipu's dollar-denominated borrowings and the cost in *reais* of transmitting such power to the Brazilian grid. These rates are above the national average for bulk supply of power and are calculated in U.S. dollars. Therefore, fluctuations in the U.S. dollar/*real* exchange rate affect the cost, in real terms, of energy we are required to purchase from Itaipu. Historically, we have been able to recover the cost of such energy by charging supply rates to customers. According to our concession contract, increases in the supply rates may be transferred to the final customer upon approval by ANEEL.

Since 2007, ANEEL publishes at the end of each year the amount of energy to be purchased from Itaipu by each of the electric power distributors for the following year, as guidance for the five subsequent years. Based on this, the distributors can estimate their remaining energy needs in advance of the next public auctions.

CCENs: These are contracts that formalize the purchase of energy and power as established in Law No. 12,111/09 and ANEEL Resolution N^o. 530/12 between distributors and Electronuclear for the energy produced by the Angra I and Angra II plants.

CCGFs: Decree No. 7,805/12 regulated Provisional Act No. 579/12 and created contractual arrangements governing contracting of energy and power from the plants whose concessions were extended under Law No. 12,783/13.

Auction Contracts: We have purchased energy in public auctions on the CCEE. These contracts are formalized between CEMIG and the various vendors in accordance with the terms and conditions in the invitation to bid.

"Bilateral Contracts" — CEMIG D entered into 'bilateral contracts' with various suppliers prior to the enactment of the New Industry Model Law in 2004. Such agreements are valid under their original terms but cannot be renewed. During the year ended December 31, 2019 CEMIG D didn't enter into new bilateral contracts.

[Table of Contents](#)**Other Businesses****Natural Gas Distribution**

Gasmig was established in Minas Gerais, Brazil, in 1986, for the purpose of developing and implementing the distribution of natural gas in the State of Minas Gerais. CEMIG holds 99.57% of the shares of Gasmig and the Municipality of Belo Horizonte owns the remaining shares.

In July 1995, the State Government granted Gasmig an exclusive 30-year concession (as from January 1993) for distribution of piped gas covering the entire State of Minas Gerais and customers located within it. On December 26, 2014, the Second Amendment to the Concession Contract was signed. This document extended Gasmig's concession for commercial operation of piped gas services for industrial, commercial, institutional and residential use in the State of Minas Gerais for 30 years. As a result, the expiration of this concession was extended from January 10, 2023, to January 10, 2053.

Gasmig's marketing efforts focus on its ability to provide a more economically efficient and environmentally friendly alternative to oil products, like diesel and liquefied petroleum gas ("LPG"), wood, wood products and charcoal. From January to December 2019, Gasmig supplied approximately 2,301 million cubic meters of natural gas per day to 51,966 customers in thirty nine cities: 109 large and medium-sized industrial plants, 981 small industrial plants and commercial customers, 55 retail distribution stations supplying compressed natural gas ("CNG") to vehicles, 2 gas fired power generation plants, 4 co-generation projects, 2 distributors of CNG to industrial customers and vehicular retail stations, and 50,813 homes.

From January to December 2019, Gasmig registered an expense for the acquisition of gas of R\$ 1,436 million compared to an expense of R\$ 1,238 million in the period from January to December 2018, an increase of 15.99 %. Although the volumes have increased 2.25%, the expenses have increased mainly due to 20.96 % increase in the average cost.

Many energy-intensive industries, such as cement, steel, iron-alloys and metallurgical plants, operate at significant volume in Minas Gerais. Gasmig's principal strategy is expansion of its distribution network to cover the part of demand that has not yet been met. Gasmig dedicates efforts to development of new projects for expansion of its natural gas distribution system, to supply customers in other areas of Minas Gerais, especially those densely industrialized.

From January to December 2019, capital expenditures totaled R\$ 43 million and 35.7 kilometers were added to our natural gas network. In 2018, Gasmig began to supply the residential market in the city of Juiz de Fora, built the pipeline for supplying a new large industrial plant at the city of Jacutinga and acquired the site in which the operational center is located.

Gas distribution concessions

The concessions for distribution of natural gas are granted by each Brazilian state. In the state of Minas Gerais the regulator, the State's Economic Development Secretariat, sets the tariffs for natural gas by market segment. The tariffs are comprised of a portion for the cost of gas and a portion for the distribution of gas. Each quarter the tariffs are adjusted to pass through the cost of gas, and once a year they are adjusted to update the portion allocated to cover the costs relating to the provision of the distribution service – remuneration of invested capital and to cover all the operating, commercial and administrative expenses of the concession holder.

In addition to these adjustments, in April 2015, the Economic Development Secretariat sent to our subsidiary Gasmig an Official Letter, SEDE/GAB/Nº303/2014 stating the timetable set for the first Tariff Review cycle. Due to delays, the methodology of the first Tariff Review cycle was decided in July 2017, and the public consultation on Required Revenue was opened in December 2018; the contributions were sent in February 2019. The process was concluded in November 2019, when parameters, remuneration rate, investment expectations, costs and volumes were determined to determine tariffs in the 2018-2022 cycle. These reviews occur every five years, from the end of the first cycle, to evaluate the changes in the costs of Gasmig, and to adjust the tariffs. The concession contract also specifies the possibility of an extraordinary review of tariffs if any event occurs that puts the economic-financial balance of the concession at risk.

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On December 14, 2018, the Minas Gerais State Department for Economic, Scientific, Technological and Higher Education Development ('Sedectes' actually "SEDE") or ('the grantor') presented a study, prepared by Fundação Getulio Vargas Business school ("FGV"), related to financial economic rebalancing of the Gasmig concession agreement, also supported by consultation from General Attorney's Office of the State. The rebalancing that has been requested by the grantor is based on the contractual obligation to build a gas pipeline to serve the Nitrogen Fertilizers Unit (UFN), which should have been built by Petrobras. Due to this reason Gasmig was requested to pay the State of Minas Gerais the amount of which Sedectes estimates at R\$852 million. Based on the study, SEDECTES requested a response from Gasmig and began discussion for solution related to imbalance referred to, considering that one of its conditions for extension of the concession contract (from 2023 to 2053, as specified in the second amendment to the contract) was execution of investments for construction of the gas pipeline.

On September 19, 2019, the Company entered into, with the State of Minas Gerais, as Grantor, the Third Amendment to the Concession Agreement for Industrial, Institutional and Residential Exploration of Piped Gas Services in the State of Minas Gerais, which represents the conclusion of the economic and financial rebalancing process of the concession contract, upon payment of a grant fee in the amount of R\$ 852 million, updated from January 1, 2019 to the date of its payment at by the DI rate (Interbank Deposits, extra group) and ensures that Gasmig maintains the extension of the term of its concession until the year 2053.

On September 26, 2019, the Company issued Commercial Promissory Notes, in a single series, totaling R\$ 850 million with a maturity of 12 months and interest of 107% of the DI rate, without any guarantees or endorsement. The proceeds from this issue were fully used, on September 26, 2019, to pay the granting bonus due to the Granting Authority updated by the variation of the DI rate since January 1, 2019 in the amount of R\$ 891.2 million.

Also under Third Amendment to the Concession Agreement, the total amount paid for the compensatory grant will be added to the Company's asset remuneration base and considered in the tariff review process by the grantor as an intangible asset to be amortized until the end of the concession contract, with immediate effects on the setting and review of tariffs.

With the conclusion of Gasmig's First Periodic Tariff Review (1st RTP), in November 2019, SEDE confirmed the inclusion of the grant bonus in the regulatory asset base. The review resulted in guidance on investment and quality goals, service expansion and definition of the new tariff design, offered by Gasmig, in the 2018 to 2022 cycle.

Among the approved changes is the creation of new tariff classes, new consumption ranges, absorption of customers from other classes and changes in the collection cascades, in order to meet market demands and simplify the classification of customers in the respective categories. The proposed new tariff design includes the following categories: Industrial, Commercial and Industrial with lower consumption, Individual Residential, Residential Collective, Cogeneration, Thermoelectric, Compressed Natural Gas or Liquefied Natural Gas and Natural Gas.

Consulting and Other Services

CEMIG SIM was launched in October 2019, as a merger of the companies Efficientia and CEMIG GD, to operate in the markets of: distributed generation, energy efficiency and energy solutions. As well as the branding and marketing strategy focused on the retail sector, and on digital transformation of the electricity sector, the organizational culture of SIM, which has a strong character of innovation and technology, is being constructed so that clients are always at the center of decisions.

In 2019 CEMIG SIM sold supply totaling 2,342MWh/month, generated by three photovoltaic plants (the *Janaíba*, *Corinto* and *Manga* plants). CEMIG SIM achieved 1,456 clients.

In energy solutions, CEMIG SIM will operate in 2020 in implementation of photovoltaic plants at medium-voltage clients, and also in energy efficiency projects. Business models are also being developed for the markets of: energy storage, electric vehicles, and cogeneration.

[Table of Contents](#)**Sale and Trading of Energy**

We provide services related to the sale and trading of energy in the Brazilian energy sector, such as evaluation of scenarios, representation of customers in the CCEE, structuring and intermediating of energy purchase and sale transactions, and consultancy and advisory services, besides services related to the purchase and sale of energy in the Free Market through our wholly-owned subsidiary companies CEMIG Trading S.A., *Empresa de Serviços de Comercialização de Energia Elétrica S.A.* (“ESCEE”) and *Cemig Comercializadora de Energia Incentivada S.A.* (“CCEI”).

Energy Losses**CEMIG**

The total recorded by CEMIG as energy losses has two components: (i) an allocated portion of the losses arising in the National Grid; and (ii) the total of technical and non-technical losses (commercial losses) in the local distribution network of CEMIG D.

The total energy losses recorded by CEMIG in the year of 2019 was 7,554GWh, an increase of 9.8% increase in comparison to 2018 (6,881GWh). The CCEE apportioned losses in the national grid totaling 506 GWh to CEMIG D. Other energy losses, totaling 7,048GWh, include technical and non-technical losses in the local distribution system.

Technical losses were approximately 64.6% of the total losses related to CEMIG D for the year ended December 31, 2019. Losses in distribution are inevitable because of transport of energy and its transformation into different levels of voltage. We seek to minimize technical losses by rigorous and regular assessments of the operational conditions of the distribution facilities, and investment to expand distribution capacity, for maintaining quality and reliable levels, thus reducing technical losses; we also operate the system in accordance with certain specific voltage levels, to reduce the level of losses. Technical losses are not strictly comparable: longer distribution distances (for example, in rural areas), naturally have higher technical loss levels.

Non-technical losses were approximately 35.4% of CEMIG D's total energy losses in 2019. Such losses are caused by customer fraud, illegal connections to the distribution network, and errors in metering and defects in meters. To minimize non-technical losses, preventive actions are taken regularly: customers' meters and connections are inspected; meter readers are trained; metering systems are modernized; procedures for installation and inspection of meters are standardized; meters with quality control guarantees are installed; and the database of customers is updated.

The non-technical losses of different distributors can be partially comparable, taking into account the social complexities in the concession area and the effectiveness of efforts to prevent losses.

Quality indicators – DEC and FEC (SAIDI and SAIFI)

At the end of 2019, the indicators that measure the quality of supply by CEMIG D – (i) System Average Interruption Duration Index (“SAIDI”), expressed as a figure per customer, in hours per year; and (ii) System Average Interruption Frequency Index (“SAIFI”), also expressed as a customer-experienced average, were 10.64 and 5.06, respectively. In 2018, after an ANEEL assessment, the figures with respect to CEMIG D for SAIDI and SAIFI changed from 10.06 to 10.56 and 5.06 to 5.24, respectively.

In December 2015, CEMIG D signed the contractual amendment that unified its concession contracts for the provision of public electricity distribution services, which extended the concessions from January 1, 2016 until December 31, 2045. The contract defined limits for the internal portion of the continuity indicators, Internal System Average Interruption Duration Index (“SAIDI-i”) and Internal System Average Interruption Frequency Index (“SAIFI-i”), and since 2016 CEMIG has been complying with the contract limits, as shown in the table below.

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Year	SAIDI-i (hours)				SAIFI-i. (Interruption)			
	2016	2017	2018	2019	2016	2017	2018	2019
Limit	11.62	11.32	11.03	10.73	8.12	7.76	7.39	7.03
Performed	11.57	11.18	10.42	10.56	5.37	5.44	5.13	4.85

Although the SAIDI-i in 2019 showed a small increase compared to 2018 results, if we analyze the total SAIDI, that represents the real customer perception of power outages, including even the data not considered in the measurement, the result is an improvement of nearly 1 hour, from 14.56 in 2018 to 13.61 in 2019.

Customers and Billing**Customer base**

The CEMIG Group sells energy through the companies CEMIG D, CEMIG GT and other wholly-owned subsidiaries – Horizontes Energia, Sá Carvalho, CEMIG PCH, Rosal Energia, CEMIG Geração Camargos, CEMIG Geração Itutinga, CEMIG Geração Salto Grande, CEMIG Geração Três Marias, CEMIG Geração Leste, CEMIG Geração Oeste, CEMIG Geração Sul, CE Praias de Parajuru and CE Volta do Rio.

This market comprises sales of energy to:

- regulated customers in CEMIG's concession area in the State of Minas Gerais;
- free customers both in the State of Minas Gerais and other states of Brazil, through the Free Market;
- other participants of the energy sector – traders, generators and independent power producers, also in the Free Market; and
- distributors, in the Regulated Market.

In 2019 we sold a total of 55,044 GWh, or 0.92% less than in 2018, while the total of power we transported for free customers was 0.3% higher, at 19,351 GWh. Sales of energy to final customers plus our own consumption in 2019 totaled 43,596 GWh, or 0.08% more than in 2018. Sales to distributors, traders, other generating companies and independent power producers in 2019 totaled 11,448 GWh – or 4.5% less than in 2018.

In December 2019, CEMIG Group invoiced 8,537,540 customers – a growth of 1.5% in the customer base in the year since December 2018. Of these, 8,537,176 are final customers, including CEMIG's own consumption; and 364 are other agents in the Brazilian energy sector.

Sales to Final Customers**Residential**

The residential customer category accounted for 19.1% of CEMIG's energy sales in 2019, totaling 10,538 GWh – or 2.6% more than in 2018 and average monthly consumption per customer in 2019 was 126,1 kWh/month, or 0.4% more than in 2018 (125.5 kWh/month);

This higher consumption by the residential customer category was the result of the following factors:

- Increase of 149,331 customers;
- Occurrence of higher temperatures than in the previous year.

[Table of Contents](#)**Industrial**

Energy billed to regulated and free industrial customers in the State of Minas Gerais and other states was 29.1% of the total volume of energy traded by us in 2019, at 16,024 GWh, or 9.4% less than in 2018.

This decline is the result of a 7.9% reduction in the captive market, and a 9.7% reduction in the Free Market.

The number of customers being 58.7% lower than in 2018, a reduction of 42,466 customers, affected the segment of captive customers. This was due to a reclassification in May 2019 of about 50% of the Industrial to Commercial and Residential consumers, and to a migration of consumers to the free market. In the free customer segment, the reduction was due to the termination of energy sale contracts.

Commercial and Services

Energy sold to regulated and free customers in this category in Minas Gerais and other states was 17.4% of the total volume of energy traded by us in 2019, at 9,567 GWh, 14.2% higher than in 2018. This reflects an increase of 0.5% in the volume billed to regulated customers of CEMIG D, and an increase of 36.5% in the volume billed by CEMIG GT and its wholly owned subsidiaries to free customers in Minas Gerais and other Brazilian states.

The increase in energy volume is associated with the increase in the number of customers. In the captive market the number of customers increased 11.8%, mainly due to a reclassification of consumers from the Industrial and Rural classes to Commercial. In the free customers segment, there was an increase of 177 customers, mainly due to the migration of customers from the captive to the free market.

Rural Customers

Energy consumed by the rural customer category in 2019, at 3,795 GWh, was 5% higher than in 2018, and did we trade 6.9% of the total in 2019. Climatic factors (lower volume of rainfall and higher temperatures at the beginning of 2019) affected the total consumption of rural customers.

Other customer categories

Supply to other categories – government, public lighting, public services, and our own consumption – totaled 3,672 GWh in 2019 or 1.7% more than in 2018.

Sales in the Free Market, and 'Bilateral Contracts'

In 2019, total sales of energy were 9,340 GWh, or 3.3% less than in 2018. The reduction is due to the termination of CEMIG GT sales contract.

Sales in the Regulated Market

Sales in the Regulated Market in 2019 totaled 2,108 GWh or 9.6% less than in 2018 due to ending of the sale contracts of the 15th Existing Energy Auction.

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The table below presents CEMIG Group's market in more detail, itemizing transactions in 2019 compared to 2018:

Type of Sale	2019				2018				Variation YoY	
	Customers		Energy		Customers		Energy		Customers	Energy
	Amount (un)	Participation (%)	Amount (GWh)	Participation (%)	Amount (un)	Participation (%)	Amount (GWh)	Participation (%)	Variation (%)	Variation (%)
Traded Energy	8,537,540	100.00	55,044	100.00	8,409,535	100.00	55,555	100.00	1.5	-0.9
Sales to final customers	8,536,461	99.99	43,5558	79.13	8,408,481	99.99	43,522	78.34	1.5	0.1
Residential	6,966,696	81.60	10,538	19.14	6,817,365	81.07	10,266	18.48	2.2	2.6
Industrial	30,659	0.36	16,024	29.11	73,003	0.87	17,689	31.84	-58.0	-9.4
Captive	29,875	0.35	2,383	4.33	72,341	0.86	2,588	4.66	-58.7	-7.9
Free	784	0.01	13,641	24.78	662	0.01	15,101	27.18	18.4	-9.7
Commercial	806,602	9.45	9,567	17.38	721,149	8.58	8,380	15.08	11.8	14.2
Captive	805,811	9.44	5,214	9.47	720,535	8.57	5,190	9.34	11.8	0.5
Free	791	0.01	4,353	7.91	614	0.01	3,190	5.74	28.8	36.5
Rural	647,066	7.58	3,795	6.90	712,793	8.48	3,615	6.51	-9.2	5.0
Captive	647,064	7.58	3,792	6.89	712,792	8.48	3,614	6.51	-9.2	5.0
Free	2	0.00	3	0.01	1	0.00	1	0.00	100.0	200.0
Other Categories	85,438	1.00	3,634	6.60	84,171	1.00	3,571	6.43	1.5	1.8
Own Consumption	715	0.01	38	0.07	702	0.01	41	0.07	1.9	-7.3
Wholesale sales	364	0.00	11,448	20.80	352	0.00	11,991	21.58	3.4	-4.5
Contracts in Regulated Market	27	0.00	2,108	3.83	28	0.00	2,333	4.20	-3.6	-9.7
Free and bilateral contracts	337	0.00	9,340	16.97	324	0.00	9,658	17.38	4.0	-3.3

This table presents the CEMIG's Group's sales to the Industrial user category as a whole in 2019, by sector of activity:

<u>Sector of activity</u>	<u>Volume invoiced (GWh)</u>	<u>(%)</u>
Metallurgy	3,422	21.4
Mining	2,150	13.4
Non metallic minerals	1,930	12.0
Foods	1,662	10.4
Chemicals	967	6.0
Automotive	924	5.8
Plastic Products	898	5.6
Textile	728	4.5
Electricity, gas and other utilities	642	4.0
Other sectors	2,701	16.9
Total, industrial customers	16,024	100.0

The ten largest industrial customers served by the CEMIG Group, located in Minas Gerais and other states of Brazil, in terms of revenue, are:

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Customer	Activity
USIMINAS	Metallurgy and Mining
ARCELORMITTAL	Metallurgy
VALLOUREC	Metallurgy
FIAT	Automotive
COMPANHIA BRAS DE METALURGIA E MINERACAO	Metallurgy and Mining
SAINT GOBAIN	Chemicals, Non-metallic mining
NOVELIS DO BRASIL	Metallurgy
HOLCIM	Non-metallic mining
WHITE MARTINS	Chemicals
ANGLOGOLD ASHANTI	Metallic Mining

Billing

Normative Resolution 414/2010, published by the National Energy Agency (ANEEL), regulates billing of customers who have active supply contracts with CEMIG D, among other instruments.

According to the Resolution, consumption of energy, and other items charged, are billed monthly, based on the voltage level delivered to the customer unit and the installed load at that unit. 'Installed load' means the sum of the nominal potentials of the electrical equipment installed in the customer unit that is in a condition to operate, expressed in kilowatts (kW). 'Customer unit' means the group of items comprising installations, facilities, branch connection, electrical equipment, cables and accessories (including the substation, in cases of supply at primary voltage), with receipt of energy at only one point of delivery, and individualized metering corresponding to a single customer located in one single property or in contiguous properties.

CEMIG D's customers are divided into Low, Medium and High Voltage.

Invoices of High voltage customers, which are connected directly to the transmission network, are payable five working days after reading of the meter. These customers receive the payment document – the energy invoice – by email.

Medium Voltage customers are those that receive supply at a voltage of 2.3 kV or more, which amount to about 13,628 customers, which are billed within two business days after the meter reading. They receive invoices both in printed form and by email, payable five business days from the date of delivery at the customer's address. Due to modernization and automation of the meter reading of these customer units, by using remote metering, CEMIG D now has approximately 88% of its billing automated. This enables the customer unit to be metered in real time – so that CEMIG D records and updates consumption of energy at regular intervals.

Low Voltage customers are billed in cycles, which vary between 27 and 33 days. The bill is delivered simultaneously with the meter reading. A total of 7.7 million customer units are billed using this technology, which is known as "On Site Billing". These bills are payable five business days from the date of their delivery (or 10 business days for the establishments of public entities and bodies). The great majority of the amounts billed to this category of customers are for energy actually consumed. Only 0.8% of these customers are billed based on estimated consumption, (i.e., on the arithmetic mean of the amounts recorded for the 12 months prior to the consumption that is not measured).

In addition to the implementation of "On Site Billing", CEMIG D has invested to increase the number of bills sent by email, which grew by 39% in 2019, with approximately 307,000 customers now receiving their billing online. CEMIG intensify campaigns to incentivize customers to choose this way of receiving their monthly bills. The reduction in the volume of printed-paper used for billing helps reduce its global cost to the Company and contributes to environmental sustainability for the planet.

In 2019, CEMIG D saved approximately R\$600 thousand with the electronic invoices sent monthly. Modernization of the billing system and the distribution network has significantly contributed to customers' satisfaction and the quality of CEMIG's energy supply. CEMIG intends to continue with improvement in this and related fields.

[Table of Contents](#)**Seasonality**

CEMIG's sales of energy are affected by seasonality. Historically, consumption by industrial and commercial customers increases in the fourth quarter due to their increase in activity. The seasonality of rural consumption is usually associated with rainfall periods. During the dry season between the months of May and November, more energy is used to irrigate crops. The table below presents quarterly figures for energy billed by the CEMIG Group to final users, regulated customers and free customers from 2017 to 2019, in GWh:

Year	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
2019	10,674	10,686	11,008	11,192
2018	10,309	11,090	11,014	11,110
2017	10,364	10,712	10,607	10,817

Competition**Contracts with Free Customers**

On December 31, 2019, CEMIG GT had a portfolio of contracts with 1,910 free customers. Of this total, 988 customers were located outside of the State of Minas Gerais, amounting to 59% of the total volume of energy sold by CEMIG GT in 2019.

The strategy adopted by CEMIG in the Free Market is to negotiate and enter into long-term contracts, thus establishing and maintaining a long-term relationship with customers. We seek to differentiate ourselves in the Free Market from our market competitors by the type of relationship we have with our customers and the quality of our services, which have added value for CEMIG GT. This strategy, together with a sales strategy that seeks to minimize exposure to short-term prices and contracts with a minimum demand on a take-or-pay basis, translates into lower risk and greater predictability of our results.

Raw Materials

Fluvial water is the main raw material used by CEMIG for hydroelectrical generation of energy. As of December 31, 2019, 82 of CEMIG's 90 plants use this source and provide 97.8% of our generation.

The cost of the water may be considered as nil, since water is a natural resource that comes from rivers and rain. In a smaller proportion, the Company also produces energy from wind (also with a nil cost) and in thermoelectric plants, burning fuel oil (the cost varies with the price of oil on the international market).

Environmental Matters**Overview**

Our generation, transmission and distribution of energy and our distribution of natural gas are subject to federal and state legislation relating to preservation of the environment. The Brazilian Constitution gives the Federal Government, states and municipalities powers to enact laws designed to protect the environment and issue enabling regulations under these laws. Generally, while the Federal Government has the power to promulgate general environmental regulations, state governments have the power to enact specific and even more stringent environmental regulation and municipalities also have the power to enact laws in their local interest. As of the day of this annual report, we believe that we comply with the relevant environmental laws and regulations in all material aspects.

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In accordance with our environmental policy, we have established various programs to prevent and minimize damage, aiming to limit our risks related to environmental issues.

Management of vegetation in the energy system

The Environmental Management Unit of CEMIG D, among other activities, develops methods and procedures for dealing with urban trees that are adjacent to the electric power system. Vegetation management is necessary due to the obligation to ensure the operational security of the system, and from the high number of interruptions in supply of energy caused by trees. In 2019, trees were the cause of 37,101 energy supply outages, in both urban and rural areas, and were the sixth largest cause of unscheduled outages in the Company's distribution system.

Investments have been directed towards technical improvements in tree pruning, so that the process can take place in such a way as to reduce risks to the employee, the system or third parties. The interventions are carried out by directional pruning, a technique considered to be more appropriate for coexistence between large trees and energy distribution networks.

Through working partnerships between its own staff and external agents, CEMIG has been developing digital applications to improve management of the process of handling vegetation and to reduce supply outages in urban areas. CEMIG also new contracts to improve the handling of vegetation in power line pathways (its Integrated Vegetation Handling methodology) to reduce costs, improve the performance of the system and help improve environmental quality.

Environmental Licensing

The purpose of environmental licensing is to establish conditions, restrictions and environmental control measures that should be complied with by entities and individuals to install, expand and operate entities or activities that use environmental resources or have the potential to cause damage to the environment.

Brazilian law requires that licenses be obtained for several activities, including construction, installation, expansion and operation of any facility that utilizes environmental resources, causes environmental degradation, or pollutes or has the potential to cause environmental degradation or pollution or to harm historical, cultural and archaeological heritage.

Failure to obtain and comply with the requirements of an environmental license to construct, implement, operate, expand or enlarge an entity that causes environmental impact, such as the energy plants operated and in implementation by CEMIG, is subject to administrative sanctions, such as fines, suspension of operations, as well as criminal sanctions, such as fines and imprisonment for individuals and restriction of rights for legal entities. We have projects licensed at both the federal and state levels.

Environmental Operating Licensing

Federal Law No. 9,605, enacted on February 12, 1998, stipulates penalties for facilities that operate without environmental licenses. In 1998, the Federal Government issued Provisional Act No. 1,710 (currently Provisional Act No. 2,163-41/01), which allows project operators to enter into agreements with the relevant environmental regulators in order to comply with Federal Law No. 9,605/98. Accordingly, we have been negotiating with (i) IBAMA; and (ii) the Regional Environmental Management Units ("Suprams"), which is the environmental authority of the State of Minas Gerais to obtain the environmental operating licenses for all our plants and transmission lines that began operating prior to February 1986.

For the generation facilities located in the State of Minas Gerais, which are subject to the environmental licensing under state level, we have agreed with *Supram* and IBAMA to bring our facilities into compliance on a gradual basis.

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For those facilities of CEMIG GT that started operations before February 1986, although we have not yet obtained an operating license, we have prepared the required environmental assessments, filed applications before the appropriate environmental bodies, and submitted them for analysis. Under the applicable law, the Company is allowed to operate while awaiting the requisition appreciation.

To manage compliance with the conditional requirements, we use the Environmental Requirements Non-compliance Risk Reduction Index (*Índice de Redução do Risco de Não Cumprimento das Condicionantes Ambientais*, or “IRDC”).

In 2019, 9 licenses and authorizations for regularization of projects of CEMIG D were obtained, in the category of Authorizing Documents for Environmental Interventions (*Documentos Autorizativos para Intervenção Ambiental*, or “DAIAs”). All the above projects have been regularized in the *IEFs agencies (Instituto Estadual de Florestas – Minas Gerais State Environmental Agencies)* spread out over the State of Minas Gerais.

Distribution of natural gas by Gasmig through pipelines throughout Minas Gerais is also subject to environmental control. The environmental authority of the State of Minas Gerais (Secretaria de Estado de Meio Ambiente e Desenvolvimento Sustentável – SEMAD) has issued all licenses necessary for the regular operation of Gasmig’s activities.

Environmental licenses and authorizations issued by relevant municipal, state and federal bodies usually impose conditions relating to environmental impacts inherent to our activities, which must be complied with in order for the environmental licenses to remain valid. They have to be complied with as long as the license is in force. To this end, CEMIG is taking appropriate steps for full compliance, and to provide evidence of compliance to the relevant environmental authorities, in each case to avoid any subsequent administrative or criminal penalties, which can include fines, suspension of operations or revocation of licenses.

Environmental Legal Reserves

Under Article No. 12 of Federal Law No. 12,651, of May 25, 2012 (the new “Brazilian Forest Code”), a Legal Reserve (*Reserva Legal*) is an area located inside a rural property or holding that is necessary for the sustainable use of natural resources, conservation or rehabilitation of ecological processes, conservation of biodiversity or for shelter or protection of native fauna and flora. Generally, all owners of rural properties have to preserve an area as a Legal Reserve. However, Article 12, §7 of the new Brazilian Forest Code establishes that a Legal Reserve will not be required for areas acquired or expropriated by the holder of a concession, permission or authorization to exploit hydroelectrical power potential, in which projects for electric power generation, or energy substations or transmission or distribution lines are operating.

In Minas Gerais, State Law No. 20,922, enacted on October 16, 2013, made provisions in the Forest Policy and the Biodiversity Protection Policy in the state, adapting the environmental legislation to the provisions of the Forest Code. This had the effect of revoking the requirement for a Legal Reserve in the case of hydroelectrical generation projects, enabling the processes of the Corrective Environmental Licensing that had been held up in the previous year for this reason to be resumed. In the federal sphere, IBAMA’s technical licensing team, in the corrective licensing of CEMIG’s plants, expressed an opinion, in correspondence sent to us on July 29, 2008, stating that in CEMIG’s case there was no need for the constitution of Legal Reserves.

The approval of the new Brazilian Forest Code and the exclusion of the hydropower projects from the need to register a Legal Reserve settled this issue allowing for the continuation of the process of the environmental licensing of the several projects of the company, with the acquisition of the pending operating licenses and the maintenance of its legal compliance.

[Table of Contents](#)**Permanent Preservation Areas**

The vegetation surrounding the reservoir is statutorily classified as Permanent Preservation Area (*Área de Preservação Permanente* or “APPs”). The length of the APP varies depending on whether the reservoir is located in rural or urban areas. In rural areas, at least 30 meters should be preserved, while in urban areas, at least 15 meters should be preserved. Preservation of APPs is mandatory, being the intervention allowed in specific situations.

Lack of preservation of vegetation in APPs or unauthorized suppression of vegetation in APPs may lead to administrative sanctions, such as fines ranging from R\$5,000 to R\$50,000 per hectare, limited to R\$50 million and criminal liability.

Law 12,651/12 regulates that the APPs of artificial reservoirs should be subject to a specific program created to regulate the use and conservation measures of the area surrounding the reservoir. Such program is called Environmental Plan for Use and Conservation of the Reservoir Surrounding Area (*Plano Ambiental de Conservação e Uso do Entorno do Reservatório* or “PACUERA”) and should be prepared according to the minimum requirements determined by the competent environmental authority in the environmental licensing proceeding.

With the new Forest Policy Law of Minas Gerais State, the requirement above was incorporated into state legislation and the preparation and approval of the PACUERA should be in a condition for the grant of operating licenses.

We have now incorporated the performance of PACUERA into the proceedings for obtaining the operating licenses of the projects subject to environmental licensing on the state level. CEMIG GT prepared and filed applications before the environmental bodies relating to all the required environmental assessments, including PACUERA, in respect to all facilities using artificial reservoir as required by law.

Compensation Measures

According to Federal Law No. 9,985, enacted on July 18, 2000, and to Decree No. 4,340, enacted on August 22, 2002, companies whose activities result in major environmental impacts are required to invest in and maintain conservation units in order to mitigate those impacts. Conservation units are areas that are subject to special protection and include ecological stations, biological reserves, national parks and relevant ecological interest areas. The environmental authority that is competent to license the project stipulates the environmental compensation for each company depending on the specific degree of pollution or damage to the environment.

Federal Decree No. 6,848/2009, enacted on May 14, 2009, and Minas Gerais State Decree No. 45,175, enacted on September 17, 2009, regulate the methodology for deciding these compensation measures, requiring that up to 0.5% of the total amount invested in the implementation of a project that causes significant environmental impact must be applied in compensation measures.

State Decree No. 45,175/2009 was amended by Decree No. 45,629/2011, which established the reference value of projects that cause significant environmental impact, as follows:

- For projects executed before the publication of Federal Law No. 9,985, enacted in 2000, the net book value (*Valor Contábil Líquido* or “VCL”) will be used, excluding revaluations or, in its absence, the value of the investment made to the project; and
- Compensation for environmental projects executed after the publication of Federal Law No. 9,985, enacted in 2000, will use the reference established in Item IV of Article 1 of Decree No. 45,175, enacted in 2009, calculated at the time of execution of the project, and updated based on an inflation-linked adjustment index.

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Due to the impact of the 2013 Energy Concessions Law (Law No. 12,783, enacted on January 11, 2013) on the business of CEMIG GT, the Company filed a consultation with the IEF, to be informed about the environmental compensation payable in relation to the Transmission System. The IEF submitted the inquiry to the Federal General Attorneys' Office (*Advocacia Geral da União*, or "AGU"). As of the date of this annual report, the Company has not received a reply to this consultation.

In addition to the environmental compensation referred to above, forest compensations for cleaning of energy tower paths and accesses in which vegetation has been suppressed are routine.

Other environmental requirements can become applicable due to the impacts of various projects; such requirements could include the structuring and operation of programs to monitor fauna and flora of regions surrounding facilities of the energy system, environmental education programs, and programs for recovery of degraded areas (*Programas de Recuperação de Áreas Degradadas*, or "PRADs").

Fish Management – The Peixe Vivo Program

Construction of hydroelectrical plants can create a risk for fish that inhabit rivers, due to various changes in the aquatic environment caused by the use of dams. One of our environmental area's principal activities is to ensure that environmental accidents involving the native fish population do not take place at our hydroelectrical power plants. Further, to mitigate the impacts caused by the operation of our plants, CEMIG has developed a methodology for evaluating the risk of fish mortality at the plants. We also carry out research projects in partnership with universities and research centers to develop scientific knowledge to serve as a basis for more effective fish population conservation programs to be implemented by CEMIG.

In June 2007, we created the *Fish Alive Program* ("Programa Peixe Vivo") program as a result of members of senior management believing that it was necessary to take more effective measures to preserve fish populations of the rivers where the company has operations. The program's main activities are summed up in its mission, which is: "To minimize the impact on fish species, seeking handling solutions and technologies that will integrate energy generation by CEMIG with conservation of native fish species, promoting involvement of the community". Since its creation, the program has been operating on two fronts – one seeking preservation of fish populations in the State of Minas Gerais, and the other focusing on forming protection strategies to avoid and prevent fish deaths at CEMIG's hydroelectrical plants. The adoption of scientific criteria for decision-making, establishment of partnerships with other institutions and modification of practices adopted because of the information generated are the principles that guide the work of the Peixe Vivo team.

On average, over the period 2007 to 2019 CEMIG spent R\$6.0 million per year in activities and research projects in relation to the *Peixe Vivo* program.

The *Peixe Vivo* program runs seven scientific projects in partnership with research institutions, involving more than 50 students and researchers.

These partnerships, which have been operating since 2007, have resulted in 619 technical publications up to today's date, and have been referenced nationally and internationally for the practices of fish conservation and dialog with the community, presenting CEMIG's work in several countries, and various states of Brazil. These academic results, jointly with the involvement of the community, have been used to create more efficient and practical conservation programs that make it possible for fish to coexist with generation plants in Brazilian rivers.

Urban Occupation of Rights of Way and Reservoir Banks

Gas Pipelines — GASMIG's natural gas distribution networks are underground and run through rural and urban areas. Pipes are usually installed on public roads near pluvial drainage, sanitation, energy and telecommunications, among other utilities. Installation of the networks in the urban subsoil presents risks of damage to the pipelines from third party maintenance workers. However, all of our gas networks are flagged according to national standards and internal procedures. In addition to security signaling, the presence of the GASMIG network in roads, streets and other areas is shown on the Company's website, where the network map is made available in a complete and up-to-date manner. Gasmig provides free on-site guidance services for third parties excavations through its Dig Safely ("*Escave com Segurança*") program. Guidance and support for safe execution of their work can be requested through Gasmig's 24-hour helpline.

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GASMIG also has network inspection plans, in order to verify the security conditions of the system and prevent illegal intrusions, constructions or erosions nearby the pipelines.

In 2019, mitigation measurements adopted by GASMIG reduced third parties' damages flaws comparing prior numbers. The efficiency of third parties' damages prevention was about 99.5%, considering the total number of interventions executed near the pipelines. The loss of natural gas was reduced because of the low pressure used on damages ducts and because of the short time response to leak containment. In collaboration to shorten the response of incidents, safe zones (blockades) were created, making the attendance more effective. GASMIG also implemented a Management Plan of the Integrity of Metallic Gas Pipeline. From that plan, appropriate techniques are being used to a direct assessment threats to external and internal corrosion of gas pipelines. In parallel, GASMIG is preparing to perform the internal inspection via PIGs electronics from *Linha Tronco Vale do Aço*, one of the main gas pipelines of the Company.

Irregular occupation of high-voltage overhead lines — we have easements for our transmission and distribution networks over land subject to restrictions. A significant portion of such land areas, however, has been occupied by unauthorized construction, majority residential constructions. This type of activity causes risks of electric shock and accidents involving local residents, and constitutes an obstacle to the maintenance and operation of our energy system. We are currently seeking solutions for these problems, which will involve either resettlement of these occupants or improvements that would make it possible to maintain our energy system safely and efficiently.

To mitigate these risks, we have been monitoring and recording invasions and by taking action to prevent invasions on the paths of the transmission and subtransmission lines. A number of measures have been adopted to preserve the security of these lines, including: contracting of a company for systematic inspection, and implementation of security measures and works to minimize the risks of accidents; education of communities about the risks of accidents involving electric shocks arising from the invasion of sites and the building of homes; and removal of occupation of the transmission line pathways through agreements with local residents and partnerships with the municipalities in our concession area.

Reservoir Areas — we have implemented safety measures to protect our energy generation facilities against invasions, using margin patrol to control the banks of reservoirs. The Company is planning to install electronic security systems in all generation power plants of the company. In several plants this system is already working. Any anglers found inside the premises are approached by the guards and asked to leave the site, which has been occurring without resistance or violence. There are signs on the banks of the reservoirs of our hydroelectrical generation facilities, indicating ownership. Periodic inspections by the mobile patrol units operating on the reservoir areas report any invaders of reservoir banks. We frequently have to take legal action to recover possession of invaded areas. Due to the vast area and number of reservoirs, we are continually subject to new trespasses and occupation of the banks of the reservoirs by unauthorized construction. However, we are making our best efforts, even establishing partnerships with the Military Police of Minas Gerais ("PMMG"), to prevent these invasions, and prevent any environmental damage to Permament Protected Areas (APPs – *Áreas de Proteção Permanentes*), around the reservoirs. To patrol the reservoir areas, during 2019 we drove approximately 87,754 miles in vehicles, spent 476 hours navigating on reservoirs and waterways. Educational campaigns are also carried out in schools with lectures and distribution of booklets on the preservation of the environment.

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The Carbon Market — we believe that Brazil has a significant potential to generate carbon credits from clean energy projects that observe the Clean Development Mechanism, or “CDM”, or the Voluntary Markets. Every year, we seek to quantify our emissions and publish our main initiatives in reducing the emission of carbon dioxide, for example through the Carbon Emission Project.

The CEMIG Group participates in CDM projects registered in the United Nations Framework Convention on Climate Change (UNFCCC), which includes seven SHPs with a capacity of 116 MW and two hydroelectrical power plants with a combined generation capacity of 3,708 MW and a solar power plant with capacity of 3 MW. The process of verification and emission of part of the carbon credits of Cachoeirão SHP and UHEs Baguari and Santo Antônio has been completed, corresponding to approximately 1,402 tons of CO2 emissions avoided through this program.

Management of equipment and waste contaminated with Polychlorinated Biphenyls, or “PCBs” — At CEMIG, most of the large equipment contaminated with PCBs was removed from the electrical system and sent for incineration in 2002. Since then, the remaining mass of PCB identified has been progressively eliminated. Brazilian legislation prohibits the sale of PCBs since 1981, but permits their use in equipment that is still in operation. The Stockholm Convention (EC), which Brazil is a signatory and has been ratified by Decree No. 5472/2005, provides for the withdrawal of operation of equipment contaminated with PCBs until 2025 and its final disposal by 2028.

Two proposals for management of PCBs are at the preparation stage: Draft Law No.1075/2011, and Conama Submission No. 02000.001745/2012-63. Some provisions in the text of both these proposed regulations have demands that go beyond the requirements of the Stockholm Convention and the practices adopted in several developed countries. Thus, depending on what regulations are approved, management of PCBs could have an effect on the concession contract, and a technical and economic effect on CEMIG and all concession holders in the Brazilian power industry, especially the distributors.

CEMIG participates actively in the discussion on these regulations through the Brazilian Energy Distributors’ Association, and the Power Industry Environment Forum.

Operational Technologies – CEMIG

CEMIG invests in automated monitoring and control equipment, in connection with the strategy of increasing efficiency and further modernizing the generation, distribution and transmission grids. CEMIG keeps developing and implementing new systems, with the purpose of optimizing its internal activities and increasing the availability of its infrastructure and applications that support CEMIG’s business.

Load Dispatch Center

CEMIG’s System Operation Center (*Centro de Operação do Sistema*, or “COS”), located at the head office in Belo Horizonte, is the nerve center of the transmission and generation operations. With two modern control rooms, it coordinates the operations of the entire energy system, in real time, providing operational integration of the generation and transmission of energy. It also operates the interconnections with other generation, transmission and distributors. The supervision and control executed by the COS now extends to more than 50 extra high voltage substations, 17 major generating power plants, 14 minor generating power plants and 1 wind farm.

Through its activities, the COS permanently guarantees the security, continuity and quality of the energy supply to its clients and to the system. The activities of the COS are supported by up-to-date telecommunications, automation and information technology resources, and executed by highly qualified personnel. The COS has a Quality Management System, with ISO 9001:2015 certification.

[Table of Contents](#)***Distribution Operation Center***

Our distribution network is managed by a Distribution Operation Center (*Centro de Operações de Distribuição*, or “COD”), located in Belo Horizonte. The COD monitors and coordinates our distribution network operations in real time. They are responsible for the supervision and control of 409 distribution substations, 324,583 miles of medium and low voltage distribution lines, and 10,841 miles of sub-transmission lines and 8.37 million customers and operates in 774 municipalities of Minas Gerais.

We provided an average of 17,506 operating services in the field a day in 2019. The COD is certified according to ISO Quality Standard 9001:2000. There are various systems in use to automate and support the COD’s processes, including trouble call, field crew management, distribution substation supervision and control, restoration of power, emergency switching, network disconnection, and inspection. Technologies, including a geographic information system and satellite data communication helpline, to reduce customer service restoration time and provide better customer service. These are devices, installed along our distribution network, that sense and interrupt fault currents, and automatically restore service after momentary outages, improving operational performance and reducing restoration time and costs.

Geoscience Information System

The Atlantis Project aims at modernizing and unifying CEMIG’s system of geoprocessing of distribution lines and networks. The new system enables management of resources with a geospatial vision, allows the planning of expansions, records electrical equipment to the analysis of electrical networks, and assists in compliance with ANEEL’s normative resolutions.

The Geographic Information System (GIS) will enable us to give support to the processes of registry and design, as well as supporting the following corporate processes: network expansion and maintenance, protection of revenues, planning and supplies, property services and management of assets through full integration with the Enterprise Resource Planning (ERP) system, besides supporting the operations.

Additionally, it provides support to engineering through integration with the electrical and mechanical calculations system that offers network analysis and suitable network sizing. The Atlantis project began in 2015 and part of the solution was deployed in August 2017. Since this time, the system is used by CEMIG’s high, medium and low voltage asset registration teams.

In 2019, we’ve implemented the reconciliation of the grid registration units with the elements registered in SAP/ERP, the consultation module and the electrical calculation module.

The remaining deployment steps will be concluded in 2020.

There are another IT solutions based in GIS technologies, such as, geographic panels with data available in tabular and map views, automation panels for distribution’s operations, system to management, inspection and security of dams and integrations to permit access to simple map views.

Internal Telecommunications Network

CEMIG’s telecommunications network is composed of high-performance microwave links provided by more than 376 communication stations, and an optical system of approximately 1,038 miles of optical fiber providing a mix of telecommunications. Our robust data network also contains communications facilities that share the site with more than 418 substations, 44 generation plants and 172 high and extra high voltage transmission and distribution lines.

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The solutions provided range from corporate telephonic and corporate networks to mission critical telecommunications grid dedicated to monitoring, protection and control of generation plants, substations, transmission and distribution lines, dispatching of field crews to carry out technical and commercial services, lightning and storm prediction and hydro meteorological system to operate reservoirs.

In order to support supervision and control of the medium-voltage mission critical distribution system, a proprietary radio communication system is in place, installed in approximately 848 reclosers and 77 automated switches. Other 8,296 reclosers are monitored and controlled utilizing third part solution; begin 8,149 supported by cellular solution and 147 by satellite media.

Commercial and technical service dispatch are supported by 1,200 vehicle mobile terminals connected by a hybrid satellite and Cellular Solution and 400 handhelds equipped with cellular solution.

Approximately 15,000 energy meters are equipped with cellular solution and dedicated to revenue protection. Additionally, more than 5,000 meters utilizing RF Mesh and PLC solution are installed in low voltage customers and medium voltage transformers at *Sete Lagoas* region constituting a complete proof-of-concept of Advanced Metering Infrastructure (AMI).

The corporate data network serves more than 230 offices and units within the concession area.

The Telecommunications Network Operation monitors and operates the infrastructure 24 hours x 7 days a week to guarantee continuity and reliability, according to Brazilian regulations and in compliance with ANEEL regulations, National Grid Operator (ONS) operational procedures and other specific regulations.

Corporate Data Network

Our corporate data network services 377 units in 275 cities of *Minas Gerais* linked by an infrastructure, which includes microwave links, optical fibers and metal cables, owned either by ourselves or by contracted operators. The architecture is in line with market standards, using state-of-the-art equipment, which is monitored, operated and managed using the latest technological solutions.

The physical and logical network topologies employ security resources such as firewalls, intrusion prevention system (IPS), access control, antivirus and antispam systems, which are continuously updated to protect against unauthorized access, in accordance with ISO 27002. A security information and event management system (SIEM) makes it possible to investigate adverse events, while also providing a historical record base to meet legal requirements.

The Network and Security Operations Centers (NOC and SOC), at the Company's head office, in *Belo Horizonte*, monitors, operates and manages the whole network and security infrastructure in real time (24 hours per day, 7 days a week), maintaining confidentiality, integrity and availability of the data throughout the whole network.

IT Governance Program

Our Information Technology Governance Program aims to continually align IT with our business, adding value by applying information technology, appropriate resource management, risk management and compliance with legal, regulatory and Sarbanes-Oxley requirements.

In order to meet the company strategy and objectives, the Company uses the Balanced Score Card methodology. The strategic objectives are deployed in IT contribution goals. This enable IT alignment with business needs.

The IT processes and services are structured and monitored using an *Itil* methodology. This monitoring allows handling deviations and ensures continuous process improvement.

The company has a risk and controls management system based on *Cobit 5* to meet the requirements of the Sarbanes Oxley Act. The internal audit and independent external auditors evaluate this system annually.

[Table of Contents](#)**Information Security Management**

Information security, a permanent concern of ours, is ensured by a management system based on the Brazilian Standard (“ABNT”) NBR ISO/IEC 27001:2013, which is aligned with best market practices. Our information security management system includes processes for policy, risk, communication, information classification and information security management and control. In addition, recurring actions for improvement in processes, communication, awareness and training strengthen our information security practices. CEMIG maintains an ongoing safety awareness program for its employees through annual campaigns.

Commercial Management System

We have established and consolidated an efficient customer service system, based on SAP CCS (Customer Care Solution)/ CRM (Customer Relationship Management) platform, fully integrated with the Business Intelligence (BI) database, which supports our customer service processes.

The employees use CCS/CRM to manage and serve approximately 9 million customers who receive high, medium and low voltage energy supply.

Both corporate tools offer security, quality and productivity to our processes of energy distribution with efficiency in accordance with the regulatory and market requirements.

In 2019, we configured a new solution based in Salesforce software to improve the efficiency and reliability of energy trading and trading actions related for the use of distribution system assets. We aim improvements in controls over energy sales processes, greater traceability of information, management of customer portfolios with mapping of new opportunities, use of mobile devices such as tablets and smartphones and greater agility for customer billing.

The solution is in operation and new features will be deployed in 2020.

Management Tools

The SAP GRC (Software Solutions for Governance, Risk & Compliance) solution controls our processes, with a focus on meeting requirements of internal audit activities. The GRC Process Control module enables to perform continuous controls monitoring using automated workflows to manage effectively compliance activities. Some of the critical IT controls are being automated with this module. The user access management, role management and segregation of duties (SoD) risks review processes have also been improved with Access Control module.

In 2019, we started a project to install new IT products to improve engineering processes, based on the Cyme Platform (CYME), provided by Cooper Power Systems.

The CYME platform is an expert system that includes complex electrical calculations for the planning and study of distribution networks. In the case of CEMIG, which has an extensive and integrated distribution network and a significant level of complexity, the activities for implementing the technology solution are even more challenging and demanding, requiring considerable effort to complete the steps.

We are developing a Pricing, Competitive Intelligence and Strategy system with a basis for budgeting and market analysis. From data on materials purchased by CEMIG, it's possible to estimate future acquisition costs through predictive analysis of market prices and can predict whether the material will increase or decrease future value. All figures are used for budgeting services, especially for field services, where we can put all the costs of materials tied to the team, such as tools, personal protective equipment, vehicles and labor costs to determine the cost of performing the services. With all of these analyzes, it's expected to save money by purchasing the lowest cost material and service at the best possible time.

[Table of Contents](#)**Customer Relationship Channels**

We have nine major channels of service to our *Minas Gerais* customers. Customer service contact, whether of an emergency nature or to deal with, service requests, can be made via: (i) our call center, which can handle an average of 40,000 daily calls, and also operates with an efficient electronic service through Interactive Voice Response (“IVR”, or *Unidade de Resposta Auditivel*); (ii) in person at branches in the 774 municipalities of our concession; (iii) through our Virtual Branch, on our website, which offers 46 types of service; (iv) via SMS; (v) via the social networks Facebook, Whatsapp and Twitter; (vi) smartphone application “*CEMIG Atende*” which offers 15 types of service and Telegram Messenger application which offers 4 types of services.

Maintenance and Repair Systems

The 10,831 miles of high voltage distribution lines in CEMIG D’s network, operating at from 34.5 kV to 161 kV, are supported by approximately 53,151 structures, mainly made of metal.

The network of CEMIG GT has 3,064 miles of high voltage transmission lines, operating at from 230 kV to 500 kV, supported by approximately 11,754 structures.

The majority of the service interruptions to our distribution and transmission lines are the result of lightning, farm surface fires, vandalism, wind, and corrosion.

The entire high voltage transmission line system of CEMIG D is inspected once a year by helicopter, using a ‘Gimbal’ gyro-stabilized system with conventional and infrared cameras, allowing for simultaneous visual and thermographic (infrared) inspections. Land-based inspections are also made at intervals of between one and three years, depending on the characteristics of the line, such as time in operation, number of outages, type of structure, and the line’s importance to the energy system as a whole.

All the extra high voltage transmission lines of CEMIG GT are inspected twice a year by helicopter. Land-based inspections are made every two years to inspect the supporting structures. Line pathways are inspected annually, aiming to keep the areas free of vegetation that could lead to surface fires.

We use modern modular aluminum structures to minimize the impact of emergencies involving fallen structures. Most of our maintenance work on transmission lines is done using live-wire methods. We have a well-trained staff and special vehicles and tools to support live- and dead-wire work.

Our set of spare equipment (transformers, breakers, arresters, etc.) and mobile substations are of great importance in prompt reestablishment of power to our customers in the event of emergencies involving failed substations.

Property, Plant, and Equipment and Intangible Assets

Our main assets are our power generation plants, transmission and distribution infrastructure. Our net book value of total property, plant and equipment and intangible assets, including our investment in certain consortia that operate energy generation projects, including projects under construction, was R\$14,074 million on December 31, 2019.

Generation facilities represented 18.50% of this net book value, intangible assets represented 82.60%, of this net book value, (distribution facilities in intangible assets represented 76.90%, and other intangible, including our gas distribution system represented 18.12% and other miscellaneous property and equipment, including transmission and telecommunication facilities, represented 4.98%.

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The average annual depreciation rates applied to these facilities were: 2.83 % for hydroelectrical generation facilities, 8.29 % for administration facilities, 4.87 % for wind facilities, and 4.13 % for thermoelectric facilities.

Apart from our distribution and generation network, no single one of our assets produced more than 10% of our total revenues in 2019. Our infrastructure is adequate for our present needs and suitable for their intended purposes. We have rights of way for our distribution lines, which are our assets and do not revert to the landowner upon expiration of our concessions.

The Brazilian Energy Industry

General

In the Brazilian energy sector, generation, transmission and distribution activities were traditionally conducted by a small number of companies that had always been owned by either the Federal Government or the governments of individual states. Since the 1990s, several state-controlled companies were privatized, in an effort to increase efficiency and competition. The Fernando Henrique Cardoso administration (1995 – 2002) aimed to privatize the state-controlled part of the energy sector, but the Luis Inácio Lula da Silva administration (2003 – 2010) ended this process and implemented a “New Industry Model” for the Brazilian energy sector, expressed in Law No. 10,848, enacted on March 15, 2004, referred to as the “New Industry Model Law”.

Significant changes were implemented during Dilma Rousseff’s administration (2011 – 2016), by means of Provisional Act No. 579/12, converted into Law No. 12,783/13, establishing new rules for renewal of concessions, including rebidding for hydroelectric power generation concessions.

Subsequently, under the administration of Michel Temer (2016–2018), other changes were introduced in the sector by Provisional Act 735/16, enacted as Law No. 13,360/16, including a change of the bidding rules for energy generation, transmission and distribution concessions as well as addressing the renegotiation of hydrological risk. Also, in 2017, a series of public consultations, which discussed proposals for modernization, and expansion of the Free Market in electric power supply with the industry (Public Consultation No. 33) began.

During the first year under Jair Bolsonaro (2019 – present), the government proceeded with the studies proposed by public consultation n. 33, holding several workshops and meetings with agents to study the following topics: separation of energy contracts into capacity and energy contracts, pricing, definition of price limits and reduction of the spot price time base.

The New Industry Model

The primary objective of the New Industry Model was to guarantee security of supply and reasonableness of rates. In terms of ensuring security of supply, the New Industry Model Law (a) requires distributors to contract their entire energy production, and to be responsible for making realistic projections of demand requirements; and (b) aims to arrange for the construction of new hydroelectric and thermal plants to be decided in ways that best balance security of supply and reasonableness of rates. To achieve reasonable rates, the New Industry Model Law requires that all purchases of energy by distributors to be by auction, based on lowest price criteria, and that contracting be carried out through the Regulated Market. Auctions are categorized into two types: (i) auctions for supply from new plants, aimed at expansion of the system; and (ii) auctions for power generated by existing plants, aiming to meet existing demand.

The New Industry Model created two environments for the purchase and sale of energy: (i) the Regulated Market, in which distributors purchase through public auctions all of the power they need to supply their customers; and (ii) the Free Market, to include all purchases of energy by non-regulated entities, such as free customers and trading companies. Distributors are allowed to operate only in the Regulated Market, whereas generators may operate in both, maintaining their competitive characteristics.

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Requirements for expansion of the sector are evaluated by the Federal Government through the MME. Two entities were created to provide structure for the sector: (i) the Energy Research Company (*Empresa de Pesquisa Energética* or “EPE”), a state-controlled company responsible for planning expansion of generation and transmission; and (ii) CCEE, a private entity responsible for the accounting and settlement of short-term (spot) energy transactions. CCEE is also responsible, through delegation by ANEEL, for organizing and conducting Regulated Market public power auctions, in which the distributors purchase energy.

The New Industry Model eliminated self-dealing, forcing distributors to purchase energy at the lowest available price rather than from related parties. The New Industry Model exempted contracts executed prior to the enactment of the law, in order to provide regulatory stability to transactions carried out before it was enacted.

Several categories of power supply are not subject to the requirement for public auction via the Regulated Market: (1) certain low capacity generation projects located near consumption points (such as certain co-generation plants and SHPs); (2) plants qualified under the PROINFA program; (3) power from *Itaipu* and, as from January 1, 2013, from *Angra I* and *II*; (4) power purchase agreements entered into before the New Industry Model Law; and (5) concessions extended by Law No. 12,783. The rates at which the energy generated by *Itaipu* is traded are denominated in U.S. dollars and established by ANEEL pursuant to a treaty between Brazil and Paraguay, and there are compulsory procurement volumes. Consequently, the price of energy from *Itaipu* rises or falls according to the U.S. Dollar/*real* exchange rate. Changes in the price of *Itaipu*-generated energy are, however, neutralized by the Brazilian Federal Government, which buys all the energy credits from Eletrobrás.

The New Industry Model Law is currently being challenged on constitutional grounds before the Brazilian Federal Supreme Court. The Brazilian Federal Government moved to dismiss the actions, arguing that the constitutional challenges were moot because they relate to a provisional act that had already been converted into law. To date, the Brazilian Supreme Court has not reached a final decision upon the merits of this action and we do not know when such a decision may be reached. Thus, the New Industry Model Law is currently in force. Regardless of the Supreme Court’s final decision, certain portions of the New Industry Model Law related to restrictions on distributors performing activities unrelated to the distribution of energy, including sale of energy by distributors to free customers and the elimination of agreements between related parties, are expected to remain in full force and effect.

Coexistence of Two Energy Trading Environments

Under the New Industry Model Law, energy purchase and sale transactions are carried out in two different market segments: (1) the Regulated Market, in which distributors buy all their power supply needs through public bids; and (2) the free market, for all purchases of energy by non-regulated entities such as free customers, energy traders and energy importers.

The Regulated Market

In the Regulated Market, distributors purchase energy for their regulated customers through public auctions regulated by ANEEL and conducted by the CCEE.

Energy purchases take place through two types of bilateral contracts: (i) Energy Agreements (*Contrato de Quantidade de Energia*) and (ii) Capacity Agreements (*Contratos de Disponibilidade de Energia*). Under an Energy Agreement, a generator commits to supply a certain amount of energy and assumes the risk that energy supply could be adversely affected by hydrological conditions and low reservoir levels, among other conditions, that could interrupt the supply of energy, in which case the generator will be required to purchase the energy from third parties to meet its supply commitments. Under a Capacity Agreement, a generator commits to make a certain amount of capacity available to the Regulated Market. In this case, the revenue of the generator is guaranteed under the contractual conditions and the distributor assumes the hydrological risk. However, if there are additional costs to the distributors, these are passed on to customers. Together, these agreements comprise the power purchase agreements (*Contratos de Comercialização de Energia no Ambiente Regulado*, or “CCEARS”) in the Regulated Market.

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The regulations under the New Industry Model Law establish that distributors that contract less than 100% of their total demand, accounted in the CCEE, will be subject to penalties. There are mechanisms to reduce the possibility of penalties, such as participation in the MCSD mechanism (“Mechanism of compensation of surpluses and deficits”), which allows for the managing of surpluses and deficits among distributors, or purchase of supply in auctions during the year. Any remaining shortfall from 100% of total demand may be purchased at the spot market. If a company contracts more than 105% of its total demand, it would be subject to price risk if it sells that supply in the spot market in the future. To reduce this price risk, a company may reduce its purchase contracts made at “existing source” auctions by up to 4% each year, by bilateral negotiation through Regulation 711, through MCSD “New Energy contracts”, and through loss of customers that have opted to become free customers (and are thus supplied by generators directly).

With the renewal of the hydroelectric power plant concessions, Contracts for the Physical Accounts Security (“CCGF”) were created. These contracts take into account 90% of the energy generated by the plants whose concessions were renewed in order to mitigate the hydrological risk. The execution of CCGF is mandatory and each distributor received an amount according to the assessment made by ANEEL.

The Free Market

In the Free Market, energy is traded by power generators. The Free Market also includes certain grandfathered existing bilateral contracts between generators and distributors until the expiration of their current terms. Upon expiration, new contracts would have to be executed under the New Industry Model Law.

Potentially free customers are those whose energy demand exceeds 3 MW at a voltage equal to or higher than 69kV or at any voltage level if their supply began after July 1995. Since January 2019, customers whose supply began before 1995 were also able to migrate to the Free Market pursuant to Law No. 13,360/16. In July 2019, the restriction to be a free customer will be reduced to 2.5 MW and in January 2020 to 2 MW (Ministerial Order 514/2018). On December 12, 2019, Ministerial Order no. 465/2019 reduced the restriction to be free consumer to 1.5 MW in January 2021, to 1.0 MW in January 2022 and to 0.5 MW in January 2023. This order also gave ANEEL and CCEE a dead line (January 2022) to finish and present regulatory measures necessary to allow the free market to be opened for consumers with a load below 0.5 MW, including the regulated energy trader and proposed opening schedule beginning January 1, 2024.

Until the total opening, customers with contracted demand of 500kW or more may be serviced by suppliers other than their local distribution company if they purchase from certain alternative energy sources, such as SHPs, wind or biomass of a certain size.

Once a customer has opted for the Free Market, it may only return to the regulated system after giving its regional distributor five years’ notice. The distributor may reduce this term at its discretion. The aim of the extended notice period is to ensure that, if necessary, the distributor is able to purchase additional energy to supply the re-entry of free customers into the Regulated Market. Moreover, distributors may also reduce the amount of energy purchased according to the volume of energy that they will no longer distribute to free customers. State-owned generators may also sell energy to free customers, but unlike private-sector generators, they are obliged to do so through an auction process.

Restricted Activities for Distribution companies

Distribution companies in the Brazilian Interconnected Grid (*Sistema Interligado Nacional*, or “SIN”) are not permitted to: (1) operate in the business of the generation or transmission of energy; (2) sell energy to free customers, except for those in their concession area and under the same conditions and rates as regulated customers in the Regulated Market; (3) directly or indirectly hold any interest in any other company, except entities incorporated for raising, investment and management of funds necessary for the distributor (or its parent company or related companies or partnerships); or (4) engage in activities that are unrelated to their respective concessions, except for those permitted by law or in the concession agreement.

[Table of Contents](#)***Contracts Executed Prior to the New Industry Model Law***

Under the New Industry Model Law, contracts executed by distributors and approved by ANEEL before the enactment of that law will not be amended to reflect any extension of their terms or change in prices or volumes of energy already contracted.

Limitations on Pass-Through

The New Industry Model also limits the pass-through of costs of energy to final customers. The Annual Reference Value corresponds to the weighted average of the energy prices in "A - 5" and "A - 3" auctions, calculated for all distributors, and creates an incentive for distributors to contract for their expected energy demands in the A - 5 auctions, where prices are expected to be lower than in A - 3 auctions. The Annual Reference Value is applied in the first three years of power purchase agreements from new power generation projects. After the fourth year, the energy acquisition costs from these projects will be allowed to be passed through in full. Decree No. 5,163/04 establishes the following limitations on the ability of distributors to pass through costs to customers:

- No pass-through of costs for energy purchases that exceed 105% of regulatory demand;
- Limited pass-through of costs for energy purchases made in an A-3 auction, if the volume of the acquired energy exceeds 2.0% of the demand found in A-5 auctions;
- Limited pass-through of energy acquisition costs from new energy generation projects if the volume re-contracted through CCEARs of existing generation facilities is below a "Contracting Limit" defined by Decree No. 5,163;
- Energy purchases from existing facilities in the "A - 1" auction are limited to 0.5% of distributors' demand, frustrated purchases in previous A - 1 auctions, involuntary exposure to regulated customer demand, plus the "replacement", defined as the amount of energy needed to replace the power from power purchase agreements that expire in the current year (A - 1), according to ANEEL Resolution No. 450/2011. If the acquired energy in the A - 1 auction exceeds the limit, the pass-through to final customers of costs of the excess portion is limited to 70.0% of the average value of such acquisition costs of energy generated by existing generation facilities. MME will establish the maximum acquisition price for energy generated by existing projects;
- Energy purchases in "market adjustment" auctions are limited to 5.0% of a distribution concession holder's total demand (the previous limit, modified by Decree 8,379/14, was 1.0%, except for 2008 and 2009) and pass-through of costs is limited to Annual Reference Value;
- If distributors fail to comply with the obligation to fully contract their demand, the pass-through of the costs from energy acquired in the short-term market will be the equivalent to the lower of the PLD or the Annual Reference Value.

Rationing under the New Industry Model Law

The New Industry Model Law establishes that, in a situation in which the Federal Government decrees a compulsory reduction in the consumption of energy in a certain region, all energy quantity agreements in the regulated market, registered within the CCEE in which the buyer is located, shall have their volumes adjusted in the same proportion to the required reduction of consumption.

[Table of Contents](#)**Rates**

Electric energy rates in Brazil are set by ANEEL, which has the authority to adjust and review rates in accordance with applicable concession contracts and regulations. Each distribution company's concession contract provides for an annual rate. In general, "Parcel A costs" are fully passed through to customers. "Parcel A costs" are the portion of the rate calculation formula which provides for the recovery of certain costs that are not within the control of the distribution company. "Parcel B costs", which are costs that are under the control of the distributors, are adjusted for inflation in accordance with IPCA index. The average annual rate adjustment includes components such as the inter-year variation of Parcel A costs ("CVA") and other financial adjustments, which compensate for changes in the company's costs, upward or downward, that could not be previously taken into account in the rate charged in the previous period.

Distribution concessionaires are also entitled to periodic reviews. Our concession agreements establish a five-year period between periodic reviews. These reviews mainly aim: (i) to ensure necessary revenues to cover efficient operating costs, determined by the regulator, and adequate return for investments deemed essential for the services within the scope of each company's concession; and (ii) to determine the "X factor", which is calculated based on the average productivity gains from increases in scale. The X factor is a result of three components: a productivity factor representing those productivity gains (Xpd); the quality factor XQ, which punishes or rewards the distribution company depending on the quality of the service provided, and the factor Xt, which has the objective of reducing or increasing the regulatory operating costs during the five-year period between the rates reviews, to reach the level defined for the efficient operating cost determined by the regulator.

In 2011, ANEEL concluded the Public Hearing No. 040/2010, in which it dealt with the methodology for the third periodic review. To calculate the rate of return, ANEEL used the methodology of Weighted Average Cost of Capital ("WACC"), which resulted in a yearly rate of 7.50% after tax, compared to the rate of 11.25% applied in the previous cycle. This rate of return was applicable to the investments made by CEMIG D until the next tariff cycle, which was conducted in 2018. After that, the new rate of return calculated by the regulator is 8.09% after tax.

ANEEL also changed the methodology used to calculate the X Factor: from a method based on discounted cash flow to the Total Factor Productivity ("TFP") method, which consists of defining potential productivity gains for each company based on average productivity gains in the later years. It also included the other two components, as mentioned above: XQ and Xt. The components of the X factor, determined in the 2018 review, for the period 2018/2023, were: Xt = -1.33%, which is applicable on each annual readjustment, Xpd and XQ which are defined *ex-post* and added to the previous value based, respectively, on the productivity gains from the last year and from changes in the quality of services provided.

ANEEL has also issued regulations governing access to the distribution and transmission facilities, and establishing TUSD and the TUST. The rates to be paid by distributors, generators and free customers for use of the interconnected power system are reviewed annually. The review of the TUST takes into account the RAP of transmission concessionaires under their concession contracts. For more detailed information on the rate-setting structure, see "—Rates for the Use of the Distribution and Transmission Systems."

In 2015, ANEEL created an additional fee that would be passed on to customers through their energy bills. This system is known as "tariff flags." The system provides customers with a system disclosing the real costs of energy generation. The system is a simple one: the colors of flags (green, yellow or red) indicate whether, based on the conditions of energy generation, the cost of energy to customers will increase or decrease. When the system provides a green flag, the hydrological conditions for energy generation are favorable and there should be no additional fee included in the customers' rate. If the conditions are somewhat less favorable, the system will indicate a yellow flag and there will be additional charges proportional to consumption. If conditions are even less favorable, the system will indicate a red flag, which has two levels.

In 2019, the additional charges remain the same as 2018 until July when the additional charges corresponding to each flag were adjusted as follows: the yellow flag was set to R\$ 1.50 per 100 kWh, the red flag level 1 was set to R\$ 4.00 per 100 kWh and the red flag level 2 was set to R\$ 6.00 per 100 kWh. Those additional charges were adjusted again in November 1st when the additional charges corresponding to each flag were adjusted as follows: the yellow flag was set to R\$ 1.343 per 100 kWh, the red flag level 1 was set to R\$ 4.169 per 100 kWh and the red flag level 2 was set to R\$ 6.243 per 100 kWh. During 2019, there were red flags level 1 in August, September and November, yellow flags in May, July, October and December and green flags in all other months.

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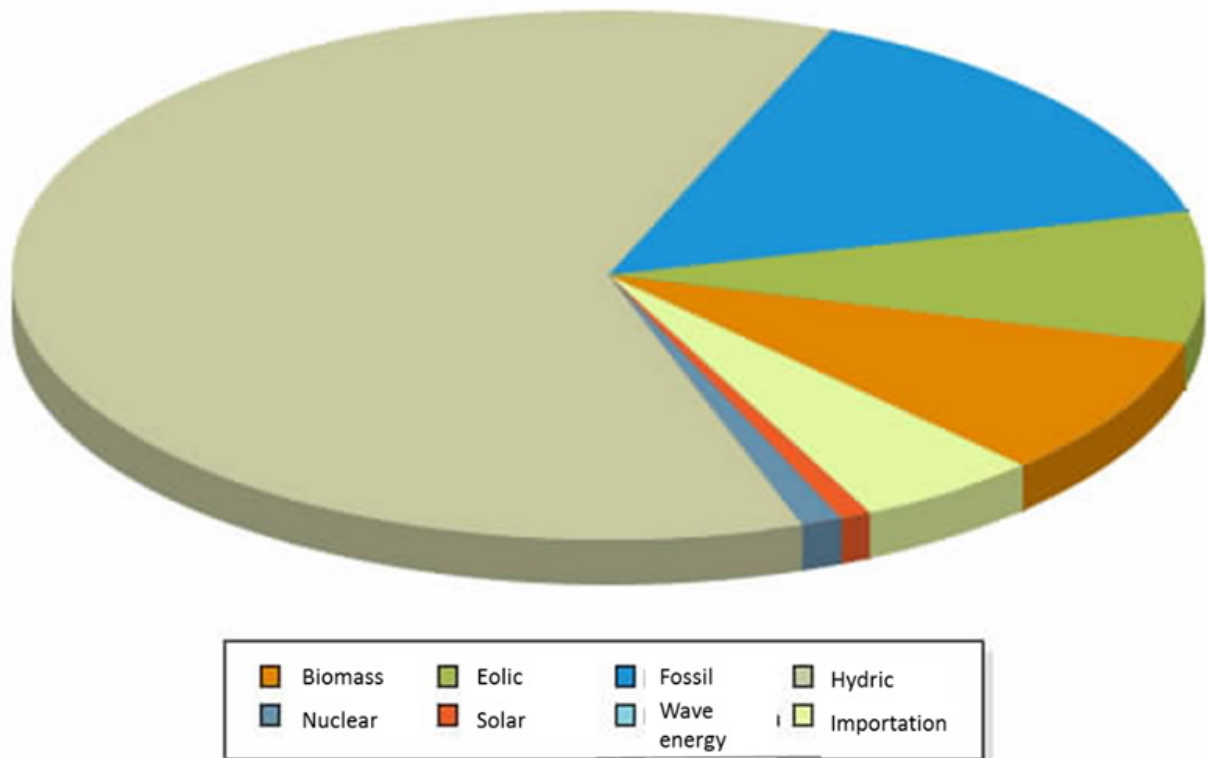
Acquisition of land

The concessions granted to CEMIG by the Federal Government assign to the concessionaire the acquisition of the lands in which the plants and substations will be implanted. Energy companies in Brazil have to negotiate with each property owner to obtain the land needed for the implementation of the entity. However, in the event that a concessionaire is unable to obtain the necessary land amicably, the concessionaire through specific legislation may acquire such land for use. In cases of acquisition, through legal proceedings, the concessionaires may have to participate in negotiations regarding the value of compensation to owners and the resettlement of communities in legal proceedings. The Company makes every effort to negotiate with the owners and affected communities before taking legal action.

The Brazilian Electric Power System – Operational Overview

Brazil’s energy production and transmission is a large-scale hydroelectric and thermal system made up predominantly of hydroelectric power stations, with many separate owners. The Brazilian Interconnected Grid connects companies in the Southern, Southeastern, Center-West, and Northeastern Regions and part of the Northern Region of Brazil. Approximately 2% of the country’s energy production capacity is not connected to the Brazilian Grid, in small isolated systems located mainly in the Amazon region. Brazil’s abundant hydrological resources are managed through storage reservoirs. It is estimated that Brazil has hydroelectric power generation potential of close to 246,241 MW, of which only 44% has been developed or is under construction, according to Eletrobrás studies compiled in December 2018.

Power Generation by source (%)



Source: Banco de Informações de Geração

By April 2020, Brazil had an installed capacity in the interconnected power system of 172,305 GW, approximately 63.3% of which is hydroelectric, according to the Matriz de Energia Elétrica available at the Sistemas de Informação de Geração “SIGA”, published by ANEEL. This installed capacity includes half of the installed capacity of Itaipu – a total of 14,000MW owned equally by Brazil and Paraguay.

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Eletrobrás, a company owned by the Federal Government, operate approximately 31% of Brazil's installed generating capacity and 49% of Brazil's high voltage transmission lines. Eletrobrás has historically been responsible for implementing energy policy, and conservation and environmental management programs. State-controlled or local electric power companies own the remaining high-voltage transmission lines. Distribution is conducted by approximately 60 state or local utilities, a majority of which has been privatized by the Federal Government or state governments.

Historical Background

The Brazilian Constitution provides that the development, use and sale of energy may be undertaken directly by the Brazilian Federal Government or indirectly through the granting of concessions, permissions or authorizations. Since 1995, the Brazilian Federal Government has taken a number of measures to restructure the power industry. In general, these have aimed to increase the role of private investment and eliminate restrictions on foreign investment, thus increasing overall competition in the power industry.

In particular, the Brazilian Federal Government has taken the following measures:

- The Brazilian Constitution was amended in 1995 to authorize foreign investment in power generation. Prior to this amendment, all generation concessions were held either by a Brazilian individual, or by an entity controlled by Brazilian individuals, or by the Brazilian Federal Government or a state government;
- The Federal Government enacted Law No.8,987 on February 13, 1995, or the Concessions Law, and Law No.9,074 on July 7, 1995, or the Power Concessions Law, that together:
 - required that all concessions for the provision of energy-related services be granted through public bidding processes;
 - gradually allowed certain energy customers with significant demand (generally greater than 3 MW), referred to as free customers, to purchase energy directly from suppliers holding a concession, permission or authorization;
 - provided for the creation of generation entities, or Independent Power Producers, which, by means of a concession, permission or authorization, may generate and sell all or part of their energy to free customers, distribution concessionaires and trading agents, among others;
 - granted free customers and energy suppliers open access to the distribution and transmission grids;
 - eliminated the need for a concession to construct and operate power projects with capacity from 1 MW to 30 MW, or Small Hydroelectrical plants, (SHPs), which was amended on May 28, 2009 by Law No. 11,943 and further by Law No. 13,360/16, raising the limit from 30 MW to 50 MW, regardless of being characterized as an SHP or not;
- The current regulator, ANEEL, and the *Conselho Nacional de Política Energética* (National Energy Policy Council, or "CNPE"), were created in 1997.

In 1998, the Federal Government enacted Law No. 9,648 ("Power Industry Law"), to overhaul the basic structure of the energy industry, providing as follows:

- Establishment of a self-regulated body responsible for operation of the short-term energy market, or Wholesale Energy Market, replacing the prior system of regulated generation prices and supply contracts;
- Creation of the ONS a non-profit, private entity responsible for the operational management of the generation and transmission activities of the interconnected power system;
- Establishment of public bidding processes for concessions for construction and operation of power plants and transmission facilities, in addition to the bidding process requirements under the Concessions Law and the Power Concessions Law, On March 15, 2004, the Brazilian Federal Government enacted Law No. 10,848, (or the "New Industry Model Law"), in an effort to further restructure the power industry, with the ultimate goal of providing customers with security of supply combined with fair rates. On July 30, 2004, the Brazilian Federal Government published Decree No. 5,163, governing trading rules under the New Industry Model Law, as well as the granting of authorizations and concessions for energy generation projects. These include rules relating to auction procedures, the form of power purchase agreements and the method of passing costs through to final customers.

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On September 12, 2013, the Brazilian Federal Government issued Provisional Measure No. 579, enacted as Law No. 12,783, related to the extension of the concessions granted prior to Law 9,074, aiming to decrease the sector's charges and achieving tariffs that are more reasonable. This legislation changed the rules applicable to certain concessions, and implemented new bidding process rules utilities, and adjustments to tariffs.

On August 18, 2015, the Brazilian Federal Government published Provisional Act No. 688, which was converted into Law No. 13,203, on December 8, 2015, which created the mechanism of voluntary re-negotiation of hydrological risks affecting the hydroelectric generation companies. In the same law, the government changed the bidding process rules concessions too.

In June 22, 2016, the Brazilian Federal Government issued Provisional Act No. 735, which was converted into Law No. 13,360, enacted on November 17, 2016, which, among other measures, altered Chapter III of Law 12,783, governing competitive bids for energy generation, transmission and distribution concessions.

On July 2017, the MME organized two public consultation proceedings with the purpose of gathering contributions from sectorial agents to improve the national electric energy sector and update its regulatory framework.

On February 9, 2018, the MME submitted for analysis by the Brazilian President a draft bill including several proposed changes to the industry regulation. Among other issues addressed by the MME in the draft of the bill, we highlight:

- *Divestment of hydro power plants.* In case of divestment of hydro power plants, the new concession would be granted by means of payment of compensation to the government and it would not be subject to the quota regime established by Law No. 12,783/2013 (for generation concessions renewed in accordance with Law No.12,783/2013, the energy produced by the power plant must be sold to all distributors in Brazil according to a quota system);
- *Expansion of the free market.* The consumption requirement for the characterization of free customers would be reduced. Currently, free customers must have an energy load of 3MW. Between 2020 and 2024, the load criteria qualifying the free customer would vary from 2 MW to 300kW. By 2026, there would not be a minimum energy load required, as long as the free customer is connected to tension equal or higher than 2,3kV;
- *Incentives for renewable energy.* MME's proposal tends to reduce incentives granted to renewable energies through discount over connection tariffs. Such discount may be subject to certain conditions;
- *Hydrological risk.* The hydrological risk of differences in power production due to a hydrological scenario would exclude: (i) generation in disregard of the merit order which means dispatching energy to the grid in disregard of the ascending price raking for energy generation, (ii) anticipation of delivery of firm energy to the system of relevant power plants, and (iii) restriction to the supply of energy to the grid due to delay in the transmission system; and
- *Separation between energy consumption and firm energy.* A timeline for implementation of the legislative model that separates the charges for firm energy added to the grid and energy consumption.

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Furthermore, it is under analysis in Congress the Bill of Law nº 622/2015, which establishes a deadline, defined in 2017, for the application of discounts not lower than 50% in tariffs for use of the transmission and distribution systems (TUST and TUSD) for projects using alternative energy sources such as solar, wind, biomass and qualified cogeneration, as stated in Article 26 and paragraphs of Law 9,427/1996. In its status, the bill states that such discounts will stay valid for current grants, even if extended, and for future grants up to December 31, 2027. The bill also imposes on the Federal Government the obligation to create a market mechanism to encourage investments in low-carbon energy sources, to be implemented on January 1, 2027. Currently, Bill of Law nº 622/2015 is in the Infrastructural Services Commission, awaiting appointment of a rapporteur.

Rationing and Extraordinary Rate Increases***Conflicts of interest between CEMIG and other users of water***

The operation of reservoirs for generation of energy by CEMIG requires it to assess the multiple uses of water by other users of the relevant river basin, and this in turn requires it to consider the applicability of a number of factors, including environmental factors, irrigation, waterways and bridges. In periods of severe drought, such as the one beginning in 2013, CEMIG was actively involved in monitoring and forecasting the levels of reservoirs and in maintaining a dialogue with public authorities, civil society and users. While CEMIG engages other essential users and takes into account societal interests with respect to its water use, competing interests with respect to the use of water could, subject to certain minimum limits established by law, affect the use of water in our operations, which in turn could affect our operating results or financial condition. Potential conflicts between CEMIG and other users are monitored through CEMIG's active participation in River Basin Committees, and also in the related Technical Boards and Working Groups, where users of water, organized civil society and public authorities are represented. CEMIG participates in 5 River Basin Committees of rivers under federal control, and 20 River Basin Committees of rivers under local State control. CEMIG also monitors news published in various media outlets, receives comments and complaints during the periods of floods or drought, and acts to resolve any conflicts with communities living in the river basins where it has hydroelectric plants.

For new projects, CEMIG prepares a socio-environmental impact study, and carries out public hearings with all interested parties, where suggestions in assessing any potential conflicts are analyzed. When the project is operational, a Plan for Environmental Conservation and Use of the Artificial Reservoir Surroundings (*Plano Ambiental de Conservação e Uso do Entorno de Reservatório Artificial*) is prepared with the participation of stakeholders. This plan is intended to govern conservation, recovery, use and environmental protection of the reservoir and its surrounding area in a balanced way, complying with the applicable legislation, the needs of the project and the demands of society.

CEMIG also conducts a program called *Proximidade* ("Proximity"), which coordinates activities aimed at improving the relationship with affected communities. Through this program, CEMIG hosts public meetings that cover topics such as the operational and security procedures in its hydroelectric plants; climate conditions; and environmental aspects. CEMIG also provides opportunities for the public to take guided tours of plant facilities. By means of the *Proximidade* program, CEMIG also receives comments and complaints from the affected population and establishes partnerships with local community leaders, public entities, the local media and other actors responsible for safety and flood, including Civil Defense associations, the Fire Brigade and the Military Police.

Finally, CEMIG uses a risk management system to analyze scenarios and estimate the degree of financial exposure to risks, considering the probability of each event, and its impact. In the scenarios related to potential conflicts with other users, CEMIG also evaluates the effects arising from prolonged droughts, which may lead to an increase in competition for water between the energy sector and other users, and also the risks arising from consequences of floods due to excessive rain.

[Table of Contents](#)**Concessions**

We conduct the majority of our activities in generation, transmission and distribution of energy through concession contracts executed with the Brazilian Federal Government. The Brazilian Constitution requires that all concessions for public services must be subject to competitive tenders. In 1995, in an effort to implement these provisions of the Constitution, the Federal Government instituted certain laws and regulations, referred to collectively as the Concessions Law, which governs the procedures for competitive tenders in the energy sector.

On December 4, 2012, CEMIG signed the second amendment to transmission contract No. 006/97, which extended the concessions under such contract for 30 years, in accordance with PA 579, beginning on January 1, 2013. This resulted in an adjustment to the RAP from these concessions, reducing the revenue from those concessions. The Brazilian Federal Government has compensated us for the reduction of the RAP in part, but we have not yet been compensated for the assets in operation before 2000. In accordance with Law No. 12,783, we are required to be compensated for the reduction of the RAP of the assets in operation before 2000, over a period of 30 years, the amounts being adjusted by the IPCA inflation index. This compensation was addressed by Mining and Energy Ministry Order No. 120/16, which determined that recognition of the amounts owed would take place as from the tariff adjustment process of 2017.

The amounts payable of the indemnities corresponding to the portions of investments linked to revertible goods not amortized or depreciated, recognized by MME in Ministerial Order 291/2017, were impugned in the administrative sphere (still awaiting decision – a hierarchy appeal), and, in the judiciary. CEMIG GT applied for a Prior Provisional Decision, on November 27, 2016, with the objective of obtaining an order for the Federal Government to exhibit the documentation that supported its calculation of the indemnity for reversion of the assets of Jaguara, Miranda, São Simão and Volta Grande hydroelectric plants. The Federal Government immediately deposit the non-contested portion of the indemnity, which had been set at R\$ 1,028 million. In this case, the application for interim decision was refused and CEMIG GT filed an Interlocutory Appeal (currently pending judgment). Additionally, on January 17, 2018, CEMIG amended the writ: (i) to reiterate the need for exhibition of documents; (ii) applying for declaration of nullity of Article 1, §1 and 2, and Article 2, of Mining and Energy Ministry Order 291/2017, and consequent payment of indemnity to include all the investments made by CEMIG GT in the concessions referred to; and (iii) requesting immediate payment of the non-contested amount.

In the years 2014 and 2015, Brazil experienced a severe drought culminating in further alterations to the regulatory framework, established by Provisional Act No. 688/15 and later converted into Law No. 13,203/15. This law, among other measures, significantly altered Law No. 12,783/13, creating a mechanism of voluntary renegotiation of hydrological risks, since they affect the hydroelectric generation companies, and changing the rules for bidding for certain hydroelectric generation concessions. Subsequently, in 2016, other changes were introduced to the sector by Provisional Act No. 735/16, enacted as Law No. 13,360/16, which, among other measures, changed Chapter III of Law No. 12,783/13, which relates to bidding for energy generation, transmission and distribution concessions.

Following publication of the tender documents for Generation Auction No. 12/15 on October 7, 2015, which included the new regulatory provisions for renewal of concessions of existing plants stipulated by Law No. 13,203/15, CEMIG's Board of Directors authorized our participation in Generation Auction No. 12/2015, and CEMIG GT was successful at this auction, held at the B3 on November 25, 2015. CEMIG won concessions for Lot 'D' – which comprises the concessions for 18 hydroelectric plants: Três Marias, Salto Grande, Itutinga, Camargos, Cajuru, Gafanhoto, Martins, Marmelos, Joasal, Paciência, Piau, Coronel Domiciano, Tronqueiras, Peti, Dona Rita, Sinceridade, Neblina and Ervália. The total installed capacity of these plants is 699.5 MW, and their guaranteed basic offtake is 420.2 MW average.

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These concession contracts have a period of 30 years beginning in January 2016 and expiring in January 2046 and, during the first half of 2016, were assigned by CEMIG GT to 7 wholly-owned subsidiaries created for commercial operation of these concessions (CEMIG Geração Camargos, CEMIG Geração Itutinga, CEMIG Geração Três Marias, CEMIG Geração Volta Grande, CEMIG Geração Leste, CEMIG Geração Oeste and CEMIG Geração Sul).

Distribution contracts: In relation to the extension of the distribution concession contracts, CEMIG D, in accordance with Decree No. 7,805/2012 and Decree No. 8,461/2015, indicated acceptance of the extension of its concession contracts, and signed the Fifth Amendment to its Concession Contract in December 2015. This amendment guarantees extension of the foregoing concessions for an additional 30 years, from January 1, 2016 until January 2, 2046. The new amendment also requires CEMIG's compliance with more stringent rules regarding service quality and with respect to CEMIG's economic and financial sustainability, which must be met during the full 30 years of the concession.

Such compliance will be annually assessed by ANEEL, and if there is non-compliance, the concessionaire may be obliged to arrange for capital contributions by its controlling shareholders. Non-compliance for two consecutive years, or for five non-consecutive years, will result in forfeiture (*caducidade*) of the concession.

Principal Regulatory Authorities**National Energy Policy Council – CNPE**

In August 1997, the CNPE was created to advise the Brazilian president regarding the development and creation of the national energy policy. CNPE is presided over by the MME, and the majority of its members are officials of the Federal Government. CNPE was created to optimize the use of Brazil's energy resources and to assure the supply of energy to the country.

Ministry of Mines and Energy – MME

The MME is the Brazilian Federal Government's primary regulator of the power industry. Following the adoption of the New Industry Model Law, the Brazilian Federal Government, acting primarily through the MME, undertook certain duties that were previously under the responsibility of ANEEL, including the drafting of guidelines governing the granting of concessions and the issuance of directives governing the bidding process for concessions related to public services and public assets.

National Electric Energy Agency – ANEEL

The Brazilian power industry is regulated by ANEEL, an independent federal regulatory agency. After enactment of the New Industry Model Law, ANEEL's primary responsibility is to regulate and supervise the power industry in line with the policy issued by MME and to respond to matters which are delegated to it by the Brazilian Federal Government.

National System Operator – ONS

The ONS was created in 1998 as a non-profit private entity comprising free customers, energy utilities engaged in the generation, transmission and distribution of energy, and other private participants such as importers and exporters. The New Industry Model Law granted the Brazilian Federal Government the power to appoint three directors of the ONS, including the Director-general. The primary role of the ONS is to coordinate and control the generation and transmission operations in the interconnected power system, subject to ANEEL's regulation and supervision.

[Table of Contents](#)***Brazilian Electric Power Trading Chamber– CCEE***

One of the main roles of the CCEE is to run public auctions in the regulated market, including the auction of existing energy and new energy. Additionally, the CCEE is responsible, among other things, for: (1) registering all the power purchase agreements within the Regulated Market (CCEARs), and the agreements within the Free Market, and (2) accounting for and settling short-term transactions.

Under the New Industry Model Law, the price of energy in the spot market, known as the Differences Settlement Price (*Preço de Liquidação de Diferenças*, or “PLD”), takes into account factors similar to the ones used to determine the Wholesale Energy Market spot prices prior to the New Industry Model Law. Among these factors, the variation of the PLD will mainly vary according to the balance between the market supply and demand for energy, as well as the impact that any variation on this balance may have on the optimal use of the energy generation resources by the ONS.

The members of the CCEE are generators, distributors, trading agents and free customers, and its board of directors comprises four members appointed by these agents and one appointed by the MME, who is the chairperson of the board of directors.

Energy Research Company – EPE

The Brazilian Federal Government created EPE by a decree enacted on August 16, 2004. It is a state-owned company, responsible for carrying out strategic research on the energy industry – including energy, oil, gas, coal and renewable energy sources. EPE is responsible for: (i) studying projections for the Brazilian energy matrix; (ii) preparing and publishing the national energy balance; (iii) identifying and quantifying energy resources; and (iv) obtaining the required environmental licenses for new generation concessionaires. EPE’s research supports the MME in its policymaking role in the domestic energy industry. EPE is also responsible for approving the technical qualification of new energy projects to be included in the related auctions.

Energy Sector Monitoring Committee – CMSE

Decree No. 5,175 enacted on August 9, 2004, established the Energy Sector Monitoring Committee, or CMSE, which acts under the direction of the MME. The CMSE is responsible for monitoring and permanently evaluating the continuity and security of energy supply conditions and for indicating necessary steps to correct identified problems.

Permanent Commission for Analysis of Methodologies and Computation Programs of the Electric Sector – CPAMP

Ordinance No. 47, enacted on February 19, 2008, created the Permanent Committee for Analysis of Methodologies and Computation Programs of the Electric Sector (CPAMP), with the purpose of guaranteeing coherence and integration of the methodologies and computational programs used by MME, EPE, ONS and CCEE.

Ownership Limitations

On November 10, 2009, ANEEL issued Resolution No. 378, requiring it to notify the Economic Law Secretariat of the Ministry of Justice (“SDE”) if it identifies any act that may cause unfair competition or may result in significant market control (under Article 54 of Law 8,884 enacted on June 11, 1994). After the notification, SDE must inform CADE. On November 30, 2011, Law No. 8,884 was revoked and replaced by Law No. 12,529, which terminated the SDE and replaced it with the Competition General Management Unit (“*Superintendência Geral*”). Such unit, if necessary, will require ANEEL to analyze any such events, upon which CADE will decide if there should be any sanctions applied. Under Articles 37 and 45 of Law No. 12,529, these may vary from pecuniary penalties to dissolution or other disposition of the offending company.

[Table of Contents](#)**Regulatory Charges****Global Reversion Fund and Public Use Fund – RGR and UBP**

In certain circumstances, power companies are compensated for assets used in connection with a concession if this concession is eventually revoked or is not renewed. In 1971, the Brazilian Congress created a Global Reversion Fund (*Reserva Global de Reversão*, or “RGR”), designed to provide funds for such compensation. In February 1999, ANEEL revised the assessment of a fee requiring all distributors, transmission companies and certain generators operating under public service regimes to make monthly contributions to the RGR at an annual rate equal to 2.5% of the company’s fixed assets in service, but not to exceed 3.0% of total operating revenues in any year. In recent years, the RGR has been used mainly to finance generation and distribution projects.

The Brazilian Federal Government has imposed a fee on IPPs reliant on hydrological resources, except for SHPs and generators under the public services regime, similar to the fee levied on public-industry companies in connection with the RGR. IPPs are required to contribute to the Public Use Fund (*Fundo de Uso de Bem Público*, or “UBP”), according to the rules of the corresponding public bidding process for the granting of concessions. Until December 31, 2002, Eletrobrás received the UBP payments. Since then they have been paid directly to the Brazilian Federal Government.

Since January 2013, the Global Reversion Fund has not been charged to: (i) any distributors; (ii) any transmission or generation utilities whose concessions have been extended under Law No. 12,783; or (iii) any transmission utilities that started their bidding procedure on or after September 12, 2012.

Fuel Consumption Account – CCC

The Fuel Consumption Account (*Conta de Consumo de Combustível*, or “CCC”), was created in 1973 to generate financial reserves to cover the high costs associated with the use of thermoelectric energy plants, especially in the Northern Region of Brazil, due to the higher operating costs of thermoelectric plants compared to hydroelectric plants. All energy companies were required to contribute annually to the CCC. Annual contributions were calculated on the basis of estimates of the cost of fuel needed by the thermoelectric energy plants in the following year. The CCC was then used to reimburse generators operating thermoelectric plants for a substantial portion of their fuel costs. Starting in 2013, CCC's expenditures are included in the annual budget of the CDE. Eletrobrás managed the CCC and, as of May 2017, it has been managed by CCEE pursuant to Law No. 13,360/2016.

Charge for the Use of Water Resources

With the exception of Small Hydroelectric Plants, all hydroelectric utilities in Brazil must pay fees to Brazilian states and municipalities for the use of hydrological resources. The amounts are based on the amount of energy generated by each utility and are paid to the states and municipalities where the plant or the plant’s reservoir is located.

Energy Development Account – CDE

In 2002, the Brazilian Federal Government created the CDE to be in effect for 25 years, funded by: (i) annual payments made by concessionaires for the use of public assets; (ii) penalties and fines imposed by ANEEL; and, (iii) since 2003, the annual fees to be paid by agents offering energy to final customers, by means of a charge to be added to the rates for the use of the transmission and distribution system. The amounts are adjusted annually. The CDE was created to support: (1) development of energy production throughout the country; (2) production of energy from alternative sources; and (3) universalization of energy services throughout Brazil. With the enactment of Law No. 12,783/2013, these fees were used to contribute to reduction of energy rates. The CDE is managed by CCEE.

Under the New Industry Model Law, failure to pay the contribution to the RGR, the PROINFA Program, the CDE or any payments for purchases of energy in the regulated market prevents the defaulting party from receiving a rate readjustment (except for an extraordinary review), or receiving resources arising from the RGR or CDE.

[Table of Contents](#)***ANEEL Inspection Charge (“TFSEE”)***

The Energy Services Inspection Charge, is an annual tax charged by ANEEL for its administrative and operating costs. It is calculated according to the Tariff Regulation Procedure (*Procedimento de Regulação Tarifária*, or “Proret”) – (Subsection 5.5: Energy Services Inspection Charge) based on the type of service provided (including independent production), and is proportional to the size of the concession, permission or authorization. It is limited to 0.4% of the annual economic benefit, considering the installed capacity, earned by the concessionaire, permit holder or authorized party and must be paid directly to ANEEL in 12 monthly installments.

The Regulated Market Account

Contracts held by distributors for a total supply of approximately 8,600 MW expired in December 2012. These contracts had been executed in the first auctions of energy from existing supply sources in 2005, and the energy should have been re-contracted in a further auction, but the Brazilian Federal Government did not hold the auction in 2012, because it expected that, with the renewal of the concession contracts this supply would come from Assured Energy Quota Contracts. However, the energy supply that was renewed was lower than expected and the distributors were under-contracted by 2,000 MW in 2014 and by 2,500 MW in 2015. By 2016, the decrease of consumption of energy resulted in a balance between the power purchase agreements and the demand from distributors. The Regulated Market Account was established in 2014 to cover the exposure that distributors could have as a result of under-contracted amounts. By 2015, the lower consumption of energy eliminated the under-contracted shortfall and resulted in a more regular contracting level. Thus, the Regulated Market Account was not needed to cover the exposure of distributors during 2015.

This situation was further exacerbated by the fact that certain power plants did enter into operation when expected, and by the low level of contracting in the auctions held in 2013 and 2014. The result was that the total level of under contracting in 2014 was 3,500 MW. In this scenario the only option for the distributors, in a situation of under contracting, was to purchase the required supply in the spot market.

The hydrological situation of the system in 2013 and 2014, as explained above, raised the energy cost in the spot market to its highest level, causing the financial exposure of the distributors to reach billions of *reais*. Since the cost of the distributors’ exposure is passed through to customers only in the following year, this gap caused a problem in the companies’ cash flow. By 2015, the new price cap was lower than in 2014 and the “tariff flags” mechanism helped the distributors to balance their exposure so no new loan was necessary.

To deal with this, the government created the Regulated Market Account, by Decree No. 8,221/14 enacted on January 1, 2014, regulated by ANEEL Resolution No. 612/04, which created an account to be managed by the CCEE, aiming to cover part or all of the costs resulting from the involuntary exposure to the spot market and of the dispatching of the thermal plants related to the availability contracts in the regulated market. To cover these costs, CCEE obtained a financing from a group of private and public institutions. These funds were then passed to the distributors, as determined by Decree No. 8,221/14 and ANEEL Resolution No. 612/2014. In 2014 and 2015, R\$21 billion was raised by this account and passed through to the distributors.

The ANEEL Resolution No. 1,863/15 defined the charges to be applied on the energy customers and the Resolution No. 2004/2015 later updated those charges. These loans were charged by means of the payment through CDE, and were inserted in the energy rates after the Annual Tariff Adjustment of each distribution company proportionally to their captive markets. Initially CEMIG D had 59 months to pay the loan, and in December 2015, that period was updated to 47 months.

[Table of Contents](#)**Energy Reallocation Mechanism**

The Energy Reallocation Mechanism (*Mecanismo de Realocação de Energia*, or “MRE”), attempts to mitigate the risks involved in the generation of hydroelectric power by mandating that all hydroelectric power generators share the hydrological risks within the Brazilian grid. Under Brazilian law, the revenue from sales by generators does not depend on the amount of energy they in fact generate, but on the “Guaranteed Energy” or “Assured Energy” of each plant, indicated in each concession agreement.

Any imbalances between the power actually generated and the Assured Energy is covered by the MRE. In other words, the MRE reallocates the energy, transferring a surplus from those who generated in excess of their Assured Energy to those who generated less than their Assured Energy. The volume of energy actually generated by the plant, either more or less than the Assured Energy, is priced pursuant to an “Energy Optimization Rate,” which covers the operation and maintenance costs of the plant. This additional revenue or expense is accounted for on a monthly basis by each generator.

The MRE is efficient in mitigating the risks of individual plants that have adverse hydrological conditions in a river basin, but it does not succeed in mitigating this risk when low hydrological levels affect the whole grid, or large regions of it. In extreme situations, even with the MRE, the aggregate generation of the whole system will not attain the levels of the total Assured Energy, and hydrological generators may be exposed to the spot market. In these situations, the shortage in hydro resources will be compensated by greater use of thermal generation, and spot prices will be higher.

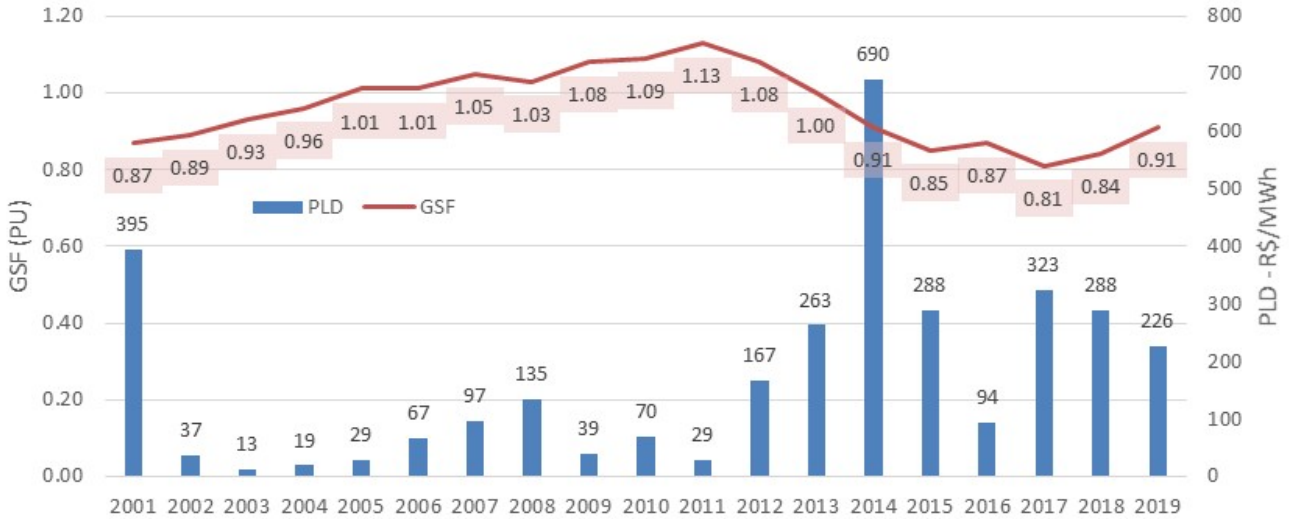
In 2014, Brazil was subject to very adverse hydrological conditions, which resulted in a lower level of hydroelectric generation, and on the full utilization of thermoelectric plants of the system, as noted above. This led the plants of the MRE to generate at levels below their physical guarantee levels, causing an exposure for the generation companies to the short-term market. The proportion of the exposure is calculated by the ratio between the energy generated by all the plants of the MRE and the total of all the physical guarantees. This ratio is called the Generation Scaling Factor (“GSF”) (*Fator de ajuste da energia*). In 2014, the GSF was 0.91, which indicates that the generation companies had their physical guarantee reduced by 9% in that year. In 2015, this exposure continued to occur, despite of a slightly better hydrology, but with the continued thermal dispatch and lower energy consumption the GSF closed the year at 0.84.

During 2015, the low values of GSFs along with high spot prices again left producers of hydroelectric generation with high financial exposure. Thus, starting in March 2015, generators began to obtain court injunctions to prevent such exposure. Such injunctions claimed that the GSF’s calculation methodology was incorrect and that it caused undue exposure to producers. From March to September, there was an exponential increase in the number of injunctions issued, which led to a paralysis of the market. In order to address this situation, the Brazilian Federal Government proposed (by means of Provisional Act No. 688) the renegotiation of the hydrological risk, enabling generators with Free Market contracts to transfer the exposure to customers in exchange for a risk’s premium payment to be deposited in the so-called tariff band deposit account (the tariff band surcharges are deposited in such account and transferred to the distribution concessionaires) and would be indemnified for the losses suffered in 2015 by means of, among other measures, an extension of their power generation grants (concessions or authorizations, as the case may be) for up to 15 years. In other words, hydroelectric power plants would recover the costs incurred with GSF deficits retroactively to January 2015, and such recovery would form a “regulatory asset,” which would be amortized over the term of the concession/authorization. If the remaining concession/authorization period is insufficient (i.e. not long enough to amortize the regulatory asset), generating companies would have a concession/authorization extension (limited to 15 years). To be able to use the mechanism the companies have to waive all claims filed and all injunctions obtained, as well as waive any further rights they would have in connection with any such legal action. This mechanism enabled plants with contracts signed in the regulated market and the free market to renegotiate them. However, the system and mechanism for renegotiating are different in the two markets. In both, this mechanism functions as a hedge, in which the generators bear the high cost of reserve of energy, and they receive the amount stipulated by the spot market price for their generation.

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In the Free Market, the system did not have the same acceptance levels that were present in the regulated market, since the value of the risk premium was too high and, in order to hedge their GSF exposure, the generation companies would have to acquire reserve energy contracts. For these reasons, and considering that there are other alternatives available in the free market to mitigate the hydrological risks, generation companies deemed the voluntary negotiation inefficient. Consequently, acceptance of the mechanism by the regulated market was, approximately 90%. However, it was not accepted by the free market.

In 2019, the average GSF stood at 0.91 still impacted by a hydrological condition below the historical average and lower reservoir levels. The chart below presents the average price and GSF for the periods shown:



Charges for Use of the Distribution and Transmission Systems

ANEEL oversees rate regulations that govern access to the distribution and transmission systems and establish rates: (i) TUSD and (ii) TUST. Additionally, distributors of the South, Southeast and Midwest parts of the grid pay specific charges for transmission of energy generated at Itaipu Hydro Plant. All these rates and charges are set by ANEEL. The following is a summary of each rate or charge:

TUSD

The TUSD is paid to a distribution company by generation companies, other distributors and customers, for the use of the distribution system to which they are connected. It is adjusted annually according to an inflation index, the variation in transmission costs, and regulatory charges. This adjustment is passed to customers of the distribution network in the Annual Rate Adjustment or Reviews.

Law 9,427/96 defines the application of discounts not lower than 50% in tariffs for use of the distribution and transmission systems (TUSD and TUST) for projects using alternative energy sources such as solar, wind, biomass and qualified cogeneration, as stated in his Article 26 and paragraphs.

[Table of Contents](#)**TUST**

The TUST is paid by generators, distributors and free customers, for the use of the basic transmission grid to which they are connected. It is adjusted annually according to an inflation index and taking into account any adjustment to the annual revenue of the transmission companies. According to criteria established by ANEEL, owners of the different parts of the transmission grid were required to transfer the coordination of their facilities to the ONS in return for receiving regulated payments from the transmission system users. Generation and distributors, and free customers, also pay a fee for exclusive transmission connections to some transmission companies. The regulator sets the fee for a 12-month period and it is paid monthly through the issuance of invoices.

As mentioned above, this tariff may suffer changes regarding the application of discounts for generators using the low-carbon energy sources defined in Article 26 and paragraphs of Law 9,427/1996.

Distribution rates

Distribution rates are subject to review by ANEEL, which has the authority to adjust and review rates in response to changes in energy purchase costs, charges payments or transmissions payments, or other factors related to market conditions. ANEEL divides the costs of all distributors into: (1) costs that are beyond the control of the distributor, or "Parcel A" costs; and (2) costs that are under the control of the distributor, or "Parcel B" costs. The rate adjustment is based on a formula that takes into account the division of costs between the two categories.

Parcel A costs include, among others, the following:

- Regulatory Charges (CDE, TFSEE and PROINFA);
- Costs of energy purchased for resale (CCEARs, power from Itaipu, and bilateral agreements); and
- Transmission charges (National grid, the Transmission Frontier grid, transport of energy from Itaipu, use of network for connection to other transmission companies, use of networks of other distributors, and the ONS).

Parcel B costs are those that are within the utility's control, and include:

- return on investment;
- taxes;
- regulatory default;
- depreciation costs; and
- costs of operation of the distribution system.

In general, Parcel A costs are fully passed through to customers. Parcel B costs; however, are adjusted for inflation in accordance with the IPCA inflation index adjusted by the X Factor. Energy distributors, according to their concession contracts, are also entitled to periodic reviews. These reviews mainly aim: (i) to ensure necessary revenues to cover efficient Parcel B operating costs and adequate compensation for investments deemed essential for the services within the scope of each company's concession; and (ii) to determine the X factor.

The X factor is used to adjust the proportion of the change in the IPCA index that is used in the annual adjustments and to share the company's productivity gains with final customers.

In addition, distribution concessionaires are entitled to an extraordinary review of rates, on a case-by-case basis, in the event of unusual circumstances, to ensure their financial balance and compensate them for unpredictable costs, including taxes that significantly change their cost structure.

[Table of Contents](#)**Item 4A. Unresolved Staff Comments**

Not Applicable.

Item 5. Operating and Financial Review and Prospects

You should read the information contained in this section together with our consolidated financial statements as of December 31, 2019 and 2018 and for the years ended December 31, 2019, 2018 and 2017, contained elsewhere in this annual report. The following discussion is based on our consolidated financial statements, which have been prepared in accordance with IFRS and presented in millions of *reais*.

Basis of Preparation***Statement of compliance***

The financial statements of the Company have been prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB).

Company's management certifies that all relevant and material information in the financial statements is being disclosed, which is used by management in its administration of the Company.

As part of its normal operations, the Company receives written comments and/or requests from local regulators (i.e. ANEEL and CVM) regarding some of the information reported by the Company on its quarterly and annual reports, as well as on its regulatory financial statements filled locally in Brazil. The Company responds to such requests timely and its management believes that these comments and/or requests would not have a material impact on the current or previously issued financial statements.

On May 22, 2020, the Company's Audit Committee authorized the issuance of the consolidated financial statements as of December 31, 2019 and 2018 and for the years ended December 31, 2019, 2018 and 2017.

Basis of measurement

The consolidated financial statements were prepared on a historical cost basis, except in the case of certain financial instruments and assets as held for sale which are measured at fair value and fair value less costs to sell, in accordance with the standards applicable, as detailed in Note 33 and 34, respectively.

Functional currency and presentation currency

The consolidated financial statements are presented in Reais, which is the functional currency of the Company and its subsidiaries, joint ventures and affiliates, and all amounts are rounded to the nearest million, except when otherwise indicated.

Transactions in foreign currency were converted to Reais at the exchange rate as of the transaction date. Balances of monetary assets and liabilities denominated in foreign currency are translated to Reais at the exchange rates at the reporting date. Foreign exchange gains and losses resulting from the settlement or translation of assets and liabilities denominated in foreign currency are recorded in finance income and costs in the consolidated statement of income.

Use of estimates and judgments

Preparation of the consolidated financial statements requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, revenues and expenses. Uncertainties about these assumptions and estimates could result in outcomes that could require a material adjustment to the carrying amount of assets or liabilities affected in future periods.

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Estimates and assumptions are periodically reviewed, using as a reference both historical experience and any significant change in scenarios that could affect the Company's financial position or results of operations. Revisions in relation to accounting estimates are recognized in the period in which the estimates are reviewed, and in any future periods affected.

The principal estimates and judgments that have a significant effect on the amounts recognized in the financial statements are as follows:

- Adjustments for loss on doubtful accounts – Note 8 to the Financial Statements;
- Amounts to be refunded to customers – Note 10 to the Financial Statements;
- Deferred income tax and social contribution tax – Note 11 to the Financial Statements;
- Financial assets and liabilities of the concession – Note 16 to the Financial Statements;
- Concession contract assets – Note 17 to the Financial Statements;
- Investments – Note 18 to the Financial Statements;
- Property, plant and equipment (“PP&E”) and useful life of assets – Note 19 to the Financial Statements;
- Intangible assets and useful life of assets – Note 20 to the Financial Statements;
- Leasing transaction – Note 21 to the Financial Statements;
- Employee post-employment obligations – Note 26 to the Financial Statements;
- Provisions – Note 27 to the Financial Statements;
- Unbilled revenue – Note 29 to the Financial Statements;
- Financial instruments measurement and fair value measurement – Note 33 to the Financial Statements;
- Assets held for sale measurement – Note 34 to the Financial Statements.

The settlement of the transactions involving those estimates may result in amounts that are significantly different from those recorded in the financial statements due to the uncertainty inherent to the estimation process. The Company reviews its significant estimates at least annually.

New accounting standards and interpretations

a) New accounting standards, interpretation or amendments of accounting standards, applied for the first time in 2019

The Company has applied, for the first time, new accounting standards that became effective for annual periods beginning January 1, 2019 or later, as described below:

IFRS 16 – Leases (“IFRS 16”)

IFRS 16 establishes principles for recognition, measurement, presentation and disclosure of leasing transactions and requires that lessees account all the leasing transactions in accordance with a single balance sheet model, similar to the accounting of finance leases. At the leasing operation beginning date, the lessee recognizes a liability to make the payments (a lease liability) and an asset, representing the right of use the subject asset during the period of the leasing (a right-of-use asset). Lessees are required to recognize separately the interest expenses from the lease liability and the depreciation or amortization expense of the right-of-use asset.

Lessees are also required to revalue the leasing liability when certain events occur (for example, change in the period of leasing, a change in the future payments of the leasing as a result of a change in an index, or a rate used to determine such payments). In general, the lessee will recognize the amount of the revaluation of the lease liability as an adjustment to the right-of-use asset.

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The Company has performed an analysis of the initial adoption of IFRS 16 in their financial statements as from January 1, 2019, and elected to apply the recognition exemptions for short-term leases (contracts that, at the commencement date, have a lease term of 12 months or less and do not contain a purchase option), and leases for which the underlying asset is of low value. The Company adopted IFRS 16 using the modified retrospective method, therefore, prior periods information are not comparative.

The Company carried out an assessment of impacts of the initial adoption of IFRS 16, which affect the following contracts:

- Leasing of commercial real estate used for serving customers;
- Leasing of buildings used as administrative headquarters;
- Leasing of commercial vehicles used in operations.

The right of use assets was assigned at the same value as the lease liability on the initial adoption date. The impacts of adoption of IFRS 16, on January 1, 2019 are as follows:

(IN MILLIONS OF REAIS - R\$ mn)	January 1, 2019
Assets – right of use	342
Liabilities – Obligations referring to operational leasing agreements	(342)

IFRIC 23 – Uncertainty over income tax treatments

The interpretation addresses the accounting of income taxes when tax treatments involve uncertainty affecting application of IAS 12– Income taxes. It does not apply to taxes outside the scope of IAS 12, nor does it specifically include requirements relating to interest and penalty payments associated with uncertain tax treatments. The Interpretation specifically addresses the following:

- Whether the entity considers uncertain tax treatments separately;
- The assumptions that the entity makes about examination of tax treatments by the tax authorities;
- How an entity determines taxable profit (tax loss), tax bases, unused tax credits and tax rates;
- How the entity consider changes in facts and circumstances.

An entity determines whether to consider each uncertain tax treatment separately or together with one or more uncertain tax treatments based on an approach that better predicts the resolution of the uncertainty. The interpretation is in effect for annual periods starting on or after January 1, 2019.

The Company has adopted the interpretation as from the date of coming into effect and have analyzed the tax treatments adopted which could generate uncertainties in the calculation of income taxes and which might potentially expose the Company to material risks of loss. We believe that none of the significant positions adopted by the Company has been changed in relation to expectation of losses due to any tax audit or challenge by the tax authorities.

Amendments of accounting standards, effective as from January 1, 2019

Amendments to IAS 28, Long-term interests in affiliates and joint ventures: The amendments clarify that an entity applies IFRS 9 to long-term interests in an affiliate or joint venture to which the equity method is not applied but that, in substance, form part of the net investment in the affiliate or joint venture (long-term interests). This clarification is relevant because it implies that the expected credit loss model in IFRS 9 applies to such long-term interests. The amendments also clarified that, in applying IFRS 9, an entity does not take account of any losses of the affiliate or joint venture, or any impairment losses on the net investment, recognized as adjustments to the net investment in the affiliate or joint venture that arise from applying IAS 28 Investments in Associates and Joint Ventures. These amendments had no impact on the consolidated financial statements as the Company does not have long term interests in its affiliate and joint venture to which the equity method is not applied.

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IAS 12 Income Taxes: The amendments clarify that the income tax consequences of dividends are linked more directly to past transactions or events that generated distributable profits than to distributions to owners. Therefore, an entity recognizes the income tax consequences of dividends in profit or loss, other comprehensive income or equity according to where it originally recognized those past transactions or events. The amendments does not affect the Company's consolidated financial statements, due to the Brazilian tax legislation over dividends applicable to its transactions, according to which dividends are not taxable.

Amendments to IAS 19 – Employee benefits: The amendments to IAS 19 address the accounting when a plan amendment, curtailment or settlement occurs during a reporting period. The amendments specify that when a plan amendment, curtailment or settlement occurs during the annual reporting period, an entity is required to determine the current service cost for the remainder of the period after the plan amendment, curtailment or settlement, using the actuarial assumptions used to remeasure the net defined benefit liability (asset) reflecting the benefits offered under the plan and the plan assets after that event. An entity is also required to determine the net interest for the remainder of the period after the plan amendment, curtailment or settlement using the net defined benefit liability (asset) reflecting the benefits offered under the plan and the plan assets after that event, and the discount rate used to remeasure that net defined benefit liability (asset). The amendments had no impact on the consolidated financial statements of the Company as it did not have any plan amendments, curtailments, or settlements during the period.

Several other amendments and interpretations applied for the first time in 2019 do not have a significant impact on the consolidated financial statements of the Company.

b) Standards issued but not yet effective

The new and amended standards and interpretations that are issued, but not yet effective, up to the date of issuance of the Company's financial statements are disclosed below. The Company intends to adopt these new and amended standards and interpretations, if applicable, when they become effective.

Amendments to IFRS 3, Definition of a Business: In October 2018, the IASB issued amendments to the definition of a business in IFRS 3 Business Combinations to help entities determine whether an acquired set of activities and assets is a business or not. They clarify the minimum requirements for a business, remove the assessment of whether market participants are capable of replacing any missing elements, add guidance to help entities assess whether an acquired process is substantive, narrow the definitions of a business and of outputs, and introduce an optional fair value concentration test. New illustrative examples were provided along with the amendments. Since the amendments apply prospectively to transactions or other events that occur on or after the date of first application, the Company will not be affected by these amendments on the date of transition.

Amendments to IAS 1 and IAS 8, Definition of Material: In October 2018, the IASB issued amendments to IAS 1 Presentation of Financial Statements and IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors to align the definition of 'material' across the standards and to clarify certain aspects of the definition. The new definition states that, 'Information is material if omitting, misstating or obscuring it could reasonably be expected to influence decisions that the primary users of general purpose financial statements make on the basis of those financial statements, which provide financial information about a specific reporting entity.' The amendments to the definition of material is not expected to have a significant impact on the Company's consolidated financial statements.

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IFRS 17 Insurance Contracts: In 2017, the IASB issued IFRS 17 – Insurance contracts, which has the general aim of supplying an accounting model for insurance contracts that is more useful and consistent for insurance companies. It is not applicable to the Company.

Summary of significant accounting policies

The significant accounting policies described below have been applied consistently to all the periods presented in the consolidated financial statements, except for the practices, which were applied prospectively as from 2019, in accordance with the standards and regulations previously described in this section.

The accounting policies relating to the Company's present operations that require judgment and the use of specific valuation criteria are the following:

Financial instruments

Financial instruments are classified, at initial recognition, as subsequently measured at amortized cost, fair value through other comprehensive income (OCI), and fair value through profit or loss, depending on the financial asset's contractual cash flow characteristics and the Company's business model for managing them.

Fair value through profit or loss: this includes the concession financial assets related to distribution segment infrastructure. These financial assets are measured at the expected New Replacement Value (*Valor Novo de Reposição*, or VNR), as defined in the concession agreement, which represent the fair value of the residual value of the infrastructure as of the balance sheet date. The Company recognizes a financial asset resulting from a concession contract when it has an unconditional contractual right to receive cash or another financial asset from, or under the direction of the grantor for the services of construction and maintenance of the infrastructure.

This category also includes cash equivalents, marketable securities not classified at amortized cost, derivative financial instruments and indemnities receivable from the generation assets.

Cash and cash-equivalents comprise cash at banks and on hand and short-term highly liquid deposits, subject to an insignificant risk of changes in value, maintained to carry out the Company's short-term cash management.

The disclosures about the main assumptions used in fair value measurement are summarized in the respective notes.

Derivative financial instruments (Swap transactions and call spread): The Company maintains derivative instruments to manage its exposure to the risks of changes in foreign currency exchange rates, mainly the US dollar. Derivative instruments are recognized initially at their fair value and the related transaction costs are recognized in the Statement of income when they are incurred. After initial recognition, derivatives are measured at fair value and changes in fair value are recorded in the Consolidated Statement of Income.

Derivative financial instruments (Put options) – The options to sell to CEMIG GT units of the FIP Melbourne and FIP Malbec funds ('the SAAG PUT') were measured at fair value using the Black-Scholes-Merton (BSM) method, using as reference the related put options obtained by the BSM model valued on the closing date of the financial statements for the year ended December 31, 2019. See note 33 to the Financial Statements for further details.

Amortized cost: This includes accounts receivables from customers, traders and power transport concession holders; advances to suppliers; accounts receivable from Minas Gerais State; restricted cash; escrow deposits in litigation; marketable debt securities with the intention of holding them until maturity and the terms of their contracts originate known cashflows that constitute exclusively payments of principal and interest; concession financial assets related to the concession grant fee; indemnifiable receivable for transmission assets; accounts receivable from related parties; suppliers; loans and debentures; debt agreed with the pension fund (Forluz); concessions payable; the Minas Gerais State PRCT Tax Amnesty Program; advances from customers; assets and liabilities related to the CVA account and Other financial components in tariff adjustments; the low-income subsidy; reimbursement of tariff subsidies; and other credits.

Amortized cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the effective interest rate (EIR).

[Table of Contents](#)***Receivables from customers, traders and power transport concession holders***

Accounts receivable from customers, traders and power transport concession holders are initially recognized at the sales value and subsequently measured at amortized cost. These receivables are stated including sales tax and net of withholding taxes, which are recognized as recoverable taxes.

In order to estimate future losses on receivables, the Company adopted a simplified approach, considered that the accounts receivable from customers do not have significant financial components, and calculated the expected loss considering the historical average of non-collection over the total billed in each month (based on the last 24 months of billing), segregated by type of customer and projected for the next 12 months, taking into account the age of maturity of invoices, including those not yet due and unbilled.

In 2019, the Company changed the assumption applied for the calculation of the historic percentages of default in the provision matrix, from 12 to 24 months, with the aim of enhancing the estimation method, based on studies of its customers' behavior after more than 12 and 24 months from the due date, using the existing collection tools. See note 8 of the consolidated financial statements.

The expected losses for overdue accounts of customers that renegotiated their debt is measured based on the maturity date of the original invoice, despite the new terms negotiated. Expected losses are fully recognized for accounts overdue for more than 12 months.

Expected losses for invoices unbilled, not yet due or less than 12 months past due are measured according to the potential default events, or losses of credit expected for the whole life of a financial instrument, if the credit risk has significantly increased since its initial recognition.

For large customers, the provision for doubtful receivables is recorded based on estimates by Management, in an amount sufficient to cover probable losses. The main criteria used by the Company are: (i) customers with significant balances, the receivable balance is analyzed based on the debt history, negotiations in progress, and asset guarantees; and (ii) for large customers, an individual analysis of the debtors and the initiatives in progress to realize the receivables.

Investments in affiliates and jointly-controlled entities

The Company has investments in affiliates and jointly-controlled entities. The considerations made in determining significant influence or joint control are similar to those necessary to determine control over subsidiaries. These investments are accounted using the equity method and are initially recognized at acquisition cost, equivalent to the consideration transferred measured at fair value at the acquisition date.

The investments of the Company include the intangible assets representing the right to commercial operation of the regulated activity identified in the process of allocation of the price for acquisition of the affiliates and jointly-controlled entities. Those intangible assets relating to the affiliates and jointly-controlled entities are included in the carrying amount of the investment and are amortized by the straight-line method, during the period of the concessions.

After application of the equity method, the Company determines whether it is necessary to recognize an impairment loss on its investment in its affiliates or jointly-controlled entities. At each reporting date, the Company determines whether there is objective evidence that the investment in the affiliates or jointly-controlled entities is impaired. If there is such evidence, the investment carrying amount is subject to impairment testing.

[Table of Contents](#)**Business combination**

Business combinations are accounted for using the acquisition method of accounting. The cost of an acquisition is measured as the aggregate of the consideration transferred, which is measured at acquisition date at fair value, as well as the amount of any non-controlling interests in the acquiree, the identifiable net assets acquired and the liabilities assumed. Goodwill is initially measured at cost, as the excess of the aggregate of the consideration transferred and the amount recognized for non-controlling interests and any previous interest held over the net identifiable assets acquired and liabilities assumed.

In the process of allocating the purchase price for of the acquisition of subsidiaries that is a concession holder, the fair value relating to the identifiable right to commercial operation of the regulated activity is recognized as intangible assets with a finite useful life.

When a business combination is carried out in stages (“step-acquisition method”), the interest previously held by the Company in its investee is remeasured at the fair value at the acquisition date and the corresponding gain or loss, if any, is recognized in the statement of income.

Concession assets

Concession infrastructure under construction are initially recorded as contract assets, in accordance with IFRS 15 and IFRIC 12, considering that the Company is entitled to consideration for performance completed to date, and, only when the construction phases ends, has the right to charge for the services provided to customers or receive an indemnity at the end of the concession period for assets not yet amortized. In accordance with IFRS 15 and IFRIC 12, construction revenues equivalent to new infrastructure are initially recorded as contract assets, measured at construction cost plus margin (which, for the construction business, is deemed as zero). Construction cost include borrowing costs.

Energy and Gas Distribution segment: When the construction phase ends and the infrastructure is incorporated to the distribution grid, the satisfaction of performance obligation related to its construction is considered fully completed, and the contract asset is bifurcated between a financial assets and an intangible assets.

The portion of the infrastructure to be amortized during the concession period is recorded as an intangible asset, as provided for in IFRIC 12 – Concession contracts, and subsequently measured at cost less amortization. The main amortization rates, which take into account the useful life that management expects for the intangible asset, and reflect the expected pattern of their consumption, are presented in Note 20 to the Financial Statements.

The Company recognizes a financial assets for the residual value of the infrastructure at the end of the concession, representing an unconditional right to receive cash or another financial asset directly from the grantor. The financial assets is subsequently measured at the estimated fair value.

Transmission segment: When construction is finalized, concession infrastructure assets remains as contract asset, considering the existence of performance obligations during the concession period, represented by the network construction, operation and maintenance, as there is no unconditional right to receive the consideration for the construction service unless the company operates and maintains the infrastructure. The contract asset is reclassified as a financial asset (accounts receivable) only after the performance obligation to operate and maintain the infrastructure is satisfied, since from that point nothing more than the passage of time is necessary for the consideration to be received. The costs related to the infrastructure construction are recognized as incurred in the statement of income. The construction revenues are recognized in accordance with the stage of completion of the construction service, including construction margin, when applicable.

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Consideration monthly received is allocated to revenue related to the operation and maintenance service and to the collection of the contract asset related to the construction service based on their relative fair value. Costs of expansion and upgrades of the infrastructure are recorded as contract assets.

Due to the acceptance of the terms of renewal of the old transmission concessions, part of the transmission assets of the concessions terminated on December 31, 2012, is subject of reimbursement by the granting authority, and a financial asset was recognized corresponding to the estimated indemnity to be received over a period of eight years. For further information, see Note 16 to the Financial Statements.

Generation segment: As described in Note 16 to the Financial Statements, the concession fee right paid for the concession contracts granted by the Brazilian Regulator (ANEEL) in November 2015 are classified as a financial asset, at amortized cost, as it represents an unconditional right to receive cash, adjusted by the IPCA index, and remuneratory interest, during the period of the concession.

Intangible assets

Intangible assets are mainly, comprised of the intangible assets related to the service concession contracts as described in topic (c) above as well as software. Intangible assets are stated at cost, less amortization, and any accumulated impairments when applicable.

Any gain or loss arising upon derecognition of an intangible asset, calculated as the difference between the net disposal proceeds and the carrying amount of the asset, is included in the statement of income when the asset is derecognized.

Property, plant and equipment

Property, plant and equipment are stated at the cost, including deemed cost (upon initial application of IFRS) and capitalized borrowing costs, less accumulated depreciation.

Depreciation is calculated on a straight-line basis over the estimated useful lives of the assets, or in certain circumstances, the concession term, whatever is shorter. Depreciation rates are shown in Note 19 to the Financial Statements.

Any gain or loss arising on derecognition of a property, plant and equipment, calculated as the difference between the net disposal proceeds and the carrying amount of the asset, is included in the statement of income when the asset is derecognized.

Impairment

In assessing impairment of financial assets, the Company uses historical trends of the probability of default, timing of recovery and the amounts of loss incurred, adjusted to reflect management's judgment as to whether current economic and credit conditions are such that the actual losses are likely to be greater or less than suggested by historical trends.

Additionally, management revises, annually, the carrying amount of non-financial assets, for the purpose of assessing if there is any indication, such as events or changes in the economic, operational or technological conditions that an asset may be impaired. If any indication exists, or when annual impairment testing of an asset is required, the Company estimates the asset's recoverable amount. The recoverable amount of an asset or cash generating unit is defined as the higher between its value in use and its fair value less costs to sell. When the carrying amount of an asset or cash generating unit exceeds its recoverable amount, an impairment loss is recognized, adjusting the carrying amount of the asset or cash generating unit to its recoverable amount.

[Table of Contents](#)**Employee benefits**

The liability recorded in the consolidated statement of financial position related the Company's retirement benefit pension plan obligations, is the greater of: (a) the amount to be paid in accordance with the terms of the pension plan for amortization of the actuarial obligations, and (b) the present value of the actuarial obligation, as calculated by a qualified actuary, less the fair value of the plan's assets, and adjusted for unrecognized actuarial gains and losses. Expenses related to the debt agreed upon with the pension trust fund were recorded in finance income (expenses), because they represent financial interest and inflation adjustment. Other expenses related to the pension fund were recorded as operating expenses.

The Company offers post-employment healthcare benefits to its employees as well as life insurance for active and retired employees. The expected costs of these benefits are accrued over the period of employment using the same accounting methodology that is used for defined benefit pension plans. These obligations are measured annually by a qualified independent actuary.

Actuarial gains and losses arising because of changes in actuarial assumptions are recognized in other comprehensive income.

Short-term benefits to employees: Employees' profit sharing as determined in the Company's by-laws are recorded in accordance with the collective agreement established with the employees' union and recorded in employees' and managers' profit sharing in the statement of income.

Income tax and social contribution tax**Current**

Advances, or tax credits, are presented as current or non-current assets, in accordance with the expected date of their realization at the balance sheet date, when the tax amounts are duly calculated and offsetted against advances made.

Deferred

Deferred tax is recognized for temporary differences between the carrying amount of an asset or liability in the statement of financial position and its tax base at the reporting date.

Deferred tax liabilities are recognized for unused tax loss carryforwards and all taxable temporary differences, except for the situations listed below. Deferred tax assets are recognized for all the deductible temporary differences, except for the situations listed below, to the extent that it is probable that future taxable profit will be available for the temporary differences to be offset. These taxes are measured at the tax rates that are expected to apply in the year when the asset is recovered or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the reporting date.

The follow exemptions apply to the deferred tax recognition:

- When the deferred tax arises from the initial recognition of goodwill or an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss;
- In respect of taxable temporary differences associated with investments in subsidiaries, associates and interests in joint arrangements, when the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future;
- The carrying amount of deferred income tax and social contribution tax assets is reviewed at each reporting date, and are reduced to the extent that is no longer probable that sufficient taxable profit will be available to allow the deferred tax asset to be utilized. Unrecognized deferred tax assets are re-assessed at each reporting date and are recognized to the extent that it has become probable that future taxable profits will allow the deferred tax asset to be recovered; and
- Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the year when the asset is realized or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the reporting date.

[Table of Contents](#)**Government grants**

Government grants are recognized when there is reasonable assurance that the grant will be received, and all attached conditions will be complied with.

The Company has operations in an area incentivized by SUDENE and recognizes its right to a 75% reduction in income tax, including the 10% additional. Such tax incentives, in the form of exemption or reduction of income tax, comply with the concept of government grants and are recognized as income on a systematic basis over the periods that the related income tax expense for which it is intended to compensate, is recorded

Given the legal restriction on the profit distribution corresponding to the tax incentive, the Company maintains the amount related to the incentive granted in a tax incentive reserve.

In addition, the Company receives amounts from the Energy Development Account (CDE) as reimbursement for subsidies on tariffs granted to users of the public energy distribution service. These amounts are recognized as revenue in the income statement on a monthly basis, at the moment that the Company acquires the right to receive them.

Non-current assets classified as held for sale and discontinued operations

The Company classifies non-current assets as held for sale when their carrying amount will be recovered, principally, through a sale transaction rather than through continuous use. This condition is met only when the asset (or group of assets) is available for immediate sale in its current condition subject only to usual and customary terms for the sale of the asset (or group of assets) and its sale is considered highly probable. Management must be committed to the sale which is expected to be completed within one year from the date of classification. Assets held for sale are measured at the lower of its carrying amount and fair value less costs to sell. Costs to sell are the incremental costs directly attributable to the disposal of an asset, excluding finance expenses and income tax expenses.

Fixed assets (PP&E) and Intangible assets are not depreciated or amortized as long as they are classified as held for sale. Assets and liabilities classified as held for sale are presented separately as current items in the Statement of financial position.

Dividends received from jointly-controlled entities and affiliates, classified as held for sale, are recognized in the Income statement, in view of the discontinuation of measurement by the equity method, under IFRS 5.

A disposal group qualifies as discontinued operation if it is a component of an entity that either has been disposed of, or is classified as held for sale, and:

- Represents a separate major line of business or geographical area of operations
- Is part of a single coordinated plan to dispose of a separate major line of business or geographical area of operations; or
- Is a subsidiary acquired exclusively with a view to resale.

Discontinued operations are excluded from the reported profit from continuing operations, and are presented as a single amount, after taxes, based on discontinued operations, in the statement of income.

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Additional disclosures are presented in Note 34 to the financial statements. All the other notes to the financial statements include amounts for continuing operations, except when otherwise stated.

Revenue recognition

Through December 31, 2017, revenue was measured at fair value of the consideration received or receivable, less any estimates or refunds and other similar deductions.

As from January 1, 2018, in general, revenue from contracts with customers is recognized when the performance obligation is satisfied, at an amount that reflects the consideration to which the Company expects to be entitled in exchange for the goods or services transferred, which must be allocated to that performance obligation. The revenue is recognized only when it is probable that the Company will collect the consideration to which it is entitled in exchange for the goods or services transferred to the customer, considering the customer's ability and intention to pay that amount of consideration when it is due.

Revenues from the sale of energy are measured based on the energy supplied and the tariffs specified in the terms of the contract or in effect in the market. Revenues from supply of energy to final customers are recorded when the delivery has taken place. The billing is carried out monthly. Unbilled supply of energy, from the period between the last billing and the end of each month, is estimated based on the supply contracted and on the volume of energy delivered but not yet billed. Historically, the differences between the estimated amounts and the actual revenues recognized are not significant.

Revenues from use of the distribution system (TUSD) received by the Company from other concession holders and other customers that use the distribution network are recognized in the month in which the services are provided. Unbilled retail supply of energy, from the period between the last consumption and the end of each month, is estimated based on the billing from the previous month or the contractual amount. Historically, the differences between the estimated amounts and the actual revenues recognized are not significant.

Construction revenue – Corresponds to the performance obligation to build the transmission and distribution infrastructure during the construction phase.

Revenues from transmission concession services are recognized in the Statement of income monthly, and includes:

- Operation and maintenance revenue arising from costs incurred and necessary to comply with the performance obligations of operation and maintenance specified in the transmission concession contract, after termination of the construction phase; and
- Revenue from remuneration of the contract asset recognized, recorded as transmission concession gross revenue in statement income.

The services provided include charges for connection and other related services; the revenues are recognized when the services are rendered.

The 'Parcel A' revenue and other financial components in tariff adjustments are recognized in the Statement of income when the non-controllable costs (including energy acquisition) effectively incurred are different from those considered by the Grantor to determine the energy distribution tariff. For further details, see Note 16 to the financial Statements.

Any adjustment of expected cash flows from the concession financial asset of the energy distribution concession contract is presented as operating revenue, together with the other revenues related to the energy distribution services.

[Table of Contents](#)**Finance income and expenses**

Finance income is mainly comprised of interest income on funds invested, monetary adjustments on overdue receivables and interest income on other financial assets. Interest income is recognized in the Statement of income using the effective interest method.

Finance expenses include interest expense on borrowings, and foreign exchange and monetary adjustments on borrowing costs of debt, financings and debentures. Interest expense on the Company's borrowings that is not capitalized is recognized in the Statement of income using the effective interest method.

Cash dividends

A liability to pay a dividend is recognized when the distribution is authorized or is enforced by law or Company's bylaws and the distribution is no longer at the discretion of the Company.

Segment reporting

The operating results of all operating segments for which discrete financial information is available, are reviewed regularly by the Company's CEO, to make decisions about resources to be allocated to the segment, and to assess its performance.

Segment results that are reported to the CEO include items directly attributable to the segment as well as those that can be allocated on a reasonable basis. Unallocated items comprise mainly corporate assets (primarily the Company's headquarters) and head office expenses.

Segment capital expenditure is the total cost incurred during the year to acquire concession financial assets, intangible assets, concession contract assets and property, plant and equipment.

Leases

Through December 31, 2018, leasing contracts were classified and accounted for as either operating or finance leases in accordance with IAS 17 Leases.

As from January 1, 2019, Company assesses at contract inception whether a contract is, or contains, a lease. That is, if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. Company applies a single recognition and measurement approach for all leases, except for short-term leases and leases of low-value assets. Company recognizes lease liabilities to make lease payments and right-of-use assets representing the right to use the underlying assets.

Right-of-use assets: Company recognizes right-of-use assets at the commencement date of the lease (i.e., the date the underlying asset is available for use). Right-of-use assets are measured at cost, less any accumulated amortization and impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities recognized, initial direct costs incurred, and lease payments made at or before the commencement date less any lease incentives received. Right-of-use assets are amortized on a straight-line basis over the shorter of the lease term and the estimated useful lives of the assets, see Note 21 to the Financial Statements.

If ownership of the leased asset transfers to the Company at the end of the lease term or the cost reflects the exercise of a purchase option, amortization is calculated using the estimated useful life of the asset.

Lease liabilities: At the commencement date of the lease, the Company recognizes lease liabilities measured at the present value of lease payments to be made over the lease term. The lease payments include fixed payments (including insubstance fixed payments) less any lease incentives receivable, variable lease payments that depend on an index or a rate, and amounts expected to be paid under residual value guarantees. The lease payments also include the exercise price of a purchase option reasonably certain to be exercised by the Company and payments of penalties for terminating the lease, if the lease term reflects the Company exercising the option to terminate. Variable lease payments that do not depend on an index or a rate are recognized as expenses in the period in which the event or condition that triggers the payment occurs.

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In calculating the present value of lease payments, the Company uses its incremental borrowing rate at the lease commencement date because the interest rate implicit in the lease is not readily determinable. After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. In addition, the carrying amount of lease liabilities is remeasured if there is a modification, a change in the lease term, a change in the lease payments (e.g., changes to future payments resulting from a change in an index or rate used to determine such lease payments) or a change in the assessment of an option to purchase the underlying asset.

Short-term leases and leases of low-value assets: The Company applies the short-term lease recognition exemption to its short-term leases. It also applies the lease of low-value assets recognition exemption to leases that are considered to be low value. Lease payments on short-term leases and leases of low value assets are recognized as expense on a straight-line basis over the lease term.

Principal Factors Affecting our Financial Performance***Analysis of Energy Sales and Cost of Energy Purchased***

Energy rates in Brazil, related to energy distributors' sales to regulated customers, are set by ANEEL, which has the authority to readjust and review rates in accordance with the applicable provisions of the concession contracts. See "Item 4: The Brazilian Power Industry—Tariffs".

We charge regulated customers for their actual energy consumption during each 30-day billing period at specified rates. Certain large industrial customers are charged according to the energy capacity contractually made available to them by us, with adjustments to those rates according to consumption during peak demand time, as well as capacity requirements that exceed the contracted amount.

In general, rates on energy that we purchase are determined by reference to the capacity contracted for as well as the volumes actually used.

The following table sets forth the average rate (in *reais* per MWh) and volume (by GWh) components of energy sales and purchases for the periods indicated. The term "average rate" refers to revenues for the relevant class of customers divided by the MWh used by such class and does not necessarily reflect actual rates and usage by a specific class of end-users during any particular period.

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	Year ended December 31,		
	2019	2018	2017
Energy sales:			
Average rate to final customers (R\$/MWh)			
Industrial rate	297.05	276.61	276.27
Residential rate	917.44	843.28	783.53
Commercial rate	568.52	558.83	578.36
Rural rate	542.29	496.27	446.09
Public services rate and others	548.43	505.74	469.17
Total sales to final customers (GWh)			
Industrial customers	16,024	17,689	17,761
Residential customers	10,538	10,267	10,008
Commercial customers	9,567	8,380	7,508
Rural customers	3,795	3,615	3,651
Public services and other customers	3,634	3,571	3,534
Average rate (R\$/MWh)	549.11	501.68	479.90
Total revenues (R\$million)	24,052	21,882	20,438
Sales to distributors:			
Volume (GWh)	11,448	11,992	12,777
Average rate (R\$/MWh)	257.08	249.33	255.37
Total revenues (R\$million)	2,876	2,990	3,263

Distribution Rates

Our operating results have been significantly affected by fluctuations in the levels of rates that CEMIG D is authorized to charge for distribution of energy. The process of setting rates in Brazil has been influenced, historically, by government attempts to control inflation. With the restructuring of the Brazilian energy sector, which began in 1995, and under the terms of the renewal of the concession contract that we signed with ANEEL in 1997, there have been significant changes in the process of setting tariffs.

CEMIG D's periodic tariff review takes place every five years and has the objective of re-evaluating the company's manageable costs, which primarily include the operating costs and the costs of fixed assets that comprise the remuneration and depreciation of these assets. In the tariff review, the regulator applies the methodology for defining efficient operating costs and evaluates the incremental investments made in the asset base since the last review, as well as the write-offs and depreciation of the existing assets, composing a new remuneration base.

The result of the 2019 tariff review became effective as of May 28, 2019, and the revenue to cover the manageable costs defined in this review will be valid for a period of five years being readjusted annually by the IPCA minus the X Factor, which is the average productivity for the distribution sector in Brazil, plus some adjustments.

On May 21, 2019, ANEEL defined the annual tariff adjustment for CEMIG D: an average increase of 8.73%. Such rate was effective starting on May 28, 2019 and it remains the same until May 27, 2020. Such increase had the following components: (i) an increase of 1.94% due to the Tariff Adjustment Index; (ii) an increase of 15.98% due to the variation in Parcel A costs (CVA – non-manageable costs); and (iii) a decrease of 9.18% related to other financial adjustments. The average annual tariff adjustments of CEMIG D in 2019, 2018 and 2017, and the revisions of their respective components were as follows:

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	<u>2019</u>	<u>2018</u>	<u>2017</u>
Average annual/periodic tariff adjustment	8.73%	23.19%	(10.66)%
Components			
Tariff adjustment index	1.94%	13.30%	1.29%
Inter-year variation in fixed costs (CVA)	15.98%	4.59%	(5.27)%
Other financial adjustments	(9.18)%	5.30%	(6.68)%

On May 22, 2018, ANEEL determined the annual tariff adjustment. The result was an average increase in customer energy rates by 23.19%, applied from May 28, 2018 until May 27, 2019.

On May 16, 2017, ANEEL determined the annual tariff adjustment. The result was an average decrease in customer energy rates by 10.66%, applied from May 28, 2017 until May 27, 2018.

Transmission Rates

In January 2013, our transmission concession was renewed for another 30 years in accordance with the rules defined in Law 12,783/2013. At that time, there was an Extraordinary Review and transmission revenue was strictly reduced to the amount necessary to cover operation and maintenance costs, being part of the non-reversible assets indemnified.

In 2017, the capital cost of the reversible assets not yet amortized at the time of renewal of the transmission became part of the Allowed Annual Revenue (RAP) of transmission concessionaires covered by Law 12,783/2013, according to rules defined in MME Administrative Rule no. 120/2016 (Portaria MME nº 120/2016). This revenue consists of two components. One refers to the financial component, which corresponds to the cost of capital of the non-indemnified assets for the period from January 2013 to June 2017. During this period, the transmission company remained without any revenue for the assets made available that had not yet been indemnified. The second component, called the economic component, refers to the cost of capital to be paid to the end of the asset lifespan.

According to Technical Note No. 183/2017, appended to Resolution No. 2,258/2017, which ratified the RAP calculation for the 2017-2018 cycle, the total value of the cost of capital of assets not indemnified for this cycle was R\$ 370.8 million.

With respect to the readjustment processes, the transmission concession agreement provides for a review every five years. The first review after the concession renewal was to occur in July 2018. However, this review will possibly occur only in 2020 with retroactive effect from July 2018. The methodology for this review was approved by Normative Resolution No. 816/2018, which covers a new criterion for valuation of the asset base and captures other revenues for tariff moderation. A new model for calculating operating costs is being discussed with the regulator. In July 2019, CEMIG GT's RAP was increased by 5.97%, being: (a) 7.21% as the result of an inflation adjustment to the revenue previously approved based on the IPCA index and recognition of new improvements strengthening the transmission network; and (b) 4.66% of readjustment of the RAP concerning the cost of non incorporated capital after the concession renewal, according to the MME Decree No. 120/2016.

In CEMIG Itajubá case (concession contract No. 079/2000) there was awarded an adjustment of 14.60%, in May 2007, as the result of an inflation adjustment to the revenue previously approved based on the IGP-M index and recognition of new improvements strengthening the transmission network.

In July 2018, CEMIG GT's RAP was reduced by 10.66%, because of an inflation adjustment to the revenue previously approved based on the IPCA index, recognition of new improvements strengthening the transmission network and the review of the RAP concerning the cost of non-incorporated capital after the concession renewal, according to the MME Decree No. 120/2016. Disregarding the non incorporated capital cost on the RAP, the readjustment would be an increase of 4.00%. In CEMIG Itajubá case (concession contract No. 079/2000) was awarded an adjustment of 3.32%. The concession contract No. 079/2000 provides that for the first 15 years of the concession, the RAP will be flat and thereafter for the following 15 years, the RAP will be 50% of the value during the first 15 years. At the time this adjustment, all our assets under the concession contract No. 079/2000 already had a 15-year lifetime.

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In July 2017, CEMIG GT's RAP was increased by 131.3%, as a result of an inflation adjustment to the revenue previously approved based on the IPCA index, recognition of new improvements strengthening the transmission network and the addition of the cost of non-incorporated capital after the concession renewal, according to the MME Decree No. 120/16. Disregarding the non-incorporated capital cost on the RAP, the readjustment would have been an increase of 6.5%. In the case of CEMIG Itajubá (concession contract No. 079/00), it had a negative adjustment of 41.2%. The concession contract No. 079/2000 provides that for the first 15 years of the concession, the RAP will be flat and thereafter for the following 15 years, the RAP will be 50% of the value during the first 15 years. At the time of such negative adjustment of 41.2%, all CEMIG GT's assets under the concession contract No. 079/00 already had a 15 year lifetime (some of them had already met this margin on the previous cycle), which is the reason for the negative adjustment to the RAP of close to 50%.

Exchange Rates

Substantially all of our revenues and operating expenses are denominated in *reais*. However, we have some foreign currency-denominated debt. As a result, in reporting periods when the real declines against the U.S. dollar or other foreign currencies in which our debt is denominated, our operating results and financial position can be adversely affected even with such foreign currency-denominated debt being hedged. Foreign exchange gain or loss and monetary variation gain or loss may affect our results of operations in periods in which there are wide swings in the value of the *real* relative to the U.S. dollar or high inflation. We have a number of financial and other contracts under which we owe, or are entitled to, amounts in respect of monetary variation as measured by an index of price inflation in Brazil.

Impacts of Covid-19

Covid-19 is spreading rapidly in many countries, causing disruptive economic effects, including in the Brazilian market.

On March 11, 2020, the World Health Organization characterized Covid-19 as a pandemic, reinforcing the restrictive measures recommendations to prevent the virus dissemination worldwide. These measures are based, mainly, on social distancing, which have been causing major negative impact on entities, affecting their production process, interrupting their supply chains, causing workforce shortages and closing of stores and facilities. The economies around the world are developing measures to handle the economic crisis, especially by their central banks and fiscal authorities, but the economic downturn and its effects are not yet accurately measurable.

Government measures aimed at Brazilian energy sector

Several measures were implemented by the Brazilian government, specifically aimed at the energy sector, which include:

- The provisional normative act. 950/2020 issued on April 8, 2020, which provides for 100% discount in the calculation of social energy tariff ('Tarifa Social de Energia Elétrica'), from April 1, 2020 to June 20, 2020, applicable to customers included in low-income residential subclass, with energy consumption less than or equal to 220 kWh/month. The act also authorizes the Federal Government to allocate resources to Energy Development Account (CDE), limited to R\$900 million, to cover the tariff discounts established;
- Expansion on the limit of total amount of energy that can be declared by energy distributors in the process of the surplus sales mechanism ('Mecanismo de Venda de Excedentes' - MVE), during 2020, from 15% to 30%, for the purpose of facilitating contractual reductions;
- Provision of financial resources available in the reserve fund, by CCEE, dedicated to reduce future regulatory fees. Cemig D was granted R\$122 million;
- Under Resolution 878/2020, issued on March 24, 2020, the regulator has implemented some measures in an attempt to maintain the public service of energy supply, which include: prohibiting energy supply suspension due to default of certain categories of customers (residential), for 90 days, prioritizing emergency assistance and energy supply to services and activities regarded as essential, drawing up specific contingency plans to assist health care units and hospital services, among others.

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On May 18, 2020, the Federal Government published the Decree n. 10,350/20 to support the energy distribution sector, which is the segment that deals directly with customers and firstly affect by the Covid-19 pandemic crisis. Based on this decree, CCEE (Power Trading Chamber) will create and manage the "Covid Account" in order to either cover the distribution agents revenue/cash flow deficit or to anticipate their revenues, related to (i) over-contracted purchases due to market retraction, (ii) "CVA" sector assets (iii) maintaining the neutrality of regulatory charges, (iv) compensation for the delay in applying tariff adjustments and (v) anticipation of "parcel B" revenues as determined by Aneel regulation.

Aneel will determine on a monthly basis the total amount to be paid to each distribution agent from Covid-Account. There are some rules applied to distribution agents to be entitled to the Covid-Account resources, such as relinquishing any intention to reduce or end the purchase of energy from generators because of a reduction in the sales until December 2020, and, in the event of default on payments, limiting their dividend payments to the legal minimum of 25% of net income. Notwithstanding, the right to request an extraordinary tariff review is fully preserved.

Aneel will determine the amount of contribution to the "CDE" sector fund in order to rebuild it, which will be implemented in the tariff adjustment/review processes to happen in 2021 and normally charged to the customers until full repayment.

In addition, the regulator have been discussing other measures to support the energy sector by providing short-term resources in order to offset the liquidity reduction due to decrease in revenue and collection.

Company's initiatives

On March 23, 2020, the Company established the Coronavirus Crisis Management Committee ('Comitê Diretor de Gestão da Crise do Coronavírus') to ensure its readiness to making decisions and responding to the impact of Covid-19, because of the fast-changing situation, which became more widespread, complex and systemic.

Also, in line with recommendations to maintain social-distancing measures, the Company has implemented an operational contingency plan and several precautionary measures to keep its employees healthy and safe, including: security and health technicians contacting operational staff on a daily basis; interacting daily with subcontractors Social Service department to monitor the evolution of suspicious cases; changing the schedule to prevent gatherings; restricting national and international travel; suspending technical visits and events at Company's facilities; using remote means of communication; adopting work-from-home policies for a substantial number of employees, providing face masks for employees in external service or in service into its facilities, and requiring outsourcings providers to put the same procedures in place. In addition, the Company has suspended in-store assistance to the general public temporarily.

The Company maintains communication with its customers on virtual channels and essential assistance in customers' facilities, ensuring the appropriate energy supply.

The Company also adopted the following measures in order to contribute to society, which are assessed continuously:

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- Providing payment flexibility to low-income residential subclass customers, registered as social tariff, who will be able to pay their debts in up to six installments, without interest or penalties;
- Providing payment flexibility to public and philanthropic hospitals as well as to emergency rooms units, which will be able to pay the bills not yet collected in up to six installments, without interest or penalties;
- Offering the entities regarded as small business by Brazilian law the option for payment in up to six installments, without interests or penalties;
- A donation program linked to its customers established for the purchase of medical equipment to hospitals located in several regions in the State of Minas Gerais, in addition to a donation made directly by the Company, which has already committed an amount approximately R\$10 million.

The Company is working diligently to mitigate the crisis impacts on its liquidity, implementing the following measures, among others:

- Reviewing its program of investments and expenses for 2020, which planned capital investments amounting to approximately R\$2,042 million, in order to postpone R\$266 (13%) of those capital investments to 2021, being R\$168 million, R\$17 million and R\$81 million originally budgeted to be applied on the distribution, generation and transmission segments, respectively;
- Payment of minimum mandatory dividends to shareholders, and concentration of the greater part of the dividend's payment at the end of 2020;
- Negotiation with its customers on the free market the volumes and delivery times on their contracts;
- Deferral of payment taxes and social charges, as authorized by legislation.

Impact of Covid-19 on its Financial Statements

Considering the significant restrictions on business and social interaction during the Covid-19 pandemic in combination with the latest movements in exchange and interest rates, the Company estimates that the resulting economic contraction might have a negative effect on its liquidity, but the overall impact of the Covid-19 outbreak on its financial position and performance of the company is still difficult to be accurately measured at this point.

In such a scenario, the significant intervention in the local market policies and the initiatives to reduce the transmission of Covid-19 are likely to cause a reduction in energy consumption and consequently in revenue from sale of energy, as well as an increase in expected credit losses. The energy demand (load) measured by Brazilian Interconnected Power Grid (SIN) has decreased 18.3% since the second half of March 2020.

From the observation of the pandemic's immediate economic effects, the Company assessed the assumptions used for calculating fair value and recoverable amount of certain financial and non-financial assets, as follows:

- The Company assessed whether the greater pressure on the exchange rate, combined with a lack of financial market liquidity, will have a negative impact on derivative financial instruments entered into to protect its operations against the risks arising from foreign exchange rate changes. At this point, given the current market conditions, the change in derivative instrument's fair value, based on the forecasts of future interest and exchanges rates, will not offset the Company's total exposure to foreign exchange rate variability, and resulted in a net loss of R\$438 million in the first quarter of 2020. The long-term projections carried out for the foreign exchange rate are lower than the current dollar quotation, which may represent a decrease in Company's foreign exchange variation expense, if the projected scenario occurs;
- As a result of Covid-19 situation, the market conditions have deteriorated, and, under the current circumstances, the fair value of the Company's interest in Light has decreased significantly. The estimated negative impact arising from the remeasurement of the asset at fair value less cost to sell is R\$609 million on March 31, 2020;

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- The Company is assessing the circumstances arising from Covid-19 pandemic and associated measures aimed at reducing its systematic impact when measuring expected credit losses. Under the Resolution 878/2020, the regulator has implemented some measures in an attempt to maintain the public service of energy supply, including prohibiting energy supply suspension due to default of certain customers categories. These measures can increase delinquency and bring further cash flow pressure. The Company believes it is still too early to assess accurately these measures potential impact, which may be mitigated by possible interventions from federal government in order to support the Brazilian energy distributors;
- The Company estimates that the assumptions applied to determine the recoverable amount of the relevant investments in subsidiaries, joint-controlled entities and associates were not influenced significantly by the Covid-19 situation, since these investees' cash flows are mainly related to long-term rights to commercial operation of the regulated activity. Therefore, except for the effects described above, related to the negative impact arising from the remeasurement Company's interest in Light, classified as asset held for sale, no additional impairment losses was recognize to its investments in subsidiaries, joint-controlled entities and associates;
- The Company has also made an assessment attempting to identify the behavior of the interest rates and discount rates that are the basis for the calculation of post-employment obligations, and believes that at this moment, due to the high volatility of the market, it is not possible to conclude whether the present rates reflect an alteration in the macroeconomic conditions that would indicate a need for recalculation of the actuarial liabilities, for the interim accounting statements;
- Despite the uncertainties related to the crisis unfolding and its potential long-term effects, the Company does not expect that the negative impact on its projections of likely future taxable profits might compromise the recoverability of its deferred tax assets.

The sensitivity analysis for interest rate, exchange rate and inflation risks presented in Note 33 to our Consolidated Financial Statements were prepared in the current pandemic context.

The Company estimates that the effects of the pandemic may temporarily affect its liquidity in 2020, however, significant long-term effects are not expected. Based on the market projections and on the crisis measurable effects, the Company has observed the following effects in 2020:

- The Company expects that the return of economic activities after the pandemic outbreak peak will reestablish the collection behavior, which reduced in April, 2020. In addition, the negotiations to enable the recovery of past due receivable and the possible regulator's measures to reestablish economic balance, which are currently being discussed in the sector, may mitigate the negative effects of the economic crisis on collection;
- The energy demand (load) measured by the Brazilian Interconnected Power Grid (SIN) has decreased in March and April, 2020. Measured up to the initial days of May 2020, the reduction in the market of Cemig D's captive customers was approximately 11%. We believe there is a possibility that the effect of this temporary market reduction on the Company's cash flow will be mitigated by the possible actions of the federal government to support the energy distributors. Further, the Company expects that the market will recover as the requirements for social distancing are made more flexible, as is happening in several cities of Minas Gerais and the country;
- The Company is starting negotiations and deferrals with its customers and energy suppliers, in order to maintain Cemig GT liquidity during the economic crisis.

Operating Results

Year Ended December 31, 2019 compared to the Year Ended December 31, 2018

From January 1, 2019, we were required to adopt IFRS 16 – Leases. IFRS 16, establishes principles for recognition, measurement, presentation and disclosure of leasing transactions and requires that lessees account all the leasing transactions in accordance with a single balance sheet model, similar to the accounting of financial leasing. At the leasing operation beginning date, the lessee recognizes a liability to make the payments (a lease liability) and an asset, representing the right of use the subject asset during the period of the leasing (a right-of-use asset). Lessees are required to recognize separately the expenses of interest on the leasing liability and the expense of depreciation of the asset of the right to use.

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Lessees are also required to revalue the leasing liability when certain events occur (for example, change in the period of leasing, a change in the future payments of the leasing as a result of a change in an index, or a rate used to determine such payments). In general, the lessee will recognize the amount of the revaluation of the lease liability as an adjustment to the right-of-use asset.

The Company has made an analysis of the initial application of IFRS 16 in their financial statements as from January 1, 2019, and elected to apply the recognition exemptions for short-term leases (contracts that, at the commencement date, have a lease term of 12 months or less and do not contain a purchase option), and leases for which the underlying asset is of low value. We used the modified retrospective approach when adopting such standards; thus, we did not restate our financial statements as of and for the year ended December 31, 2018 and 2017 for the adoption of IFRS 16. Accordingly, our financial statements as of and for the year ended December 31, 2019 and our financial statements for the comparative periods are not directly comparable when it comes to such standard. For more information regarding the adoption of IFRS 16 and its effects on our financial statements, see note 2.4 to our Consolidated Financial Statements included in "Item 18. Financial Statements".

Net operating revenues

Net operating revenues increased by 14.03 % from R\$ 22,266 million in 2018 to R\$ 25,390 million in 2019, as follows.

	2019	Net operating revenues	2018	Net operating revenues	2019 vs 2018
	(in millions of R\$)	(%)	(in millions of R\$)	(%)	(%)
Energy sales to final customers	24,052	94,7	21,882	98.3	9.92
Revenue from wholesale supply to other concession holders	2,876	11.3	2,990	13.4	(3.81)
CVA (compensation for changes in 'Parcel A' items) and Other financial components	58	0.2	1,973	8.9	(97.06)
Revenue from use of the electricity distribution systems – TUSD	2,722	10.7	2,045	9.2	33.11
Transmission concession revenue	504	2.0	411	1.8	22.63
Transmission assets - indemnity revenue	156	0.6	250	1.1	(37.60)
Generation assets - indemnity revenue	-	-	55	0.2	-
Adjustment to expectation of cash flow from indemnifiable financial asset of the distribution concession	18	0.1	-	-	-
Revenue on financial updating of the Concession Grant Fee	318	1.3	321	1.4	(0.93)
Construction revenues	1,200	4.7	898	4.0	33.63
Energy transactions on the CCEE	432	1.7	217	1.0	99.08
Supply of gas	2,298	9.1	1,995	9.0	15.19
Fine for violation of service continuity indicator	(58)	(0.2)	(44)	(0.2)	31.82
Recovery of PIS/Pasep and Cofins taxes credits over ICMS	1,428	5.6	-	-	-
Other operating revenues	1,722	6.8	1,585	7.1	8.64
Deductions on revenue	(12,336)	(48.6)	(12,312)	(55.3)	0.19
Total net operating revenue	25,390	100.0	22,266	100.0	14.03

[Table of Contents](#)**Energy sales to final customers**

Total revenue from energy sold to final customers, excluding CEMIG's own consumption, in 2019 was R\$ 24,052 million, or 9.92 % higher than the figure for 2018 of R\$ 21,882 million.

The main items that affected total revenue from energy sold to final customers were:

- The annual tariff adjustment for CEMIG D effective as from May 28, 2019, with an average *upward* effect of 8.73% on customer tariffs, in comparison an average *upward* effect on customer tariffs of 23.19% effective as from May 28, 2018;
- Lower revenues from the 'Tariff flag' components of customer bills: R\$ 294 million in 2019, compared to R\$ 655 million in 2018. This reflects the level of reservoirs, activating the 'green Flag' for most of the months in 2019, as a consequence of the best hydrological conditions compared to the year of 2018;
- Volume of energy sold to final customers 0.08% higher year-on-year.

Market Evolution

The total for sales in CEMIG's consolidated energy market comprises sales to: (i) Captive customers in CEMIG's concession area in the State of Minas Gerais; (ii) Free Customers in both the State of Minas Gerais and other States of Brazil, in the Free Market (*Ambiente de Contratação Livre*, or ACL); (iii) other agents of the energy sector – traders, generators and independent power producers, also in the Free Market; (iv) Distributors, in the Regulated Market (*Ambiente de Contratação Regulada*, or ACR); and (v) the Wholesale Trading Exchange (*Câmara de Comercialização de Energia Elétrica – CCEE*) eliminating transactions between companies of the CEMIG Group.

As illustrated in the table below, the total volume of energy sold by CEMIG in 2019 decreased by 2.72% as compared to 2018:

GWh (2)	2019	2018	Var %
Residential	10,538	10,267	2.64
Industrial	16,024	17,689	(9.41)
Commercial, Services and Others	9,567	8,380	14.16
Rural	3,795	3,615	4.98
Public Power	905	871	3.90
Public Illumination	1,357	1,384	(1.95)
Public Service	1,372	1,316	4.26
Subtotal	43,558	43,522	0.08
Own Consumption	38	41	(7.32)
	43,596	43,563	0.08
Supply to Other Concessionaires (1)	11,448	11,992	(4.54)
Total	54,044	55,555	(2.72)

(1) Includes Regulated Market Energy Sale Contracts (CCEARs) and 'bilateral contracts' with other agents.

(2) Data not audited by external auditors; includes Regulated Market Energy Sale Contracts (CCEARs) and 'bilateral contracts' with other agents.

Residential: Residential consumption in 2019 was 2.64% higher than in 2018. This increase is primarily due to new customer connections made in 2019, in CEMIG D.

Industrial: Total volume of energy consumed by regulated and free industrial customers was 9.41% lower in 2019 than in 2018. This decrease was due primarily to industrial activity not resuming growth at the rate expected for the year.

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Commercial, Services and Others: Consumption was 14.16 % higher in 2019, mainly due to the incorporation of new customers in CEMIG GT's portfolio.

Rural: Consumption by rural users increased by 4.98 % in 2019.

Supply to Other concessionaires: The energy sale to other concessionaires decreased 4.54 % compared to 2018 due to a lower volume of energy available sold in this segment, considering the low level of Brazilian reservoirs in 2019 and the allocation of energy sold to final customers.

Revenue from Use of Distribution Systems (the TUSD charge): This is revenue from charging Free Customers the Tariff for Use of the Distribution System (TUSD) on the volume of energy distributed. In 2019, this revenue was R\$ 2,722 million, compared to R\$ 2,045 million in 2018, an increase of 33.11% year-on-year, mainly reflecting the following:

- upward adjustment of 17.44% in the TUSD, in CEMIG D's 2018 annual tariff adjustment, effective from May 28, 2018 in comparison to a upward adjustment of 17.28% in the TUSD, in CEMIG D's 2019 annual tariff adjustment, effective from May 28, 2019.

The CVA Account and Other financial components, in rate increases: CEMIG recognizes the difference between actual non-controllable costs (in which the CDE, and energy bought for resale, are significant components) and the costs that were used as the basis of decision of the rates charged to customers. The amount of this difference is passed through to customers in CEMIG D's next tariff adjustment – in 2019 this represented a decrease in revenue of R\$ 58 million, compared to an increase in 2018 of R\$ 1,973 million. The lower figure in 2019 than 2018 is mainly due to a lower difference in 2019 than 2018 between actual costs of energy and the estimated figures used for future cost of energy in the tariff calculation (this difference generates a financial asset to be reimbursed to the Company through the next tariff adjustment).

Transmission revenue: Permitted Annual Revenue (RAP) for the existing assets of the system, updated annually based on the variation in the IPCA index. In 2019, the revenue was R\$504 million compared to R\$411 million in 2018 – or 22.63% higher year-on-year. The increase was principally due to inflation adjustment of the annual RAP, applied in July 2019, increased by the new revenue related to the authorized investments. It includes an additional adjustment to expectation of contractual cash flow from the concession.

The percentages and indices applied for the adjustment are different for different concessions: the IPCA index is applied to the contract of the Cemig GT, and the IGPM index to the contract of Cemig Itajubá. In 2019, the adjustments made to the RAP were: positive 5.97%, including the portion referring to new investments, for the Company's concession contracts; and positive 14.60% for the concession contracts of Cemig Itajubá. The adjustments comprised application of the inflation adjustment index, and recognition of works to upgrade and improve the facilities.

Transmission assets - indemnity revenue: In 2019, we recognized transmission indemnity revenue of R\$ 156 million compared to R\$250 million in 2018.

Revenue from transactions in energy on the CCEE: Revenue from transactions in energy on the CCEE was R\$ 432 million in 2019, compared to R\$ 217 million in 2018, an increase of 99.08% year-on-year. This reflects higher volume of energy available for settlement in the wholesale market in 2019 considering the low level of Brazilian reservoirs and energy allocated to be sold to other segments.

Revenue from supply of gas: CEMIG reported revenue from supply of gas totaling R\$ 2,298 million in 2019, compared to R\$ 1,995 million in 2018, an increase of 15.19%. This mainly reflects the increase in the cost of gas, which was passed through to customers of 6.74% higher year-on-year.

Construction revenues: Distribution infrastructure construction revenues totaled R\$ 1,200 million in 2019, compared to R\$ 897 million in 2018, an increase of 33.63%. This revenue is fully offset by Construction costs, of the same amount, and corresponds to the Company's investments in assets of the concession in the year.

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Recovery of PIS/Pasep and Cofins taxes credits over ICMS: The credits of PIS/Pasep and Cofins taxes (previously erroneously charged to include the amounts of ICMS taxes paid or due), totaling R\$1,428 million, resulted from the success in the Company's legal action questioning the inclusion of ICMS tax in these amounts, and is backdated to July 2003.

Other operating revenues: Other operating revenues was R\$ 2,000 million in 2019, compared to R\$1,862 million in 2018, 7.41% higher year-on-year. This was primarily due to an increase in revenues related to subsidies and reimbursement for decontracted supply that are reimbursed by Eletrobras. The breakdown of the other revenues is presented on Note 29 to the Financial Statements.

Deductions from Revenue: Taxes and charges applied to revenue in 2019 were R\$ 12,336 million, or 0.19% higher than in 2018 (R\$12,312 million).

CDE

The amounts of payments to the Energy Development Account (CDE) are decided by an ANEEL Resolution. The purpose of the CDE is to cover costs of concession indemnities, tariff subsidies, and the subsidy for balanced tariff reduction, the low-income customer subsidy, the coal consumption subsidy, and the Fuels Consumption Account (CCC). Charges for the CDE in 2019 were R\$ 2,448 million, compared to R\$ 2,603 million in 2018.

This is a non-manageable cost: the difference between the amounts used as a reference for setting of tariffs and the costs actually incurred is compensated for in the subsequent tariff adjustment.

Customer charges – the “Tariff Flag” system

The Tariff Flag bands are activated because of low levels of water in the system's reservoirs – tariffs are temporarily increased due to scarcity of rain. The 'Red' band has two levels – Level 1 and Level 2. Level 2 comes into effect when scarcity is more intense. Activation of the tariff flags generates an impact on billing in the subsequent month.

Income from charges to the customer related to the Tariff Flag bands was 55.11% lower in 2019, at R\$ 294 million, compared to R\$ 655 million in 2018.

This reflects less application of the Red band in 2019 than in 2018, due to (i) stabilized reservoir levels, and (ii) slightly higher expectations of rain.

Other taxes and charges on revenue

The other significant deductions from revenue are taxes, which are calculated as a percentage of sales revenue. Thus, their variations arise, substantially, from the changes in revenue.

Operating costs and expenses

Operating costs and expenses, in 2019 were R\$ 22,479 million, an increase of 15.75% as compared to 2018 (R\$19,420 million).

The following table illustrates the components of operating costs and expenses in 2019 and 2018 expressed as a percentage of net operating revenues:

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	<u>2019</u>	<u>Net operating revenues</u>	<u>2018</u>	<u>Net operating revenues</u>	<u>2019 vs 2018</u>
	(in millions of R\$)	(%)	(in millions of R\$)	(%)	(%)
Energy bought for resale	(11,286)	(44.5)	(11,084)	(49.8)	1.82
Gas bought for resale	(1,436)	(5.7)	(1,238)	(5.6)	15.99
Charges for use of the national grid	(1,426)	(5.6)	(1,480)	(6.6)	(3.65)
Depreciation and amortization	(958)	(3.8)	(835)	(3.8)	14.73
Personnel	(1,272)	(5.0)	(1,410)	(6.3)	(9.79)
Employees' and managers' profit sharing	(263)	(1.0)	(77)	(0.3)	241.56
Outsourced services	(1,239)	(4.9)	(1,087)	(4.9)	13.98
Post-employment benefits	(408)	(1.6)	(337)	(1.5)	21.07
Materials	(91)	(0.4)	(104)	(0.5)	(12.50)
Operating provisions and adjustments for operating losses	(2,401)	(9.5)	(466)	(2.1)	415.24
Construction costs	(1,200)	(4.7)	(897)	(4.0)	33.78
Other operating expenses, net	(499)	(2.0)	(405)	(1.8)	23.21
Total operating costs and expenses	<u>(22,479)</u>	<u>(88.5)</u>	<u>(19,420)</u>	<u>(87.2)</u>	<u>15.75</u>

The following are the main variations in operating costs and expenses between 2019 and 2018:

Personnel

Personnel expenses were R\$ 1,272 million in 2019, compared to R\$1,410 million in 2018, a decrease of 9.79%. The was mainly due to a reduction of 10% in the average number of employees in 2019 compared to 2018 (5,796 in 2019 and 5,923 in 2018).

Employee profit sharing

The expense on employees' and managers' profit sharing was R\$ 263 million in 2019, compared to R\$ 77 million in 2018. The increase was due to a higher consolidated net income of Cemig – the basis of calculation for this expense.

Energy purchased for resale

Expenses due to energy purchased for resale in 2019 were R\$11,286 million, compared to R\$11,084 million in 2018, representing an increase of 1.82%. The main factors contributing to such were:

- The cost of purchases of supply in the spot market was at R\$ 1,886 million in 2019, compared to R\$1,818 million in 2018, reflecting CEMIG D's exposure to the wholesale market in 2019.
- Expenses on supply acquired through physical guarantee quota contracts were 5.30% higher, at R\$ 715 million in 2019, compared to R\$679 million in 2018. This mainly reflects CEMIG D's average quota tariff being in 2019, at R\$ 102.22/MWh, compared to R\$ 92.51/MWh in 2018.
- Expenses on energy acquired in regulated market auctions by 9.71% lower, totalling R\$ 3,021 million in 2019, as compared to R\$3,346 million in 2018, mainly due to level of the water reservoirs of the hydroelectric plants in the system, the number of thermoelectric plants dispatched was larger in– with a consequent higher expense on fuel for these plants.

Expenses on supply acquired in the free market and 'bilateral contracts' were, at R\$ 4,098 million in 2019, compared to R\$ 3,871 million in 2018. This mainly reflects CEMIG GT's expenses being (R\$ 4,097 million in 2019, compared to R\$ 4,055 million in 2018) due to the volume of energy acquired.

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This is a non-manageable cost for Cemig Distribution: the difference between the amounts used as a reference for calculation of tariffs and the costs actually incurred is compensated for in the subsequent tariff adjustment. For further details see Note 30 to the Financial Statements.

Charges for use of the national grid

Charges for use of the national grid in 2019 were R\$ 1,426 million, compared to R\$ 1,480 million in 2018, representing a decrease of 3.65%.

This expense is payable by energy distribution and generation agents for use of the facilities that are components of the national grid. The amounts to be paid are set by an ANEEL Resolution. The amounts in 2019 are due to increased transmission costs related to the payment of the transmission indemnities to the agents of the energy sector that accepted the terms of Law 12,783/13.

This is a non-manageable cost in the energy distribution business: the difference between the amounts used as a reference for calculation of tariffs and the costs actually incurred is compensated for in the subsequent tariff adjustment.

Operating provisions and adjustments for operating losses

Operating provisions in 2019 totaled R\$ 2,401 million, compared to R\$466 million in 2018, an increase of 415.24%. The increase was mainly due to:

- recognition of an estimated loss on realization of the receivables from Renova, in the amount of R\$ 688 million, after an assessment of the investee's credit risk, which deteriorated in the current year;
- provisions for employment-law legal actions amounting R\$ 136 million in 2019, compared to a reversal of provisions of R\$ 42 million in 2018. This arises mainly from new actions, or from reassessment of the chances of loss in existing actions, based on adverse court decisions taking place in the period. Also, a difference was recognized for application of the IPCA-E inflation index instead of the TR reference rate in monetary adjustment for employment-law legal actions dealing with debts arising from March 25, 2015 to November 10, 2017. These are at the advanced execution phase and now have chances of loss assessed as 'probable', due to the recent decision by the Regional Employment-law Appeal Court of the Minas Gerais region (3rd Region) to apply the decision of the Higher Employment-law Appeal Court, ordering use of the IPCA-E index. For further information see Note 27 to the Financial Statements;
- variation of provisions for taxes, which represented the recognition of R\$1,228 million in 2019, compared to the reversion of R\$5 million in 2018. This variation results, mainly, of the Company's reassessment, based on the opinion of its legal advisers, of the chances of loss on administrative and court proceedings opened against the Company relating to social security contributions on the payment of profit shares to its employees, alleging that Company did not previously establish clear and objective rules for the distribution of these amounts. For further information see Note 27 to the Financial Statements.

Construction cost

Construction costs in 2019 totaled R\$ 1,200 million, or 33.78% more than in 2018 (R\$ 897 million). This cost is fully offset by Construction revenue, of the same amount, and corresponds to the Company's investment in assets of the concession in the period.

[Table of Contents](#)**Gas bought for resale**

In 2019 the Company reported expense of R\$ 1,436 million on acquisition of gas, 15.99 more than the expense of R\$ 1,238 million in 2018. This is primarily due to the increase of 23.11% in the cost of gas bought from Petrobras.

Post-employment obligations

The Company's post-retirement obligations were 21.07% higher in 2019, than 2018, being R\$408 million and R\$337 million, respectively. This mainly reflects a higher cost for the Health Plan in 2019, due to reduction of the discount rate used in the actuarial valuation made in December 2018.

Share of profit (loss), net, of associates and joint ventures

In 2019, CEMIG reported a gain by the equity method of R\$ 125 million, compared to a loss of R\$ 104 million reported in 2018. This primarily reflects higher losses in 2018 on the investments in Renova and Santo Antônio Energia. See Note 18 to the Financial Statements for details on the results from the investees recognized under this line.

Net finance income (expense)

Net finance income totaled R\$ 1,360 million in 2019, compared to net finance expenses of R\$518 million in 2018. The main factors contributing to this in net finance expenses were:

Revenue of Monetary updating of the PIS/Pasep and Cofins taxes credits over ICMS, adding up to R\$ 1,580 million. CEMIG, Cemig GT and Cemig D filed an Ordinary Action for a declaration that it was unconstitutional to include the ICMS value added tax within the taxable amount for calculation of PIS/Pasep and Cofins; and for recognition of these companies' right to offsetting of amounts unduly paid for the 10 years prior to the action being filed, with monetary adjustment by the Selic rate. For more information see Note 10.

The increase was partially offset by the following:

- Recognition, in 2019, of R\$998 million from the hedge transaction related to the Eurobond Issue, compared to recognition of a gain of R\$ 893 million in 2018. The adjustment of the hedge transaction to fair value resulted in a positive effect, due to a lower variation in the future curve for the DI (Interbank Deposit) rate than in the future curve for the US dollar exchange rate. This gain should be considered together with the expense on foreign exchange variation arising from the Eurobond, as described below;
- lower foreign exchange variation on loans in foreign currency – which in 2019 represented a financial expense of R\$ 226 million, compared a financial expense of R\$ 582 million in 2018. This reduction is due to the lower exchange rate in effect in the period (4.02% in 2019, compared to 17.03% in 2018).

The breakdown of financial income and expenses is in Note 31 to the Financial Statements.

Income Tax and the Social Contribution Tax

In 2019, the Company's expense on income tax and the Social Contribution tax totaled R\$ 1,567 million, on pre-tax profit of R\$ 4,469 million, an effective rate of 35.03%. In 2018, the Company's expense on income tax and the Social Contribution tax totaled R\$ 599 million, on pre-tax profit of R\$ 1,978 million, an effective rate of 30.30%.

[Table of Contents](#)**Operating Results****Year Ended December 31, 2018 compared to the Year Ended December 31, 2017**

From January 1, 2018, we were required to adopt IFRS 9 – Financial Instruments and IFRS 15 – Revenue from contracts with customers. We are not required to retrospectively apply IFRS 9 and IFRS 15 to any periods prior to January 1, 2018. IFRS 9 introduced changes to the measurement and classification of financial instruments, as well as changes to the method for calculating impairment of financial instruments. IFRS 15 established a new method to recognize revenue from contracts with customers by applying a five-step analysis, including contract identification, performance obligation identification, transaction price determination, transaction price allocation and recognition of revenue. Our financial statements as of and for the years ended December 31, 2019 and 2018 reflect the adoption of IFRS 9 and IFRS 15. We used the modified retrospective approach when adopting such standards; thus, we did not restate our financial statements as of and for the year ended December 31, 2017 for the adoption of IFRS 9 and IFRS 15. Accordingly, our financial statements as of and for the years ended December 31, 2019 and 2018 and our financial statements for the comparative periods are not directly comparable when it comes to such standards. For more information regarding the adoption of IFRS 9 and IFRS 15 and its effects on our financial statements, see note 2.6 to our Consolidated Financial Statements included in “Item 18. Financial Statements.”

Net operating revenues

Net operating revenues increased by 2.55% from R\$21,712 million in 2017 to R\$22,266 million in 2018, as follows.

	2018	Net operating revenues	2017	Net operating revenues	2018 vs 2017
	(in millions of R\$)	(%)	(in millions of R\$)	(%)	(%)
Energy sales to final customers	21,882	98.3	20,439	94.1	7.06
Revenue from wholesale supply to other concession holders	2,990	13.4	3,263	15.0	(8.37)
CVA (compensation for changes in ‘Parcel A’ items) and Other financial components	1,973	8.9	988	4.6	99.70
Revenue from use of the electricity distribution systems – TUSD	2,045	9.2	1,611	7.4	26.94
Transmission concession revenue	411	1.8	371	1.7	10.78
Transmission assets - indemnity revenue	250	1.1	373	1.7	(32.98)
Generation assets - indemnity revenue	55	0.2	271	1.3	(79.70)
Adjustment to expectation of cash flow from indemnifiable financial asset of the distribution concession	-	-	9	0.1	-
Revenue on financial updating of the Concession Grant Fee	321	1.4	317	1.5	1.26
Construction revenues	898	4.0	1,118	5.1	(19.68)
Energy transactions on the CCEE	217	1.0	860	4.0	(74.77)
Supply of gas	1,995	9.0	1,759	8.1	13.42
Fine for violation of service continuity indicator	(44)	(0.2)	-	-	-
Other operating revenues	1,585	7.1	1,484	6.8	6.81
Deductions on revenue	(12,312)	(55.3)	(11,151)	(51.4)	10.41
Total net operating revenue	22,266	100.0	21,712	100.0	2.55

[Table of Contents](#)**Energy sales to final customers**

Total revenue from energy sold to final customers, excluding CEMIG's own consumption, in 2018 was R\$ 21,882 million, or 7.06% higher than the figure for 2017 of R\$ 20,439 million.

The main items that affected total revenue from energy sold to final customers were:

- The annual tariff adjustment for CEMIG D effective as from May 28, 2018, with an average *upward* effect of 23.19% on customer tariffs, in comparison an average *downward* effect on customer tariffs of 10.66% effective as from May 28, 2017.
- Higher revenues from the 'Tariff flag' components of customer bills: R\$ 655 million in 2018, compared to R\$ 454 million in 2017. This reflects the low level of reservoirs, activating the 'Yellow Flag' and 'Red Flag' additional tariff rates, leading to higher revenue in 2018.
- Volume of energy sold to final customers 2.51% higher year-on-year.

Market Evolution

The total for sales in CEMIG's consolidated energy market comprises sales to: (i) Captive customers in CEMIG's concession area in the State of Minas Gerais; (ii) Free Customers in both the State of Minas Gerais and other States of Brazil, in the Free Market (*Ambiente de Contratação Livre*, or ACL); (iii) other agents of the energy sector – traders, generators and independent power producers, also in the Free Market; (iv) Distributors, in the Regulated Market (*Ambiente de Contratação Regulada*, or ACR); and (v) the Brazilian Electric Power Trading Chamber (*Câmara de Comercialização de Energia Elétrica* – CCEE) eliminating transactions between companies of the CEMIG Group.

As illustrated in the table below, the total volume of energy sold by CEMIG in 2018 increased by 0.5% as compared to 2017:

	GWh (2)		
	2018	2017	Var %
Residential	10,267	10,008	2.6
Industrial	17,689	17,761	(0.4)
Commercial, Services and Others	8,380	7,507	11.6
Rural	3,615	3,652	(1.0)
Public Power	871	866	0.6
Public Illumination	1,384	1,367	1.2
Public Service	1,316	1,301	1.2
Subtotal	43,522	42,462	2.5
Own Consumption	41	37	10.8
Supply to Other Concessionaires (1)	43,563	42,499	2.5
Total	11,992	12,777	(6.1)
	55,555	55,276	0.5

(1) Includes Regulated Market Energy Sale Contracts (CCEARs) and 'bilateral contracts' with other agents.

(2) Data not audited by external auditors; includes Regulated Market Energy Sale Contracts (CCEARs) and 'bilateral contracts' with other agents.

Residential: Residential consumption in 2018 was 2.6% higher than in 2017. This increase is primarily due to new customer connections made in 2018, in CEMIG D.

Industrial: Total volume of energy consumed by regulated and free industrial customers was 0.4% lower in 2018 than in 2017. This decrease was due primarily to industrial activity not resuming growth at the rate expected for the year.

Commercial, Services and Others: Consumption was 11.6% higher in 2018, mainly due to the incorporation of new customers in CEMIG GT's portfolio.

Rural: Consumption by rural users decreased by 1% in 2018, mainly due to lower use of irrigation systems.

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Supply to Other concessionaires: The energy sale to other concessionaires decreased 6.1% compared to 2017 due to a lower volume of energy available sold in this segment, considering the low level of Brazilian reservoirs in 2018 and the allocation of energy sold to final customers.

Revenue from Use of Distribution Systems (the TUSD charge): This is revenue from charging Free Customers the Tariff for Use of the Distribution System (TUSD) on the volume of energy distributed. In 2018, this revenue was R\$ 2,045 million, compared to R\$ 1,611 million in 2017, an increase of 26.94% year-on-year, mainly reflecting the following:

- upward adjustment of approximately 36% in the TUSD, in CEMIG D's 2018 annual tariff adjustment, effective from May 28, 2018 in comparison to a downward adjustment of approximately 40% in the TUSD, in CEMIG D's 2017 annual tariff adjustment, effective May 28, 2017;
- contracted demand approximately 8.18% higher in 2018; and
- approximately 14.29% more facilities being billed under Contracts for Use of the Distribution System (CUSDs).

The CVA Account and Other financial components, in rate increases: CEMIG recognizes the difference between actual non-controllable costs (in which the CDE, and energy bought for resale, are significant components) and the costs that were used as the basis of decision of the rates charged to customers. The amount of this difference is passed through to customers in CEMIG D's next tariff adjustment – in 2018 this represented an increase in revenue of R\$ 1,973 million, compared to an increase in 2017 of R\$ 988 million. The higher figure in 2018 than 2017 is mainly due to a higher difference in 2018 than 2017 between actual costs of energy and the estimated figures used for future cost of energy in the tariff calculation (this difference generates a financial asset to be reimbursed to the Company through the next tariff adjustment).

Transmission indemnity revenue: In 2018, we recognized transmission indemnity revenue of R\$ 250 million compared to R\$373 million in 2017. In 2017 CEMIG GT recorded R\$ 149 million related to transmission concession assets, which were not included in the calculation basis for revenues in the previous tariff reviews.

Generation indemnity revenue: In 2018 the Company recognized revenue of R\$ 55 million compared to R\$ 271 million in 2017 for the adjustment to the balance not yet amortized of the concessions for the São Simão and Miranda Hydroelectric Plants, as per Ministerial Order 291/17.

Revenue from transactions in energy on the CCEE: Revenue from transactions in energy on the CCEE was R\$ 217 million in 2018, compared to R\$ 860 million in 2017, a decrease of 74.77% year-on-year. This reflects lower volume of energy available for settlement in the wholesale market in 2018 considering the low level of Brazilian reservoirs in 2018 and energy allocated to be sold to other segments. In the first quarter of 2017 the Company reported revenues relating to the available energy of the Jaguará and Miranda plants.

Revenue from supply of gas: CEMIG reported revenue from supply of gas totaling R\$ 1,995 million in 2018, compared to R\$ 1,759 million in 2017, an increase of 13.42%. This mainly reflects the increase in the cost of gas, which was passed through to customers – since there was in fact a reduction of 16.26% in the volume of gas sold (from 1,319,242 m³ in 2017 to 1,104,745 m³ in 2018). The cost of gas suffered a significant effect from FX variation in 2018.

Construction revenues: Distribution infrastructure construction revenues totaled R\$ 898 million in 2018, compared to R\$ 1,118 million in 2017, a reduction of 19.68%. This revenue is fully offset by Construction costs, of the same amount, and corresponds to the Company's investments in assets of the concession in the year.

Other operating revenues: Other operating revenues was R\$ 2,273 million in 2018, up 4.22% from 2017 (R\$ 2,181 million). This increase was primarily due to an increase in revenues related to subsidies and reimbursement for decontracted supply partially compensated by a revenue related to Telecom services of R\$149 million recorded in 2017, considering that the Telecom business was sold in 2018. See more information on Note 34 to the Financial Statements. The breakdown of the other revenues is presented on Note 29 to the Financial Statements.

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Deductions from Revenue: Taxes and charges applied to revenue in 2018 were R\$12,312 million, or 10.41% higher than in 2017 (R\$11,151 million), as follows.

CDE

The amounts of payments to the Energy Development Account (CDE) are decided by an ANEEL Resolution. The purpose of the CDE is to cover costs of concession indemnities, tariff subsidies, the subsidy for balanced tariff reduction, the low-income customer subsidy, the coal consumption subsidy, and the Fuels Consumption Account (CCC). Charges for the CDE in 2018 were R\$ 2,603 million, compared to R\$ 1,822 million in 2017.

This is a non-manageable cost: the difference between the amounts used as a reference for setting of tariffs and the costs actually incurred is compensated for in the subsequent tariff adjustment.

Customer charges – the “Tariff Flag” system

The Tariff Flag bands are activated as a result of low levels of water in the system’s reservoirs – tariffs are temporarily increased due to scarcity of rain. The ‘Red’ band has two levels – Level 1 and Level 2. Level 2 comes into effect when scarcity is more intense. Activation of the tariff flags generates an impact on billing in the subsequent month.

Income from charges to the customer related to the Tariff Flag bands was 44.27% higher in 2018, at R\$ 655 million, compared to R\$ 454 million in 2017.

This reflects greater application of the Red band in 2018 than in 2017, due to (i) lower reservoir levels, and (ii) lower expectations of rain.

Other taxes and charges on revenue

The other significant deductions from revenue are taxes, which are calculated as a percentage of sales revenue. Thus, their variations arise, substantially, from the changes in revenue.

Operating costs and expenses

Operating costs and expenses, in 2018 were R\$19,420 million, an increase of 3.20% as compared to 2017 (R\$18,818 million).

The following table illustrates the components of operating costs and expenses in 2018 and 2017 expressed as a percentage of net operating revenues:

	2018	Net operating revenues	2017	Net operating revenues	2018 vs 2017
	(in millions of R\$)	(%)	(in millions of R\$)	(%)	(%)
Energy bought for resale	(11,084)	(49.8)	(10,919)	(50.3)	1.51
Gas bought for resale	(1,238)	(5.6)	(1,071)	(4.9)	15.59
Charges for use of the national grid	(1,480)	(6.6)	(1,174)	(5.4)	25.98
Depreciation and amortization	(835)	(3.8)	(850)	(3.9)	(1.76)
Personnel	(1,410)	(6.3)	(1,627)	(7.5)	(13.34)
Employees’ and managers’ profit sharing	(77)	(0.3)	(5)	-	1,440.00
Outsourced services	(1,087)	(4.9)	(974)	(4.5)	11.60
Post-employment benefits	(337)	(1.5)	229	1.1	-
Materials	(104)	(0.5)	(71)	(0.3)	46.48
Operating provisions and adjustments for operating losses	(466)	(2.1)	(854)	(3.9)	(45.43)
Construction costs	(897)	(4.0)	(1,119)	(5.2)	(19.84)
Other operating expenses, net	(405)	(1.8)	(383)	(1.8)	5.74
Total operating costs and expenses	(19,420)	(87.2)	(18,818)	(86.6)	3.20

[Table of Contents](#)***The following are the main variations in operating costs and expenses between 2018 and 2017:******Personnel***

Personnel expenses were R\$ 1,410 million in 2018, compared to R\$1,627 million in 2017, a decrease of 13.34%. The decrease was mainly due to a 69.16% decrease in expenses related to our voluntary retirement plan from R\$214 million in 2017 to R\$66 million in 2018. This decrease was partially offset by the following:

- Salary increase of 1.83% under the Collective Work Agreement, which came into effect in November 2017 (full effect in 2018);
- Salary increase of 4.00% under the Collective Work Agreement, which came into effect in November 2018.

Energy purchased for resale

Expenses due to energy purchased for resale in 2018 were R\$11,084 million, compared to R\$10,919 million in 2017, representing an increase of 1.51%. The main factors contributing to such increase were:

- The cost of purchases of supply in the spot market was 21.36% higher at R\$1,818 million in 2018, compared to R\$1,498 million in 2017, reflecting CEMIG D's higher exposure to the wholesale market in 2018;
- Expenses on supply acquired through physical guarantee quota contracts were 47.29% higher, at R\$679 million in 2018, compared to R\$461 million in 2017. This mainly reflects CEMIG D's average quota tariff being 52.98% higher in 2018, at R\$ 92.51/MWh, compared to R\$ 60.47/MWh in 2017;
- Expenses on energy acquired in regulated market auctions decreased by 5.88%, totalling R\$3,346 million in 2018, as compared to R\$3,555 million in 2017, mainly due to low level of the water reservoirs of the hydroelectric plants in the system, the number of thermoelectric plants dispatched was larger in 2017 – with a consequent higher expense on fuel for these plants;
- Expenses on supply acquired in the free market and 'bilateral contracts' were 6.71% lower, at R\$ 4.355 billion in 2018, compared to R\$ 4.668 billion in 2017. This mainly reflects CEMIG GT's expenses being 10.13% lower (R\$ 4.055 billion in 2018, compared to R\$ 4.512 billion in 2017) due to the volume of energy acquired being 8.99% lower (22,742,263 MWh in 2017, compared to 20,697,022 MWh in 2018).

This is a non-manageable cost: the difference between the amounts used as a reference for calculation of tariffs and the costs actually incurred is compensated for in the subsequent tariff adjustment. For further details see Note 30 to the Financial Statements.

Charges for use of the national grid

Charges for use of the national grid totaled R\$ 1,480 million in 2018, 26.06% higher than in 2017 (R\$ 1,174 million).

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This expense is payable by energy distribution and generation agents for use of the facilities that are components of the national grid. The amounts to be paid are set by an ANEEL Resolution. The higher amounts in 2018 are due to increased transmission costs related to the payment of the transmission indemnities to the agents of the energy sector that accepted the terms of Law 12,783/13.

This is a non-manageable cost in the energy distribution business: the difference between the amounts used as a reference for calculation of tariffs and the costs actually incurred is compensated for in the subsequent tariff adjustment.

Operating provisions

Operating provisions in 2018 totaled R\$ 466 million, compared to R\$ 854 million in 2017, an decrease of 45.43%.

The decrease was mainly due to:

- The lower provisions for employment-law contingencies, which were R\$ 42 million in 2018, compared to R\$ 206 million in 2017. The significant amount provisioned in 2017 mainly reflects re-evaluations of potential losses in various legal actions as a result of change in the procedural phase of provisional execution, and its effect on actions disputing: the basis for calculation of hazardous work remuneration; claims for equal payment for allegedly unlawful outsourcing; and subsidiary/joint liability. In 2018, a new case law of the Federal Supreme Court (STF) on the lawfulness of outsourcing of any activities, whether for means or for end-use, led to re-evaluation of the potential loss on several actions on this subject, with consequent reduction of the amounts previously provisioned. For further information see Note 27 to the Financial Statements.
- Reduction of R\$ 155 million in the fair value of the investment options in RME, Lepsa and SAAG in 2018. This was 55.46% less than in 2017 (reduction of R\$ 348 million). See more details related to the put options on Note 30 and 33 to the Financial Statements.
- On the other hand, estimated losses on doubtful receivables were 6.45% higher, at R\$ 264 million in 2018, compared to R\$ 248 million in 2017. Rather than representing an increase in default as a percentage of billing, this difference reflects an increase in the basis for calculation of the provision, partly due to the higher total billing in 2018 resulting from the May 2018 tariff adjustment for CEMIG D.

Construction cost

Construction costs in 2018 totaled R\$897 million, or 19.84% less than in 2017 (R\$ 1,119 million). This cost is fully offset by Construction revenue, of the same amount, and corresponds to the Company's investment in assets of the concession in the period.

Gas bought for resale

In 2018 the Company reported expense of R\$ 1,238 million on acquisition of gas, 15.59% more than the expense of R\$ 1,071 million in 2017. This is primarily due to the increase in the price of gas and was partially offset by a reduction of 16.20% in the volume of gas purchased (from 1,309,459 m³ in 2017 to 1,097,275 m³ in 2018). The price of gas suffered a significant effect from exchange rate variation in 2018.

Post-employment obligations

The impact of the post-employment obligations of the Company on operational profit was an expense totaling R\$ 337 million in 2018, compared to a reversal of expense of R\$ 229 million in 2017.

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This is due to changes made in the life insurance policy in 2017, which resulted in the insured capital for retirees being reduced by 20% every 5 years, as from age 60, reaching a minimum of 20%. This represented a reduction of R\$ 619 million in the post-employment obligations for the year ended December 31, 2017.

Other operating revenues and expenses recognized as discontinued operations

A highlight component was the completion, in November 2018, of the process of disposal of the assets of CEMIG Telecom, which resulted in a gain of R\$ 378 million in 2018. More details are in Note 34 to the financial statements.

Share of (loss) profit, net, of associates and joint ventures

In 2018, CEMIG reported a loss by the equity method of R\$ 104 million, a 58.73% decrease compared to a loss of R\$252 million reported in 2017. This basically reflects losses in 2018 and 2017 on the interests in Renova and Santo Antônio Energia.

See Note 18 to the Financial Statements for details on the results from the investees recognized under this line.

Remeasurement of previously held equity interest in subsidiaries acquired

Due to the exercise of the put option on the RME's shares, by the other shareholders of RME, the Shareholders' Agreement related to the jointly control of the investee Light lost effect, and the Company directly and indirectly holds an aggregated 49.99% of Light's voting shares. As a result the Company currently controls Light, in accordance with the provisions of IFRS 10 – Consolidated financial statements.

In addition, upon obtaining control of Light, the investments Lightger, Axxiom, Guanhães Energia and Itaocara in which the Company exercised joint control with Light, became controlled subsidiaries of the Company.

As specified in IFRS 3 – Business combinations, the Company remeasured the interest previously held in the investments at fair value, and a loss related to the difference between the fair value and the carrying value of the previously held interest in the amount of R\$199 million was recognized in the statement of income for the year.

On December 20, 2018, the Company acquired 51% equity interest held by Energimp in Parajuru and Volta do Rio, which became wholly-owned subsidiaries, in exchange for its 49% interest in Morgado.

Prior to the transaction above, the Company owned a joint controlled interest of 49% in the share capital of Parajuru and Volta do Rio. As such these investment were accounted for under the equity method.

Upon obtaining control, the Company remeasured the previously held interest in these investments at fair value, and gain related to the difference between the fair value and the carrying value in the amount of R\$80 million was recognized in the statement of income for the year.

Net Finance Expenses

Net finance expenses totaled R\$518 million in 2018, compared to net finance expenses of R\$996 million in 2017. The main factors contributing to this decrease in net finance expenses were:

- Recognition, in 2018, of a gain of R\$ 893 million from the hedge transaction related to the Eurobond Issue, compared to recognition of a loss of R\$ 32 million in 2017. The adjustment of the hedge transaction to fair value resulted in a positive effect, due to a lower variation in the future curve for the DI (Interbank Deposit) rate than in the future curve for the US dollar exchange rate. This gain should be considered together with the expense on foreign exchange variation arising from the Eurobond, as described below.

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- Recognition in 2018 of R\$ 56 million in income from charges related to lending to related parties. There is more information in Note 32 to the financial statements.
- Costs and charges on loans and financing were 14.26% lower, at R\$ 1.257 billion in 2018, compared to R\$ 1.466 billion in 2017. This reflects the lower CDI rate (principal index of the debt) – which totaled a variation of 6.40% over the whole of 2018, compared to 9.93% in 2017.
- Income from late charges on energy bills 34.87% higher in 2018, at R\$ 352 million, compared to R\$ 261 million in 2017. This mainly reflects the effects of renegotiation of past due bills with customers, with recognition of interest and monetary updating.
- Higher net result of monetary updating on the balances of CVA and Other financial components in tariff increases: net revenue of R\$ 62 million in 2018, compared to a net expense of R\$ 41 million in 2017, primarily reflecting the higher balance of net assets in 2018 than in 2017.

The decrease was partially offset by the following:

- Income from financial investments 43.41% lower, at R\$ 116 million in 2018, compared to R\$ 205 million in 2017. This primarily reflects a lower total of funds invested in 2018, and a lower average CDI Rate: 6.40% in 2018 compared to 9.93% in 2017;
- Monetary updating on escrow deposits 82.20% lower, at R\$ 34 million in 2018, vs. R\$ 191 million in 2017. In 2017 CEMIG GT posted a gain of R\$ 82 million, for reversal of the provision for the lawsuit challenging the constitutionality of inclusion of ICMS tax (payable or already paid) within the amount of revenue on which two other taxes – the Pasesp and Cofins taxes – were charged (more details in Note 14 to our Financial Statements);
- Expense on monetary updating of loans and financing 22.94% higher, at R\$ 134 million in 2018, vs. R\$ 109 million in 2017. This mainly reflects the higher IPCA index – one of the principal index of the debt – in the year: 3.75% in 2018 compared to 2.95% in 2017;
- There was a foreign exchange variation expense of R\$ 579 million in 2018, relating to the dollar-indexed funding of the Eurobond issue (placed in two parts: US\$1 billion (R\$ 3.2 billion) in December 2017 and US\$500 million (R\$ 1.9 billion) in July 2018).

The breakdown of financial income and expenses is in Note 31 to the Financial Statements.

Income Tax and the Social Contribution Tax

In 2018, the Company's expense on income tax and the Social Contribution tax totaled R\$ 728 million, on pre-tax profit of R\$ 2.304 billion, an effective rate of 31.60%. In 2017, the Company's expense on income tax and the Social Contribution tax totaled R\$ 644 million, on pre-tax profit of R\$ 1.646 billion, an effective rate of 39.13%.

There is a reconciliation of these effective rates with the nominal tax rates in Note 11(d) to the financial statements.

Liquidity and Capital Resources

Our business is capital-intensive. Historically, we have had a need for capital to finance the construction of new generation facilities and expansion and modernization of the existing generation, transmission and distribution facilities.

Our liquidity requirements are also affected by our dividend policy. We finance our liquidity and capital needs principally with cash generated by operations and, on a lesser scale, with funds from financing.

[Table of Contents](#)**Cash and Cash Equivalents**

Cash and cash equivalents on December 31, 2019 totaled R\$ 536 million, compared to R\$ 891 million on December 31, 2018 and R\$1,030 million on December 31, 2017. No cash nor cash equivalents were held in any other currency than the Real. The main components of this variation:

Net Cash flows from operating activities

The totals of Net cash generated by operating activities in 2019 and 2018 were, respectively, R\$ 2,036 million and R\$ 1,008 million. The higher net cash from operations in 2019 was mainly due to the Company's higher profitability, and the ratio between non-manageable costs and the tariff receipts for Cemig D, expressed in the change in the "CVA" account ("Parcel A" items variation compensation) and the item "Other financial components".

The totals of net cash generated by operating activities in 2018 and 2017 were, respectively, R\$1,008 million and R\$580 million. The higher cash generated in 2018 compared to 2017 mainly reflects the reimbursement received for the São Simão and Miranda hydroelectric plants, and the Company's increased in profitability.

Net Cash flow used in investing activities

The Company used net cash of R\$1,188 million in investing activities in 2019, compared to net cash used of R\$211 million in 2018. This figure results from: payment by Gasmig of the concession grant fee, of R\$ 891 million, with the objective of re-establishing the economic-financial equilibrium of the concession contract, and its extension up to 2053. This amount was added to the Remuneration Base of Assets (BRR) of Gasmig, as an intangible asset, to be amortized over the period up to the end of the concession contract.

The Company used net cash of R\$ 211 million in investing activities in 2018, compared to net cash used in investing activities of R\$ 386 million in 2017. The decrease reflects the high volume of the Company's investments in the distribution system and capital contribution on investees in the period, net of the amounts received from sale of assets – which totaled R\$ 655 million in 2018, and R\$ 766 million in 2017.

Net Cash flow used in financing activities

Cash used in financing activities in 2019 totaled R\$ 1,203 million, comprising: R\$4,883 million in amortization of financings, R\$4,477 million in new funding received; R\$96 million in leasing payments; and R\$701 million in dividends and Interest on Equity paid to shareholders.

In 2018, cash used in financing activities totaled R\$ 936 million, comprising R\$509 million related to dividends and interest on capital paid, amortization of financing totaling R\$ 3,527 million partially offset by new financing of R\$ 2,990 million and subscription of capital by shareholders in the amount of R\$110 million.

In 2017, financing activities resulted in a net outflow of R\$159 million primarily related to the payment of loans, financing and debentures in the amount of R\$4,131 million, R\$11 million related to borrowing costs and R\$540 million related to dividends and interest on capital paid, which were partially offset by an inflow from loans, financing and debentures of R\$3,308 million and subscription of capital by shareholders to be capitalized in the amount of R\$1,215 million.

Indebtedness

Our indebtedness from loans, financing and debentures (current and non-current) as of December 31, 2019 was R\$ 14,777 million, which was comprised of R\$ 2,747 million of current debt and R\$ 12,030 million of non-current debt. Of our debt as of December 31, 2019, R\$ 6,061 million was denominated in foreign currencies of which was U.S. dollar-denominated and R\$ 8,716 million denominated in *reais*.

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Our indebtedness from loans, financing and debentures (current and non-current) as of December 31, 2018 was R\$ 14,772 million, which was comprised of R\$ 2,198 million of current debt and R\$ 12,574 million of non-current debt. Of our debt as of December 31, 2018, R\$ 5,827 million was denominated in foreign currencies (R\$ 5,826 million of which was U.S. dollar-denominated and R\$ 0.2 million of which was Euro-denominated) and R\$ 8,945 million denominated in *reais*.

Our main financing contracts, on a consolidated basis, as of December 31, 2019, are shown in the following table (in millions of *Reais*):

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Financing source	Principal maturity	Annual financial cost %	Currency	2019			2018
				Current	Non-current	Total	Total
FOREIGN CURRENCY							
Banco do Brasil: Various Bonds (1) (4)	2024	Diverse	US\$	2	16	18	26
Eurobonds (2)	2024	9.25%	US\$	46	6,046	6,092	5,856
(-)Transaction costs				-	(19)	(19)	(21)
(±) Interest paid in advance (3)				-	(30)	(30)	(34)
Debt in foreign currency				48	6,013	6,061	5,827
BRAZILIAN CURRENCY							
Banco do Brasil S.A.(4) (11)	2022	146.50% of CDI	R\$	-	-	-	503
Caixa Econômica Federal (4) (11)	2022	146.50% of CDI	R\$	-	-	-	627
Caixa Econômica Federal (5)	2021	TJLP + 2.50%	R\$	61	-	61	56
Caixa Econômica Federal (6)	2022	TJLP + 2.50%	R\$	118	-	118	108
Eletrobrás (4)	2023	UFIR + 6.00% at 8.00%	R\$	11	9	20	33
Large customers (4)	2024	IGP-DI + 6.00%	R\$	3	2	5	5
Sonda (7)	2021	110.00% of CDI	R\$	-	49	49	46
Promissory Notes – 9th Issue - Single series (4) (11)	2019	151.00% of CDI	R\$	-	-	-	426
Promissory Notes – 1st Issue - Single series (8)	2020	107.00% of CDI	R\$	875	-	875	-
(-) FIC Pampulha - Marketable securities of subsidiary companies (9)				(3)	-	(3)	(25)
(-)Transaction costs				-	-	-	(13)
Debt in Brazilian currency				1,065	60	1,125	1,766
Total of loans and financings				1,113	6,073	7,186	7,593
Debentures - 3th Issue – 2nd Series (2)	2019	IPCA + 6.00%	R\$	-	-	-	156
Debentures - 3th Issue – 3rd Series (2)	2022	IPCA + 6.20%	R\$	396	692	1,088	1,049
Debentures - 6th Issue – 2nd Series (2)	2020	IPCA + 8.07%	R\$	17	-	17	33
Debentures - 7th Issue – Single series (2) (12)	2021	140.00% of CDI	R\$	289	289	578	1,023
Debentures - 3th Issue – 2nd Series (4)	2021	IPCA + 4.70%	R\$	568	541	1,109	1,596
Debentures - 3th Issue – 3rd Series (4)	2025	IPCA + 5.10%	R\$	42	949	991	957
Debentures - 5th Issue - Single Series (4) (11)	2022	146.50% of CDI	R\$	-	-	-	1,580
Debentures - 6th Issue - Single Series (4) (11)	2020	CDI + 1.75%	R\$	-	-	-	551
Debentures - 7th Issue – 1st Series (4)	2024	CDI + 0.45%	R\$	275	1,890	2,165	-
Debentures - 7th Issue – 2nd Series (4)	2026	IPCA + 4.10%	R\$	3	1,517	1,520	-
Debentures – 4th Issue – 1st Series (8)	2022	TJLP+1.82%	R\$	12	19	31	125
Debentures – 4th Issue – 2nd Series (8)	2022	Selic + 1,82%	R\$	5	9	14	-
Debentures – 4th Issue – 3th Series (8)	2022	TJLP + 1,82%	R\$	12	22	34	-
Debentures – 4th Issue – 4th Series (8)	2022	Selic + 1,82%	R\$	5	10	15	-
Debentures – 6th Issue – Single series (8)	2019	116.50% of CDI	R\$	-	-	-	50
Debentures – 7th Issue – Single series (8)	2023	CDI + 1.50%	R\$	20	60	80	100
(-) Discount on the issuance of debentures (10)				-	(22)	(22)	-
(-) Transaction costs				(10)	(19)	(29)	(41)
Total, debentures				1,634	5,957	7,591	7,179
Total				2,747	12,030	14,777	14,772

- (1) Net balance of the Restructured Debt comprising bonds at par and discounted, with balance of R\$ 181,716, less the amounts given as Deposits in guarantee, with balance of R\$ 163,666. Interest rates vary – from 2 to 8% p.a.; six- month Libor plus spread of 0.81% to 0.88% p.a.;
- (2) CEMIG Geração e Transmissão;
- (3) Advance of funds to achieve the yield to maturity agreed in the Eurobonds contract;
- (4) CEMIG Distribuição;
- (5) In Central Eólica Praias de Parajuru, resulting from the transactions to eliminate cross-shareholdings between CEMIG GT and Energimp. For more details please see Note 18 to the financial statements;

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- (6) *Central Eólica Volta do Rio* – result of elimination of cross-shareholdings between CEMIG GT and Energimp. For more details please see Note 18 to the financial statements;
- (7) CEMIG Company. Arising from merger of CEMIG Telecom;
- (8) Gasmig;
- (9) FIC Pampulha has financial investments in securities issued by subsidiary companies of the Company. For more information and characteristics of this fund, see Note 32 to the financial statements;
- (10) Discount on sale price of the 2nd series of the 7th Issue by Cemig Distribution (Cemig D);
- (11) The funds incorporated into the cash position of Cemig D as a result of the distribution of its 7th Issue of non-convertible debentures, on July 22, 2019, enabled full prepayment of the debtor balances of: the 9th Issue of Promissory Notes, with final maturity in October 2019; the 6th Issue of non-convertible debentures, with final maturity in June 2020; the 5th Issue of non-convertible debentures, with final maturity in June 2022; and Bank Credit Notes with final maturities in June 2022. These prepayments, made on July 24, 2019, totaled R\$ 3.644 billion in principal, interest and charges. These initiatives have balanced the cash flow and improved the Company's credit quality. In the new debt profile, the changes consisted of extinction of existing contracts and signature of new contracts. The accounting effects of the transactions are reflected in accordance with Accounting Pronouncement CPC 48 (Financial instruments);
- (12) On July 24, 2019, Cemig GT effected extraordinary amortization of its 7th issue of non-convertible debentures, in the amount of R\$ 125 million, which had final maturity in December 2021.

The following financing contracts were entered into during the year ended December 31, 2019 (in millions of Reais):

Financing source 2019	Date	Principal maturity	Annual financial cost %	Amount
BRAZILIAN CURRENCY				
Debentures – 7th Issue – 1st Series (1)	July, 2019	2024	CDI + 0.454%	2,160
Debentures – 7th Issue – 2nd Series (1)	July, 2019	2026	4.10% of IPCA	1,500
Promissory Notes – 1st Issue (2)	September, 2019	2020	107.00% of CDI	850
(-)Transactions costs				(10)
(-)Discount on the issuance of debentures (3)				(23)
Total raised				4,477

- (1) Cemig Distribuição
- (2) Gasmig
- (3) Discount on the sale price of the 2nd series of the debentures issued by Cemig Distribuição.

On July 22, 2019, the Company completed the distribution of its 7th issue of simple debentures, non-convertible secured debentures, in the amount of R\$3,685 million, in two series. The 1st series, with a term of 5 years, for R\$ 2,160 million and paying interest of CDI + 0.45%. The 2nd series, with a 7 year term, in the amount of R\$ 1,500 million and paying monetary restatement by the IPCA plus interest of 4.10%, making an average equivalent cost estimated at 108.61% of CDI.

The Company used the proceeds to prepay the outstanding balance of the 9th issue of promissory notes, with final maturity in October 2019, of the 6th issue of simple debentures, with final maturity in June 2020, of the 5th issue of simple debentures, with final maturity in June 2022, and Bank Credit Notes, with final maturities in June 2022, totaling R\$ 3,644 million in principal, interest and charges.

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The following financing contracts were entered into during the year ended December 31, 2018 (in millions of Reais):

Financing source 2018	Date	Principal maturity	Annual financial cost %	Amount
FOREIGN CURRENCY				
Eurobonds (1)	July, 2018	2024	9.25%	1,946
(-) Transactions costs				(8)
(±)Interest paid in advance (2)				10
				1,948
BRAZILIAN CURRENCY				
Promissory Notes – 9th Issue - Single Series (3)	May, 2018	2019	151% of CDI	400
(-)Transactions costs				(4)
Debentures				
Debentures (4)	August, 2018	2023	CDI + 1.50%	100
Debentures – 6th Issue – Single Series (5)	December, 2018	2020	CDI + 1.75%	550
(-)Transactions costs				(4)
				1,042
Total raised				2,990

- (1) In July 2018, Cemig GT completed financial settlement of an additional tranche to its initial Eurobond issue completed on December 5, 2017. The new tranche, of US\$ 500 million, which brought the total of the issuance to R\$ 1.946 billion, has a semi-annual coupon of 9.25% p.a., with maturity of the principal in 2024;
- (2) Advance of funds to achieve the yield to maturity agreed in the Eurobonds contract;
- (3) In May 2018 Cemig D made its 9th Promissory Note issue, with maturity at 18 months, annual remuneration of 151% of the CDI rate, and single bullet amortization on October 24, 2019;
- (4) In August 2018 Gasmig completed its 7th debenture issue, with maturity at 5 years, paying CDI + 1.50%, with annual amortization from August 2019;
- (5) In December 2018 the 6th Debenture Issue was placed, with maturity at 18 months, annual remuneration of CDI +1.75%, and monthly amortization in 12 payments from July 3, 2019;

Issuance of Commercial Promissory Notes

In May 2018, CEMIG D issued Commercial Promissory Notes for R\$400 million, due on October 24, 2019. The promissory notes bear interest at 151% of the CDI Rate, which will be paid on the maturity date. The proceeds will be used to recompose CEMIG D's cash, due to the payment of the 3rd issuance of debentures, and to enhance working capital. The issuance is guaranteed by CEMIG and benefits from collateral composed of a fiduciary assignment (*alienação fiduciária*) of shares issued by Gasmig. The Commercial Promissory Notes have restrictive financial covenants, requiring the maintenance of a Net Debt/EBITDA ratio less than or equal to: (A) for CEMIG: (i) 4.5x for June 2018; (ii) 4.25x for the fiscal year 2018; and (iii) 4.25x for June 2019; and (B) for CEMIG D (i) 7.5x for June 2018; (ii) 4.5x for the fiscal year 2018; and (iii) 3.8x for June 2019.

On December 19, 2018, CEMIG D completed the public offering of the 6th issuance of simple non-convertible secured debentures, in a single series, under which 550,000 debentures, with par value unit of R\$1,000, at the issue date of December 3, 2018, in a total amount of R\$550 million that shall be paid in 12 monthly installments, maturing on June 3, 2020. The net proceeds from the issuance were used for replenishment of the CEMIG D's cash position due to expenses related to purchase energy and for the payment of debts maturing in February 2019. The debentures pay interests of CDI plus 1.75% per year. The interest will be paid monthly, with the first installment due on January 3, 2019 and the last installment on the maturity date. The debentures are guaranteed by (i) CEMIG's Guaranty; (ii) fiduciary assignment (*alienação fiduciária*) of 33.37% common shares issued by Gasmig. The indenture also has restrictive financial covenants, requiring the maintenance of minimum capitalization rate as expressed by Net Debt/EBITDA plus dividends received that shall be equal or below (A) for CEMIG D: (i) 4.50x for the fiscal year of 2018; (ii) 3.80x for June 2019; (iii) 3.80x for the fiscal year of 2019; inclusive. and (B) for CEMIG (i) 4.25x for the fiscal year of 2018; (ii) 4.25x for June 2019; (iii) 3.50x for the fiscal year of 2019; inclusive.

[Table of Contents](#)**CEMIG GT's repap of Eurobonds**

On July 18, 2018, CEMIG GT issued an additional US\$500 million of its Eurobonds. The proceeds were used to repay debt. As with the original issuance of Eurobonds by CEMIG GT in December 2017, the issuance was hedged by a coupon swap and a call spread on the principal, in order to protect the company against foreign exchange volatility.

The following financing contracts were entered into during the year ended December 31, 2017 (in millions of Reais):

Financing source 2017	Date	Principal maturity	Annual financing cost – %	Amount (*)
Foreign currency				
Eurobonds	12/05/2017	2024	9.25%	3,252
(–) Transaction costs (*)				(16)
Interest paid in advance (*)				(48)
Brazilian currency				
Debentures (1)	11/04/2013	2022	CDI + 0.74%	34
Debentures (2)	04/22/2017	2019	128.50% of CDI	26
Debentures – 5th Issue, single series (3)	12/14/2017	2022	146.50% of CDI	1,575
(–) Transaction costs (3)				(11)
Total raised				4,812

(*) Includes taxes without cash effect, of R\$ 10 million;

(1) Subscription by BNDESPar of Gasmig's 4th debentures Issue, in June 2017, to support the plan for investment in expansion of the gas distribution network;

(2) Cemig Telecom (merged into Company in 2018) completed its second issue of non-convertible debentures in May 2017 with real guarantees and additional surety, in a single series, to roll over debt and strengthen cash position;

(3) On December 14, 2017 CemigTelecom made its 5th issue of non-convertible debentures, with maturity 4.5 years, annual remuneration of 146.50% of the CDI, to be amortized in 36 monthly installments due as from July 2019. Payment for subscription of the Debentures of the 5th issue was made with debentures of the 4th issue – thus there was no cash effect.

CEMIG's Bank Debt Refinancing

In 2017, CEMIG entered into negotiations with its main creditors in connection with the Bank Debt Refinancing, representing up to R\$3.4 billion of debt, in order to refinance short- and medium-term indebtedness of CEMIG GT and CEMIG D and to balance CEMIG's short- and medium-term cash flows. The reprofiling involved extending the amortization schedules of existing debt maturities, ranging from 2017 through 2020, into facilities with a principal amortization grace period in 2018 and final maturities in 2022.

In December 2017, CEMIG D concluded the reprofiling by means of a local notes issuance in the amount of R\$1,575 million and amendments to debt agreements entered into with Banco do Brasil (R\$500 million) and Caixa Econômica Federal – CEF (R\$625 million). As to CEMIG GT, there were amendments to debt agreements entered into with Banco do Brasil (R\$741 million). In the aggregate, the bank debt reprofiling reached approximately R\$3.4 billion. The new debt of CEMIG D will pay interest of 146.5% of CDI (local interest rate), whereas the new debt of CEMIG GT will pay interest of 140% of CDI. The amortization of principal began in January 2019, with 36 equal monthly payments for CEMIG GT, and the amortization of principal began in July 2019, with 36 monthly payments corresponding to an annual distribution of 6.75% in 2019, 13.50% in 2020, 27% in 2021, 11.25% and a balloon of 41.50% in 2022, for CEMIG D.

The Bank Debt Refinancing did not involve a principal reduction and the new facilities are senior secured indebtedness. The collateral for CEMIG GT's Bank Debt Refinancing is comprised of a cash sweep on CEMIG GT's asset sales (35% of every asset sale), a pledge on dividends earned from some of CEMIG and CEMIG GT's subsidiaries (TAESA, Aliança, CEMIG Geração Carmagos S.A., CEMIG Geração Itutinga S.A., CEMIG Geração Leste S.A., CEMIG Geração Oeste S.A., CEMIG Geração Salto Grande S.A., CEMIG Geração Sul S.A. and CEMIG Geração Três Marias S.A.), a fiduciary assignment (alienação fiduciária) of 34.34% of the preferred shares issued by Gasmig, a pledge on receivables (R\$125 million per month for the life of the new debt facility) and an escrow account equal to the amount of the next three payments due. The collateral for CEMIG D's Bank Debt Refinancing, shared among the local debentures, Caixa Econômica Federal – CEF and Banco do Brasil, is comprised of: (i) a cash sweep on CEMIG's asset sales (35% of every asset sale) and (ii) a pledge on certain receivables (R\$400 million per month for the life of the new debt facility with respect to the local debentures and a debt agreement entered into with Caixa Econômica Federal – CEF, and other receivables with respect to the debt agreements entered into with Caixa Econômica Federal – CEF and Banco do Brasil). In addition, the collateral for the debt agreements entered into with Banco do Brasil also includes a pledge of receivables (duplicate invoice). There is also a corporate guarantee by CEMIG of both CEMIG D and CEMIG GT's Bank Debt Refinancing.

[Table of Contents](#)**CEMIG GT's issuance of Eurobonds**

In the same context of lengthening the amortization schedule, CEMIG GT issued the *Eurobonds* in December 2017. The issuance was priced in December with a 9.25% coupon and 9.5% yield and the proceeds were used to repay existing short-term debt. The bonds will pay interests semiannually and the principal will fall due in December 2024, with an option for prepayment, without premium after 6 years from issue. The issuance was hedged by a coupon swap and a call spread on the principal, in order to protect the company against foreign exchange volatility.

The *Eurobonds* contain certain restrictive covenants which, among other things, limit CEMIG GT's ability to (i) incur additional debt; (ii) make certain dividend payments, redeem capital stock and make certain investments; (iii) transfer and sell assets; (iv) enter into any agreements that would limit the ability of subsidiaries to pay dividends or make distributions; (v) create liens on assets; (vi) effect a consolidation, merger or sale of assets; and (vii) enter into transactions with affiliates. The *Eurobonds* also contain certain financial maintenance covenants applicable to CEMIG and CEMIG GT. The indenture governing the *Eurobonds* contains customary events of default. CEMIG GT has the right, at its option, to redeem any of the *Eurobonds*, in whole or in part, at any time on or after December 5, 2023, at the redemption prices set forth in the indenture governing the *Eurobonds*. Prior to December 5, 2023, CEMIG GT has the right, at its option, to redeem the *Eurobonds*, in whole but not in part, at a redemption price equal to the greater of (i) 100% of the principal amount of such *Eurobonds* and (ii) the sum of the present value at such redemption date of (a) the redemption price of the *Eurobonds* on December 5, 2023 plus (b) all required interest payments on the *Eurobonds* through December 5, 2023 (excluding accrued but unpaid interest to the date of redemption), discounted to the redemption date on a semi-annual basis (assuming a 360-day year consisting of twelve 30-day months) at the Treasury Rate plus 50 basis points, plus in each case any accrued interest on the principal amount of the *Eurobonds* to, but excluding, the date of redemption.

CEMIG Financing Guarantees

CEMIG has provided total financing guarantees for R\$ 14,777 million on loans, financing and debentures, on December 31, 2019, were as follows:

	2019 (In millions)
Promissory notes and Sureties	9,247
Guarantee and Receivables	3,652
Receivables	310
Shares	609
Unsecured	959
TOTAL	14,777

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CEMIG has provided total financing guarantees for R\$ 4,607 million on loans, financing and debentures of the following related parties – not consolidated in the financial statements because they relate to jointly-controlled entities or affiliated companies, as described below.

Related party	Relationship	Type	Objective	2019	Maturity
Norte Energia (NESA)	Affiliated	Surety	Financing	2,555	2042
Light (1)	Affiliated	Counter-guarantee	Financing	684	2042
Santo Antônio Energia (SAESA) (2)	Affiliated	Guarantee	Financing	939	2034
Santo Antônio Energia (SAESA) (2)	Affiliated	Surety	Debentures	424	2037
Centroeste	Jointly-controlled entity	Surety	Financing	5	2023
				4,607	

- (1) Related to execution of guarantees of the Norte Energia financing.
(2) Corporate guarantee given by CEMIG to Saesa.

Restricted Covenant Clauses

The Company has contracts with covenants linked to financial ratios, as follows:

Title - Security	Covenant	Ratio required – Issuer	Ratio required CEMIG (guarantor)	Ratio required – Parajuru and Volta do Rio	Compliance required
7th Debentures Issue CEMIG GT (1)	Net debt	The following or less: 4.5 in 2019	The following or less: 3.5 in 2019	-	Semi-annual and annual
	/	3.0 in 2020	3.0 in 2020	-	
	(Ebitda + Dividends received)	2.5 in 2021	2.5 in 2021	-	
Eurobonds CEMIG GT (2)	Net debt	The following or less: 4.5 on Dec. 31, 2019	The following or less: 3.5 on Dec. 31, 2019	-	Semi-annual and annual
	/	4.5 on June 30, 2020	3.5 on June 30, 2020	-	
	Ebitda adjusted for the Covenant	3.0 on Dec. 31, 2020 3.0 on June 30, 2021 2.5 on/after Dec. 31, 2021	3.0 on Dec. 31, 2020 3.0 on June 30, 2021 3.0 on/after Dec. 31, 2021	-	
7th Debentures Issue CEMIG D	Net debt	The following or less: 3.8 on Dec. 31, 2019	The following or less: 3.5 on December, 31, 2019	-	Semi-annual and annual
	/	3.5 on June 30, 2020	3.5 on June 30, 2020	-	
Debentures GASMIG (3)	Ebitda adjusted	3.5 on June 30, 2020	3.0 on December, 31, 2020	-	
	Overall indebtedness (Total liabilities/ Total assets)	Less than 0.6	-	-	Annual
	Ebitda / Debt servicing	1.3 or more	-	-	Annual
	Ebitda / Net finance income (expenses)	2.5 or more	-	-	Annual
	Net debt / Ebitda	The following or less: 4.0 on Dec. 31, 2019 2.5 on/after Dec.31,2020	-	-	Annual
	Debt servicing coverage index	-	-	1.20 or more	Annual (during amortization)
Financing Caixa Econômica Federal (CEF) Parajuru and Volta do Rio (4)	Equity / Total liabilities	-	-	20.61% or more (Parajuru) 20.63% or more (Volta do Rio)	Always
	Share capital subscribed in investee / Total investments made in the project financed	-	-	20.61% or more (Parajuru) 20.63% or more (Volta do Rio)	Always

- (1) 7th Issue of Debentures by CEMIG GT, as of December 31, 2016, of R\$ 2,240.

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- (2) In the event of a possible breach of the financial covenants, interest will automatically be increased by 2% p.a. during the period in which they remain exceeded. There is also an obligation to comply with a 'maintenance' covenants – that the consolidated debt, shall have a guarantee for debt of 1.75x Ebitda (2.0 as of December 31, 2017); and a 'damage' covenant, requiring real guarantee for debt at CEMIG GT of 1.5x Ebitda.
- (3) If Gasmig does not achieve the required covenants, it must, within 120 days from the date of notice in writing from BNDES or BNDESPar, constitute guarantees acceptable the debenture holders for the total amount of the debt, subject to the rules of the National Monetary Council (CMN), unless the required ratios are restored within that period. Certain contractually specified situations can cause early maturity of other debts (cross-default).
- (4) The financing contracts with Caixa Econômica Federal for the Praias de Parajuru and Volta do Rio wind power plants have financial covenants with compliance relating to early maturity of the debt remaining balance. Compliance with the debt servicing coverage index is considered to be demandable only annually and during the period of amortization, which begins in July 2020.

The Company is in compliance with all covenants as of December 31, 2019, with the exception of the CEF contract non-financial covenant at the loan of the subsidiaries Central Eólica Praias de Parajuru and Central Eólica Volta do Rio, for an amount of R\$ 178 million, which is classified in current liabilities. In the event the Company is required by the creditor to settle such amount, which is not expected, the Company has available resources to make such payments. Additionally, the Company assessed the possible consequences arising from this matter in their other contracts for loans, financings and debentures, and concluded that no further adjustments were necessary.

Review of Compliance and Corporate Governance System

CEMIG has undertaken a number of initiatives to boost its compliance and corporate governance system, including revising its bylaws in light of the new State Companies Law (Law No. 13,303/16), its code of ethics in light of the Brazilian Anticorruption Law (Law No. 12,846/13), approving a new and improved Compliance Policy on December 2019, revisiting its Corporate Risk Management Policy on December 2019, maintaining compliance policies and procedures and providing compliance training to all of its employees. Training on CEMIG's Code of Conduct is provided yearly to all employees.

Research and Development

We dedicate ourselves to projects that use technological advances not only in energy systems, but in all fields related to energy, such as development of environmental control, storage energy systems, performance of energy systems and safety optimization. CEMIG currently invests around R\$ 95.75 million in research projects and Development (R&D).

In 2019, CEMIG transferred R\$ 41 million to the National Scientific and Technological Development Fund (*Fundo Nacional de Desenvolvimento Científico e Tecnológico*, or "FNDCT"), a federal fund to support research and development, and R\$20 million to the Energy Research Company (*Empresa de Pesquisa Energética*, or "EPE").

In 2018, we transferred R\$38 million to the FNDCT, and R\$19 million to the EPE.

In 2017, we invested R\$40 million in research and development, and transferred R\$37.8 million to the FNDCT, and R\$18.9 million to the EPE.

Trends

As a public service utility, we are subject to regulations issued by the Brazilian Federal Government as described in "Item 4: Information on the Company – The Brazilian Power Industry". Therefore, any change in the regulatory framework may affect us significantly either with respect to our revenue, if the change relates to prices or with respect to our operating expenses if the change relates to costs incurred to provide service to customers.

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As to the question of reliability of supply of energy, the structural capacity of the system is adequate to meet the market's needs for consumption of energy, and the expansion of generation and transmission capacity currently in development will be able to meet the expected demand for consumption from the market. Rates of growth of energy consumption in Brazil in recent years have been -0.9% (2015-2016), 4.2% (2016-2017), 3.73% (2017-2018) and 1.92% (2018-2019), as a result of strong recovery of energy consumption after two years of economic recession. The Brazilian Federal Government has been successful with the "new supply" auctions starting in 2005 – which have made possible the construction of new projects such as the *Santo Antônio* hydroelectrical plant (3,150 MW) and the *Jirau* hydroelectrical plant (3,750 MW), on the *Madeira* River; the *Belo Monte* plant (11,233 MW) on the *Xingu* River; and the *Teles Pires* plant (1,820 MW) on the *Teles Pires* River, in accordance with the needs of the distributors for acquisition of energy.

Regarding capital expenditures, for 2020 we planned to make capital investments in relation to our fixed assets in the amount of approximately R\$ 2,042 million, corresponding to our basic program. We expect to allocate these expenditures primarily to the expansion of our distribution system. We will also allocate R\$295 million for injection of capital into subsidiaries to meet specific capital needs. Considering that the economic contraction due to the impact of Covid-19 might have a negative effect on the Company's liquidity, we are reviewing our program of investments and expenses in order to postpone R\$266 million (13%) of those capital investments to 2021, being R\$168 million, R\$17 million and R\$81 million originally budgeted to be applied on the distribution, generation and transmission segments, respectively. For more details see item 4 "Capital Expenditures."

In the matter of the pandemic situation, caused by the new coronavirus, see "Risk Factors" and "Impacts of Covid-19", where the Company addresses its initiatives and possible impacts on its business.

Commitments

CEMIG GT and the private pension plan entities participating in the investment of SAAG entered into put option agreements exercisable by the funds in July 2021. The exercise price of the put options will correspond to the amount invested by each private pension plan, adjusted *pro rata temporis*, by the IPCA index as published by the IBGE, plus interest at 7% p.a., discounting dividends and interest on capital that have already been paid by SAAG to the private pension plan entities. For more details please see Note 33 to our consolidated financial statements.

CEMIG and its subsidiaries have commitments that include acquisition of energy from Itaipu, acquisition of energy at auctions, physical quota guarantees and other commitments, as follows as of December 31, 2019:

	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>After 2025</u>	<u>Total</u>
Purchase of energy from Itaipu	1,701	1,538	1,538	1,568	1,551	32,724	40,620
Purchase of energy – auctions	4,408	4,081	4,035	4,281	4,724	55,730	77,259
Purchase of energy – 'bilateral contracts'	334	334	334	334	223	148	1,707
Quotas of Angra 1 and Angra 2	296	289	291	299	302	6,352	7,829
Transport of energy from Itaipu	240	251	264	251	238	1,441	2,685
Other energy purchase contracts	3,619	3,347	3,808	3,679	3,913	35,082	53,448
Physical quota guarantees	845	757	718	681	653	13,601	17,255
Total	<u>11,443</u>	<u>10,597</u>	<u>10,988</u>	<u>11,093</u>	<u>11,604</u>	<u>145,078</u>	<u>200,803</u>

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CEMIG and its subsidiaries have loans, financing and debentures, by currency and index, with the respective amortization, as follows:

	2020	2021	2022	2023	2024	After 2024	Total
Currency							
US dollar	48	-	-	-	6,062	-	6,110
Total, currency denominated	48	-	-	-	6,062	-	6,110
Index							
IPCA (1)	1,027	881	588	237	237	1,755	4,725
UFIR/RGR (2)	11	3	3	3	-	-	20
CDI (3)	1,465	907	570	560	271	-	3,773
URTJ/TJLP (4)	202	21	21	-	-	-	244
IGP-DI (5)	2	1	1	1	-	-	5
Total by index	2,707	1,813	1,183	801	508	1,755	8,767
(-) Transaction costs	(11)	(10)	(1)	(1)	(19)	(6)	(48)
(±) Interest paid in advance	-	-	-	-	(30)	-	(30)
(-) Discount	-	-	-	-	-	(22)	(22)
Overall total	2,744	1,803	1,182	800	6,521	745	14,777

(1) Expanded National Customer Price (IPCA) Index.

(2) Fiscal Reference Unit (Ufir / RGR)

(3) CDI: Interbank Rate for Certificates of Deposit.

(4) Interest rate reference unit (URTJ) / Long-Term Interest Rate (TJLP)

(5) IGP-DI ("General – Domestic Availability") Price Index.

CEMIG and its subsidiaries have contracts containing a lease that are, in their majority, indexed to the IPCA inflation index on an annual basis. Below is an analysis of maturity of lease contracts:

2020	86
2021	58
2022	26
2023	26
2024	26
2025 at 2045	482
Undiscounted values	704
Embedded interest	(416)
Leasing liabilities	288

Item 6. Directors, Senior Managers and Employees

The Company is managed by the Board of Directors and the Executive Board. The Board of Directors of the Company comprises nine members, of which one shall be the Chair and another the Deputy Chair. The Executive Board has seven Executive Officers, who may be shareholders, resident in Brazil, elected by the Board of Directors for a period of two years, subject to the requirements of the applicable law and regulations. Re-election for a maximum of three further consecutive periods of office is permitted. The structure and composition of the Board of Directors and the Executive Board shall be identical in the wholly-owned subsidiaries CEMIG Distribuição S.A and CEMIG Geração e Transmissão S.A., with occasional exceptions if approved by the Board of Directors.

Board of Directors

The Board of Directors meets, ordinarily, at least once a month and, extraordinarily, whenever called by its Chair, Deputy Chair, or by one third of its members, or by the Executive Board. Its responsibilities include: setting the corporate strategy, general orientation of CEMIG's businesses, approval of significant transactions, and election, dismissal and monitoring of the Chief Officers (members of the Executive Board).

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All the members of the Board of Directors are elected by the General Meeting of Shareholders. With the exception of the member of the Board of Directors representing the Employees, no other member of the Board of Directors has a work contract with CEMIG or with any subsidiary that provides any benefit in the event of its rescission.

The following rules apply to the composition of the Board of Directors:

- a) The following two groups of shareholders each have the right to elect one member, in a separate vote, in accordance with the applicable legislation: (i) the minority holders of common shares, and (ii) the holders of preferred shares;
- b) At least 25% (twenty five per cent) of the members must be independent, or, under Article 141 of Law 6404/1976, at least one of them if there is a decision for the minority shareholders to exercise their option to use the multiple vote mechanism;
- c) The employees have the right to elect one member, subject to the terms of Federal Law 12353 of December 28, 2010, as applicable;
- d) In any event, the majority of the members shall be elected by the controlling shareholder of the Company.

Composition of the Board of Directors:

Board of Directors		
Nomination	Position	Date of first appointment
Márcio Luiz Simões Utsch (1)	Chair	March 25, 2019
Antônio Rodrigues dos Santos e Junqueira (1)	Member	March 25, 2019
Cledorvino Belini (1)	Member	March 25, 2019
José Reinaldo Magalhães (1)	Member	March 25, 2019
Romeu Donizete Rufino (1)	Member	March 25, 2019
José João Abdalla Filho (2)	Member	April 30, 2014
Marcelo Gasparino da Silva (2)	Member	May 2, 2016
(Seat vacant) (2)	Member	-
Marco Aurélio Dumont Porto (3)	Member	February 25, 2020

(1) Elected by State of Minas Gerais and other shareholders

(2) Elected by minority shareholders

(3) Elected by a representative of the employees

Below is some brief biographical information about each member of the Board of Directors:

Márcio Luiz Simões Utsch, born in 1959, has a Law Degree. Principal executive positions: Mesbla S.A. (department store): General Manager, Purchasing and Operations; Gradiente Entertainment (electronics, games): Chief Officer for Sales and Distribution Logistics. Alpargatas S.A.: Joined 1997. CEO from 2003 until retirement, age 60, in 2019.

Antônio Rodrigues dos Santos e Junqueira, born in 1983, is a founding partner of Vinland Capital, and since May 2018 has been responsible for the Companies and Equities Research area. From 2007 to 2018, he was Executive Director and Partner of Banco BTG Pactual, responsible for sell-side research on the Electricity and Water Services sectors. At UBS Investment Bank he worked in the Companies and Equity Research Department, in 2005–2006.

Cledorvino Belini, born in 1949, has a degree in business administration from Mackenzie University, a master's degree and postgraduate degree from São Paulo University (USP), and MBA from FDC/Insead. In a 44-year career at Fiat, he served as its CEO in Brazil and Latin America for 11 years (2004-2015), and in 2009 joined the Fiat Group Executive Council (GEC), the highest governing body of the Fiat Group worldwide. In 2010–2013 he was president of the Brazilian Vehicle Manufacturers' Association (Anfavea). Since October 2017 he has been an Independent Member of the Board of Directors of the JBS group.

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José Reinaldo Magalhães, born in 1956, was manager of private equity FIP funds at BR-Investimentos and Bozano Investimentos Gestoras de Recursos from 2009 to 2015 – the team member responsible for the Funds' investment and divestment decisions. At PREVI (Banco do Brasil pension fund), he was Director of Investments, Institutional Investor Department, from – 2006–2018. At Banco do Brasil, he was New York Branch Assistant Manager in 2004–2005, Deputy Manager of the Chicago Representative Office (2002-4), and Executive Manager in the Director's Department for Planning and Risk Management, from 1998 to 2002. At PREVI, he was Division Manager, International Financial Institutions Management, from 1995 to 1998. From 1994–1998, he was a Trainee in the Overseas Manager Training Program, in São Paulo, Austin, Texas and London, and from 1990 to 1994, an analyst in the Technical Department (DETEC) of BB-B1 Banco de Investimentos. He joined DETEC in October 1975, and from 1983–1989 was Technical Adviser to the Minas Gerais State Supervision Office.

Romeu Donizete Rufino, born in 1956, worked as an independent auditor with PriceWaterhouseCoopers from 1978 to 1982 – joining as an assistant, and becoming a supervisor. From 1983 to 1998, at Eletronorte, he was Manager of the Accounts Department, and subsequently advisor to Chief Financial Officer's Department. In this period, he also served on the Fiscal Councils of: Companhia Energética de Brasília — CEB; and Previnorte, the Eletronorte pension fund. At the Brazilian electricity regulator, ANEEL, he was General Manager for Inspections from 1998 to 2006, a director, from 2006 to 2013; and Director General, from 2013 to 2018.

José João Abdalla Filho, born in 1945, is CEO and controlling shareholder of Banco Clássico S.A.; Substitute Member of the Board of Directors of CEG (Companhia Distribuidora de Gás do Rio de Janeiro); Substitute Member of the Board of Directors of Tractebel Energia S.A.; CEO of Dinâmica Energia S.A.; and CEO of Social S.A. Mineração e Intercâmbio Comercial e Industrial.

Marcelo Gasparino da Silva, Mr. Silva was born in 1971. He is a lawyer specializing in corporate tax law, with a degree from ESAG, and MBA in Controllershship, Auditing and Finance. He began his executive career in 2007 as Legal and Institutional Director of Celesc. He is the Coordinator of the Santa Catarina Chapter, Holder of Board Member Certification from, and a member of the Council of, IBGC (the Brazilian Corporate Governance Institute). He is Chair of the Board of Directors of Usiminas, and is a member of the Board of Directors of Bradespar and Eternit. He has served as a Member of the Boards of Directors of Eletrobras, Celesc, AES Eletropaulo, Tecnisa and SC Gás, and as a member of the Fiscal councils of Bradespar, AES Eletropaulo, AES Tietê and Renuka do Brasil. He is Coordinator of the Legal and Compliance Committee of Eternit. He is the spokesperson of the GGG (Corporate Governance Group).

Marco Aurélio Dumond Porto, born in 1968, earned a degree in civil engineering from Fumec University in 1994, before pursuing postgraduate studies and specialization in project management, and innovation and knowledge management, at IETEC, He has an MBA in business management from Centro Universitário Newton Paiva. Working at CEMIG since March 1986, initially via CEMIG Senai, he became Assistant Engineer, Project Engineer, Generation Projects Manager; and Technical and Commercial Director of the two SPCs Hidrelétrica Cachoeirão S.A and Hidrelétrica Pipoca S.A. He has served as Alternative Energy Sources Manager, Quality and Special Projects Manager, and Management and Internal Controls Manager; and is currently a Quality Analyst in the Office of the CEO.

Significant Civil and Criminal Proceedings Involving Key Management Members

Mr. Marcelo Gasparino da Silva, a member of the Board of Directors of CEMIG, is a defendant in two "Civil Action of Administrative Impropriety due to Damages to the Public Treasury" proceedings (not criminal cases), both of which were filed before the 1st Public Treasury Court of Florianópolis in Santa Catarina State, Brazil.

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In the first case, the prosecutor in Santa Catarina State, Brazil has alleged irregularities regarding a specific business purchase by Celesc Distribuição S.A. approved on December 11, 2008 without the required auction proceeding. Such purchase was made in reliance on an emergency decree by the State Governor. Mr. Marcelo Gasparino da Silva was named as a defendant as a result of his role as Celesc Distribuição's Legal Officer from 2007 to 2009. In the other civil action involving Mr. Marcelo Gasparino da Silva, the prosecutor has alleged irregularities in the agreement entered into by Celesc Distribuição S.A. and Monreal Corporação Nacional de Serviços e Cobranças S/C Ltda. Almost all former members of the Celesc Distribuição's board of directors between 2003 and 2009 were named as defendants in the case. Both actions are in the pre-trial proceeding stage, and the relevant complaints have not been accepted by the Court yet. Since the last report in 2019, there hasn't been significant development on these cases and there's no verdict, they are still on the pre-trial proceeding stage.

Mr. José João Abdalla Filho, a member of the Company's Board of Directors, is a defendant in criminal action pending before the 2nd Federal Criminal Court of Rio de Janeiro, for which he is accused of having committed the crime of tax evasion, for alleged omission of information in his 2010 income tax return. Mr. José João Abdalla Filho presented his defense, in which he alleges that the Court is unfit to proceed with the Criminal Action and the non-occurrence of the criminal practice, considering that the facts found (sale of real estate) occurred in the 1910s and 1940s, and not in the year 2001, according to the accusatory view. There has been no conviction to date and there has been no imposition of any personal or equity precautionary measure. The proceeding awaits the start of the evidentiary instruction and, after the conclusion of all procedural acts, with due diligence, questioning of witnesses, interrogation of the accused and final manifestations to the parties, the sentence will be rendered by the Judge of 1st Instance, which appeals to other Courts.

Executive Board

The Executive Board comprises seven Executive Officers, who may be shareholders, resident in Brazil, elected by the Board of Directors for a period of two years, subject to the requirements of the applicable legislation and regulations. Re-election for a maximum of three consecutive periods of office is permitted. The periods of office of the present members of the Board of Directors expire at the Annual General Meeting of Shareholders to be held in April 2020. The Executive Board meets ordinarily at least twice per month, and extraordinarily whenever called by the Chief Executive Officer or by two Executive Officers.

The Executive Officers exercise their positions as full-time occupations in service of the Company. They may at the same time exercise non-remunerated positions in the management of the Company's wholly-owned or other subsidiaries, or affiliated companies, at the option of the Board of Directors. They obligatorily hold and exercise, however, the corresponding positions in the wholly-owned subsidiaries CEMIG Distribuição S.A. and CEMIG Geração e Transmissão S.A.

The Executive Board is responsible for current management of the Company's business, subject to obedience to the Long-term Strategy, the Multi-year Business Plan, and the Annual Budget, which must be prepared and approved in accordance with the by-laws. The Annual Budget shall reflect the Company's Multi-year Business Plan and, consequently, the Long-Term Strategy, and must give details of the operational revenue and expenses, costs and capital expenditure, cash flow, the amount to be allocated to the payment of dividends, investments of cash from the Company's own funds or from funds of third parties, and any other data that the Executive Board considers to be necessary.

Subject to the provisions in the preceding Clauses and good corporate governance practices, it shall be the duty of each member of the Executive Board to comply with these by-laws, the decisions of the General Meeting of Shareholders, and of the Board of Directors, the Internal Regulations and decisions of the Executive Board, these being duties of the related Chief Officers' Offices.

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The following are the names, positions and dates of first appointment of the Members of the Executive Board:

Executive Board		
Chief Officer	Nomination	Date of initial appointment
CEO	Reynaldo Passanezi Filho	January 13, 2020
Chief Trading Officer	Dimas Costa	September 1, 2016
Chief Distribution Officer	Ronaldo Gomes de Abreu	June 28, 2017
Chief Generation and Transmission Officer	Paulo Mota Henriques	March 21, 2019
CEMIGPar Director	Rafael Falcão Noda	March 20, 2020
Chief Finance and Investor Relations Officer	Leonardo George de Magalhães	March 20, 2020
Chief Counsel and Chief Officer for Regulation	Eduardo Soares	March 20, 2020

Reynaldo Passanezi Filho, born in 1965, is a graduate of the Senior Executive Program, the principal course in the Stanford University Graduate School of Business (July-August 2018); he attended the CEO course of the Getúlio Vargas Foundation in Entrepreneurial Management from March 2015 to July 2017; has a doctorate in economics from São Paulo University, 1995-2000; a master's degree in economics from the University of Campinas, 1987-92, with distinction, for the dissertation in Industrial Organization on the subject "financial Solutions and Privatization for Brazilian Steel"; a degree in economics from São Paulo University, 1983-86 (sixth-placed in the University Entrance examination); and a degree in Law from the Pontifícia Universidade Católica of São Paulo, 1983-89. He is a member of the Brazilian Bar Association (OAB). He has wide experience in positions of senior leadership in the private sector, the financial sector and the public sector; excellence in strategy and management, with a track record of success in privatizations, restructurings and growth; solid qualification in finance and mergers and acquisitions, with profound knowledge of Latin America and infrastructure, especially electricity.

Dimas Costa, born in 1954, earned a degree in Electrical Engineering from PUC Minas in 1978. From 1978 to 1980, he was an Engineer in the Water & Energy Department of Minas Gerais, where he was Division Head from 1980 to 1985. From 1978 to 1980, he worked as an engineer in the Minas Gerais Water & Energy Department. At CEMIG, in 1985-1987, he was an engineer in the Distribution Unit; from 1987 to 1995 he was assistant in the Senior Power Planning & Development Management Unit; from 1995 to 1998 he was manager of the Energy Development Department; from 1998 to 2007, manager for sales to corporate clients; from 2007 to 2010, general manager for sales to clients of the company; and in 2011 to 2013, general manager of the company for sales to the company's clients with incentive benefits. He was formerly Director and managing partner of Ponta Energia Consultores Associados Ltda, from 2013 to 2016.

Ronaldo Gomes de Abreu, born in 1965, elected CEMIG's Chief Distribution and Sales Officer in June 2017, has a degree in business administration from the Management and Accounting Sciences School of UNA; a law degree from the Law School of Sete Lagoas, and an MBA in strategic and business management from the Federal University of Minas Gerais (UFMG). He joined CEMIG as an employee in 1985, and since 1994 has held management posts in the departments of Distribution and Sales, and Finance and Investor Relations. In his management career in CEMIG he has worked in areas and processes of relationships with clients, collection, management of revenue, expansion and planning of the electricity system, regulation and tariffs.

Paulo Mota Henrique, born in 1962, has a degree in electrical engineering from the Federal University of Juiz de Fora, MBA from the Getúlio Vargas Foundation, and specialization in Industrial Automation Engineering from the Federal University of Minas Gerais (UFMG). His professional career began at CEMIG in 1987, where he worked as General Manager for Transmission in Belo Horizonte from 2004 to 2007, and was responsible for the technical, financial and administrative management of the assets of substations and transmissions lines of ultra-high voltage belonging to the national grid, and other transmission facilities. He was General Manager, Generation and Transmission Management Control, CEMIG GT, from 2007 to 2009: - where responsibilities included planning, implementation, coordination and development of Strategy Management in the Chief Generation and Transmission Officer's Office. In 2009, he became General Manager for Coordination, Generation and Transmission, CEMIG GT – responsible for management of corporate processes in the office of the Chief Generation and Transmission Officer's Office, and planning and management of Generation and Transmission projects in companies and wholly owned subsidiaries. He also served as General Manager of Taesa (from 2009 to 2011). He was a member of the Board of Directors of the following companies affiliated to CEMIG: Companhia Transleste de Transmissão (2007–2009), Companhia Transirapê de Transmissão (2007–2009); PCH Guanhães Energia (2007–2009); and PCH Pai Joaquim (April 30, 2008 to April 30, 2010). He was General Manager for Maintenance and Transmission at CEMIG (from 2011 to 2016); and Director of the Brazilian Power Transmission Companies' Association (Abrate) (from 2017 to 2019).

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Rafael Falcão Noda, company manager by profession, practices as a university lecturer in finance, strategy and quantitative methods. He has 20 years' experience in mergers, acquisition, financial restructurings and sustainability, and has served in senior management of an electricity company.

Leonardo George de Magalhães has a degree in accounting, and has been an employee of Cemig for more than 30 years. Since 2008, he has worked in the Controller's Department, with numerous executive responsibilities in the Finance Department including accounting, tax planning, financial planning, budget, valuation of investments, cash management and forecasting of results.

Eduardo Soares is a lawyer, with a career of 30 years in the profession, dedicated to the areas of infrastructure, energy, structured financings, project finance, and administrative and corporate law. He has wide experience in financial transactions, M&A, restructurings and stockholding transactions.

Compensation of Members of the Board of Directors and Executive Board

The total costs of key personnel, comprising the Executive Board, the Fiscal Council, the Audit Committee and the Board of Directors in 2019, 2018 and 2017, are within the limits approved at a General Shareholders' Meeting, and the effects on the income statements of the years ended, are as follows:

	(in millions of reais)		
	2019	2018	2017
Remuneration	25	34	32
Profit sharing (reversal)	6	4	1
Assistance benefits	1	3	2
Total	32	41	35

There is no contract between CEMIG or its wholly-owned subsidiaries and affiliates and any director or officer of CEMIG that grants any kind of retirement benefits, other than the retirement plan of Forluz and the healthcare plan CEMIG Saúde, which is applicable to the Executive Officers (as long as they qualify under the rules and regulations of Forluz) on the same terms as for other employees.

The Fiscal Council

Under CEMIG's by-laws, its Fiscal Council is established permanently. It sets forth ordinary monthly meetings and extraordinary meetings whenever necessary. It comprises five members, and their respective substitute members, elected by the shareholders at the General Meeting, for a term of two years. A member may be re-elected a total of two times. The holders of the preferred shares, as a group, are entitled to elect one member of the Fiscal Council and a corresponding substitute. A single minority holder of common shares, or a group of minority holders of common shares, with a joint interest of at least 10% of the total shares, has the right to elect one member of the Fiscal Council and a corresponding substitute. The majority of the members shall be elected by the controlling shareholder and at least one member shall be a public servant. The primary responsibility of the Fiscal Council, which is independent from management and from the independent external auditors appointed by the Board of Directors, is to review the financial statements and report on them to the shareholders. The Fiscal Council is also responsible for providing opinions on any proposals by management to be submitted to the General Meeting of Shareholders related to: (i) changes in the share capital; (ii) issue of debentures or warrants; (iii) capital expenditures plans and budgets; (iv) distribution of dividends; (v) changes in the corporate structure; or (vi) corporate reorganization, such as mergers, consolidations and spin-offs. The Fiscal Council also examines the activities of management and reports on them to the shareholders.

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The current members of the Fiscal Council, and their substitute members, all of whose terms expire at the Annual General Meeting of Shareholders to be held in 2020, are as follows:

<u>Name</u>	<u>Position</u>	<u>Date of initial appointment</u>
Gustavo de Oliveira Barbosa – Chair (1)	Member	August 7, 2019
Germano Luiz Gomes Vieira (1)	Substitute member	August 7, 2019
Marco Aurélio de Barcelos Silva (1)	Member	August 7, 2019
Carlos Eduardo Amaral Pereira da Silva (1)	Substitute member	August 7, 2019
Elizabeth Jucá e Mello Jacometti (1)	Member	August 7, 2019
Seat vacant (1)	Substitute member	-
Rodrigo de Mesquita Pereira (2)	Member	June 11, 2018
Ronaldo Dias (2)	Substitute member	August 7, 2019
Cláudio Morais Machado (3)	Member	June 11, 2018
Carlos Roberto de Albuquerque Sá (3)	Substitute member	June 11, 2018

(1) Appointed by State of Minas Gerais (as the controlling shareholder).

(2) Appointed by the holders of the preferred shares.

(3) Appointed by the minority of the holders of voting shares.

Below is a brief biography of each member of our Fiscal Council:

Gustavo de Oliveira Barbosa, born in 1965, has a degree in accounting from UNICEUB (Centro de Ensino Unificado de Brasília), and postgraduation, with MBA in executive management of Pension Funds, from the Federal District University Centre (ICAT/UDF). He was Chief Executive Officer of the Rio de Janeiro State Pension Fund (Rioprevidência) from 2010 to 2016. He then served as State Secretary for Finance and Planning of Rio de Janeiro from 2016 to 2018; Technical Banking Advisor in the Regional Headquarters for Public Legal Entities at Caixa Econômica, from 2018 to 2019, and consultant at Barbosa & Mello Consultoria in 2019. He is currently State Secretary for Finance in the Minas Gerais State Government.

Germano Luiz Gomes Vieira, born in 1981, has a degree in Law from the Milton Campos Law School, and a master's degree in Public and International Law from Universidade Católica Portuguesa. From 2015 to 2019 he headed the office of the President of the State Environmental Foundation. He is currently Minas Gerais State Secretary for the Environment and Sustainable Development, and Chair of the State Environment Foundation.

Marco Aurélio de Barcelos Silva, born in 1980, has a law degree from Minas Gerais Federal University (UFMG), postgraduate degree in Public Law from PUC-MG (Pontifícia Universidade Católica de Minas Gerais), postgraduate degree in Finance from IBMEC Business School, a master's degree in Administrative Law from UFMG, and a master's degree in Law from University College, London (UCL); and is currently completing the doctorate course in Administrative Law at São Paulo University (USP). He was a consultant to the Getúlio Vargas Foundation (FGV) from 2013 to 2016; and Chief Counsel and Partnerships Director, and General Manager of Projects, for São Paulo Negócios S.A., from 2014 to 2016. Subsequently he was Secretary for Negotiation of Investments and Partnerships for the Special Management Unit of the federal government's Investment Partnerships Program (PPI), from 2016 to 2019. He is currently the State Secretary for Infrastructure and Mobility in the Minas Gerais Government.

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Carlos Eduardo Amaral Pereira da Silva, born in 1969, has a degree in Medicine from the Federal University of Juiz de Fora (UFJF), with MBA in management of Business and Projects from the same university, and MBA in Patient Health and Safety Management from the Juiz de Fora Medicine & Health School (Suprema). Since 1994 he has served as a neurosurgeon at the Minas Gerais State Hospital Foundation (FHEMIG), also serving since 1998 at Juiz de Fora Federal University (UFJF). Since 1996 he has been a neurosurgeon at the Monte Sinai Hospital (HMS-NCI). He is currently State Secretary for Health in the Minas Gerais State Government.

Elizabeth Jucá e Mello Jacometti, born in 1960, has a degree in Economics, specialization course in finance, from Juiz de Fora Federal University (UFJF), and master's degree in Leadership and management from the Public Leadership Centre (CLP) / Instituto Singularidade. From 2013 to 2016 she was Planning and Management Secretary of the Prefecture of Juiz de Fora, where she was also Municipal Health Secretary from 2016 to 2018. She is currently State Secretary for Social Development in the Minas Gerais State Government.

Rodrigo de Mesquita Pereira, born in 1964, has a law degree from São Paulo University (USP) Law School (1988). He also has a postgraduate degree with MBA specializing in Business Management (2005) and specialization in Legal Aspects of the Capital Market (2013), both from Fundação Getúlio Vargas - FGV; and a postgraduate degree in Diffuse and Collective Rights (2016) from Pontifícia Universidade Católica (PUC) of São Paulo. Former district attorney in the State of São Paulo (1991-2001), since 2001 he has practiced law as a partner in the Mesquita Pereira, Almeida, Esteves Law Office (2001-2018) and in the Alves Ferreira & Mesquita Law Office (2018 onwards).

Ronaldo Dias, born in 1946, has a degree in Accounting from Faculdade Moraes Júnior. From 2014 to 2016 he was a substitute member of the Fiscal Council of CEG, the Rio de Janeiro Gas Distribution Company. Subsequently he was a substitute member of the Fiscal Council of CEMIG, from 2016 to 2018. Since 2017 he has been a director of Banco Clássico.

Cláudio Morais Machado, born in 1943, has a degree in Accounting, with updating from 1998 to 2017, and serves as an Accounting Expert Witness for State and Federal Courts of Rio Grande do Sul, with focus on finance. He has lectured at postgraduate courses in accounting and auditing from 1973 to 2015; giving lectures and serving as facilitator in courses of Ibracon (6th Regional Sector), CRCRS and IBGC; and is a university lecturer in postgraduate courses specialized in accounting, auditing and corporate governance, since 1990. He has also served as a Member of the Fiscal Councils of the following companies: Grupo Everest Hotel, do Rio de Janeiro, 2015; Profarma Distribuidora de Produtos Farmacêuticos S.A., Rio, 2015; Tupi S.A., Joinville, Santa Catarina, 2010–2016; Porto Alegre (Rio Grande do Sul), which he chaired since 2003; the holding company Paludo Participações S.A., of Porto Alegre (RS), since 2014; and the NGO Fundação Projeto Pescar, Porto Alegre, since 2012. From 2011 to 2015 he served as substitute member of the Fiscal Council of the Management Development Institute (IDG) of Nova Lima, Minas Gerais. He joined the Fiscal Council of CEMIG, nominated by BNDESPar, in 2018.

Carlos Roberto de Albuquerque Sá, born in 1950, has a degree in accounting and economics, and a postgraduate degree in finance, from PUC (Pontifícia Universidade Católica) of Rio de Janeiro. Since 2011 he has been coordinator of the Audit Committee of Lojas Marisa; a since 2016 has been a member of the Fiscal Council of the holding company of Itaú/Unibanco, and of Marfig Global Foods. He is a partner in the company CS Consult.

The Audit Committee

The Audit Committee is an independent, consultative body, permanently established, with its own budget allocation. Its objective is to provide advice and assistance to the Board of Directors, to which it reports. It also has the responsibility for such other activities as are attributed to it by legislation.

The main activities conducted by the Audit Committee are related to: (i) supervision of independent auditors activities, (ii) supervision of the activities carried out in the areas of internal control, internal audit and preparation of the financial statements of the Company, and (iii) monitor the quality and integrity of the internal control mechanisms, the financial statements, information and measurements disclosed by the Company.

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The Audit Committee has three members, all of which are independent and audit committee financial experts, nominated and elected by the Board of Directors in the first meeting after the Annual General Meeting for periods of office of three years, not to run concurrently. One re-election is permitted.

The Audit Committee has operational autonomy to conduct or order consultations, evaluations and investigations within the scope of its activities, including contracting and use of independent external specialists.

The Audit Committee must have means for receiving accusations, including those of a confidential nature, internal and external to the Company, on subjects related to its area of duties.

The Audit Committee may exercise its duties and responsibilities in relation to such wholly-owned and other subsidiaries of the Company as adopt the structure of joint sharing of an Audit Committee.

Name	Position
Pedro Carlos de Mello	Coordinator
Márcio de Lima Leite	Member
Roberto Tommasetti	Member

The following is a brief biography of each member of our Audit Committee:

Pedro Carlos de Mello, born in 1952, has a degree in accounting from the Federal District Unified Teaching Association (AEUDF), and a degree in Economics from the Political Sciences and Economics College of Cruz Alta. He has an MBA degree in controllership from Fipecafi (The Accounting, Actuarial and Financial Research Institute Foundation of São Paulo University – USP), MBA in training of executives from Coppead (the Postgraduate Management Research Institute of Rio de Janeiro Federal University – UFRJ), and postgraduate degree in accounting, costs and auditing from the Getúlio Vargas Foundation (FGV). For the Accounting Management Unit of Banco do Brasil S.A. in Brasília (DF), he was Chief Accountant from April 2007 to March 2009; Executive Manager for Supervision of Brazilian Subsidiaries and Foreign Offices (Gesex) from April 1999 to April 2007; and acted as General Manager for Accounting, in absences of the principal office holder (in Brasília), from 1998 to April 2007. He was General Coordinator of Management Information for the Technical Analysis Director (DITEC) of the National Pension Plan Authority (Previc) in 2014, and a substitute member of the Fiscal Council of Usiminas in 2016 and 2017. Since 2016 he has been a member of the Audit Committee of the Minas Gerais Development Bank (BDMG).

Márcio de Lima Leite, born in 1971, has a law degree from the Milton Campos Faculty and in accounting from the Pontifícia Universidade Católica (PUC) of Minas Gerais. He has a postgraduate degree in Strategic Management with specialization in finance from Minas Gerais Federal University (UFMG), and a master's degree in law, economic and social relations from the Milton Campos Faculty. He is currently director of the Commercial Association of Minas Gerais (ACMinas); a guest professor at PUC of Minas Gerais; and Chief Counsel and Business Development Director at Fiat Chrysler Automobiles (FIAT) of Latin America.

Roberto Tommasetti, born in 1973, has a degree in Economics from University “Federico II” (Italy), revalidated by Rio de Janeiro State University (UERJ), and in accounting from UFRJ (Rio de Janeiro Federal University). He has a master's degree in accounting and finance from PUC, São Paulo, and a doctorate in accounting from UFRJ. CPA in Brazil and Italy, he is a partner of a consulting firm and lectures financial and management accounting in graduate and postgraduate courses. Member of Italian-Brazilian Chamber of Commerce of Rio de Janeiro, where he is part of the Brazil-Italy Energy Council, he has been a member of the Board of Directors and the Audit Committee of different companies and served as CFO, Chief Controller, and independent auditor.

[Table of Contents](#)**Employees**

As of December 31, 2019, we had 5,596 employees at CEMIG, CEMIG D and CEMIG GT, of which 185 were management level and 72 were contracted to provide temporary outsourced services. As of December 31, 2018, we had 6,083 employees at CEMIG, CEMIG D and CEMIG GT, of which 244 were management level and 316 were contracted to provide temporary outsourced services. As of December 31, 2017, we had 5,864 employees at CEMIG, CEMIG D and CEMIG GT, of which 254 were management level and 333 were contracted to provide temporary outsourced services. This table presents the breakdown of our employees by type on those dates:

Number of Employees as of December 31, (1)	2019 (2)	2018 (3)	2017(4)
Managers	185	244	254
Professional staff	1,147	1,188	1,096
Operational technical staff and office employees	4,264	4,651	4,514
Total	5,596	6,083	5,864

(1) These figures include only employees of CEMIG GT, CEMIG D and CEMIG.

(2) In 2019, 272 employees were hired and 762 left CEMIG.

(3) In 2018, 359 employees were hired and 244 left CEMIG.

(4) In 2017, 27 employees were hired and 1,189 left CEMIG.

Unions

Meetings are held throughout the year for collective negotiation with the unions that represent the employees. The Collective Work Agreements (*Acordos Coletivos de Trabalho*, or "ACTs") that result from these meetings cover salary adjustments, benefits, rights and duties of the employment relationship, and come into effect starting on November 1 of each year until the end of the validity of each respective Collective Work Agreement. Negotiations between the Company and the Unions for the 2019-2021 Collective Work Agreements were concluded.

During the October 2017 to January 2019, negotiations, the company and the unions agreed to a readjustment of economic benefits to ensure replacement of losses due to inflation in the period, with an adjustment of 2.55% in line with inflation, in addition to ensuring the correction of salaries and benefits, in November 2020, by the inflation index (INPC-IBGE) accumulated between November 1, 2017 and October 31, 2020.

The agreement reaffirmed benefits as: payment of day and night overtime; setting of a ceiling for grant of financial help for training in technical or graduation courses; advance of the first installment of the annual 13th salary payment; assistance benefits; release of union leaders and provisional job stability; and funds for grant of salary alterations in accordance with the Careers and Remuneration Plan (*Plano de Cargos e Remunerações*, or "PCR").

In health and safety in the workplace, the employees have the following benefits guaranteed: regulated Internal Accident Prevention Committees (*Comissões Internas de Prevenção de Acidentes*, or "CIPAs"), with participation by the unions; medical health inventory; inspection of contractors as to their work safety; and notification of serious or fatal accidents.

During the 2019/2020 negotiations, there was a stoppage/strike of six days, with a minimal participation of employees. In the event of strikes, CEMIG has an Operational Emergency Committee, created with the basic objective of establishing a Contingency Plan to maintain our essential services. In the event of strikes; CEMIG has an Operational Contingency Council aimed at setting forth a Contingency Plan for continuation of its essential services.

[Table of Contents](#)**Compensation*****CEMIG compensates its employees in a competitive way, in line with best market practices.***

CEMIG's compensation strategy reflects a compatible and competitive positioning with the market, with benefits and programs for the welfare of its employees. Thus, CEMIG has a Careers and Remuneration Plan in which the positions are described based on their nature and complexity, as well as the knowledge requirements necessary for the performance of their functions. The fees are set considering the reviews of positions, made according to specific methodology. The plan is designed to attract, develop, retain and enhance the best talented Company professionals needed to conduct CEMIG's business while preserving our culture, the alignment to its business objectives, competitiveness and longevity in the market where it operates without losing sight of the particularities of its segment and the commitment of the employees with the result of their work. In addition, the Careers and Remuneration Plan establishes criteria for granting horizontal and vertical progressions that include, among other things, employee performance.

The current Careers and Remuneration Plan was put in place in September 2018 aiming to provide us with the instruments of compensation considered to be necessary to maintain an equitable and competitive payment structure and establish criteria for promotions. The new plan consolidates the company's principles of having people with the required skills, adequately remunerated and qualified, aligned with the strategic planning.

This table presents the monthly average of base salary and of compensation, by job category of CEMIG:

<u>December 31, 2019 (R\$)</u>	<u>Average base salary as of</u>	<u>Average compensation as of</u>
Managers	19,765.84	33,330.71
Professional staff	10,112.06	12,403.95
Operational technical staff and office employees	4,933.73	7,720.11

Program for Sharing in Profit, Results, and Productivity

CEMIG has a program for sharing profits and results with employees in accordance with applicable Brazilian employment legislation. Profits are distributed only if, in aggregate, at least 50% of the corporate targets are achieved, after relative weighting for each of the corporate and operational indicators.

In 2019, in accordance with the terms of the Collective Agreement, CEMIG distributed 4% of its profits, with the possibility of an increase of another 20% of the value of this profit that exceeds the budget, reaching the maximum limit to be distributed of 7.5% of the Consolidated Net Income.

The calculation of the profit sharing distribution will be based on the Result of Indicators, and the payment will be made 50% in proportion to the individual remuneration of each employee and 50% in a linear manner among all the employees represented by the signatory entities of the referred agreement.

Distribution will occur only if at least 50% of the goals are achieved as a whole, observing the relative weight of each of the indicators. The basket of indicators for the year 2019 contains 10 corporate indicators.

In 2018, in accordance with the terms of the Collective Agreement PLR 2017, CEMIG distributed part of its profits to the employees represented by the unions that signed the program and simplified the list of indicators to 7 corporate and 28 operational indicators, facilitating the monitoring of the results by its employees. CEMIG also signed the Collective Agreement PLR that will distribute part of the profits to employees, based on the results in 2018.

In 2017, CEMIG distributed part of its profits to the Program for Sharing in Profit and reduced the operational indicators to 28 targets.

[Table of Contents](#)**Benefits**

CEMIG provides its employees a range of benefits, such as reimbursement of disability-related expenses of employees and/or their dependents, funeral assistance in the event of death of an employee or of his or her direct dependents, and payment of part of the employee's contribution to the complementary pension plan. In 2019, a total of R\$174.4 million was paid in employee benefits, comprising R\$ 91.5 million in contributions to the pension plan and R\$ 82.9 million in assistance benefits.

Voluntary Retirement Programs

In April 2020, the Company approved the Programmed Voluntary Retirement Plan for 2020 ('the 2020 PDVP'). Those eligible – any employees who had worked with the Company for 25 years or more by December 31, 2020 – are able to join from May 4 to 22, 2020. The program will pay the standard legal payments for severance, 50% of the period of notice, an amount equal to 20% of the Base Value of the employee's FGTS fund, an additional premium equal to 50% of the period of notice plus 20% of the Base Value of the employee's FGTS fund, as well as the other payments under the legislation.

In December 2018, the Company created the Programmed Voluntary Retirement Plan (PDVP 2019). Eligible employees – all employees who worked at the Company for 25 years or more as of December 31, 2019 – were able to join the program between January 7 and January 31, 2019. The PDVP provided for the payment of the legal severance payments, including indemnified notice, deposit of the amount corresponding to a fine of 40% of the FGTS base amount for retirement purposes and other charges provided by the legislation, with no provision for payment of additional premium. In March 2019, the Company approved the reopening of the PDVP 2019, with the adhesion period between April 1 and 10, 2019, and changes to the requirements for adhesion, keeping the other conditions unchanged. The program reached 613 employees and the Company expects savings of approximately R\$ 150 million per year.

In March 2018, CEMIG approved the Programmed Voluntary Retirement Program (the "2018 PDVP"). Employees eligible to be part of the 2018 PDVP are those that will have worked for CEMIG for 25 years or more as of December 31, 2018. The period for joining the 2018 PDVP was April 2 through April 30, 2018. The 2018 PDVP offered payment of the severance amounts specified by law, including payment for the notice period, and deposit of the penalty amount of 40% of the FGTS (Labor Guarantee Fund) Base Value, as well as the other payments specified by the legislation. The 2018 PDVP was accepted by 151 employees, for which the estimated cost in the amount of R\$ 25.6 million was recorded.

In March 2017, CEMIG launched its PDVP Programmed Voluntary Retirement Plan (PDVP 2017) for employees who would have worked for the Company for 25 years or more as of December 31, 2017. The offer included the payment of an additional premium of up to five salaries in the following terms:

Deadline to enroll in the program

<u>Deadline to enroll in the program</u>	<u>Additional premium</u>
04/03 to 04/28/2017	5 salaries
05/02 to 05/31/2017	4 salaries
06/01 to 06/30/2017	3 salaries
07/03 to 07/31/2017	2 salaries
08/01 to 08/31/2017	1 salary
09/01 to 09/29/2017	None

In addition to the additional premium there were also the following items, as extra compensation: (i) 40% of the balance of the employee's account with the FGTS; and (ii) payment of the amount normally paid to employees who are dismissed, which can vary from one month to 90 days of the severance reference salary, as specified by Law No. 12,506/11. This was accepted by 1,189 employees, who began to leave the company during the period between May 2, 2017 and October 17, 2017 and the amount expensed was R\$ 214 million.

[Table of Contents](#)**Health and Safety**

As a result of the various initiatives and programs from CEMIG, focused on health, hygiene and safety at work, accident indicators have shown a significant reduction over the last seven years. In 2018, the Frequency Rate of Accidents with Displacement ("TFA"), relative to the workforce, closed at 1.52 accidents per million hours worked, 3.4% higher than in 2017 and 22% below the 1.95 limit. In 2019, the TFA, relative to the workforce, was 1.60 accidents per million hours worked, 5.26% higher than in 2018, and 18.75% below the 1.90 limit.

In 2020, CEMIG will monitor as a corporate strategic indicator to promote the health and safety of the entire workforce at the Rate of Frequency – TF, at the rate calculated takes into account accidents with and without leave. The objective is to deepen the analysis of incidents and accidents without time off work to establish blocking actions to reduce accidents with time off work monitored by TFA.

Item 7. Major shareholders and related party transactions**Principal Shareholders**

On March 31, 2020, the government of the State of Minas Gerais was the holder, directly and indirectly of 248,536,849 common shares, or 50.97% of CEMIG's shares carrying the right to vote. As of the same date, FIA Dinâmica Energia, our second largest shareholder, held 48,772,500 common shares, or approximately 10% of that class of shares, and 53,622,344 preferred shares, or approximately 5.52% of that class of shares.

The table below provides information about ownership of the common and preferred shares in CEMIG as of March, 2020:

Shareholder	Common Shares	% of the Class	Preferred Shares	% of the Class
Minas Gerais State Government (1)	248,536,849	50.97%	4,542,877	0.47%
FIA Dinâmica Energia Fund	48,772,500	10%	53,622,344	5.52%
BNDES Participações S/A – BNDESPar	54,342,992	11.14%	26,220,938	2.70%
Total of all members of Board of Directors, Executive Board and Fiscal Council	1	-	47,000	-
Others	135,961,802	27.89%	886,144,580	91.25%
Total shares	487,614,144	100%	970,577,739	99.94%
Shares in treasury	69	-	560,649	0.06%
Total shares issued	487,614,213	100%	971,138,388	100%

(1) The shares attributed in this line to the State of Minas Gerais include shares held by Minas Gerais Participações S.A., a Brazilian stock company (*sociedade por ações*), and other agencies of the State government and companies controlled by the State of Minas Gerais.

Since CEMIG was formed, its operations have been influenced by the fact that it is controlled by the government of the Brazilian State of Minas Gerais. Its operations have had and will continue to have an important impact in the development of trade and industry of Minas Gerais and on the social conditions in the State. Occasionally in the past the Minas Gerais state government has oriented the company to dedicate itself to certain activities and make certain expenditures specifically designed to promote the social, political or economic objectives of the government of the State of Minas Gerais, and not necessarily destined to generate profit for CEMIG, and there is the possibility that the state government may orient us in this direction in the future. See "Item 3. Material Information – Risk factors – Risks Relating to CEMIG – We are controlled by the government of the Brazilian State of Minas Gerais, which might have interests that are different from the interests of the other investors, or even of the Company".

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As of March 31, 2020 CEMIG had 1 holder of common shares represented by ADRs who were registered in the United States, holding a total of 595,267 common shares; and 14 holders of preferred shares represented by ADRs who were registered in the United States, holding a total of 164,403,865 preferred shares.

Although the by-laws do not make any restriction on a change in control of CEMIG, under the legislation of the State of Minas Gerais such a change would require a state law authorizing the change of control. Because CEMIG is controlled by the State, any sale that results in the state government not holding more than 50% of the voting shares of CEMIG (or any other transaction that could transfer the control of CEMIG, in whole or in part), requires approval by legislation specifically authorizing this change, made by the legislative power of Minas Gerais, approved by a minimum of 60% of the members of the State Assembly; and this authorization must then also be approved by the local citizens in a referendum.

On March 3, 2016, BNDESPar exchanged the totality of its holding of debentures issued under the Deed of the First Private Issue by AGC Energia of Non-convertible Permanent Asset guaranteed Exchangeable Shareholders' Debentures, in a Single Series, dated February 28, 2011 and amended January 17, 2012, for 54,342,992 common shares and 16,718,797 preferred shares in CEMIG, owned by AGC Energia. After the exchange, the equity interest held by BNDESPar in CEMIG — which on March 2, 2016, totaled 0% of the common shares and 1.13% of the preferred shares — increased to 12.9% of the common shares and 3.13% of the preferred shares.

We are not aware of any other significant alterations in percentages of shares held by holders of 5% or more of our voting shares in circulation during the last three years.

Related Party Transactions

During the regular course of our business, we engage in transactions with related parties, some of which are of a recurring nature. The following summarizes the material transactions we engage in with our principal shareholders and their affiliates.

CEMIG is party to the following transactions with related parties (please refer to Note 32 to our consolidated financial statements for more details):

- Sale of energy supply to the Minas Gerais State government. The price of the supply is the one set by ANEEL through a Resolution relating to the annual tariff adjustment of CEMIG D. In 2017 the government of Minas Gerais State signed a debt recognition agreement with CEMIG D for payment of debt relating to the supply of power due and unpaid, in the amount of R\$ 113 million, to be settled in 24 installments, updated monthly by the variation of the IGP-M index, up to November 2019. Twenty installments were unpaid on December 31, 2019. These receivables have a guarantee in the form of CEMIG's right to retain dividends and Interest on capital otherwise payable to the State (in proportion to the State's equity interest in the Company), for as long as any payments are overdue or in default. The amount of the Public Lighting Contribution relating to the debt recognition agreement on December 31, 2019 was R\$ 190 million;
- Financial income from ICMS tax anticipation, as per Minas Gerais State Decree 47,488;
- Inflation adjustment of amounts relating to the Advance for Future Capital Increase (AFAC), which were returned to the State of Minas Gerais. Amount transferred to Accounts receivable from Minas Gerais State, on September 30, 2017. The outstanding amount on December 31, 2019 was R\$ 115 million (see Note 13 to the Financial Statements);
- Transactions in energy between generators and distributors were made in auctions organized by the Federal Government; transactions for transport of energy, made by transmission companies, arise from the centralized operation of the National Grid carried out by the National System Operator (ONS);
- Contract to provide plant operation and maintenance services related to transmission services;

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- Legal actions realized and legal actions provisioned arising from the agreement made between Aliança Geração (jointly-controlled entity), Vale S.A. (company which we have joint ventures in common) and Cemig. The action is provisioned in the amount of R \$98 million, of which Cemig's portion is R\$ 32 million;
- In 2017, payments of R\$ 70 million were made to Santo Antônio Energia, subsidiary of Madeira Energia: R\$ 52 million was advanced by CEMIG GT (subsidiary); R\$ 12 million by Sá Carvalho (subsidiary); and R\$ 6 million by Rosal (subsidiary). The last installment was paid in January 2019;
- Reimbursement for the supply that was decontracted due to alteration of the power purchase agreements (CCEARs) between Santo Antônio Energia S.A., a subsidiary of Madeira Energia (affiliated entity), and CEMIG Distribuição (subsidiary) – totaling R\$ 84 million, to be settled in 24 monthly installments, with inflation adjustment by the Selic rate and maturities up to January 2020. The outstanding amount on December 31, 2019 was R\$ 4 million;
- Advance payments for energy supply made in 2019 to Norte Energia (jointly-controlled entity), established by auction and by contract registered with the CCEE (Wholesale Trading Exchange). In full-year 2020 Norte Energia S.A. will deliver contracted supply in the amount of R\$ 40 million. There is no financial updating of the contract;
- CEMIG GT (subsidiary) has an R\$ 688 million receivable from Renova (jointly-controlled entity) that due to the uncertainties related to continuity of Renova (jointly-controlled entity), an estimated loss on realization of the receivables was recorded for the full value of the balance;
- On November 25 and December 27, 2019, DIP loan contracts under the court-supervised reorganization proceedings, referred to as 'DIP' and 'DIP 2', were entered into between the Company and Renova (jointly-controlled entity), which is in-court reorganization, in the amounts of R\$10 million and R\$6.5 million, respectively. The contracts specify interest equal to 100% of the accumulated variation in the DI rate, plus an annual spread, applied pro rata die (on 252-business-days basis), of 1.083% for the DIP contract and 2.5% for the DIP2 contract, up to the date of respective full payment. The proceeds of this loan were allocated to the investee's minimum cash needs. The contracts specify a guarantee, given by the investee and its guarantor, through surety and a fiduciary assignment on the shares of the special-purpose company Mina de Ouro, which represents 120% of the principal value of the loan, according to an independent valuation;
- A liability was recognized corresponding to the Company's interest in the share capital of Hidrelétrica Itaocara, due to its negative equity (see Note 18 to the Financial Statements);
- Contract for development of management software between CEMIG D (subsidiary) and Axxiom Soluções Tecnológicas S.A., instituted in ANEEL Dispatch 2657/2017. The outstanding amount on December 31, 2019 was R\$ 3 million;
- The contracts of Forluz are updated by the Expanded Customer Price Index (Índice Nacional de Preços ao Consumidor Amplo, or IPCA) calculated by the Brazilian Geography and Statistics Institute (IBGE) plus interest of 6% p.a. and will be amortized up to the business year of 2031 (see Note 26 to the Financial Statements);
- The Company's contributions to the pension fund for the employees participating in the Mixed Plan, and calculated on the monthly remuneration, in accordance with the regulations of the Fund. In 2019, it represented an expense of R\$ 78 million;
- Funds for annual current administrative costs of the Pension Fund in accordance with the specific legislation of the sector. The amounts are estimated as a percentage of the Company's payroll. In 2019, it represented an expense of R\$ 30 million;
- Rental of the Company's administrative head offices with Forluz (the employees' Pension Fund), in effect up to October 2020 (able to be extended every five years, up to 2035) and August 2024 (contract in the process of renewal, able to be extended every five years, up to 2034) with annual inflation adjustment by the IPCA index and price reviewed every 60 months;
- Post-employment obligations relating to the employees' health and dental plan (CEMIG Saúde) in amount of R\$ 3,162 million in 2019. (See Note 26 to the Financial Statements).

[Table of Contents](#)**Government-Controlled Companies Law**

On June 30, 2016, Federal Law No. 13,303/16 (the “State Companies Law”) came into force. According to this law, all government-owned companies, mixed capital companies (*sociedades de economia mista*), as well as their subsidiaries, must comply with new standards regarding corporate governance, contracting with third parties and public bidding procedures.

On June 11, 2018, CEMIG’s Extraordinary General Shareholders’ Meeting approved changes in the bylaws of CEMIG and its subsidiaries in order to formalize best practices of corporate governance and to comply with the requirements of the State Companies Law. The improvements formally incorporated in CEMIG’s by-laws include:

- Reduction of the number of members of the Board of Directors from 15 to 9 – reflecting the Best Corporate Governance Practices Code of the Brazilian Corporate Governance Institute (*Instituto Brasileiro de Governança Corporativa*, IBGC) and the Corporate Sustainability Assessment Manual of the Dow Jones Sustainability Index;
- The employees have the right to elect one of the members of the Board of Directors;
- At least 25% (twenty five per cent) of the members must be independent; and at least one, in the event that the minority shareholders decide to exercise the option of multiple vote;
- Creation of the Audit Committee (*Comitê de Auditoria*). The Fiscal Council (*Conselho Fiscal*) remains in existence;
- Where filling of appointments to positions on the Board of Directors and/or Executive Board of the Company’s subsidiaries or affiliates is the competency of the Company, it shall do so in accordance with the criteria of the State Companies Law and its bylaws;
- The creation or review of the following policies by the Board of Directors: dividend policy; policy on transactions with the related parties; people management policy; information disclosure policy; policy on communication and spokespersons; policy on nominations; policy on holdings and corporate risk policy;
- The requirement to comply with an eligibility and assessment policy for appointments to the Board of Directors or Executive Board of subsidiaries or affiliates;
- Formal designation for the Board of Directors to ensure implementation of and supervision of our systems of risks and internal controls;
- The CEO to have responsibility for directing compliance and corporate risk management;
- Greater emphasis on control functions: internal audit, compliance and corporate risk management;
- Adoption of an arbitration chamber for resolution of any disputes among the company, its shareholders, board of directors and members of the Fiscal Council;
- Every year the members of the Board of Directors, Executive Board and the members of the statutory committees shall undergo individual and collective performance evaluation;
- Only the Board of Directors can appoint, from among the Company’ career employees, and dismiss, in both cases with due justification, the head of the Internal Audit Unit.

Item 8. Financial Information**Consolidated Financial Statements and Other Financial Information**

Please find our consolidated financial statements which begin on page F-1 of this document, and “Item 3. Key Information – Selected Consolidated Financial Data.”

Legal and Administrative Proceedings

The Company, in particular CEMIG GT and CEMIG D, are involved in certain legal and administrative proceedings regarding tax, regulatory, customer, administrative, environmental, employment-law and other issues, in relation to its business. In accordance with IFRS, we record and disclose the amounts of the proceedings that we have determined a loss to “probable”, and disclose the amounts of the proceedings in which we have determined a loss to be “possible”; to the extent, these amounts can be reasonably estimated. For more information regarding such contingencies, see Note 27 to our consolidated financial statements.

[Table of Contents](#)**Regulatory Matters**

CEMIG and CEMIG D are parties in lawsuits arising from clauses of energy supply contracts for public lighting, signed with various municipalities in the concession area. These actions request restitution of a portion of amounts charged in the last 20 years, in the event that the courts recognize that these amounts were unduly charged. The proceedings are based on an alleged mistake by CEMIG in the estimate of time used for the calculation of the consumption of energy by public lighting paid for by the Public Lighting Contribution (*Contribuição de Iluminação Pública*, or “CIP”). On December 31, 2019, the amount involved in these actions was approximately R\$959 million, and the chances of loss were assessed as ‘possible’, since, although the case law is amply in favor of CEMIG, it has not been definitively consolidated.

CEMIG GT filed an application to be included a joint defendant in a lawsuit brought by AES Sul against ANEEL, seeking annulment of ANEEL Dispatch No. 288/2002, which set the guidelines for interpretation of ANEEL Resolution No. 290/2000, and thus changed the situation of AES Sul Distribuidora, from creditor to debtor of the Wholesale Energy Market (Mercado Atacadista de Energia, or “MAE”), predecessor of the present CCEE. CEMIG GT obtained an interim decision to suspend the deposit that had been ordered in favor of AES, determined in the process of financial settlement, for the historic amount. The application to be joined as a party was granted and CEMIG GT is a co-litigant with Centrais Elétricas de Santa Catarina S.A. (“CELESC”) in the principal case (“Ordinary Action”), resulting in CEMIG D being able to present petitions and appeals in that action if necessary. A Special Appeal was filed against the decision allowing for CEMIG D’s joinder before the STJ, which awaits judgment. This appeal does not prevent CEMIG GT from acting in the case to which it was admitted. Judgment at first instance was given against said Ordinary Action, and AES filed an appeal, which was granted. The Appeal Court Judgment on the appeal was the subject of a Motion for Clarification by CEMIG GT, on which judgment was given (cognizance taken, and appeal granted in part as to confirmation that only ANEEL should bear the costs of loser’s fees). As to the merits of the question, an appeal was lodged (against non-unanimous decision by an appellate court), which awaits judgment. On December 31, 2019, the amount involved in the action was R\$343 million, and the chances of loss were assessed as possible since there is still the possibility of the second instance decision being modified in the appeals that are currently awaiting judgment.

CEMIG GT and its subsidiaries are represented by the Brazilian Independent Energy Producers Association (*Associação Brasileira dos Produtores Independentes de Energia Elétrica*, or “APINE”) in a legal action in which APINE seeks a declaration of nullity of Articles 2 and 3 of CNPE Resolution No. 3, enacted on March 6, 2013, which states, in summary, that the ONS shall have the power, in addition to what is indicated by the computer programs, to dispatch energy resources or change the direction of exchange between sub-markets, and that the cost of the additional dispatch will be prorated between all the agents of the market, in proportion to the energy traded. The ability to make such rulings represents imposition of a burden on the Generating Agents of the market, which led them, through their associations, including APINE, to question the legality of this Resolution in the Courts. The Plaintiff’s request was granted by the trial court, with interim decision in favor of members of APINE, including CEMIG GT and its subsidiaries. This decision has been challenged distributed to the 7th Panel of the Regional Federal Court (*Tribunal Regional Federal*, or “TRF”) of the 1st Region, which unanimously rejected it. The Federal Government filed a motion for clarification, which was denied. On January 16, 2017, the Federal Government filed a Special Appeal, which was denied. On June, 2019, the lawsuit was definitively closed in favor of APINE, including CEMIG GT and its subsidiaries.

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Company and its subsidiaries are involved in numerous administrative and judicial proceedings, challenging, principally: (i) tariff charges in invoices for use of the distribution system by a self-producer; (ii) alleged violation of targets for continuity indicators in retail supply of energy; and (iii) the tariff increase made during the federal government's economic stabilization plan referred to as the 'Cruzado Plan', in 1986. As of December 31, 2019, the amount involved in these actions for which chances of loss were assessed as 'possible' totaled approximately R\$244 million and the proceedings in which the chances of loss were assessed 'probable' totaled approximately R\$ 36 million.

Tariff Increases

The Federal Public Attorneys' Office filed a class action against CEMIG D and ANEEL, to avoid exclusion of customers from classification in the Low-income Residential Tariff Sub-category, and also requesting an order for CEMIG D to pay 200% of the amount allegedly paid in excess by customers in that sub-category. Judgment at first instance was given in favor of the Federal Public Attorneys, and CEMIG D and ANEEL have filed an appeal with TRF. A decision by the Court in this case has been pending since March 2008. As of December 31, 2019 the amount involved in this case was approximately R\$327 million. The chance of loss has been classified as 'possible' due to the existence of other judgments, both in the judiciary and in the administrative sphere, that are in favor of the argument put forward by CEMIG D.

Tax and Similar Charges

CEMIG, CEMIG GT and CEMIG D are parties in various legal actions disputing the applicability of the Urban Land Tax (Imposto Territorial Urbano, or "IPTU"), on real estate properties designed for public service concessions. This is a matter on which case law has not been established by the higher courts. There is an Extraordinary Appeal awaiting judgment by the Federal Supreme Court which, because it will give rise to a global precedent, will be applied to the other legal actions involving the same question. As of December 31, 2019 the amount involved in these actions for which chances of loss were assessed as 'probable' totaled approximately R\$ 4 million and the proceedings in which the chances of loss were assessed 'possible' totaled approximately R\$ 79 million.

In 2006, CEMIG, CEMIG GT and CEMIG D advanced funds to some of their employees in exchange for their rights to future payments, referred to as the "Anuênio." No income tax or social security contributions were collected in connection with those payments, since it is our opinion that they are not applicable. The Brazilian Federal Revenue Service, however, initiated an administrative proceeding seeking to levy taxes on such payments. In order to avoid the risk of imposition of penalties, we filed two writs for mandamus, which were decided unfavorably to us in the lower court. We have appealed and are awaiting the ruling of the Court of Appeals on whether the income tax is applicable. Regarding the social security contributions, the TRF ruled against us. We appealed to the Superior Courts, which have not yet rendered a decision. On December 31, 2019, the amount involved in these actions was, approximately, R\$289 million, and we have assessed the chance of loss as possible, in view of the indemnity nature of the advance payments made to the employees and the absence of specific case law in STJ and the TRF of the First Region. We emphasize that, in relation to Income Tax, both the STJ and the TRF of the First Region adopt the position that there is no tax levied on payments arising from the suppression of employees' collective bargaining rights when agreed through a collective agreement, since such amounts are considered as being of an indemnity nature.

INSS initiated an administrative proceeding against CEMIG in 2006 alleging non-payment of the social security contribution on the amounts paid to our employees and directors as profit-sharing in the period 1998 to 2004. In 2007, we filed a writ of mandamus seeking declaration that such profit-sharing payments were not subject to social security contributions. We received a partial favorable decision in 2008, which declared non-applicability of the contribution of social security on the profit-sharing amounts paid for employees, and its applicability on the profit-sharing amounts paid to directors. We have appealed the decision and, on August 23, 2019, the TRF of the 1st Region issued a ruling giving partial approval to declare the decay of tax credits related to taxable events that occurred up to August 2001, but denying the other requests. As a result of that decision, on December 31, 2019, the amount involved in this action was assessed as approximately R\$136 million, and we have assessed the chance of loss as probable.

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The Brazilian Federal Tax Authority (Secretaria da Receita Federal) has brought, in addition to the process mentioned above, other administrative proceedings against CEMIG, CEMIG GT, CEMIG D and Rosal Energia S.A., in relation to Social Security contributions under various headings: employee profit sharing, the Workers' Food Program (Programa de Alimentação do Trabalhador, or "PAT"), the education support contribution (auxílio-educação), time-of-service bonuses, Special Additional Retirement payments, taxes under suspended enforcement, overtime payments, hazardous occupation payments, matters related to Sest/Senat (transport workers' support programs), donations, sponsorships, and fines for non-compliance with accessory obligations. We have presented defenses and wait for judgment. As of December 31, 2019, the amount involved in these actions was approximately R\$ 1.43 billion. As a result of the decision by the TRF of the 1st Region mentioned above, the amounts for which chances of loss were assessed as 'probable' totaled approximately R\$1.08 billion and the proceedings in which the chances of loss were assessed 'possible' totaled approximately R\$349 million.

CEMIG, CEMIG GT, CEMIG D and Sá Carvalho S.A. are parties in administrative proceedings in relation to Corporate Income Tax ("IRPJ") and the Social Contribution on Net income ("CSLL"). As of December 31, 2019, the amount involved in these actions were assessed as approximately R\$ 400 million, and the chances of loss assessed as 'possible'. The infringement notices for the Social Contribution (CSLL) tax are due in particular to the companies having excluded, from their declared basis of calculation for this tax, amounts relating to: (i) cultural and artistic donations and sponsorship; (ii) payments of punitive fines; (iii) taxes with liability suspended; and (iv) expenses on amortization of goodwill, since there is no provision in law that supports taxation of amounts reported under this heading. The infringement notices for corporate income tax are due to the fact that when calculating the Real Profit the companies considered as expenses the amounts spent on technological innovation, under Law 11196/05. The Trade and Industry Ministry (MCTI), which initially, due to lack of information, had not recognized this legal categorization of these amounts, is reviewing its legal opinions now that it is in possession of the information sent by the companies.

The Federal Tax Authority issued an infringement notice on Parati – Participações em Ativos de Energia Elétrica (Parati), a CEMIG affiliated company, and as a jointly responsible party, on CEMIG, in relation to the Withholding Income Tax (Imposto de Renda Retido na Fonte, or "IRRF") allegedly applicable to capital gains arising from the disposal of assets or rights in Brazil by a non-resident, on the basis of allegedly being the legal entity responsible for the withholding and payment of the tax. The transaction in question was in regards to the purchase by Parati, and sale by Enlighted, on July 7, 2011, of a 100% interest in Lepsa LLC (a company headquartered in Delaware, USA). Lepsa LLC was also the owner of 75% of the quotas of Luce Brasil Fundo de Investimento em Participações ("FIP Luce"), which in turn was the indirect holder, through Luce Empreendimentos e Participações S.A., of approximately 13.03% of the total and voting share of Light (Light, which has only issued common shares). After certain transactions, Parati became the direct holder of 100% of the shares of Luce Empreendimentos e Participações S.A. (LEPSA), which in turn was the holder of approximately 13.03% of the voting share and total share capital of Light. After successive corporate transactions, CEMIG incorporated Parati and, consequently, succeeding its position in this process. On May 2, 2016, the Delegated Judgment office of the Federal Tax Authority decided on the challenge presented by Parati and CEMIG: it maintained the posting of the tax credit against Parati, and in relation to CEMIG, it upheld the principle of joint liability. The companies then appealed, and the Voluntary Appeal is pending judgment by CARE. As of December 31, 2019, the amount claimed in this case totaled approximately R\$230 million and the chance of loss was assessed as 'possible', mainly due to the matters of fact: (i) On the question of joint responsibility, CEMIG is merely an affiliated entity, because it had assigned its contractual rights to Parati; (ii) on the question of simulation, the situation in this specific case is more favorable than that in the precedents that are found in the case law. If the allegation of simulation is overturned, we believe that there will be no legal case for the demand for payment; (iii) on the merits, because this is a very specific transaction, there are no similar precedents; and (iv) with regards to the fine, the same arguments hold as to the singular nature of this specific case.

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CEMIG and its wholly-owned subsidiaries, especially CEMIG GT and CEMIG D, are parties in various court and administrative proceedings dealing with offsetting of credits arising from tax losses in corporate income tax returns, and also payments made in excess, identified by Federal Revenue Payment or Credit Receipts, involving corporate income tax, the Social Contribution on net income and the PIS and Cofins taxes. The companies are contesting the non-ratification by the authorities of these offsettings, and attempts by the federal tax authorities to recover the amounts of these taxes to be compensated. On December 31, 2019 the amount involved in these for which the chances of loss were assessed 'possible' totaled approximately R\$160 million.

CEMIG and its subsidiaries are involved in numerous administrative and judicial claims actions relating to taxes, including, among other matters, subjects relating to the Rural Property Tax (ITR); the Tax on Donations and Legacies (ITCD); the Social Integration Program (Programa de Integração Social, or PIS); the Contribution to Finance Social Security (Contribuição para o Financiamento da Seguridade Social, or Cofins); Corporate Income tax (Imposto de Renda Pessoa Jurídica, or IRPJ); the Social Contribution (Contribuição Social sobre o Lucro Líquido, or CSLL); and motions to tax enforcement. As of December 31, 2019, the amount involved in these actions for which chances of loss were assessed as 'probable' totaled approximately R\$43 million and the proceedings in which the chances of loss were assessed 'possible' totaled approximately R\$161 million.

ICMS (local state value added tax)

From December 2019 to March 2020 the Tax Authority of Minas Gerais State issued infraction notices against the subsidiary Gasmig, in the total amount of R\$55, relating to reduction of the calculation base of ICMS tax in the sale of natural gas to its customers over the period from December 2014 to December 2015, alleging a divergence between the form of calculation used by Gasmig and the opinion of that tax authority. The claims comprises: principal of R\$17 million, penalty payments of R\$27 million and interest of R\$11 million.

Considering that the State of Minas Gerais, over a period of more than 25 years, has never made any allegations against the methodology of calculation by the Company, the managers, together with their legal advisers, believe that there is a defense under Article 100, III of the National Tax Code, which removes claims for penalties and interest; and that the contingency for loss related to these amounts is 'remote'. In relation to the argument on the difference between the amount of ICMS tax calculated by Gasmig and the new interpretation by the state tax authority, the probability of loss was considered 'possible'. On December 31, 2019 the amount of the contingency for the period relating to the rules on expiry by limitation of time is R\$ 89 million.

Contracts

CEMIG D is a party in court disputes involving claims for rebalancing of contracts to implement part of the rural electrification program known as *Luz Para Todos* ("Light for All"). As of December 31, 2019, the amount involved in these actions was approximately R\$322 million. The amounts for which chances of loss were assessed as 'probable' totaled approximately R\$4 million and the proceedings in which the chances of loss were assessed 'possible' totaled approximately R\$318 million.

CEMIG and the State of Minas Gerais are parties in an administrative proceeding filed by the Audit Court of the State of Minas Gerais ("TCMG"), on a representation of supposed irregularities in the manner used for application of arrears interest, and in the percentage of discount given, at the time of the settlement of the debt owed by the State of Minas Gerais to CEMIG in relation to the Contract for Assignment of the Outstanding Balance Receivable on the Earnings Compensation Account ("CRC"). In June 2018, the Court's Technical Unit and the Public Attorneys' Accounting Department gave opinions, against the Representation. The principal arguments presented by CEMIG were accepted. Proceedings in the case before the Reporting Member of the Court have been completed, and will be included in a judgment agenda for decision by the full Court sitting in session. As of December 31, 2019, the amount involved in this action was approximately R\$426 million, and the chances of loss in the action were assessed as 'possible'.

[Table of Contents](#)***Employment Law Obligations***

CEMIG, CEMIG GT and CEMIG D are parties in various labor claims filed by their employees and by employees of companies that provide them with services. Most of these claims relate to overtime and additional pay, severance payments, various benefits, salary adjustments and the effects of such matters on a supplementary retirement plan, and the use of outsourced labor. Under Brazilian employment laws, claimants must file claims for any unpaid amounts to which they are entitled within two years from the relevant termination of the employment contract, and such rights are limited to a period of five years prior to the filing of the claim. On December 31, 2019 the value of the claims for which the chances of loss had been assessed as 'probable' was approximately R\$ 487 million; for those with chances of loss assessed as 'possible' the amount was R\$1.19 billion.

Alteration of the monetary updating index of labor claims

The Higher Labor Appeal Court (Tribunal Superior do Trabalho, or TST), considering a position adopted by the Federal Supreme Court (Supremo Tribunal Federal, STF) in two actions on constitutionality that dealt with the index for monetary updating of federal debts, decided on August 4, 2015 that labor claims not yet decided that discuss debts subsequent to June 30, 2009 should be updated based on the variation of the IPCA-E (Expanded National Customer Price) Index, rather than of the TR reference interest rate. On October 16, 2015 an interim injunction was given by the STF that suspended the effects of the TST decision, on the grounds that decisions on matters of general constitutional importance should be decided exclusively by the STF. In a public joint judgment of November 1, 2018, the Higher Employment Appeal Court decided that the IPCA-E should be adopted as the index for inflation adjustment of employment-law debts for cases proceedings filed from March 25, 2015 to November 10, 2017, and the TR continue to be used for the other periods. This results in a reduction of the estimated value of the difference between the inflation adjustment indices for employment-law cases proceedings, which is R\$ 107 million as of December 31, 2019, having been provisioned the amount of R\$10 million, based on the assessment of its legal advisors, has assessed the chances of loss in some of these employment-law cases proceedings as 'probable'.

Environmental Issues

The Public Attorneys' Office of the State of Minas Gerais and other parties, have brought civil public actions against CEMIG, CEMIG GT and CEMIG D requiring them to invest at least 0.5% of their annual operating revenue since 1997 in environmental protection and preservation of the water tables of the municipalities where hydroelectrical plants are located, and to indemnify the State of Minas Gerais, proportionately, for environmental damage allegedly caused, arising from omission to comply with Minas Gerais State Law No.º12,503/97. Partial judgment has been given in favor of the plaintiffs in four of these actions by the Minas Gerais State Court of Appeals, ordering CEMIG and CEMIG GT to invest 0.5% of gross annual revenue since 1997 in measures for preservation and protection of the water tables. The Companies have filed appeals with the STJ and with the STF, since the actions involve federal laws and constitutional matters. On February 9, 2015, the STF recognized the general repercussion of the dispute. As of December 31, 2019, the amount involved in these actions was approximately R\$165 million, and the chances of loss were assessed as 'possible'.

Additionally, CEMIG, CEMIG GT and CEMIG D are party to a number of other administrative and judicial proceedings and claims involving environmental matters, regarding certain protected areas, environmental licenses and remediation of environmental damages, among others. As of December 31, 2019 the amount for which chance of loss was assessed as 'probable' was approximately R\$ 55 thousand and the total of proceedings in which chances of loss were assessed as 'possible' was approximately R\$142 million. These proceedings also include other public civil actions in which the amounts involved cannot be precisely assessed, in our view, since most of these lawsuits are related to alleged environmental damages and claim indemnity, remediation of damaged areas and compensation measures that will be defined in the course of the proceedings, by expert verification of the amounts involved. Also, since public civil lawsuits are related to collective rights, individual actions may be filed seeking reparations or damages arising from judicial decisions to be issued under the public civil actions.

[Table of Contents](#)***Property and Liability***

CEMIG, CEMIG GT and CEMIG D are party in several legal proceedings, mainly as defendant, relating to real property and to indemnity arising from accidents taking place in the ordinary course of the business. On December 31, 2019 the amount for which chances of loss were assessed as 'probable' was approximately R\$25 million, and the total of proceedings in which chances of losses were assessed as 'possible' was approximately R\$382.8 million.

Other proceedings

Company and its subsidiaries are involved as plaintiff or defendant, in other less significant claims, related to the normal course of their operations including: provision of cleaning service in power line pathways and firebreaks, indemnities for rescission of contracts, on a lesser scale, and disputes alleging losses suffered as a result of supposed breaches of contract at the time of provision of services of cleaning of power line pathways and firebreaks. As of December 31, 2019, the amount involved in these actions for which chances of loss were assessed as 'possible' totaled approximately R\$ 338 million and the proceedings in which the chances of loss were assessed 'probable' totaled approximately R\$ 47 million.

Customer's claims

Company and its subsidiaries are involved in various civil actions relating to indemnity for moral injury and for material damages, arising, principally, from allegations of irregularity in measurement of consumption, and claims of undue charging, in the normal course of business. As of December 31, 2019, the amount involved in these actions for which chances of loss were assessed as 'possible' totaled approximately R\$49 million and the proceedings in which the chances of loss were assessed 'probable' totaled approximately R\$19 million.

Dividend Policy and Payments***Mandatory Dividend—Priority and Amount of Dividends***

Under our by-laws, we are required to pay to our shareholders, as mandatory dividends, 50% of the net income of each fiscal year ending December 31, determined in accordance with Law No. 6,404, enacted on December 15, 1976, or "Brazilian Corporate Law". Our preferred shares have priority in the allocation of the minimum mandatory dividend for the period in question. The order of priority of the dividend distribution is as follows:

The annual minimum dividend for the preferred shares: these have preference in the event of repurchase of shares, and have an annual minimum dividend equal to the greater of the following:

- 10% of their par value; or
- 3% of the shareholders' equity associated with it.
- The dividends on the common shares, up to the minimum percentage for the preferred shares.

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In the General Shareholders' Meeting held on April 30, 2015 and on April 29, 2016, our Board of Directors indicated that the payment of a dividend calculated on the basis of 50% of the net income for the years ended in 2014 and 2015, as specified in the by-laws would not be compatible with the Company's current financial situation. As a result, the General Meeting of Shareholders approved the payment of dividends corresponding to 25% of our net income for the years ended in 2014 and 2015. The amount not distributed as a mandatory dividend, calculated as the difference between 50% of net income as specified in our bylaws and the amount paid equal to 25% of our net income for the years ended in 2014 and 2015, will be held in Shareholders' equity in the reserve for mandatory dividends not distributed, to be paid as soon as our financial situation so permits, in accordance with Paragraph 5 of Article 202 of Law 6,404/1976.

The Annual General Meeting of Shareholders held on May 12, 2017 approved payment of dividends for the business year 2016, of R\$204 million, to holders of preferred shares, this amount being below the mandatory minimum specified by the by-laws, of R\$419 million. On December 21, 2016, the Company declared payment of Interest on Capital (Juros sobre Capital Próprio, or JCP) in the amount of R\$380 million, using the balance of the Retained Earnings Reserve, and payable to shareholders whose names were on the Company's Nominal Share Registry on December 26, 2016. Of this amount of Interest on Capital, the amount of R\$215 million, net of income tax, was allocated to the holders of the preferred shares. Sub-item III of CVM Decision 683/2012 specifies that Interest on Capital paid or credited may be imputed against the minimum mandatory dividend only at its value net of withholding income tax. Any amount remaining after the payment of the mandatory dividend on common share must be distributed on an equal, *pro rata* basis with respect to all preferred shares and common shares.

The Annual General Meeting of Shareholders held on April 30, 2018 approved payment of dividends for the year 2017, of R\$ 486 million, to holders of preferred shares and R\$15 million to holders of common shares. The payment of dividends was made in a single tranche on December 30, 2018.

On December 18, 2018, the Company declared payment of Interest on Capital in the amount of R\$210 million, on account of the amount of the minimum mandatory dividend for 2018, and payable to shareholders whose names were on the Company's Nominal Share Registry on December 21, 2018. This amount was paid in two installments, the first on June 28, 2019 and the second on December 27, 2019. The Board of Directors proposed to the Annual General Meeting held on May 3, 2019 the payment of dividends for the year 2018 of R\$437 million, to holders of preferred shares and R\$220 million to holders of common shares. The payment of dividends was made in a single tranche on December 27, 2019.

On December 18, 2019, the Company declared payment of Interest on Capital in the amount of R\$400 million, on account of the amount of the minimum mandatory dividend for 2019, and payable to shareholders whose names were on the Company's Nominal Share Registry on December 23, 2019. This amount will be paid in two installments, the first by June 30, 2020 and the second by December 30, 2020. The Board of Directors decided to propose to the Annual General Meeting (AGM) to be held on July 31, 2020 the payment of dividends for the year 2019 of R\$364 million, to holders whose names are in the Company's Nominal Share Registry on the date of the AGM. The payment of dividends will be made in a single tranche until the end of December, 2020.

Unrealized profit reserve: Article 197 of the Brazilian corporate law n° 6,404/76 allows the Company to pay the mandatory dividend, calculated as required by the Bylaws, up to the amounts of the realized portion of the net income for the year (received in cash). The excess between such mandatory dividend amount and the dividends that will be actually paid was recorded in the "Unrealized profit reserve".

In 2019, Company presented a positive net share of profit of subsidiaries, jointly-controlled entities and affiliates of R\$2,834 million, which can be regarded as unrealized portion of net income for the year, in accordance with the Brazilian corporate law. The share of profit of subsidiaries and joint ventures might not be realized in 2020, which means it might not be converted into cash, considering the macro-economic scenario and the fact that is not possible yet to forecast the impacts of Covid-19 – coronavirus on investees' cash flows and financial results.

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Thus, since the mandatory dividends if distributed in their totality represents 50% of net income and an amount of R\$1,564 million and considering the expectations of realized profit for the year, as stated above, Management proposed the constitution of unrealized profit reserve in the amount of R\$835 million.

The unrealized profit reserve amounts can only be used to pay mandatory dividends. Hence, when the Company realizes such profits in cash, it must distribute the corresponding dividend in the subsequent period, after offsetting of any losses in subsequent years.

Without prejudice to the mandatory dividend, every two years, or shorter period if the Company's cash position permits, we distribute extraordinary dividends, up to the limit of the cash available, as determined by the Board of Directors, under the Company's Strategic Guidelines Plan and the dividend policy specified in that plan.

The annual dividends declared shall be paid in two equal installments, the first by June 30 and the second by December 30 of each year. Extraordinary dividends shall be paid as decided by the Board of Directors, according to the same deadline.

Under Brazilian Corporate Law, the Board of Directors may declare interim dividends, in the form of interest on capital, to be paid from retained earnings, accumulated reserves or profit reported in semi-annual or quarterly financial statements. Any interim dividend paid may be set off against the amount of the mandatory dividend payable for the fiscal year in which the interim dividend was paid.

In the fiscal years in which we do not have sufficient profit to pay dividends to our preferred and common shareholders, the State of Minas Gerais guarantees a minimum dividend of 6% of the par value of the preferred or common shares, respectively, per year to all shares of the Company issued until August 5, 2004 and held by individuals.

Amounts Available for Distribution

The amount available for distribution is calculated on the basis of the financial statements prepared in accordance with generally accepted accounting practices adopted in Brazil and the procedures described below.

The mandatory dividend is calculated on the basis of *adjusted net income*, defined as net income after taking onto account: (a) amounts allocated to the legal reserve, (b) amounts allocated to record contingency reserves and reversal of these reserves accumulated in prior fiscal years, and (c) any unrealized profit transferred to the unrealized profit reserve account, and any amounts previously posted to this reserve account which have been realized in the fiscal year and used to offset losses.

We are obligated to maintain a legal reserve of 5% of the net income of each fiscal year until it reaches 20% of the Company's social capital according to Article 193 of Brazilian Corporate Law. However, we are not obligated to make any allocation to the legal reserve in relation to any fiscal year in which the sum of the legal reserve and the other established capital reserves exceeds 30% of the Company's total paid-in capital. Any loss for the year may be charged against the legal reserve.

Under Brazilian Corporate Law, profits of subsidiaries or affiliates are accounted by the equity method and income from term sales, realizable after the end of the next fiscal year, are accounted for as unrealized profit.

The total of income reserves (with the exception of the reserve for contingencies relating to expected losses, tax benefits and the unrealized profit reserve), the legal reserve, the special reserves, the reserve for investment projects, and retained earnings may not be greater than the Company's registered capital. The amount in excess of our registered capital must be used to increase our registered capital or be distributed as cash dividends.

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Under Brazilian Corporate Law and the by-laws of the Company, dividends not claimed within three years of the date on which they are distributed revert to the Company.

Interest on Capital

Brazilian corporations are permitted to distribute dividends in the form of a tax deductible notional interest expense on shareholders' equity in accordance with Law No. 9,249/1995 of December 26, 1995, as amended. The amount of tax deductible interest that may be paid is calculated by applying the daily pro rata variation of the TJLP on the shareholders' equity during the relevant period and cannot exceed the greater of:

- 50.0% of net income (before taking into account such distribution and any deductions for income taxes and after taking into account any deductions for social contributions on net income) for the period in respect of which the payment is made; or
- 50.0% of earnings reserves and retained earnings.

Non-residents shareholders must register with the Central Bank so that the foreign currency proceeds of their dividend, Interest on Capital payments, or of sale or other amounts relating to their shares, may be remitted to them outside Brazil. The preferred shares underlying our Preferred ADSs and the common shares underlying our Common ADSs are held in Brazil by the custodian bank, as agent for the depositary bank, which is the registered owner of the shares.

Dividends and interest on shareholders' equity over the minimum established in a Company's by-laws are recognized when approved by the shareholders in the general meeting.

Currency Exchange

Payments of cash dividends and distributions, if any, will be made in *reais* to the custodian on behalf of the depositary bank, which will then convert such proceeds into U.S. dollars and transfer such U.S. dollars to the depositary bank for distribution to holders of ADRs. In the event that the custodian is unable to immediately convert the *reais* received as dividends into U.S. dollars, the amount of U.S. dollars payable to the holders of ADRs may be adversely affected by devaluations of the *real* that occur before such dividends are converted and remitted. The *real* depreciated approximately 3.45% in comparison to the U.S. dollar in 2019. See "Item 3, Key Information—Risk Factors—Risks Relating to Brazil— The Federal Government exercises significant influence on the Brazilian economy. Political and economic conditions can have a direct impact on our business".

Dividends in respect of the preferred shares and common shares paid to non-resident holders, including holders of Preferred ADSs and Common ADSs, are generally not subject to Brazilian withholding tax, although in general payments of interest on capital are subject to withholding tax. See "Item 10, Additional Information—Taxation—Brazilian Tax Considerations—Taxation of Dividends" and "—U.S. Tax Considerations—Taxation of Distributions." There is no specific record date upon which the depositary bank will determine the exchange rate to be used in connection with converting cash dividends or other cash distributions. Pursuant to the Deposit Agreements, the depositary bank will arrange for the funds to be converted into U.S. dollars upon receipt of notice of cash dividends or other cash distributions.

History of Dividend Payments

The table below gives the history of recent declarations of dividends and Interest on Capital to holders of our common and preferred shares. In each case, the payment takes place in the year following the year for the results of which the dividend was declared. Please see the section "Item 3 – Material information – Selected Consolidated Financial Information".

[Table of Contents](#)**Declaration History of Dividends and Interest on Capital (1)**

Dividend Year	Common Shares		Preferred Shares	
	<u>(in millions R\$) (2)</u>	<u>(in millions US\$) (3)</u>	<u>(in millions R\$) (2)</u>	<u>(in millions US\$) (3)</u>
2017 (4)	14	5	486	147
2018 (5)	290	75	577	149
2019 (6)	255	49	509	99

- (1) Under Brazilian accounting practices, dividends and Interest on Capital are accounted in the business year in which the income from which the dividends are declared, provided that they are previously approved;
- (2) Amounts expressed in *reais* are expressed in nominal *reais*;
- (3) The amounts in USD displayed above are for illustrative purposes only and were calculated by dividing the amount of dividends and interest on capital paid, expressed in nominal *reais*, by the exchange rate obtained from the Federal Reserve Board's website on respective "record dates"; for 2019 - as of April 8, 2020;
- (4) According to the Ordinary and Extraordinary General Meetings of Shareholders held on April 30, 2018, the Company declared payment of R\$486 million as mandatory minimum dividend to holders of preferred shares whose names are on the Company's Nominal Share registry on the date on which the Ordinary (Annual) General Meeting is held. The Company also proposed payment of R\$ 14 million as the mandatory minimum dividend to holders of common shares whose names are on the Company's Nominal Share registry on the date on which the Ordinary (Annual) General Meeting is held;
- (5) On December 18, 2018, the Company declared payment of Interest on Capital in the amount of R\$210 million, on account of the amount of the minimum mandatory dividend for 2018, and payable to shareholders whose names were on the Company's Nominal Share Registry on December 21, 2018. This amount will be paid in two installments, the first by June 28, 2019 and the second by December 30, 2019. According to the proposal of the Ordinary and Extraordinary General Meetings of Shareholders held on May 3, 2019, the Company proposed payment of R\$437 million as mandatory minimum dividend to holders of preferred shares whose names are on the Company's Nominal Share registry on the date on which the Ordinary (Annual) General Meeting is held. The Company also proposed payment of R\$220 million as the mandatory minimum dividend to holders of common shares whose names are on the Company's Nominal Share registry on the date on which the Ordinary (Annual) General Meeting is held;
- (6) On December 18, 2019, the Company declared payment of Interest on Capital in the amount of R\$400 million, on account of the amount of the minimum mandatory dividend for 2019, and payable to shareholders whose names were on the Company's Nominal Share Registry on December 23, 2019. This amount will be paid in two installments, the first by June 30, 2020 and the second by December 30, 2020. According to the proposal of the Ordinary and Extraordinary General Meetings of Shareholders to be held on July 31, 2020, the Company proposed payment of R\$364 million as mandatory minimum dividend to holders of common and preferred shares whose names are on the Company's Nominal Share registry on the date on which the Ordinary (Annual) General Meeting is held.

Item 9. Offer and Listing Details**Trading Market**

The principal trading market for our preferred shares is the Brazilian Stock Exchange (B3). Our Preferred ADSs, each representing one preferred share as of December 31, 2019 have traded on the NYSE under the symbol "CIG" since September 18, 2001. Prior to that date, our Preferred ADSs were traded in the over-the-counter, or OTC, market in the United States. The Preferred ADSs are evidenced by Preferred ADRs issued by Citibank, N.A., as depositary, pursuant to a Second Amended and Restated Deposit Agreement, dated August 10, 2001, as amended on June 11, 2007 and on September 11, 2012 by and among the Company, the depositary and the holders and beneficial owners of Preferred ADSs evidenced by Preferred ADRs issued thereunder. As of December 31, 2019 there were approximately 152,580,657 Preferred ADSs outstanding (each representing one preferred share), representing approximately 15.7% of our 971,138,388 preferred shares.

The principal trading market for our common shares is the B3. Our Common ADSs, each representing one common share as of December 31, 2019 have traded on the NYSE under the symbol "CIG.C" since June 12, 2007, when we established an American Depositary Shares program for our common shares. The Common ADSs are evidenced by Common ADRs issued by Citibank, N.A., as depositary, pursuant to a Deposit Agreement, dated June 12, 2007, by and among Company, the depositary and the holders and beneficial owners of Common ADSs evidenced by Common ADRs issued thereunder. As of December 31, 2019 there were approximately 497,376 Common ADSs outstanding (each representing one common share), representing 0.10% of our 487,614,213 common shares.

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As of December 31, 2019, the closing price per preferred share on the B3 was R\$13.79 and the closing price per Preferred ADS on the NYSE was US\$3.41.

As of December 31, 2019, the closing price per common share on the B3 was R\$15.59 and the closing price per Common ADS on the NYSE was US\$3.97.

The following table sets forth the reported high and low closing sale prices adjusted for dividends for the preferred and common shares on the B3 and the Preferred and common ADSs on the NYSE for the periods indicated.

Year	Common Shares		Common ADSs		Preferred Shares		Preferred ADS	
	Price in Nominal R\$		Price in US\$		Price in Nominal R\$		Price in US\$	
	High	Low	High	Low	High	Low	High	Low
2015	13.69	5.16	4.82	1.14	12.34	4.49	4.19	1.14
2016	9.08	3.94	3.03	0.98	8.26	3.43	2.63	0.86
2017	13.45	6.05	4.44	1.81	10.23	5.92	3.34	1.76
2018	15.03	5.97	4.26	1.54	13.86	6.09	3.56	1.58
2019	18.71	13.73	4.83	3.21	15.09	12.24	3.95	2.86

Quarter	Common Shares		Common ADSs		Preferred Shares		Preferred ADS	
	Price in Nominal R\$		Price in US\$		Price in Nominal R\$		Price in US\$	
	High	Low	High	Low	High	Low	High	Low
2018								
1 Q	7.71	6.06	2.29	1.82	8.13	6.09	2.42	1.88
2 Q	7.68	5.97	2.19	1.57	8.07	6.49	2.31	1.69
3 Q	6.86	6.24	1.72	1.54	7.32	6.73	1.79	1.58
4 Q	15.03	6.45	4.26	1.60	13.86	6.93	3.56	1.69
2019								
1 Q	17.03	14.45	4.40	3.65	14.13	12.43	3.74	3.21
2 Q	18.71	14.62	4.77	3.79	14.94	12.24	3.81	3.00
3 Q	18.56	15.23	4.83	3.59	15.09	13.62	3.95	3.24
4 Q	15.82	13.73	3.90	3.21	14.21	12.30	3.37	2.86

Month	Common Shares		Common ADSs		Preferred Shares		Preferred ADS	
	Price in Nominal R\$		Price in US\$		Price in Nominal R\$		Price in US\$	
	High	Low	High	Low	High	Low	High	Low
October 2019	15.82	14.22	3.67	3.50	14.21	12.90	3.37	3.19
November 2019	14.63	13.73	3.62	3.21	13.17	12.30	3.28	2.86
December 2019	15.59	13.99	3.90	3.33	13.79	12.48	3.36	2.95
January 2020	17.51	15.54	4.26	3.79	15.64	13.73	3.70	3.34
February 2020	17.76	14.87	4.15	3.15	15.97	13.70	3.72	3.01
March 2020	15.91	7.74	3.43	1.52	15.08	8.15	3.25	1.56
April 2020	10.72	8.05	2.05	1.54	10.42	7.86	1.96	1.45
May 2020 (until May 14,2020)	9.59	7.54	1.78	1.30	9.55	7.58	1.72	1.28

The table below represents the dividends paid on the common and preferred shares and their respective Common and Preferred ADSs, resulting in an adjustment to the price per share and ADS:

[Table of Contents](#)**Record of dividends paid on common and preferred shares and Common and Preferred ADSs**

Year	Declaration	Record date Brazil	Payment date Brazil	Record date NYSE	Payment date NYSE
2017	05/12/2017	05/12/2017	12/28/2017	05/07/2017	01/05/2018
2018	04/30/2018	04/30/2018	12/28/2018	05/03/2018	01/08/2019
2019	05/03/2019	05/03/2019	12/26/2019	05/07/2019	01/07/2020

Since July 12, 2002, our shares have been traded on the LATIBEX, under the ticker symbol "XCMIG." The LATIBEX is an electronic trading market created in 1999 by the Madrid Stock Exchange in order to facilitate the trading market of Latin American Securities in Euros.

Trading on the B3 S.A. - BRASIL, BOLSA, BALCÃO ("B3")

The preferred shares and common shares are traded on the B3, the only Brazilian stock exchange that trades shares. Trading on the B3 is limited to brokerage firms and a limited number of authorized entities. The CVM and B3 have discretionary authority to suspend trading in shares of a particular issuer under certain circumstances.

Trading on the B3 is conducted between 10:00 a.m. and 5:00 p.m. or from 11:00 a.m. to 6:00 p.m. (during daylight savings time in Brazil). The B3 also permits trading from 5:30 p.m. to 6:00 p.m. during a different trading period called the "after market", except during daylight time. Trading during aftermarket is subject to regulatory limits on price volatility and on the volume of shares transacted through internet brokers.

If you were to trade in the preferred shares or common shares on the B3, your trade is settled in three business days after the date of the trade. Delivery of and payment for shares is made through the facilities of a separate clearinghouse, which maintains accounts for brokerage firms. The seller is ordinarily required to deliver the shares to the exchange on the second business day following the date of the trade. The clearing house for the B3 is the *Câmara de Ações* (previously organized as *Companhia Brasileira de Liquidação e Custódia*, or "CBLC").

In order to better control volatility, the B3 has adopted a "circuit breaker" system pursuant to which trading sessions may be suspended (i) for a period of 30 minutes whenever the index of this stock exchange falls more than 10% from the index registered for the previous day; (ii) for one hour if the index of this stock exchange falls 15% or more from the index registered for the previous day, after the reopening of trading; and (iii) for a certain period of time to be defined by the B3, if the index of this stock exchange falls 20% or more from the index registered for the previous day, after the reopening of trading. The minimum and maximum price is based on a reference price for each asset, which will be the previous session's closing quote, when considering the asset at the beginning of the day before the first trade, or the price of the day's first trade. The asset's reference price will be altered during the session if there is an auction sparked by the intraday limit being breached. In this case the reference price will become whatever results from the auction.

B3 settles the sale of shares three business days after they have taken place, without monetary adjustment of the purchase price. The shares are paid for and delivered through a settlement agent affiliated with the B3. The B3 performs multilateral compensation for both the financial obligations and the delivery of shares. According to the B3's regulations, financial settlement is carried out by the Central Bank's reserve transfer system. The securities are transferred by the B3's custody system. Both delivery and payment are final and irrevocable.

Trading on the B3 is significantly less liquid than trading on the NYSE or other major exchanges in the world. Although any of the outstanding shares of a listed company may trade on the B3, in most cases fewer than half of the listed shares are actually available for trading by the public, the remainder being held by a controlling group or by government entities.

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Trading on the B3 by a holder not deemed to be domiciled in Brazil for Brazilian tax and regulatory purposes, or a “non Brazilian holder,” is subject to certain limitations under Brazilian foreign investment regulations. With limited exceptions, non-Brazilian holders may trade on Brazilian stock exchanges in accordance with the requirements of CMN Resolution No. 4,373/2014, which requires that securities held by non-Brazilian holders be maintained in the custody of financial institutions authorized by the Central Bank and by the CVM or in deposit accounts with financial institutions. In addition, Resolution No. 4,373/2014 requires non Brazilian holders to restrict their securities trading to transactions on the B3 or qualified over the counter markets. With limited exceptions, non-Brazilian holders may not transfer the ownership of investments made under Resolution No. 4,373/2014 to other non-Brazilian holders through a private transaction.

We have been a member of Special Corporate Governance Level 1 of the B3 since October 2001. The rules regarding such corporate governance segment are comprised by the Special Corporate Governance Level 1 Regulations (“*Regulamento de Listagem do Nível 1 de Governança Corporativa*”), which were amended on March 21, 2011 by B3 and approved by the CVM. Such revised set of rules became effective on May 10, 2011. Among the obligations that are contemplated by such regulations, we are required to:

- present our consolidated statement of financial position, Standardized Financial Statements – DFP, consolidated statement of income, quarterly financial statements – ITR, and the Reference Form (Formulário de Referência);
- include, in the notes to our quarterly financial statements, a note regarding related party transactions, containing the disclosure provided in the applicable accounting rules to annual financial statements;
- disclose any direct or indirect ownership interest per type and class exceeding 5% of each type and class of the Company’s capital share, to the level of individual shareholders, once the Company has been provided with such information;
- disclose the amount of free float shares and their respective percentage in relation to total shares outstanding, which shall be of at least 25% of shares representing our capital share;
- disclose, by December 10th of each year, an annual timetable of corporate events, containing, at a minimum, the date of (a) acts and corporate events, (b) public meetings with analysts and other applicable parties, and (c) disclosure of financial information scheduled for the next fiscal year, Any changes in scheduled events must be notified to the B3 and to the public at least 5 days in advance;
- hold at least one annual meeting with market analysts and any other interested parties to disclose information about their economic and financial situation, projects and perspectives;
- prepare, disclose and submit to the B3, a securities trading policy and a code of conduct establishing the values and principles that guide the Company, the controlling shareholder, the members of the board of directors and of the Fiscal Council, when installed, and members of any bodies with technical or advisory functions created the by-laws;
- establish that the term of office of our board of directors shall not exceed two years, with reelection being permitted;
- have different persons occupying the positions of chairman of the board of directors and chief executive officer or main executive officer of our company;
- adopt mechanisms that provide for capital dispersion in any public share offerings through the adoption of special procedures, such as guaranteeing access to all interested investors or distributing to non-institutional individuals or investors of at least 10% of the total to be distributed; and
- include in our by-laws the mandatory provisions required by B3.

Disclosure of Trading by Insiders

Brazilian securities regulations require our controlling shareholders, management, members of our Fiscal Council and any other technical or advisory body to disclose to us, the CVM and the B3 the number and types of securities issued by us, our subsidiaries and our controlling companies that are held by them or by persons closely related to them and any changes in their respective ownership positions during the preceding 12 months. The information regarding the trading of such securities (amount, price and date of acquisition) must be provided to the CVM and the B3 by the Company within 10 days of the end of the month in which they occurred or of the month in which the managers of the Company were empowered.

[Table of Contents](#)**Disclosure of Material Developments**

Under the Brazilian securities legislation, we are required to publicly disclose any material act or fact related to our business, to CVM and to B3. We are also required to publish an announcement of such material acts or facts (in newspapers or on news websites). An act or fact is considered material if it has a material impact on: the price of our securities; the decision of investors to buy, sell or hold our securities; or the decision of investors to exercise any rights as holder of any of our securities. Under extraordinary circumstances, material acts or facts may in practice not be disclosed if the controlling shareholders or the management believes that revealing them would put the Company's legitimate interests at risk, provided that such controlling shareholders or managers must immediately publicize the material act or fact if they lose control over the information or in case of atypical alterations on share prices or on the amount of shares traded.

Trading on Brazilian stock exchanges by non-residents in Brazil is subject to limitations under the Brazilian law on foreign investment. See the section "Item 10. Additional information – Foreign exchange controls".

Regulation of Brazilian Securities Markets

The Brazilian securities markets are principally governed by Law No. 6,385, enacted on December 7, 1976, and the Brazilian Corporate Law, each as amended and supplemented, and by regulations issued by the CVM, the National Monetary Council (CMN), and the Central Bank, which has, among other powers, licensing authority over brokerage firms, and which regulates foreign investments and foreign exchange transactions. These laws and regulations, among others, provide for disclosure requirements applicable to issuers of traded securities, protection of minority shareholders and criminal penalties for insider trading and price manipulation. They also provide for licensing and oversight of brokerage firms and governance of the Brazilian stock exchanges.

Under Brazilian Corporate Law, a corporation is either public (*companhia aberta*), such as we are, or a closed company (*companhia fechada*). All public companies, including us, are registered with the CVM and are subject to reporting requirements. A company registered with the CVM may have its securities traded on the Brazilian stock exchanges or in the Brazilian over-the-counter market. Our common shares are listed and traded on the B3 and may be traded privately subject to some limitations between individuals in which a financial institution registered with the CVM serves as intermediary.

We have the option to request that trading in our securities on the B3 be suspended in anticipation of a material announcement. Trading may also be suspended on the initiative of the B3 or the CVM based on or due to, among other reasons, a belief that a company has provided inadequate information regarding a material event or has provided inadequate responses to inquiries by the CVM or the stock exchange.

The Brazilian over the counter market consists of direct trades between individuals in which a financial institution registered with the CVM serves as intermediary. No special application, other than registration with the CVM, is necessary for securities of a public company to be traded in this market. The CVM requires that it be given notice of all trades carried out in the Brazilian over the counter market by the respective intermediaries.

Trading on the B3 by non-residents of Brazil is subject to limitations under Brazilian foreign investment and tax legislation. The Brazilian custodian for the preferred shares or the common shares must register with the Central Bank of Brazil to be eligible for the remittance of funds in U.S. dollars abroad for payments of dividends, any other cash disbursements, or upon the disposition of the shares and sales proceeds thereof. In the event that a holder of Preferred ADSs exchanges it is Preferred ADSs for preferred shares or a holder of Common ADSs exchanges it is Common ADSs for common shares, the investor will need to apply for registration, as required by Resolution No. 4,373, enacted on September 29, 2014, which regulates investments in Brazilian financial and securities markets by foreigners. See "Item 10. Additional Information—Exchange Controls".

[Table of Contents](#)**Disclosure Requirements**

The CVM Rule No. 358, of January 3, 2002, establishes some requirements regarding the disclosure and use of information related to material facts and acts of publicly held companies, including the disclosure of information on the trading and acquisition of securities issued by publicly held companies. Among others, these requirements include provisions that:

- establish the concept of a material fact that gives rise to reporting requirements. Material facts include decisions made by the controlling shareholders, resolutions of the general meeting of shareholders and of management of the company, or any other facts related to the company's business (whether occurring within the company or otherwise somehow related thereto) that may influence the price of its publicly traded securities, or the decision of investors to trade those securities or to exercise any of those securities' underlying rights;
- specify examples of facts that are considered to be material, which include, among others, the execution of shareholders' agreements providing for the transfer of control, the entry or withdrawal of shareholders that maintain any managing, financial, technological or administrative function with or contribution to the company, and any corporate restructuring undertaken among related companies;
- oblige the investor relations officer, controlling shareholders, other officers, directors, members of the audit committee and other advisory boards to disclose material facts;
- require simultaneous disclosure of material facts to all markets in which the corporation's securities are admitted for trading;
- require the acquirer of a controlling stake in a corporation to publish material facts, including its intentions as to whether or not to de-list the corporation's shares, within one year;
- establish rules regarding disclosure requirements in the acquisition and disposal of a material shareholding stake; and
- restrict the use of insider information.

Item 10. Additional Information**Memorandum and Articles of Association****By-laws**

We are a state-controlled company registered under the laws of Brazil. The registration number ("NIRE") given to us by the Board of Trade of Minas Gerais (*Junta Comercial do Estado de Minas Gerais*) is 5804055. Set forth below is a brief summary of certain significant provisions of (i) our by-laws, as amended by our general and special shareholders' meeting on August 07, 2019 and (ii) Brazilian Corporate Law. The description of our by-laws contained herein does not purport to be complete and is qualified by reference to our by-laws, which have been filed as an exhibit to this annual report.

Objects and purpose

As described in Clause 1 of its by-laws, CEMIG was incorporated with four main objects:

- i. to build, operate and commercially operate systems of generation, transmission, distribution and sale of energy, and related services;
- ii. to operate in the various fields of energy, from whatever source, with a view to economic and commercial operation;
- iii. to provide consultancy services within its field of operation to companies in and outside Brazil; and
- iv. to carry out activities directly or indirectly related to its objects, including the development and commercial operation of telecommunication and information systems, technological research and development, and innovation.

[Table of Contents](#)***Preferred Shares***

Holders of preferred shares have the right to receive annual minimum dividends in an amount equal to the greater of 10% of the par value of each preferred share or 3% of the net worth value associated with each preferred share. Holders of our preferred shares also have priority over any other class of shares if we decide to redeem shares. A preferred share does not entitle its owner to vote at the General Shareholders' Meetings.

Share Subscription

Shares purchased by the State Government, which must constitute at all times the majority of our voting shares, are paid for in accordance with Brazilian Corporate Law. Shares purchased by other shareholders (whether natural persons or legal entities) shall be paid for in accordance with the decision resulting from the general meeting of shareholders that addresses the matter.

Article 172 of the Brazilian Corporate Law provides that each shareholder has a general preemptive right to subscribe for new shares or convertible securities issued in any capital increase, in proportion to that shareholder's shareholding, except in the event of the exercise of any option to acquire shares of our capital share. Shareholders must exercise their preemptive rights within 30 days of the publication of the notice of capital increase.

In the event of a capital increase, holders of Preferred ADSs, which represent preferred shares, and holders of Common ADSs, which represent common shares, have preemptive rights to subscribe only for newly issued preferred shares or common shares, respectively, in proportion to their shareholdings but may be unable to exercise those rights due to U.S. securities law restrictions. See "Item 3, Risk Factors—Risks Relating to the Preferred Shares, Preferred ADSs, Common shares and Common ADSs—You may not be able to exercise preemptive rights with respect to our securities".

Minority Shareholders

Our by-laws provide that the preferred and minority common shareholders are entitled to elect one member to the Board of Directors, respectively, in a separate vote in accordance with the applicable legislation, as more fully described in "—Rights of Shareholders—Rights of Minority Shareholders."

Dividends

For a discussion of our dividend policy, see "Item 8, Financial Information—Dividend Policy and Payments."

General Meetings of Shareholders

The general meetings of shareholders are held for the purposes provided for by law, specifically in the Brazilian Corporate Law. They take place within the first four months following the end of the business year, and are called by prior notice of at least 15 days. The Corporate Law also specifies that the following decisions can be made only by the General Meeting of Shareholders:

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- to changes the by-laws;
- to elect or dismiss, at any time, the members of the company's management or Fiscal Council or committee, subject to sub-item II of Article 142 of the Corporate Law;
- annually, to receive the accounts of management, and to decide on the financial statements presented by them;
- to authorize issuance of debentures;
- to suspend exercise of shareholders' rights;
- to decide on valuation of goods or assets that a shareholder provides for formation of the share capital;
- to authorize issuance of 'founder's shares';
- to decide on transformation, merger, absorption or split of or by the company, its dissolution or liquidation; to elect or dismiss liquidators, and take decisions on their accounts; and
- to authorize the managers to admit bankruptcy or seek concordata.

As a general rule, a vote in favor by shareholders representing at least the majority of the common shares in circulation, present in person or represented by holders of power of attorney, at a General Meeting of Shareholders, is required for approving or ratifying any measure proposed. Abstentions are not counted. However, an affirmative vote by shareholders representing a majority of the share capital in circulation is required for decisions which:

- create preferred shares or increase an existing class of preferred shares in a manner not proportional in relation to the other classes of shares, unless the measure is specified or authorized by the by-laws;
- change any preference, prerogative or condition of redemption or amortization conferred upon one or more classes of preference shares; or create a class with greater prerogatives than those of the existing classes of preferred shares;
- reduce the percentage of the obligatory dividends;
- make any change to the company's corporate Objects;
- carry out any transaction of absorption or merger of the company with any other company;
- carry out a split of part of the company's assets or liabilities;
- approve our participation in a group of companies;
- apply for cancellation of the state of liquidation;
- approve dissolution of the company;
- approve the creation of 'founder's shares'; and/or
- approve incorporation of all of our shares into those of another company in such a way as to make us a wholly owned subsidiary of that other company.

Shareholders may be represented at a General Meeting of Shareholders by a person holding a power of attorney given not more than one year prior to the date of the meeting. To be qualified to represent a shareholder at a General Meeting of Shareholders, the holder of the power of attorney must be a shareholder, or one of the Company's directors, or a member of the Board of Directors, or a lawyer. For a listed company, such as CEMIG, the holder of the power of attorney may also be a financial institution.

Subject to provisions of the Corporate Law and our by-laws, our Board of Directors may routinely call our General Meetings of Shareholders. General Meetings of Shareholders may also be called:

- by the Fiscal Council, if the Board of Directors omits to call the General Meeting within one month from the date on which this has been requested of it, in accordance with the applicable law, or a General Meeting at any moment in the event that serious and urgent matters affect our Company;
- by any shareholder, whenever the Board of Directors omits to call the General Meeting of Shareholders within 60 days from the date on which this has been requested of it in accordance with the Brazilian Corporate Law or our by-laws;

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- by shareholders holding at least 5% of the share capital, in the event that the Board of Directors omits to call the General Meeting within 8 calendar days from receipt of a request from these shareholders to call a General Meeting, with indication of the matters to be discussed;
- or by any holders of at least 5% of our voting stock or 5% of the shareholders without the right to vote, if our Board of Directors omits to call the General Meeting of Shareholders within 8 calendar days from receipt of a request from said shareholders to install the Fiscal Council.

Remote voting procedure

Pursuant to CVM Instruction No. 561, it is mandatory that remote voting – an absentee ballot system – should be available for Ordinary (Annual) General Meetings and Extraordinary General Meetings of Shareholders held to elect members of the Board of Directors or the Fiscal Council.

Shareholders may exercise the vote in General Meetings by filling in the Remote Voting Statement (Boletim de Voto à Distância, or BVD), which must contain all the subjects to be decided. The BVD may be delivered through the custody agent, through the administrator for book-entry shares, or directly at the Company.

The objective of remote voting is to increase shareholders' participation in general meetings, by facilitating the process of voting/representation. It also enables reduction of the costs of attending meetings and representation in them. In accordance with the provisions of the legislation, CEMIG is adopting remote voting as from the start of the current year.

The Board of Directors

Our by-laws require our Board of Directors to have nine members. One must be appointed Chair of the Board, and one Deputy Chair.

Key functions specific to the Board of Directors include the following:

- to set the general orientation of the Company's business;
- to elect, dismiss and evaluate the Executive Officers of the Company, in accordance with the applicable legislation, subject to the by-laws;
- to approve the policy on transactions with the related parties;
- to decide, upon proposal by the Executive Board, on disposal of, or placement of a charge upon, any of the Company's property, plant or equipment, and on the Company giving any guarantee to any third party of which the individual value is equal to 1% or more of the Company's Shareholders' equity;
- to decide, upon proposal by the Executive Board, on the Company's investment projects, signing of contracts and other legal transactions, contracting of loans or financing, or the constitution of any obligations in the name of the Company which, individually or jointly, have value equal to 1% or more of the Company's Shareholders' equity, including injections of capital into wholly-owned or other subsidiaries or affiliates or the consortia in which the Company participates;
- to call the General Meeting of Shareholders;
- to monitor and inspect the management by the Executive Board: the Board of Directors may, at any time, examine the books and papers of the Company, and request information on contracts entered into or in the process of being entered into, and on any other administrative facts or acts which it deems to be of interest to it;
- to give a prior opinion on the Executive Board's report of management and accounts of the Company;
- to choose and to dismiss the Company's auditors, from among companies with international reputation that are authorized by the Securities Commission (CVM) to audit listed companies, subject to statement of position by the Fiscal Council;

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- to authorize, upon proposal by the Executive Board, opening of administrative tender proceedings, or proceedings for dispensation or non-requirement of tender, or of non-applicability of the duty to tender, and the corresponding contractings, when the amount is more than 1% or more of the Company's Shareholders' equity, or more than R\$ 100,000,000.00, as adjusted annually by the IPCA Inflation Index, if positive;
- upon proposal by the Executive Board, to authorize filing of legal actions, or administrative proceedings, or entering into court or out-of-court settlements, for amounts equal to 1% or more of the Company's Shareholders' equity;
- to authorize the issuance of securities in the Brazilian or external market, for raising of funding in the form of non-convertible debentures, promissory notes, commercial papers and other instruments;
- to approve the Long-term Strategy, the Multi-year Business Plan and the Annual Budget, and alterations and revisions to them;
- annually, to set the directives and establish the limits, including financial limits, for spending on personnel, including concession of benefits and collective employment agreements, subject to the competency of the General Meeting of Shareholders and subject to the Annual Budget;
- to authorize the exercise of the right of preference and rights under shareholders' agreements or voting agreements in wholly-owned or other subsidiaries or affiliates and the consortia in which the Company participates, except in the cases of the wholly-owned subsidiaries CEMIG Distribuição S.A. and CEMIG Geração e Transmissão S.A., for which the General Meeting of Shareholders has the competency for decision on these matters;
- to approve participation in the share capital of, and constitution or extinction of, any company, undertaking or consortium;
- to approve, in accordance with its Internal Regulations, the institution of committees supporting the Board of Directors – the opinions or decisions of which are not a necessary condition for decision on the matters by the Board of Directors;
- to accompany the activities of internal auditing;
- to discuss, approve and monitor decisions that involve corporate governance practices, relationship with interested parties, people management policy and code of conduct;
- to ensure implementation of, and to supervise, the systems for management of risks and internal controls established for the prevention and mitigation of the principal risks to which the Company is exposed, including the risks related to safety and security of accounting and financial information and the occurrence of corruption or fraud;
- to establish an information disclosure policy to mitigate the risk of contradiction between the various areas and the managers of the Company;
- to make statements on any increase in number of the Company's own staff, concession of benefits or advantages, or revision of a salaries and careers plan, including alteration in the amount paid for commissioned posts or free appointments, and compensation of Chief Officers;
- to appoint, and to dismiss, in both cases with grounds, the head of the Internal Audit Unit, from among the Company' career employees;
- to elect the members of the Audit Committee, at the first meeting held after the Annual General Meeting, and to dismiss them, at any time, upon vote given with grounds by absolute majority of the members of the Board of Directors;
- to arrange for analysis, every year, of the success in meeting targets and results in execution of the Multi-year Business Plan and the Long-term Strategy, and to publish its conclusions and state them to the Legislative Assembly of Minas Gerais State and to the Minas Gerais State Audit Court; and
- to approve the complementary policies, including the policy on holdings, in accordance with the terms of these by-laws.

The financial limits relating to decisions by the Board of Directors that are identified by a percentage of the Company's Shareholders' equity shall be automatically adopted when the financial statements of each year are approved.

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Under Brazilian Corporate Law, members of the Board of Directors of a company usually have certain duties equivalent to those imposed by the laws of the majority of the States of the USA, including duty of loyalty to the company, duty not to trade in their own personal interest, and the duty diligently attend to the management of the company's business. The Members of our Board of Directors and our Executive Board may be held liable for failure in these duties to us and to our shareholders, and may be subject to legal action in proceedings brought by government bodies or by our shareholders.

There are no provisions in our bylaws relating to: (i) power for a board member to vote on proposals or contracts in which he or she has a material interest; (ii) powers that may be exercised by our board members to take on loans; (iii) retirement age for members of the Board of Directors; or (iv) the number of shares necessary for qualification of board members.

The Chair and Vice-Chair of the Board of Directors must be chosen by their peers, at the first meeting of the Board of Directors that takes place after the election of its members, and the Vice-Chair shall take the place of the Chair when the Chair is absent or prevented from exercising his/her functions. The shareholders have the power to set the compensation of the members of boards at the General Meeting of Shareholders at which the board members are elected.

Rights of Shareholders

We extend to our shareholders all of the rights that are provided under Brazilian law. Our by-laws are in compliance with the Brazilian Corporate Law.

Essential Rights

Article 109 of Brazilian Corporate Law provides that a corporation may not deny certain rights to its shareholders under any circumstances. These shareholders' rights include:

- the right to have a share of the corporation's earnings;
- the right to have a share of the corporation's assets, in the event of a liquidation of the Company;
- the right to supervise our management according to Brazilian Corporate Law;
- preemptive rights to subscribe new shares or securities convertible into shares, except for exceptions provided by Brazilian Corporate Law and our by-laws; and
- the right to withdraw from the company under certain circumstances provided in Brazilian Corporate Law.

Voting Rights

As a general rule, only our common shares are entitled to vote and each common share corresponds to one vote. Holders of preferred shares acquire voting rights if, during three consecutive fiscal years, we fail to pay a fixed or minimum dividend to which the preferred shares are entitled. If a holder of preferred shares acquires voting rights in this manner, such rights will be identical to the voting rights of a holder of common shares and will continue until the dividend is paid. No restrictions exist on the right of a holder of common shares or preferred shares to exercise voting rights with respect to such shares by virtue of such holder being a non-resident of Brazil or a citizen of a country other than Brazil. However, holders of Preferred ADSs may only vote the underlying preferred shares through the depositary according to the terms of the Second Amended and Restated Deposit Agreement, and holders of Common ADSs may only vote the underlying common shares through the depositary according to the terms of the Common ADS Deposit Agreement. In any circumstance in which holders of preferred shares are entitled to vote, each preferred share will entitle its holder to one vote.

[Table of Contents](#)**Redemption Rights**

Brazilian Corporate Law provides that, under limited circumstances, a shareholder has the right to withdraw his or her equity interest from the company and to receive payment for the portion of shareholder's equity attributable to his or her equity interest. Our common shares and preferred shares are not redeemable, with the exception that a dissenting shareholder is entitled under Brazilian Corporate Law to obtain redemption in the event of any of the following decisions being made at a shareholders' meeting by shareholders representing at least 50% of the voting shares:

- creating preferred shares or increasing an existing class of preferred shares without maintaining the existing ratio with the remaining class of preferred shares, unless when already set forth in or authorized by the bylaws (1);
- to modify a preference, privilege or condition of redemption or amortization conferred on one or more classes of preferred shares, or to create a new class with greater privileges than the existing classes of preferred shares (2);
- to reduce the mandatory distribution of dividends (3);
- to change the Company's purpose (4);
- to merge into another company or to consolidate with another company, subject to the conditions set forth in Brazilian Corporate Law (5);
- to transfer all of our shares to another company in order to make us a wholly-owned subsidiary of that company, known as *incorporação de ações* (6);
- to approve acquisition of the control of another company at a price that exceeds certain limits set out in Brazilian Corporate Law (7);
- to split up, subject to the conditions set forth in Brazilian Corporate Law (8);
- to transform the Company into another type of company (9);
- to participate in a centralized group of companies, as defined under Brazilian Corporate Law and subject to the conditions set forth therein (10);

Only holders of shares adversely affected by the changes mentioned in items (1) and (2) above may require the Company to redeem their shares. The right of redemption mentioned in items (5), (6), (7) and (10) above may only be exercised if our shares do not satisfy certain liquidity ratios or dispersion at the time of the decision by the shareholders. The shareholders' right to withdraw referred to in item (8) may be exercised only if the split results in: (a) a change in the corporate objects, except when the equity value of the assets and liabilities split off is passed to a company whose preponderant activity coincides with that arising from the corporate objects of the company from which it is split; (b) reduction of the mandatory dividend; or (c) participation in a group of companies. Also note that in the case of item (10), the right to withdraw applies to all the Company's shareholders, and not only to those who have been dissident at the related General Meeting of shareholders. The right to redeem shares will expire 30 calendar days from publication of the minutes of the related shareholders' meeting, except: (a) in the case of items (1) and (2) above, if the decision is subject to confirmation by the holders of the preferred shares (which must be given in an Extraordinary General Meeting to be held within one year), in which case the period of 30 days shall be counted from publication of the minutes of the Extraordinary General Meeting; or (b) in the case of item (5), (6) and (7) above, in which case the period of 30 days shall be counted from the end of a period of 120 days, given for the company resulting from the amalgamation, merger or unbundling to obtain a listed company registration and have its shares listed on the secondary market.

Our Company has the right to reconsider any act that gives rise to rights of redemption within 10 calendar days of expiry of such rights if the redemption of shares of dissident shareholders places the Company's financial stability at risk. Law 9,457 enacted on May 5, 1997, which altered Brazilian Corporate Law, contains provisions which, among other matters, restrict the rights of redemption in certain cases and allow companies to redeem their shares for their economic value, subject to certain requirements. Our by-laws at present do not specify that our share capital may be redeemed at its economic value and, consequently, any redemption in accordance with Brazilian Corporate Law would be made at a minimum of the book value per share, determined on the basis of the last Statement of financial position approved by the shareholders, it being stipulated that, if the General Meeting which gives rise to the rights of redemption has taken place more than 60 calendar days of the date of the last approved Statement of financial position approved, the shareholder shall have the right to require that its shares be valued based on a new Statement of financial position on a date that falls within a period of 60 calendar days of the General Meeting of Shareholders.

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Rights of Minority Shareholders – Brazilian Corporate Law provides that shareholders owning at least 5% of the capital share of a corporation are afforded the following rights, among others:

- the right to require that the books of the corporation be made available for review, whenever there is any indication of an act violating the Brazilian legislation or the Company's by-laws, or whenever these have been violated, or if there are grounds for suspicion that serious irregularities have been committed by the company's management; the right to require the Company's managers to reveal:
 - the number of securities issued by the company or by subsidiaries, or companies of the same group, that they have acquired or sold, directly or through other people, in the prior business year;
 - share purchase options that management have contracted or exercised in the prior business year;
 - all benefits or advantages, whether indirect or complementary, that they have received or which they are receiving from the company, or from affiliated or subsidiary companies or companies of the same group;
 - the terms of such employment contracts as have been signed by the company with directors or high-level employees; and/or
 - any other material acts or facts in relation to the activities of the company.
- the right to require that the members of the Fiscal Council supply information about matters within their sphere of competence;
- the right to call General Meetings of Shareholders, in certain circumstances, whenever the members of the Board of Directors or of the Executive Board omit to do so; and
- the right to file legal actions for indemnity against members of the Board of Directors or the Executive Board, as the case may be, for losses and/or damages caused to the company's property, whenever it is decided in the General Meeting of Shareholders that such an application for indemnity will not be presented.

Minority shareholders that own, individually or in aggregate, our outstanding common shares (since at least 10% of our outstanding common shares are held by minority shareholders), and also holders of our preferred shares, have the right to appoint one member of the Fiscal Council and an alternate. All shareholders have the right to attend general meetings of shareholders.

Brazilian Corporate Law also provides that minority shareholders that hold either (i) preferred shares representing at least 10% of the total share capital of a company or (ii) common shares representing at least 15% of the voting capital of a company, have the right to appoint one member to the Board of Directors. If no common or preferred shareholder meets these thresholds, shareholders holding preferred shares or common shares representing at least 10% of the total share capital of the company are entitled to combine their holdings to appoint one member to the Board of Directors.

Changes in rights of shareholders – A General Meeting of Shareholders must be held whenever the Company intends to change the rights of holders of our common shares or preferred shares. Under Brazilian Corporate Law the proposed changes must be approved by a majority of the class of shareholders that would be affected. Certain changes related to the rights of preferred shares, such as changes in preferences, advantages or conditions of redemption or amortization, may result in the exercise of rights to withdraw by the holders of the shares affected.

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Going Private Transactions and Delisting from the B3 – Our delisting, as a public company, must be preceded by a tender offer by our controlling shareholders or the Company for the acquisition of all of the then outstanding shares, subject to the conditions below:

- the price offered for the shares under the public offering must be the fair value of those shares, as established in Brazilian Corporate Law; and
- shareholders holding more than two thirds of our float shares shall have expressly agreed to the decision to become a private company or accepted the offer.

Under Brazilian Corporate Law, the fair price shall be at least equal to our valuation as determined by one or more of the following valuation methods: Shareholders' equity as expressed by book value, Shareholders' equity valued at market prices, discounted cash flow, comparison of multiples, the quoted price of our shares on the securities market; or based on some other method of valuation accepted by the CVM. The price of the offer may be revised if it is challenged within 15 calendar days of its publication by holders of at least 10% of our outstanding shares, by means of a request sent to our management for an extraordinary General Meeting of Shareholders to be called to decide on whether to request new valuations, using the same, or another, valuation method. If the new valuation is lower than the valuation challenged, the shareholders that requested a new valuation, and those that approved the request, shall reimburse us for the costs incurred. However, if the second valuation is higher, the offering party will have the option to continue the offer, with the new price, or withdraw the offer.

Arbitration

Under the Brazilian Corporate Law and its related regulations, litigation between shareholders is subject to the arbitration specified in the by-laws. Under Clause 44 of CEMIG's by-laws, the Company, its shareholders, managers and members of the Fiscal Council undertake to resolve through arbitration, preceded by mediation, before the Market Arbitration Chamber (CAM) of the B3 or the FGV Mediation and Arbitration Chamber, all and any dispute or controversy that may arise between them related to or arising from, in particular, the application, validity, efficacy, interpretation or violation of the provisions contained in the applicable legislation and regulations, the by-laws, any shareholders' agreements filed at the head office, the rules issued by the Brazilian Securities Commission (CVM), or the other rules applicable to the functioning of the capital markets in general, as well as those contained in the Level 1 Regulations of the B3. Without prejudice to the validity of this arbitration clause, application for urgency measures, before the arbitration tribunal has been constituted, should be remitted to the Judiciary, through the courts of the legal district of Belo Horizonte, Minas Gerais.

Material Contracts

For information concerning our material contracts, see "Item 4, Information on the Company" and "Item 5, Operating and Financial Review and Prospects".

Exchange Controls

There are no restrictions on the ownership of preferred shares or common shares of non-financial institutions by legal entities domiciled outside Brazil. However, the right to convert dividend payments and proceeds from the sale of preferred shares or common shares into foreign currency and to remit such amounts outside Brazil is subject to restrictions under foreign investment legislation, which generally requires, among other things, that you register the relevant investment with the Central Bank and the CVM. Such restrictions on the remittance of foreign capital abroad may hinder or prevent the custodian for our common shares represented by our ADSs or the holders of our common shares from converting dividends, distributions or the proceeds from any sale of these shares into U.S. dollars and remitting the U.S. dollars abroad. Holders of our ADSs could be adversely affected by delays in, or refusal to grant any, required government approval to convert Brazilian currency payments on the common shares underlying our ADS and to remit the proceeds abroad.

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Since March 30, 2015, CMN Resolution No. 4,373/2014, of September 29, 2014, has been in full effect, providing for the issuance of depositary receipts in foreign markets in respect to shares of Brazilian issuers. CMN Resolution No. 4,373/2014, among other acts, revoked CMN Resolution No. 1,927/1992, enacted on May 18, 1992, CMN Resolution No. 1,289/1987, of March 20, 1987, and CMN Resolution No. 2,689/2000, enacted on January 26, 2000. Under Brazilian law relating to foreign investment in the Brazilian capital markets, foreign investors registered with the CVM and acting through authorized custodial accounts managed by local agents may buy and sell shares on Brazilian stock exchanges without obtaining separate certificates of registration for each transaction. Foreign investors may register their investment under Law No. 4,131/1962, enacted on September 3, 1962, as amended, or under CMN Resolution No. 4,373, enacted on September 20, 2014.

The Law No. 4,131/1962 is the main legislation concerning investment of direct foreign capital and foreign direct equity in companies based in Brazil. It is applicable to any amount of capital that enters Brazil in the form of foreign currency, goods or services. Foreign investment portfolios are regulated by CMN Resolution No. 4,373/2014, CVM Instruction No. 559/2015, enacted on March 27, 2015, which regulates the approval of ADR programs by the CVM, and CVM Instruction No. 560/2015, enacted on March 27, 2015, which regulates the filing of transactions and disclosure of information by foreign investors, all reflecting the provisions of CMN Resolution No. 4,373/2014.

As of January 1, 2016, foreign investors that intend to be registered with the CVM shall fulfill the requirements under CVM Instruction No. 560/2015. In accordance with CMN Resolution No. 4,373/2014, the definition of a foreign investor includes individuals, legal entities, mutual funds and other collective investment entities, domiciled or headquartered abroad. In order to become a 4,373 Holder, a foreign investor must:

- appoint at least one representative in Brazil, with powers to perform actions relating to its investment;
- appoint an authorized custodian in Brazil for its investments, which must be a financial institution or entity duly authorized by the Central Bank or CVM;
- appoint a tax representative in Brazil;
- through its representative in Brazil, register itself as a foreign investor with the CVM;
- through its representative in Brazil, register its foreign investment with the Central Bank; and
- be registered with the Federal Tax Authority (Secretaria da Receita Federal), or the "RFB", pursuant to RFB Normative Instruction 1,634/2016, enacted on May 06, 2016, and RFB Normative Instruction No. 1,548/2015, enacted on February 13, 2015.

Investments in the preferred shares through the holding of Preferred ADSs, or in the common shares through the holding of Common ADSs, must be made pursuant to Annex II to CMN Resolution No. 4,373 enacted on September 29, 2014. Direct investments in the preferred shares upon the cancellation of the Preferred ADSs, or in the common shares upon the cancellation of the Common ADSs, may be held by foreign investors under Law No. 4,131 of September 3, 1962 or CMN Resolution No. 4,373 enacted on September 29, 2014, both of which effectively allow registered foreign investors to invest substantially in any capital market instrument in Brazil and extend a favorable tax treatment to all foreign investors registered and qualified under CMN Resolution No. 4,373, who are not resident in a tax haven, as defined by Brazilian tax laws.

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The Annex II Regulations provide for the issuance of depositary receipts in foreign markets in respect of shares of Brazilian issuers. The Preferred ADSs have been approved under the Resolution No. 1,289, which was repealed by Resolution No. 4,373, by the Central Bank and the CVM, and the Common ADSs have been approved by the CVM (since authorization from the Central Bank is no longer necessary).

Electronic certificates of registration have been issued in the name of Citibank, N.A., the depositary bank, with respect to the Preferred ADSs and the Common ADSs, and are maintained by Citibank Distribuidora de Títulos e Valores Mobiliários S.A., the Brazilian custodian for the preferred shares and the common shares, on behalf of the depositary bank. These electronic certificates of registration are registered through the Central Bank Information System. Pursuant to the certificates of registration, the custodian and the depositary bank are able to convert dividends and other distributions or sales proceeds with respect to the preferred shares represented by Preferred ADSs and the common shares represented by the Common ADSs into foreign currency and remit the proceeds outside Brazil.

In the event that a holder of Preferred ADSs exchanges such Preferred ADSs for preferred shares, or a holder of Common ADSs exchanges such Common ADSs for common shares, such investment will need to be registered with the Central Bank, according to Resolution No. 4,373. Thereafter, the holder may not be able to convert into foreign currency and remit outside Brazil the proceeds from the disposition of, or distributions with respect to, the preferred shares or the common shares, unless the holder is a duly qualified investor under Resolution No. 4,373 by registering with the CVM and the Central Bank and appointing a representative in Brazil. If not so registered, the holder will be subject to less favorable Brazilian tax treatment than a holder of Preferred ADSs or Common ADSs. Regardless of qualification under Resolution No. 4,373, residents in tax havens are subject to less favorable tax treatment than other foreign investors. See “—Taxation—Brazilian Tax Considerations.”

Under current Brazilian legislation, the Brazilian Federal Government may impose temporary restrictions of foreign capital abroad in the event of a serious imbalance or an anticipated serious imbalance of Brazil’s balance of payments. For approximately nine months in 1989 and early 1990, the Brazilian Federal Government froze all dividend and capital repatriations held by the Central Bank that were owed to foreign equity investors, in order to conserve Brazil’s foreign currency reserves. These amounts were subsequently released in accordance with Brazilian Federal Government directives. We cannot assure you that the Brazilian Federal Government will not impose similar restrictions on foreign repatriations in the future.

Taxation

The following summary contains a description of certain Brazilian and U.S. federal income tax consequences of the purchase, ownership and disposition of preferred shares, common shares, and Preferred ADSs or Common ADSs by a United States person, as defined in section 7701(a)(30) of the Internal Revenue Code of 1986, or the Code, as amended, or a holder that otherwise will be subject to U.S. federal income tax on a net income basis in respect of preferred shares, common shares, Preferred ADSs or Common ADSs, which we refer to as a U.S. holder, but it does not purport to be a comprehensive description of all of the tax considerations that may be relevant to a decision to purchase preferred shares, common shares, Preferred ADSs or Common ADSs. In particular this summary deals only with U.S. holders that will hold preferred shares, common shares, Preferred ADSs or Common ADSs as capital assets and does not address the tax treatment of U.S. holders that own or are treated as owning 10% or more of the total combined voting power of all classes of stock entitled to vote of the Company or 10% or more of the total value of shares of all classes of stock of the Company or that may be subject to special tax rules, such as banks or other financial institutions, insurance companies, retirement plans, regulated investment companies, real estate investment trusts, dealers in securities or currencies, brokers, traders in securities that elect to mark to market, tax-exempt organizations, persons liable for alternative minimum tax, “pass-through entities” such as partnerships or persons that will hold preferred shares, common shares, Preferred ADSs or Common ADSs as part of a hedging transaction, constructive sale transaction, position in a “straddle” or a “conversion transaction” for tax purposes, and persons that have a “functional currency” other than the U.S. dollar. If an entity treated as a partnership for U.S. federal income tax purposes invests in our preferred shares, common shares, Preferred ADSs or Common ADSs, the U.S. federal income tax considerations relating to such investment will depend in part upon the status and activities of such entity and the particular partner. Any such entity should consult its own tax advisor regarding the U.S. federal income tax considerations applicable to it and its partners relating to the purchase, ownership and disposition of such shares or ADSs. This summary, as relates to U.S. tax considerations, does not describe any implications under U.S. state or local tax law, non-U.S. tax law, or the federal estate tax or gift tax. U.S. shareholders should consult their own tax advisors regarding such matters.

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This summary is based upon the tax laws of Brazil and the United States as in effect on the date hereof which are subject to change, possibly with retroactive effect, and to different interpretations. Prospective purchasers of preferred shares, common shares, Preferred ADSs or Common ADSs are encouraged to consult their own tax advisors as to the Brazilian, U.S. or other tax consequences of the purchase, ownership and disposition of preferred shares, common shares, Preferred ADSs or Common ADSs, including, in particular, the effect of any foreign, state or local tax laws.

Although there is currently no income tax treaty in force between Brazil and the United States, the tax authorities of both countries have had discussions that may culminate in such a treaty. No assurance can be given, however, as to whether or when a treaty will enter into force or how it will affect the U.S. holders of preferred shares, common shares, Preferred ADSs or Common ADSs.

Brazilian Tax Considerations

General — The following discussion summarizes the main Brazilian material tax consequences of the acquisition, ownership and disposal of preferred shares, common shares, Preferred ADSs or Common ADSs, as the case may be, by a holder that is not domiciled in Brazil, which we refer to as a non-Brazilian holder for purposes of Brazilian taxation. In the case of a holder of preferred shares or common shares, we assume the investment is registered with the Central Bank. The following discussion does not address all of the Brazilian tax considerations applicable to any particular non-Brazilian holder. Therefore, each non-Brazilian holder should consult his or her own tax adviser concerning the Brazilian tax consequences of an investment in our preferred shares, common shares, Preferred ADSs or Common ADSs.

Taxation of Dividends — Dividends paid by the Company, including share dividends and other dividends paid in property to the depositary in respect of the preferred shares or common shares, or to a non-Brazilian holder in respect of the preferred shares or common shares, are currently exempted from withholding tax in Brazil to the extent that the dividends are paid out of profits generated as of January 1, 1996. Dividends relating to profits generated prior to January 1, 1996 may be subject to Brazilian withholding tax at varying rates, depending on the year the profits were generated.

Payments of 'Interest on capital' — Law No. 9,249, enacted on December 26, 1995, as amended, enables Brazilian corporations to make distributions to shareholders, in Brazilian currency, of a payment referred to as Interest on capital (*Juros sobre Capital Próprio*). The payment is calculated based on multiplying the value of the company's Shareholders' equity by the Federal Government's "TJLP", as set forth by the Central Bank, and payments up to such an amount may be deducted by the company as an expense when calculating its profit that will be taxable by income tax and the Social Contribution Tax, subject to the deduction not exceeding the greater of:

- 50% of the net income (after deduction of the Social Contribution tax on Net Income, and before the provision for corporate income tax and the amounts attributed to shareholders as Interest on capital) for the period in which the payment will be made; or
- 50% of the sum of retained earnings and earnings reserves as of the date of the beginning of the period in respect of which the payment is made.

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Any payment of interest on capital to shareholders (including holders of Preferred ADSs in respect of preferred shares and Common ADSs in respect of common shares) is subject to a withholding tax at a rate of 15%, or 25% if the non-Brazilian holder is domiciled in a Nil or Low Taxation Jurisdiction. These payments may be included, at their net value, as part of any mandatory dividend.

Law No. 9,430, enacted on December 27, 1996 was amended by Law No. 11,727 enacted on June 24, 2008, and later by Law No. 11,941 enacted on May 27, 2009, establishing the concept of a 'privileged tax regime', to govern transactions involving transfer pricing, and to strict rules for capitalization. This concept has a wider reach than the concept of a Nil or Low Taxation Jurisdiction. Under the new laws, a 'privileged tax regime' is defined as one which has one or more of the following characteristics: (i) it does not tax income or it taxes it at a maximum rate lower than 20%; (ii) it grants tax advantages to non-resident entities or individuals (a) without requiring substantial economic activity in the country or territory or (b) conditional upon non-exercise of substantive business activity in the country or territory; (iii) it does not generate tax income outside its territory, or taxes such income with a maximum rate lower than 20% (or 17% if the jurisdiction follows international standards of tax transparency, as defined by Brazilian Internal Revenue Office, especially in what regards to the disclosure of information in respect to corporate structure, ultimate beneficial owner, ownership of assets and business activities carried on in their territory) or (iv) it does not allow access to information on shareholdings, ownership of assets or rights, or to the business transactions carried out.

Although interpretation of the current Brazilian tax legislation might lead to the conclusion that the concept of 'privileged tax regime' should apply only for the purposes of rules to govern transfer pricing in Brazil, it is unclear whether such concept would also apply to other types of transaction, such as investments carried out in the Brazilian financial and capital markets for the purposes of this law. In the event that the 'privileged tax regime' concept is interpreted to be applicable to transactions carried out in the Brazilian financial and capital markets, this tax law would accordingly result in the imposition of taxes on a Non-Brazilian-Resident Holder that meets the privileged tax regime requirements in the same way as is applicable to a Nil or Low Taxation Jurisdiction. Current and prospective investors should consult with their own tax advisors regarding the consequences of the implementation of Law 9,430 enacted on December 27, 1996, as amended, and of any related Brazilian tax law or regulation concerning the concepts of "Nil or Low Taxation Jurisdiction" or "privileged tax regimes".

To the extent that payments of interest on capital are included as part of a mandatory dividend, we are required to distribute an additional amount to ensure that the net amount received by shareholders, after payment of the applicable withholding tax is at least equal to the mandatory dividend.

Distributions of interest on net equity to foreign holders may be converted into U.S. dollars and remitted outside Brazil, subject to applicable exchange controls, to the extent that the investment is registered with the Central Bank.

We cannot assure you that our Board of Directors will not determine that future distributions should be made by means of dividends or interest on net equity.

Taxation of Gains — According to Law No. 10,833/03, the gains recognized on a disposal of assets located in Brazil, such as CEMIG shares, by a non-Brazilian holder, are subject to withholding income tax in Brazil. This rule is applicable regardless of whether the disposal is conducted in Brazil or abroad whether or not the disposal is made to an individual or entity resident or domiciled in Brazil.

As a general rule, capital gains realized as a result of a disposal transaction are the positive difference between the amount realized on the disposal of the asset and the respective acquisition cost.

Capital gains realized by non-Brazilian holders on the disposal of shares sold on the Brazilian stock exchange (which includes the transactions carried out on the official over-the-counter market) are subject to:

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- withholding income tax at a zero percent rate, when realized by a non-Brazilian holder that (i) has registered its investment in Brazil with the Central Bank under the rules of the Brazilian Monetary Council, (“CMN”) (“Resolution No. 4,373 enacted on September 29, 2014”), or a Registered Holder, and (ii) is not a Nil or Low Taxation Jurisdiction Holder;
- in all other cases, including gains realized by a Non-Resident Holder that is not a Registered Holder and/or is a resident of or domiciled in a Nil or Low Taxation Jurisdiction, subject to income tax at a 15.0% rate. In this case, a withholding income tax of 0.005% shall be applicable and can be offset against any income tax due on the capital gain.

Any other gains assessed on the disposition of the common shares that are not carried out on the Brazilian stock exchange are subject to income tax at a rate of 15%, except for Nil or Low Taxation Jurisdiction, which, in this case, would be subject to income tax at a rate of 25%. Law No. 13,259 of March 17, 2016 increased the income tax rates applicable to gains derived by Brazilian individuals up to 22.5% and, such increase, applicable as of January 2017, may affect Non-Resident Holders. Non-Resident Holders should consult with their own tax advisors regarding the consequences of Law 13,259/2016. In the cases above, if the gains are related to transactions conducted on the Brazilian unofficial over-the-counter market with intermediation, the withholding income tax of 0.005% shall also be applicable and can be offset against any income tax due on the capital gain.

Any exercise of preemptive rights relating to shares will not be subject to Brazilian income tax. Gains realized by a non-Brazilian holder on the disposal of preemptive rights will be subject to Brazilian income tax according to the same rules applicable to the disposal of shares. There can be no assurance that the current favorable tax treatment of Registered Holders will continue in the future.

Sale of Preferred ADSs and Common ADSs by U.S. Holders to Other Non-Residents in Brazil—Pursuant to Section 26 of Law No. 10,833, published on December 29, 2003, the sale of property located in Brazil involving non-resident investors is subject to Brazilian income tax as of February 1, 2004. Our understanding is that ADSs do not qualify as property located in Brazil and, thus, should not be subject to the Brazilian withholding tax; nevertheless, there is a risk that the Tax Authorities will try to assert Brazilian tax jurisdiction in such situation, reason why Non-Resident Holders should consult with their own tax advisors the chances of success in that respect. Insofar as the regulatory norm referred to is generic and has not been tested through the administrative or judicial courts, we are unable to assure the final outcome of such situation.

If such argument does not prevail, it is important to mention that with respect to the cost of acquisition to be adopted for calculating such gains, Brazilian law has conflicting provisions regarding the currency in which such amount must be determined, CEMIG’s Brazilian counsel’s view is that the capital gains should be based on the positive difference between the cost of acquisition of the preferred shares or common shares registered with the Central Bank in foreign currency and the value of disposal of those preferred shares or common shares in the same foreign currency. A precedent issued by the Brazilian administrative court has supported this view. However, considering that the tax authorities are not bound by such precedent, assessments have been issued adopting the cost of acquisition in Brazilian currency.

Gains on the Exchange of Preferred ADSs for Preferred Shares or the Exchange of Common ADSs for Common Shares—Although there is no clear regulatory guidance, the exchange of ADSs for shares should not be subject to Brazilian tax to the extent that, as described above, ADSs do not qualify as property located in Brazil for the purposes of Law No. 10,833. Non-Brazilian holders may exchange Preferred ADSs for the underlying preferred shares or Common ADSs for the underlying common shares, sell the preferred shares or common shares on a Brazilian stock exchange and remit abroad the proceeds of the sale within five business days of the date of exchange (according to the depository’s electronic registration), with no tax consequences. Although there is no clear regulatory guidance, the exchange of ADSs for shares should not be subject to Brazilian withholding income tax. Nevertheless, it is important to mention that there is no precedent regarding this matter in administrative or judicial courts.

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Upon receipt of the underlying preferred shares in exchange for Preferred ADSs or the underlying common shares in exchange for Common ADSs, non-Brazilian holders may also elect to register with the Central Bank the U.S. dollar value of such preferred shares or common shares as a foreign portfolio investment under CMN Resolution No. 4,373/2014, which will entitle them to the tax treatment referred to above in connection with “U.S. market investors”.

Alternatively, the non-Brazilian holder is entitled to register with the Central Bank the U.S. dollar value of such preferred shares or common shares as a foreign direct investment under Law No. 4,131/62, in which case the respective sale would be subject to the tax treatment referred in the section “Taxation of Gains”.

Gains on the Exchange of Preferred Shares for Preferred ADSs or Common Shares for Common ADSs— With reference to the deposit of preferred shares in exchange for the Preferred ADSs or common shares in exchange for the Common ADSs, the difference between the acquisition cost of the preferred shares or common shares and the market price of the preferred shares or common shares is considered to be a capital gain subject to income tax at a rate from 15% or 25% for Nil or Low Taxation Jurisdiction Holders. Although there is no clear regulatory guidance, such taxation should not apply in case of Non-Resident Holders registered under CMN Resolution No. 4,373/2014, except for Nil or Low Taxation Jurisdiction Residents. Law No. 13,259 of March 17, 2016 increased the income tax rates applicable to gains derived by Brazilian individuals up to 22.5% and, such increase, applicable as of January 2017, may affect Non-Resident Holders. Non-Resident Holders should consult with their own tax advisors regarding the consequences of Law 13,259/2016.

Taxation of foreign exchange transactions—Brazilian law imposes Financial Transactions Tax (*Imposto sobre Operações Financeiras*, or “IOF”) on foreign exchange transactions (known as the IOF/Câmbio, or ‘FX IOF’), on conversion of *reais* into foreign currency or vice-versa. The currently applicable rate of this tax for almost all foreign exchange transactions is 0.38%. However, exchange transactions carried out for the inflow of funds in Brazil for investments in the Brazilian financial and capital market made by a foreign investor (including a Non-Resident Holder, as applicable) are subject to IOF/Exchange at a 0%. The IOF/Exchange rate will also be 0% for the outflow of funds from Brazil related to these types of investments, including payments of dividends and interest on shareholders’ equity and the repatriation of funds invested in the Brazilian market.

Notwithstanding the said rates of the FX IOF tax in effect on the date of publication hereof, the Finance Ministry is authorized by law to increase the rate of this tax up to a maximum of 25% of the value of the transaction, but only for future transactions.

Taxation on transactions relating to securities—Brazilian legislation imposes a tax on financial transactions relating to securities (referred to as the *IOF tax on Securities*, or “IOF/Títulos”), including transactions made on Brazilian stock exchanges.

The IOF Tax on Securities may also apply to transactions involving ADSs of preferred shares, or ADSs of common shares, if they are considered by the Brazilian tax authorities to be assets located in Brazil.

The rate of the IOF Tax on Securities applicable to transactions involving shares (preferred shares, ADSs for preferred shares, common shares and ADSs for common shares) is currently zero. Moreover, by Decree No. 8,165 enacted on December 24, 2013, the rate of the IOF Tax on Securities applicable on assignment of shares traded on a Brazilian stock exchange for the specific purpose of the underlying issuance of DRs outside Brazil was reduced to zero.

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The Finance Ministry has the power to increase the rates of IOF Tax on Securities to as high as 1.5% per day, but this is applicable only to future transactions.

Other Brazilian Taxes — Some Brazilian states impose gift and inheritance tax on gifts or bequests made by individuals or entities not domiciled or residing in Brazil to individuals or entities domiciled or residing within such states. There are no Brazilian stamp, issues, registrations, or similar taxes or duties payable by holders of preferred shares, common shares, Preferred ADSs or Common ADSs.

U.S. Tax Considerations — In general, and taking into account the earlier assumptions, for U.S. federal income tax purposes, a U.S. holder of ADSs is typically treated as the owner of the underlying shares represented by those ADSs. Consequently, exchanges of ADSs into shares, and shares into ADSs, generally, will not be subject to U.S. federal income tax.

Taxation of Distributions—Subject to the discussion below under “Passive Foreign Investment Company Rules”, distributions with respect to the shares or the ADSs (other than distributions in redemption of the shares subject to Section 302(b) of the Code or in a liquidation of the Company) will, to the extent made from current or accumulated earnings and profits of the Company as determined under U.S. federal income tax principles, constitute dividends. A distribution also includes distributions characterized as interest attributable to shareholders’ capital for Brazilian law purposes and the amount of any Brazilian taxes withheld on any such distribution, if any, even though a U.S. holder will not receive such amount as part of their distribution. Whether current or accumulated earnings and profits will be sufficient for all such distributions on the shares or ADSs to qualify as dividends depends on the future profitability of the Company and other factors, many of which are beyond the control of the Company. To the extent that such a distribution exceeds the amount of the Company’s earnings and profits, it will be treated as a non-taxable return of capital to the extent of the U.S. holder’s basis in the shares or ADSs, and thereafter as capital gains. As used below, the term “dividend” means a distribution that constitutes a dividend for U.S. federal income tax purposes. The Company does not currently intend to continue the calculations of its earnings and profits under U.S. federal income tax principles. Accordingly, U.S. holders should expect that all distributions made with respect to the shares or ADSs will generally be treated as dividends. Cash dividends (including distributions characterized as interest attributable to shareholders’ capital for Brazilian law purposes and amounts withheld in respect of Brazilian taxes) paid with respect to:

- the shares generally will be included in the gross income of a U.S. holder as ordinary income on the day on which the dividends are actually or constructively received by the U.S. holder; or
- the shares represented by ADSs generally will be included in the gross income of a U.S. holder as ordinary income on the day on which the dividends are received by the depository bank, and in either case, will not be eligible for the dividends received deduction allowed to corporations. Dividends paid in *reais* will be included in the income of a U.S. holder in a U.S. dollar amount calculated by reference to the exchange rate in effect on the day they are received by the U.S. holder, in the case of shares, or the depository bank, in the case of shares represented by ADSs.

If dividends paid in *reais* are converted into U.S. dollars on the day they are received by the U.S. holder or the depository bank, as the case may be, U.S. holders generally should not be required to recognize a foreign currency gain or loss in respect of the dividend income. U.S. holders should consult their own tax advisors regarding the treatment of any foreign currency gain or loss if any *reais* received by the U.S. holder or the depository bank are not converted into U.S. dollars on the date of receipt, as well as the tax consequences of the receipt of any additional *reais* from the custodian due to Brazilian inflation.

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Dividends will generally constitute foreign source income and will generally constitute “passive category income” or, in the case of certain U.S. holders, “general category income,” for foreign tax credit purposes. In the event Brazilian withholding taxes are imposed on such dividends, such taxes may be treated as a foreign income tax eligible, subject to generally applicable limitations and conditions under U.S. federal income tax law, for a credit against a U.S. holder’s U.S. federal income tax liability (or at a U.S. holder’s election, may be deducted in computing taxable income). The calculation and availability of foreign tax credits and, in the case of a U.S. holder that elects to deduct foreign taxes, the availability of deductions, involves the application of rules that depend on a U.S. holder’s particular circumstances. U.S. holders should consult their own tax advisors regarding the availability of foreign tax credits with respect to Brazilian withholding taxes.

Distributions to U.S. holders of additional common shares or preemptive rights relating to such common shares with respect to their common shares or Common ADSs that are made as part of a *pro rata* distribution to all shareholders of the Company generally will not be treated as dividend income for U.S. federal income tax purposes, but could result in additional U.S.-source taxable gain upon the sale of such additional shares or preemptive rights. Non-*pro rata* distributions of such shares or rights generally would be included in the U.S. holder’s gross income to the same extent and in the same manner as distributions payable in cash. In that event, the amount of such distribution (and the basis of the new shares or preemptive rights so received) generally will equal the fair market value of the shares or preemptive rights on the date of distribution. It is not entirely clear whether the preferred shares will be treated as preferred shares or common shares for this purpose. If the preferred shares are treated as common shares for these purposes the treatment above would apply to distributions of shares or preemptive rights with respect to preferred shares or Preferred ADSs. On the other hand, if the preferred shares are treated as preferred shares a distribution of additional shares or preemptive rights would be included in gross income to the same extent as a cash distribution whether or not such distribution is considered a *pro rata* distribution.

Qualified Dividend Income –Notwithstanding the foregoing, certain dividends received by individual U.S. holders that constitute “qualified dividend income” currently may be subject to a reduced maximum marginal U.S. federal income tax rate. Qualified dividend income generally includes, among other dividends, dividends received during the taxable year from “qualified foreign corporations”. In general, a foreign corporation is treated as a qualified foreign corporation with respect to any dividend paid by the corporation with respect to shares of the corporation that are readily tradable on an established securities market in the United States. For this purpose, a share is treated as readily tradable on an established securities market in the United States if an ADR backed by such share is so traded.

Notwithstanding this previous rule, dividends received from a foreign corporation that is a passive foreign investment company (as defined below under “Passive Foreign Investment Company Rules”) in either the taxable year of the corporation in which the dividend was paid or the preceding taxable year will not constitute qualified dividend income. In addition, the term “qualified dividend income” will not include, among other dividends, any (i) dividends on any share or ADS which is held by a taxpayer for 60 days or less during the 121-day period beginning on the date which is 60 days before the date on which such share or the shares backing the ADS become ex-dividend with respect to such dividends (as measured under section 246(c) of the Code) or (ii) dividends to the extent that the taxpayer is under an obligation (whether pursuant to a short sale or otherwise) to make related payments with respect to positions in substantially similar or related property. Moreover, special rules apply in determining a taxpayer’s foreign tax credit limitation under section 904 of the Code in the case of qualified dividend income.

Individual U.S. holders should consult their own tax advisors to determine whether or not amounts received as dividends from us will constitute qualified dividend income subject to a reduced maximum marginal U.S. federal income tax rate and, in such a case, the effect, if any, on the individual U.S. holder’s foreign tax credit.

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Taxation of Sales, Redemptions and Other Taxable Dispositions — Deposits and withdrawals of shares by U.S. holders in exchange for ADSs will not result in the realization of gain or loss for U.S. federal income tax purposes.

Subject to the discussion below under – “Passive Foreign Investment Company Rules”, gains or losses realized by a U.S. holder on the sale, redemption or other taxable disposition of shares or ADSs will be subject to U.S. federal income taxation as capital gains or losses in an amount equal to the difference between such U.S. holder’s basis in the shares or the ADSs and the amount realized on the disposition in the case of the shares as determined in U.S. dollars. Gains or losses recognized by a U.S. holder on such a sale, redemption or other taxable disposition generally will be long-term capital gains or losses if, at the time of the sale or other taxable disposition, the shares or ADSs, as applicable, have been held for more than one year. Certain non-corporate U.S. holders (including individuals) may be eligible for preferential rates of U.S. federal income tax in respect of long-term capital gains. The deduction of a capital loss is subject to limitations for U.S. federal income tax purposes.

A gain realized by a U.S. holder on a sale, redemption or other taxable disposition of shares or ADSs, including a gain that arises because the U.S. holder’s basis in the shares or ADSs has been reduced because a distribution is treated as a return of capital rather than as a dividend, generally will be treated as U.S. source income for U.S. foreign tax credit purposes. Accordingly, if Brazilian withholding tax or income tax is imposed on the sale, redemption or other disposition of shares or ADSs as described in — “Taxation—Brazilian Tax Considerations”, such tax generally will not be available as a credit for the U.S. holder against U.S. federal income tax unless the U.S. holder has other income treated as derived from foreign sources, in the appropriate category, for purposes of the foreign tax credit rules.

If a Brazilian withholding tax or income tax is imposed on the sale, redemption or other taxable disposition of shares or ADSs, the amount realized by a U.S. holder will include the gross amount of the proceeds of such sale, redemption or other taxable disposition before deduction of the Brazilian withholding tax or income tax if applicable. The availability of U.S. foreign tax credits for these Brazilian taxes is subject to certain limitations and involves the application of rules that depend on a U.S. holder’s particular circumstances. U.S. holders should consult their own tax advisors regarding the application of the foreign tax credit rules to their investment in, and disposition of, shares or ADSs.

Passive Foreign Investment Company Rules – Certain adverse U.S. federal income tax rules generally, apply to a U.S. person that owns or disposes of stock in a non-U.S. corporation that is classified as a passive foreign investment company (a “PFIC”). In general, a non-U.S. corporation will be classified as a PFIC for any taxable year during which, after applying relevant look-through rules with respect to the income and assets of subsidiaries, either (i) 75% or more of the non-U.S. corporation’s gross income is “passive income” or (ii) 50% or more of the gross value (determined on a quarterly basis) of the non-U.S. corporation’s assets produce passive income or are held for the production of passive income. For these purposes, passive income generally includes, among other things, dividends, interest, rents, royalties, gains from the disposition of passive assets and gains from commodities and securities transactions (other than certain active business gains from the sale of commodities). In determining whether a non-U.S. corporation is a PFIC, a pro rata portion of the income and assets of each corporation in which it owns, directly or indirectly, at least a 25% interest (by value) is taken into account.

The Company does not believe that it was a PFIC, for United States federal income tax purposes, for its preceding taxable year and does not expect to be a PFIC in its current taxable year or in the foreseeable future. However, because PFIC status depends upon the composition of a company’s income and assets, the market value of assets from time to time, and the application of rules that are not always clear, there can be no assurance that the Company will not be classified as a PFIC for any taxable year.

If the Company was to be classified a PFIC, a U.S. holder could be subject to material adverse tax consequences including being subject to greater amounts of tax on gains and certain distributions on the shares or ADSs as well as increased reporting requirements. U.S. holders should consult their tax advisors about the possibility that the Company might be classified as a PFIC and the consequences if the Company was classified as a PFIC.

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Tax on Net Investment Income – A U.S. holder that is an individual, an estate or a trust (other than a trust that falls into a special class of trusts that is exempt from such tax) will be subject to a 3.8% tax on the lesser of (i) the U.S. holder’s “net investment income” (in the case of individuals) or “undistributed net investment income” (in the case of estates and trusts) for the relevant taxable year and (ii) the excess of the U.S. holder’s “modified adjusted gross income” (in the case of individuals) or “adjusted gross income” in the case of estates and trusts) for the taxable year over a certain threshold (which, in the case of individuals, will be between \$125,000 and \$250,000 depending upon the individual’s circumstances). A U.S. holder’s net investment income will generally include its dividend income on the shares or ADSs, and its net gains from the disposition of the shares or ADSs. U.S. holders that are individuals, estates or trusts should consult their own tax advisors regarding the applicability of this tax to their income and gains in respect of the shares or ADSs.

Information Reporting and Backup Withholding — Information reporting requirements will generally apply to U.S. holders of ADSs and U.S. holders will be required to comply with applicable certification procedures to establish that they are not subject to backup withholding. Investors who are individuals and fail to report the required information could be subject to substantial penalties. Investors should consult their own tax advisors regarding these requirements. The amount of any backup withholding from a payment to a U.S. holder will be allowed as a credit against the U.S. holder’s U.S. federal income tax liability and may entitle such holder to a refund, provided that certain required information is furnished to the U.S. Internal Revenue Service on a timely basis.

Disclosure Requirements for Specified Foreign Financial Assets – Certain U.S. holders that own certain “specified foreign financial assets” with an aggregate value in excess of US\$50,000 on the last day of the tax year or US\$75,000 at any time during the tax year are generally required to file an information statement along with their tax returns, currently on Form 8938, with respect to such assets. “Specified foreign financial assets” generally include any financial accounts held at a non-U.S. financial institution, as well as securities issued by a non-U.S. issuer that are not held in accounts maintained by financial institutions. Higher reporting thresholds apply to certain individuals living abroad and to certain married individuals. U.S. holders who fail to report on their specified foreign financial assets could be subject to substantial tax penalties. U.S. holders should consult their own tax advisors regarding the application of these information reporting rules to the ADSs or shares, including the application of these rules to their own particular circumstances.

Dividends and Paying Agents

We pay dividends on preferred shares and common shares in the amounts and in the manner set forth under “Item 8, Financial Information—Dividend Policy and Payments”. We will pay dividends in respect of preferred shares represented by Preferred ADSs or common shares represented by Common ADSs to the custodian for the depositary bank, as record owner of the preferred shares represented by Preferred ADSs or the common shares represented by Common ADSs. As promptly as practicable after receipt of the dividends we pay through Citibank N.A. to the custodian, it will convert these payments into U.S. dollars and remit such amounts to the depositary bank for payment to the holders of Preferred ADSs or Common ADSs in proportion to individual ownership.

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We are subject to the information requirements of the Securities Exchange Act of 1934, as amended, or the Exchange Act. In accordance with these requirements, we file reports and other information with the SEC. These materials, including this annual report and the accompanying exhibits, may be inspected and copied at the SEC's Public Reference Room at 100 F Street, N.E., Room 1580, Washington D.C. 20549. Copies of the materials may be obtained from the SEC's Public Reference Room at prescribed rates. The public may obtain information on the operation of the SEC's Public Reference Room by calling the SEC in the United States at 1-800-SEC-0330. In addition, copies of the exhibits that accompany this annual report may be inspected at our principal executive offices located at Avenida Barbacena, 1219, 30190-131 Belo Horizonte, Minas Gerais, Brazil.

Insurance

We have insurance policies to cover fire damages to the building in which our head office is located and to other owned or rented buildings. Our operational risk insurance policy covers damages to the turbines, generators and transformers of our principal generating plants and substations caused by lightning, fire and explosion or risks such as equipment failure. We also have insurance policies covering damage to or caused by aircraft used in our operations. We do not have general third party liability insurance to cover accidents, and we do not seek proposals for this type of insurance. There is however a possibility that we may contract this type of insurance in the future.

In addition, we do not seek proposals for, nor do we have, insurance cover against major natural disasters that might affect our facilities, such as earthquakes and floods or failures of the operational system.

We do not have insurance coverage for the risk of interruption of business, which means that damages suffered by our company, and consequent damages suffered by our customers because of interruption in the supply of energy are in general not covered by our insurance and we may be subject to significant losses. See the Section "Item 3, Key Information-Risk Factors-Risks relating to CEMIG". We operate without insurance policies against natural disasters and third-party liability.

We believe that, since we contract insurance against fire and operational risk, our insurance cover is at a level that is usual in Brazil for the type of business that we conduct.

Difficulties of Enforcing Civil Liabilities against Non-U.S. Persons

We are a state-controlled mixed capital company established under the laws of Brazil. All of our executive officers and directors presently reside in Brazil. In addition, substantially all of our assets are located in Brazil. As a result, it will be necessary for holders of Preferred ADSs or Common ADSs to comply with Brazilian law in order to obtain an enforceable judgment against our executive officers or directors or our assets. It may not be possible for holders of Preferred ADSs or Common ADSs to effect service of process within the United States upon our executive officers and directors, or to enforce in the United States judgments against these persons obtained in U.S. courts based upon civil liabilities of these persons, including any judgments based upon U.S. federal securities laws, to the extent these judgments exceed these persons' U.S. assets. We have been advised by Brazilian counsel, Tozzini Freire Teixeira e Silva Advogados, that judgments of U.S. courts for civil liabilities based upon the federal securities laws of the United States may be, subject to the requirements described below, enforced in Brazil to the extent Brazilian courts may have jurisdiction. A judgment against the Company, or the persons described above, obtained outside Brazil, is subject to confirmation by the Brazilian Superior Court of Justice, without reconsideration of the merits. That confirmation will occur if the foreign judgment:

- fulfills all formalities required for its enforceability under the laws of the country where the foreign judgment is granted;

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- is issued by a competent court after proper service of process is made, or after sufficient evidence of the parties' absence has been given, as established pursuant to applicable Law;
- is not subject to appeal;
- is for the payment of a specified amount;
- is authenticated by a Brazilian consular officer in the country where the foreign judgment is issued and is accompanied by a sworn translation into Portuguese; and
- is not contrary to Brazilian national sovereignty, public policy or public morality;

We cannot be certain that the confirmation process described above will be conducted in a timely manner or that Brazilian courts would enforce a monetary judgment for violation of the United States securities laws with respect to the Preferred ADSs and the preferred shares represented by the Preferred ADSs or the Common ADSs and the common shares represented by the Common ADSs.

We were further advised by the abovementioned Brazilian counsel that:

- original actions based on the federal securities laws of the United States may be brought in Brazilian courts and that, subject to Brazilian public policy and national sovereignty, Brazilian courts will enforce liabilities in such actions against us and our officers; and
- the ability of a creditor or the other persons named above to satisfy a judgment by attaching our assets or those of the selling shareholders is limited by provisions of Brazilian law.

A plaintiff (whether Brazilian or non-Brazilian) residing outside Brazil during the course of litigation in Brazil must, in order to cover court costs and legal fees, provide a bond or if the plaintiff does not own any real property in Brazil, a guarantee. The bond must have a value sufficient to satisfy the payment of court fees and the defendant's attorney fees, as determined by a judge in Brazil. This requirement does not apply to a proceeding to enforce a foreign judgment which has been confirmed by the STJ (*Superior Tribunal de Justiça*).

Item 11. Quantitative and Qualitative Disclosures about Market Risk

We are exposed to market risk resulting from foreign currency exchange rates and interest rates fluctuations.

Foreign exchange risk results from certain of our loans and financing being denominated in currencies (primarily the U.S. dollar) other than the currency in which we earn revenues (the Brazilian real). See "Item 5. Operating and Financial Review and Prospects – Critical Accounting Policies."

Exchange Rate Risk

On December 31, 2019, R\$ 6,110 million, representing 41.35% of our outstanding indebtedness, were denominated in foreign currencies, of which 100.00%, was denominated in U.S. dollars. We do not have substantial revenues denominated in any foreign currencies and, due to regulations that require us to keep excess cash on deposit in real-denominated accounts at Brazilian banks, we do not have monetary assets denominated in foreign currencies.

In 2020, a hypothetical 25% and 50% depreciation of the real against the U.S. dollar would result in an additional annual rate expense, of approximately R\$ 3,743 million and R\$ 5,714 million, respectively, reflecting the increased cost in *reais* of foreign currency-denominated indebtedness from loans, financing and debentures, compared to probable scenario. This sensitivity analysis assumes a simultaneous unfavorable 25% and 50% fluctuation in each of the exchange rates affecting the foreign currencies in which our indebtedness is denominated.

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The foreign exchange variations of the acquisition of energy from Itaipu is balanced by the CVA and Other financial components in tariff adjustment. This amount is passed through to customers in next tariff adjustment. Thus, this exposure affects the cash flow of the year, but does not affect the result of the year.

The table below provides summarized information regarding our exposure to exchange rate risk as of December 31, 2019:

	(in millions of R\$)
U.S. Dollar:	
Financing	6,110
Supplier (Itaipu)	243
	<u>6,353</u>
Other Currencies:	
Financing	-
Net liabilities exposed to exchange rate risk	<u>6,353</u>

Swap transactions

On December 31, 2019 we had R\$ 6,092 million in loans and financing outstanding that we use derivative instruments (swaps) to protect the servicing associated with these debts (principal plus interest).

The derivative financial instruments contracted have the purpose of protecting the operations against the risks arising from foreign exchange variation and are not used for speculative purposes.

The notional amount of derivative transactions are not presented in the Company's statement of financial position, since they refer to transactions that do not require cash as only the gains or losses actually incurred are recorded.

This table presents the derivative instruments contracted by Company as of December 31, 2019:

<u>Assets (1)</u>	<u>Liability (1)</u>	<u>Maturity period</u>	<u>Trade market</u>	<u>Notional amount (2)</u>	<u>Unrealized gain / loss</u>	
					<u>Carrying amount 2019</u>	<u>Fair value 2019</u>
US\$ exchange variation + Rate (9.25% p.y.)	Local currency + R\$ 150.49% of CDI	Interest: Semi-annual Principal: Dec. 2024	Over the counter	US\$1,000	814	1,235
US\$ exchange variation + Rate (9.25% p.y.)	Local currency + R\$125.52% of CDI	Interest: Semi-annual Principal: Dec. 2024	Over the counter	US\$500	108	456
					<u>922</u>	<u>1,691</u>

(1) For the US\$1 billion Eurobond issued on December 2017: (i) for the principal, a call spread was contracted, with floor at R\$ 3.25/US\$ and ceiling at R\$ 5.00/US\$; and (ii) a swap was contracted for the total interest, for a coupon of 9.25% p.a. at an average rate equivalent to 150.49% of the CDI. For the additional US\$500 issuance of the same Eurobond issued on July 2018: (1) a call spread was contracted for the principal, with floor at R\$ 3.85/US\$ and ceiling at R\$ 5.00/US\$; and (2) a swap was contracted for the interest, resulting in a coupon of 9.25% p.a., with an average rate equivalent to 125.52% of the CDI rate.

(2) In millions of US\$.

In accordance with market practice, the Company uses a mark-to-market method to measure its derivatives financial instruments for its Eurobonds. The principal indicators for measuring the fair value of the swap are the B3 future market curves for the DI rate and the dollar. The Black & Scholes model is used to price the call spread, and one of parameters of which is the volatility of the dollar, measured on the basis of its historic record over 2 years.

[Table of Contents](#)**Interest Rate Risk**

On December 31, 2019 we had R\$ 14,777 million in loans and financing outstanding, of which approximately R\$4,017 million bear interest at rates tied to CDI rate and other floating indexes.

On December 31, 2019, we had liabilities, net of other assets leaving interest at floating rates in the amount of R\$ 2,044 million. The assets consisted mainly of cash equivalents, as summarized in the tables below. A hypothetical, instantaneous and unfavorable change of 100 basis points in interest rates applicable to floating rate financial assets and liabilities held on December 31, 2019 would result in a potential loss of R\$20 million accounted as a finance expense in our consolidated financial statements.

<u>Total Debt Portfolio</u>	<u>(in millions of R\$)</u>
Floating rate debt:	
Real-denominated	8,767
Fixed Rate debt:	
Foreign currency-denominated	6,110
Transaction costs (-)	(48)
Paid interest (-)	(30)
Discount on the issuance (-)	(22)
Total	<u>14,777</u>

<u>Total Portfolio</u>	<u>Interest Rate Risk (in millions of R\$)</u>
Assets:	
Cash equivalents	326
Securities	753
Restricted Cash	12
CVA and other financial components	882
Total	<u>1,973</u>
Liabilities:	
Financing	<u>(4,017)</u>
Total liabilities	<u>(4,017)</u>
Total	<u>(2,044)</u>

Item 12. Description of Securities Other than Equity Securities***American Depositary Shares***

Citibank, N.A. serves as the depository (the "Depository") for both our Common ADSs and Preferred ADSs. Holders of ADSs, any person or entity having a beneficial interest deriving from the ownership of the ADSs, and persons depositing shares or surrendering ADSs for cancellation and withdrawal of Deposited Securities (as defined in the Deposit Agreements) are required to pay to the Depository certain fees and related charges as identified below.

The fees associated with our Common ADSs are as follows:

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Service	Rate	By Whom Paid
(1) Issuance of Common ADSs upon deposit of common shares (excluding issuances as a result of distributions described in paragraph (4) below).	Up to \$5.00 per 100 Common ADSs (or fraction thereof) issued.	Persons depositing common shares or persons receiving Common ADSs.
(2) Delivery of Deposited Securities, property and cash against surrender of Common ADSs.	Up to \$5.00 per 100 Common ADSs (or fraction thereof) surrendered.	Persons surrendering Common ADSs for purpose of withdrawal of Deposited Securities or persons to whom Deposited Securities are delivered.
(3) Distribution of cash dividends or other cash distributions (i.e. sale of rights and other entitlements).	Up to \$2.00 per 100 Common ADSs (or fraction thereof) held.	Persons to whom a distribution is made.
(4) Distribution of Common ADSs pursuant to (i) share dividends or other free share distributions, or (ii) exercise of rights to purchase additional Common ADSs.	Up to \$5.00 per 100 Common ADSs (or fraction thereof) issued.	Persons to whom a distribution is made.
(5) Distribution of securities other than Common ADSs or rights to purchase additional Common ADSs (i.e., spin off shares).	Up to \$5.00 per 100 Common ADSs (or fraction thereof) issued.	Persons to whom a distribution is made.
(6) Transfer of ADRs.	\$1.50 per certificate presented for transfer.	Persons presenting certificate for transfer.

The fees associated with our Preferred ADSs are as follows:

Service	Rate	By Whom Paid
(1) Issuance of Preferred ADSs upon deposit of preferred shares (excluding issuances contemplated by paragraphs (3) (b) and (5) below).	Up to \$5.00 per 100 Preferred ADSs (or fraction thereof) issued.	Persons for whom deposits are made or persons receiving Preferred ADSs.
(2) Delivery of Deposited Securities, property and cash against surrender of Preferred ADSs.	Up to \$5.00 per 100 Preferred ADSs (or fraction thereof) surrendered.	Persons surrendering Preferred ADSs or making withdrawal.
(3) Distribution of (a) cash dividend or (b) Preferred ADSs pursuant to share dividends (or other free distribution of share).	No fee, so long as prohibited by the exchange upon which the Preferred ADSs are listed. If the charging of such fee is not prohibited, the fees specified in (1) above shall be payable in respect of a distribution of Preferred ADSs pursuant to share dividends (or other free distribution of share) and the fees specified in (4) below shall be payable in respect of distributions of cash.	Persons to whom a distribution is made.
(4) Distribution of cash proceeds (i.e., upon sale of rights and other entitlements).	Up to \$2.00 per 100 Preferred ADSs (or fraction thereof) held.	Persons to whom a distribution is made.
(5) Distribution of Preferred ADSs pursuant to exercise of rights.	Up to \$5.00 per 100 Preferred ADSs (or fraction thereof) issued.	Persons to whom a distribution is made.

Direct and indirect depositary payments.

We have an agreement with the Depositary to reimburse the Company, up to a limited amount, for certain expenses in connection with our ADR programs, including listing fees, legal and accounting expenses, proxy distribution costs and investor relation related expenses. These reimbursements for the year ended December 31, 2019 totaled a net amount of approximately US\$1.33 million, after deduction of applicable U.S. taxes, in the amount of US\$0.57 million.

[Table of Contents](#)**PART II****Item 13. Defaults, Dividend Arrears and Delinquencies**

Not applicable.

Item 14. Material Modifications to the Rights of Security Holders and Use of Proceeds

Not applicable.

Item 15. Controls and procedures**(a) Assessment of Controls and Procedures for Disclosure**

Our Executive Board, including our Chief Executive Officer (“CEO”) and Chief Financial and Investor Relations Officer, evaluated the effectiveness of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Exchange Act) as of December 31 2019, and have concluded that because of the material weakness in our internal control over financial reporting as discussed below in Item 15 (b), these controls and procedures were not effective.

Disclosure controls and procedures are designed to provide reasonable assurance that information required to be disclosed by us in the reports that we file or submit under the Securities Exchange Act of 1934, as amended, is recorded, processed, summarized and reported within the time period specified in the SEC rules and forms. These disclosure controls and procedures include, without limitation, controls and procedures designed to provide reasonable assurance that information required to be disclosed by us in the reports we file or submit is accumulated and communicated to management of the Company, including the principal executive officer and financial officers, as appropriate to allow timely decisions regarding required disclosure. In light of the material weaknesses discussed below, we performed additional analysis and other post-closing procedures to ensure our consolidated financial statements are prepared in accordance with generally accepted accounting principles. Accordingly, our management, including our principal executive and financial officers, have concluded that the consolidated financial statements included in this Form 20-F present fairly, in all material respects, our financial position, results of operations and cash flows for the periods presented in conformity with IFRS as issued by the IASB.

(b) Management’s Annual Report on Internal Controls over Financial Reporting

Management is responsible for establishing and maintaining adequate internal control over financial reporting, as defined in Rules 13a-15(f) and 15d-15(f) of the Exchange Act.

Our internal control system was designed to provide a reasonable assurance as to the integrity and reliability of the published financial statements. Our internal control over financial reporting includes those policies and procedures that:

- (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the Company’s assets;
- (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with IFRS, and that receipts and expenditures of the Company are being made only in accordance with authorizations of management and Chief Officers of the Company; and
- (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the Company’s assets that could have a material effect on the financial statements.

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All internal control systems, no matter how well designed, have inherent limitations and can provide only reasonable assurance that the objectives of the control system are met.

Management evaluated the internal control over financial reporting under the supervision of our CEO and Chief Financial and Investor Relations Officer, as of December 31, 2019. Management evaluated the effectiveness of our internal control over financial reporting based on the criteria set forth in the *Committee of Sponsoring Organizations of Treadway Commission* framework of 2013.

Based on these criteria, a material weakness was identified and management concluded that as of December 31, 2019 our internal control over financial reporting were not effective. As previously highlighted herein, this ineffectiveness has not compromised the consolidated financial statements as of December 31, 2019.

Material Weakness in Internal Control over Financial Reporting

A material weakness is a deficiency, or a combination of deficiencies, in the internal control over financial reporting, such that there is a reasonable possibility that a material misstatement in the Company's annual or interim financial statements will not be prevented or detected on a timely basis.

Our management has identified a material weakness related to lack of identification, design and execution of relevant controls on business and financial reporting processes, to prevent or detect material misstatements of the Company's annual or interim financial statements on a timely basis.

Attestation Report of the Registered Public Accounting Firm

The effectiveness of our internal control over financial reporting as of December 31, 2019, has been audited by Ernst & Young Auditores Independentes S.S., the Company's independent registered public accounting firm. Their audit report on management's assessment of internal control over financial reporting as of December 31, 2019, is included below in this Form 20-F and expresses an adverse opinion on the effectiveness of our internal control over financial reporting as of December 31, 2019.

(c) Report of Independent Registered Public Accounting Firm

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and the Board of Directors of
Companhia Energética de Minas Gerais – CEMIG

Opinion on Internal Control over Financial Reporting

We have audited Companhia Energética de Minas Gerais – CEMIG's internal control over financial reporting as of December 31, 2019, based on criteria established in Internal Control – Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework) (the COSO criteria). In our opinion, because of the effect of the material weakness described below on the achievement of the objectives of the control criteria, Companhia Energética de Minas Gerais – CEMIG (the Company) has not maintained effective internal control over financial reporting as of December 31, 2019, based on the COSO criteria.

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A material weakness is a deficiency, or combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of the company's annual or interim financial statements will not be prevented or detected on a timely basis. The following material weakness has been identified and included in management's assessment. Management has identified a material weakness related to the lack of identification, design and execution of relevant controls on business and financial reporting processes.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the consolidated statement of financial position of the Company as of December 31, 2019 and 2018, the related consolidated statements of income, comprehensive income, changes in equity and cash flows for each of the three years in the period ended December 31, 2019, and the related notes. This material weakness was considered in determining the nature, timing and extent of audit tests applied in our audit of the 2019 consolidated financial statements, and this report does not affect our report dated May 22, 2020, which expressed an unqualified opinion thereon.

Basis for Opinion

The Company's management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management's Annual Report on Internal Control over Financial Reporting. Our responsibility is to express an opinion on the Company's internal control over financial reporting based on our audit. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audit in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects.

Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

Definition and Limitations of Internal Control Over Financial Reporting

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ Ernst & Young Auditores Independentes S.S.

Belo Horizonte, Brazil
May 22, 2020

[Table of Contents](#)**(d) Plans for Remediation of Material Weakness**

Our management is committed to improve our internal control processes and will continue to diligently review our financial reporting controls and procedures in order to ensure our compliance with the requirements of the Sarbanes-Oxley Act of 2002 and the related rules promulgated by the SEC. To remediate the material weakness identified as of December 31, 2019, the following activities have been already or are expected to be implemented in 2020:

Activities already implemented as of the date of this Annual Report: Hiring specialized consulting firm

Management hired a specialized consulting firm to support us in a major review of the Company's control matrix, establish our remediation plan with employees responsible for controls and perform procedures to evaluate the design and operating effectiveness of internal control over financial reporting. The work for the year 2020 has already started and one of its main goals is to remediate the deficiencies identified in 2019. Certain remediation plans have been approved by our Internal Controls department and the related execution is currently in progress by the relevant departments.

Organizational Restructuring

At the end of 2019, the Company underwent an organizational restructuring whereby the former Risks, Internal Controls, Compliance and Ombudsman departments were consolidated into a single department. A Director with experience in Sox 404 compliance was hired to lead this department and, among other functions, one of his main responsibilities is to improve our internal control environment.

Such an organizational restructuring aims to streamline our processes and procedures, which will lead to make our decision-making process to be more agile.

The increase of our Accounting staff

Management allocated more employees to our accounting department, in order to improve activities such as the analysis of the new accounting pronouncements, the timely preparation of financial reports and the implementation of the remediation plans.

Activities to be implemented in 2020:

Mobilization of an internal team, with the support of the specialized consulting firm previously mentioned, to work together with control owners of certain departments in the implementation of remediation plans for the gaps and deficiencies identified.

Creation of a performance indicator measure that will be part of the performance-based bonus program that the Company has in place to enhance accountability of the personnel involved in activities that pertain to the Company's internal control environment.

Item 16A. Financial Specialist of the Audit Committee

We established an Audit Committee on June 11, 2018 in compliance with the Brazilian State Companies Law, which operates as an audit committee for the purpose of the Sarbanes-Oxley Law of 2002. Under Section 10A-3 (c) (3) of the SEC rules on audit committees of companies listed on the New York Stock Exchange, non-US issuers can opt not to have a separate audit committee made up of independent members provided that they have an established audit board or committee that has been chosen in accordance with the legal rules of its origin country, which expressly require or permit this committee or board should comply with certain obligations. While all of the current members of our Audit Committee meet the requirements to be an audit committee financial expert under Item 16A of the Form 20-F, we have nominated Pedro Carlos de Mello as our Audit Committee Financial Expert and he also satisfies the independence requirements of Rule 10A-3.

[Table of Contents](#)**Item 16B. Code of Ethics**

We have adopted a code of ethics, as defined in Item 16B of Form 20-F under the Exchange Act. Our code of ethics applies to our Chief Executive Officer, Chief Finance and Investor Relations Officer, and to persons performing similar functions, members of the Board of Directors, other officers, and employees. In 2019, we made minor adjustments to our code of ethics to comply with Brazilian Law No. 13.303 of 2016, which is filed with the SEC as an exhibit to this Form 20-F, and is available on our website www.cemig.com.br. If we change the provisions of our code of ethics that apply to our Chief Executive Officer, Chief Finance and Investor Relations Officer, and/or persons performing similar functions, or if we grant any waiver of such provisions, we will disclose such change or waiver within five business days following the date of the change or waiver, on our website at the same address.

Item 16C. Principal Accountant Fees and Services

Ernst & Young Auditores Independentes acted as our independent registered public accounting firm for the fiscal years ended December 31, 2017, 2018 and 2019.

Fees for professional services provided by our independent auditors in each of the last three fiscal years, in each of the following categories are:

<u>Year ended December, 31</u>	<u>2019</u>	<u>2018</u>	<u>2017</u>
	(thousands of reais)		
Audit fees	7,116	8,111	6,053
Audit-related fees	-	4,232	845
Tax fees	842	767	758
Total	<u>7,958</u>	<u>13,110</u>	<u>7,656</u>

The fees disclosed in 2018, were included fees related to professional services performed by Ernst & Young Auditores Independentes for Light S.A. amounting of R\$ 5,207 thousand.

Audit fees include the audit of our annual consolidated financial statements and internal control over financial reporting, the quarterly reviews of our consolidated interim financial statements, statutory audits of our subsidiaries and certain regulatory audits.

Audit-related fees include services related to the issuance of comfort letter in connection with our Eurobond offering.

Tax fees refers to certain tax compliance services.

Audit Committee Pre-Approval Policies and Procedures

Our Audit Committee currently serves as our audit board or committee for purposes of the Sarbanes-Oxley Act of 2002. However, as required by Brazilian legislation, we have adopted pre-approval policies and procedures whereby all audit and non-audit services provided by external auditors must be approved by the Board of Directors. Any service proposals submitted by external auditors need to be discussed and approved by the Board of Directors during its meetings. Once the proposed service is approved, we formalize the engagement of the relevant services. The approval of any audit and non-audit services to be provided by our external auditors is specified in the minutes of the meetings of the Board of Directors. All services mentioned above were pre-approved by the Board of Directors and Audit Committee.

[Table of Contents](#)**Item 16D. Exemptions from the Listing Standards for Audit Committees**

We rely on the general exemption from the listing standards relating to audit committees contained in Rule 10A-3(c) (3) under the Exchange Act. Our Audit Committee carries out the functions of an audit committee of the United States to the extent permitted under Brazilian law. Brazilian law requires our Audit Committee to be separate from our board of directors, and members of our Audit Committee are not elected by the Company's management. Brazilian law provides standards for the independence of our Audit Committee from our management. Our Audit Committee is composed of three members, none of which are members of our board of directors.

We do not believe that our reliance on this general exemption will materially affect the ability of our Audit Committee to act independently and to satisfy the other requirements of the listing standards relating to audit committees contained in Rule 10A-3 under the Exchange Act.

We also have a Fiscal Council constituted according to the Brazilian law requirements. See more information on Item 6. Directors, Senior Managers and Employees.

Item 16E. Purchases of Equity Securities by the Issuer and Affiliated Purchasers

Not applicable.

Item 16F. Change in Registrant's Certifying Accountant

Not applicable.

Item 16G. Corporate Governance**Corporate Governance Differences from NYSE Practices**

On November 4, 2003, the NYSE established new corporate governance rules. Under the rules, foreign private issuers are subject to a more limited set of corporate governance requirements than U.S. domestic issuers. Under the NYSE rules, we are required only to: (i) have an audit committee or Fiscal Council, pursuant to an applicable exemption available to foreign private issuers, that meets certain requirements, (ii) provide prompt certification by our CEO of any material noncompliance with any corporate governance rules, and (iii) provide a brief description of the significant differences between our corporate governance practices and the NYSE corporate governance practice required to be followed by U.S. listed companies. The discussion of the significant differences between our corporate governance practices and those required of U.S. listed companies follows below.

For more information on our corporate governance practices, see Item 9. The Offer and Listing Trading Market—Trading on the B3.

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<u>Section</u>	<u>NYSE Corporate Governance Rule for U.S.Domestic Issuers</u>	<u>Our Approach</u>
303A.01	A listed company must have a majority of independent directors; "Controlled companies" are not required to comply with this requirement.	Under Section 303A of the rules of the NYSE, "controlled company" is taken to include a company in which more than 50% of the voting power is held by one individual, a group or another company. Since 50.97% of the voting share of CEMIG is held by the State of Minas Gerais, it is considered to be a controlled company. Therefore, this requirement currently does not apply to CEMIG.
303A.03	The non-management directors of a listed company must meet at regularly scheduled executive sessions without management.	The non-management directors of CEMIG do not meet at regularly scheduled executive sessions without management.
303A.04	A listed company must have a nominating/corporate governance committee composed entirely of independent directors, with a written charter that covers certain minimum specified duties. "Controlled companies" are not required to comply with this requirement.	As a controlled company, CEMIG is not required to have a nominating/governance committee. Nonetheless, CEMIG has a Corporate Governance Committee, composed of dependent and independent directors, and its responsibilities are clearly defined in the internal regulations of the Board of Directors.
303A.05	A listed company must have a compensation committee composed entirely of independent directors, with a written charter that covers certain minimum specified duties, "Controlled companies" are not required to comply with this requirement.	As a controlled company, CEMIG would not be required to comply with the compensation committee requirements as if it were a U.S. domestic issuer. CEMIG does not have a compensation committee.
303A.06 and 303A.07	A listed company must have an audit committee with a minimum of three independent directors that satisfy the independence requirements of Rule 10A-3 under the Securities Exchange Act of 1934, as amended, with a written charter that covers certain minimum specified duties.	CEMIG exercised its prerogative under SEC Rule 10A-3 and the Sarbanes Oxley Act of 2002, which allow non U.S. issuers not to have an Audit Committee. Our Audit Committee carries out the functions of an audit committee of the United States up to the limit permitted by Brazilian law. CEMIG's Audit Committee is a permanent body, responsible, principally, for inspection and supervision of the activities of the management and for verifying the managers' compliance with their duties under the law and under the by-laws.
303A.08	Shareholders must be given the opportunity to vote on all equity-compensation plans and material revisions thereto, with limited exemptions set forth in the NYSE rules.	Under Brazilian Corporate Law, shareholder preapproval is required for the adoption of equity compensation plans.
303A.09	A listed company must adopt and disclose corporate governance guidelines that cover certain minimum specified subjects.	CEMIG's listing on B3 is at Corporate Governance Level 1, and CEMIG is thus obliged to comply with the rules contained in those related regulations. In addition, CEMIG's Manual for Disclosure and Use of Information, its Securities Trading Policy, the Internal Regulations of its Board of Directors, and its Code of Ethics outline important rules of corporate governance which orient its management.
303A.12	Each listed company CEO must certify to the NYSE each year that he or she is not aware of any violation by the company of NYSE corporate governance listing standards.	CEMIG's CEO will promptly notify the NYSE in writing after any executive officer of CEMIG becomes aware of any material non-compliance with any applicable provisions of the NYSE corporate governance rules.

Item 16H. Mine Safety Disclosure

Not applicable.

[Table of Contents](#)**Item 17. Financial Statements**

See "Item 18. Financial Statements."

Item 18. Financial Statements

Reference is made to pages F-1 through F- 162 hereof.

The following financial statements are filed as part of this annual report on Form 20-F:

- Audited Consolidated Statement of Financial Position as of December 31, 2019 and 2018;
- Audited Consolidated Statement of Income for the years ended December 31, 2019, 2018 and 2017;
- Audited Consolidated Statement of Comprehensive Income for the years ended December 31, 2019, 2018 and 2017;
- Audited Consolidated Statement of Changes in Equity for the years ended December 31, 2019, 2018 and 2017;
- Audited Consolidated Statement of Cash Flow for the years ended December 31, 2019, 2018 and 2017;
- Notes to the Consolidated Financial Statements;
- Report of Ernst & Young Auditores Independentes as of December 31, 2019, 2018 and 2017 and for each of the three years ended December 31, 2019; Independent Auditor's Report (Pricewaterhouse Coopers) of Madeira Energia S.A. – MESA as of December 31, 2019, 2018 and 2017 and for each of the three years ended December 31, 2019;

Item 19. Exhibits

The following documents are included as exhibits to this annual report:

No.	Description
1	Corporate by-laws of CEMIG, as amended and in effect since August 7, 2019.
2.1	Second Amended and Restated Deposit Agreement, dated as of August 10, 2001, by and among us, Citibank, N.A., as depositary, and the holders and beneficial owners of ADSs evidenced by ADRs issued thereunder (incorporated by reference to the Registration Statement on Form F-6 relating to the ADSs filed on August 20, 2001 (File No. 333-13826)). (P)
2.2	Shareholders' Agreement, dated June 18, 1997, between the State Government and Southern, relating to the rights and obligations of owners of our shares (incorporated by reference to Exhibit 2.1 to our Registration Statement on Form 20-F filed on August 13, 2001 (File No. 1-15224)). (P)
2.3	Amendment No. 1 to the Second Amended and Restated Deposit Agreement, dated August 10, 2001, by and among us, Citibank, N.A., as depositary, and the holders and beneficial owners of ADSs evidenced by ADRs issued thereunder (incorporated by reference to the Registration Statement on Form F-6 relating to the ADSs filed on June 11, 2007 (File No. 333-143636)).
2.4	Deposit Agreement, dated as of June 12, 2007, by and among us, Citibank, N.A., as depositary, and the holders and beneficial owners of ADSs evidenced by ADRs issued thereunder (incorporated by reference to the Registration Statement on Form F-6 relating to the common share ADSs filed on May 7, 2007 (File No. 333-142654)).
2.5	The total amount of long-term debt securities of CEMIG and its subsidiaries under any one instrument does not exceed 10.0% of our total assets on a consolidated basis. We agree to furnish copies of instruments defining the rights of certain holders of long-term debt to the Securities and Exchange Commission upon request.

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- 2.6 [Indenture, dated as of December 5, 2017, among CEMIG Geração e Transmissão S.A., as issuer, Companhia Energética de Minas Gerais – CEMIG, as notes guarantor, and the Bank of New York Mellon as trustee, paying agent, transfer agent and registrar and the Bank of New York Mellon SA/NV, Luxembourg Branch, as Luxembourg Paying Agent, Luxembourg Transfer Agent and Luxembourg Listing Agent.](#)
- 4.1 [Contract of Concession for Generating Electric Energy, dated July 10, 1997, between the Federal Government and us, relating to the provision of electric energy generation services to the public \(incorporated by reference to Exhibit 4.1 to our Registration Statement on Form 20-F filed on August 13, 2001 \(File No. 1-15224\)\). \(P\)](#)
- 4.2 [Contract of Concession of Electric Energy Transmission Services, dated July 10, 1997, between the Federal Government and us, relating to the transmission of electric energy to the public \(incorporated by reference to Exhibit 4.2 to our Registration Statement on Form 20-F filed on August 13, 2001 \(File No. 1-15224\)\). \(P\)](#)
- 4.3 [Second Amendment to the Energy Transmission Concession Contract, dated September 16, 2005 \(incorporated by reference to Exhibit 4.3 to our Registration Statement on Form 20-F filed on June 30, 2006 \(File No. 1-15224\)\)](#)
- 4.4 [Third Amendment to the Energy Transmission Concession Contract, for the Northern, Southern, Eastern, and Western geographic areas, dated April 13, 2010 \(incorporated by reference to Exhibit 4.4 to our Registration Statement on Form 20-F filed on June 30, 2010 \(File No. 1-15224\)\).](#)
- 4.5 [Contracts of Concession of Public Service for Distribution of Electric Energy, dated July 10, 1997, between the Federal Government and us, relating to the provision of electric energy distribution services to the public \(incorporated by reference to Exhibit 4.3 to our Registration Statement on Form 20-F filed on August 13, 2001 \(File No. 1-15224\)\). \(P\)](#)
- 4.6 [First Amendment to the Energy Distribution Concession Contract, dated March 31, 2005 \(incorporated by reference to Exhibit 4.5 to our Registration Statement on Form 20-F filed on June 30, 2006 \(File No. 1-15224\)\).](#)
- 4.7 [Second Amendment to the Energy Distribution Concession Contract, dated September 16, 2005 \(incorporated by reference to Exhibit 4.6 to our Registration Statement on Form 20-F filed on June 30, 2006 \(File No. 1-15224\)\).](#)
- 4.8 [Contract for the Assignment of CRC Account, dated May 31, 1995, between the State Government and us, relating to amounts due to us from the State Government \(incorporated by reference to Exhibit 4.4 to our Registration Statement on Form 20-F filed on August 13, 2001 \(File No. 1-15224\)\). \(P\)](#)
- 4.9 [First Amendment to the Contract for the Assignment of CRC Account, dated February 24, 2001, between the State Government and us, relating to amounts due to us from the State Government \(incorporated by reference to Exhibit 4.5 to our Annual Report on Form 20-F filed on March 26, 2003 \(File No. 1-15224\)\).](#)
- 4.10 [Second Amendment to the Contract for the Assignment of CRC Account, dated October 14, 2002, between the State Government and us, relating to amounts due to us from the State Government \(incorporated by reference to Exhibit 4.6 to our Annual Report on Form 20-F filed on March 26, 2003 \(File No. 1-15224\)\).](#)
- 4.11 [Third Amendment to the Contract for the Assignment of CRC Account, dated October 24, 2002, between the State Government and us, relating to amounts due to us from the State Government \(incorporated by reference to Exhibit 4.7 to our Annual Report on Form 20-F filed on March 26, 2003 \(File No. 1-15224\)\).](#)
- 4.12 [Fourth Amendment to the Contract for the Assignment of CRC Account, dated January 23, 2006, between the State Government and us, relating to amounts due to us from the State Government \(incorporated by reference to Exhibit 4.14 to our Registration Statement on Form 20-F filed on June 30, 2006 \(File No. 1-15224\)\).](#)
- 4.13 [Announcement of Start of Public Distribution of Senior Units under CRC Account Securitization Fund, dated as of January 26, 2006 \(incorporated by reference to Exhibit 4.15 to our Registration Statement on Form 20-F filed on June 30, 2006 \(File No. 1-15224\)\).](#)
- 4.14 [Summary of Indenture Covering Public Distribution of Non-Convertible Unsecured Debentures, dated August 24, 2006, between CEMIG D and Unibanco—União dos Bancos Brasileiros S.A. \(incorporated by reference to Exhibit 4.18 to our Registration Statement on Form 20-F filed on July 23, 2007 \(File No. 1-15224\)\).](#)
- 4.15 [Summary of Indenture Covering Public Distribution of Non-Convertible Unsecured Debentures, dated April 17, 2007, between CEMIG GT and Unibanco—União dos Bancos Brasileiros S.A. \(incorporated by reference to Exhibit 4.19 to our Registration Statement on Form 20-F filed on July 23, 2007 \(File No. 1-15224\)\).](#)
- 4.16 [Summary of Indenture Covering the Second Issuance of Debentures, dated December 19, 2007, between CEMIG D and BB Banco de Investimento S.A. \(incorporated by reference to Exhibit 4.20 to our Annual Report on Form 20-F filed on June 30, 2008 \(File No. 1-15224\)\).](#)
- 4.17 [Share Purchase Agreement, dated April 23, 2009, between CEMIG GT, Terna—Rete Elettrica Nazionale S.p.A., and CEMIG \(incorporated by reference to Exhibit 4.22 to our Registration Statement on Form 20-F filed on June 19, 2009 \(File No. 1-15224\)\).](#)
- 4.18 [English Summary of Share Purchase Agreement between CEMIG and Andrade Gutierrez Concessões S.A., dated December 30, 2009 \(incorporated by reference to Exhibit 4.18 to our Registration Statement on Form 20-F filed on June 30, 2010 \(File No. 1-15224\)\).](#)

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- 4.19 [English Summary of Share Purchase Agreement between CEMIG and Fundo de Investimento em Participações PCP, dated December 31, 2009 \(incorporated by reference to Exhibit 4.19 to our Registration Statement on Form 20-F filed on June 30, 2010 \(File No. 1-15224\)\).](#)
- 4.20 [English Summary of Put Option Agreement between CEMIG and Enlighted Partners Venture Capital LLC, dated March 24, 2010 \(incorporated by reference to Exhibit 4.20 to our Registration Statement on Form 20-F filed on June 30, 2010 \(File No. 1-15224\)\).](#)
- 4.21 [English Summary of Share Purchase Agreement among, TAESA, Abengoa Concessões Brasil Holding S.A. and Abengoa Participações Holding S.A., dated June 2, 2011 \(incorporated by reference to the Form 20-F filed on April 27, 2012 \(File No. 1-15224\)\).](#)
- 4.22 [English Summary of Share Purchase Agreement among, TAESA, Abengoa Concessões Brasil Holding S.A., Abengoa Construção Brasil Ltda., NTE—Nordeste Transmissora de Energia S.A. and Abengoa Participações Holding S.A., dated June 2, 2011 \(incorporated by reference to the Form 20-F filed on April 27, 2012 \(File No. 1-15224\)\).](#)
- 4.23 [Summary of Indenture Covering Public Distribution of Non-Convertible Unsecured Debentures, dated March 3, 2010, between CEMIG GT and BB – Banco de Investimento S.A. \(incorporated by reference to Exhibit 4.23 to our Annual Report on Form 20-F filed on June 30, 2011 \(File No. 1-15224\)\).](#)
- 4.24 [English Summary of Share Purchase Agreement between TAESA and Abengoa Concessões Brasil Holding S.A. dated March 16, 2012 \(incorporated by reference to the Form 20-F filed on April 27, 2012 \(File No. 1-15224\)\).](#)
- 4.25 [English Summary of Investment Agreement among RR Participações S.A., Light and Renova dated July 8, 2011 \(incorporated by reference to the Form 20-F filed on April 27, 2012 \(File No. 1-15224\)\).](#)
- 4.26 [English Summary of Put Option Agreement between Parati S.A. and Fundação de Seguridade Social Braslight dated July 15, 2011 \(incorporated by reference to the Form 20-F filed on April 27, 2012 \(File No. 1-15224\)\).](#)
- 4.27 [English Summary of Share Purchase and Sale Agreement entered into between Amazônia Energia Participações S.A. and Construtora Queiroz Galvão S.A., Construtora OAS Ltda., Contern Construções e Comércio Ltda., Cetenco Engenharia S.A., Galvão Engenharia S.A. and J. Malucelli Construtora de Obras S.A., for shares in Norte Energia S.A. dated October 25, 2011 \(incorporated by reference to the Form 20-F filed on April 27, 2012 \(File No. 1-15224\)\).](#)
- 4.28 [English Summary of Share Acquisition Agreement between CEMIG and the State of Minas Gerais dated December 27, 2011 \(incorporated by reference to the Form 20-F filed on April 27, 2012 \(File No. 1-15224\)\).](#)
- 4.29 [Summary of Indenture Covering the Public Distribution of Non-Convertible Unsecured Debentures, dated March 13, 2012, between CEMIG Geração e Transmissão S.A., HSBC Corretora de Títulos e Valores Mobiliários S.A., Banco BTG Pactual S.A. and Banco do Nordeste do Brasil S.A. \(incorporated by reference to the Form 20-F filed on April 27, 2012 \(File No. 1-15224\)\).](#)
- 4.30 [Initial Announcement of Public Distribution, under the Regime of Firm Guarantee of Placement, of Unsecured Debentures Not Convertible into Shares, with Additional Guarantee, in Three Series, of the Third Issue by CEMIG D, dated March 19, 2012 \(incorporated by reference to the Form 20-F filed on April 30, 2013 \(File No. 1-15224\)\).](#)
- 4.31 [Initial Announcement of Public Distribution, under the Regime of Best Efforts for Placement, of Unsecured Debentures Not Convertible into Shares, with Additional Guarantee, in up to Three Series, of the Third Issue by CEMIG GT, dated March 12, 2012 \(incorporated by reference to the Form 20-F filed on April 30, 2013 \(File No. 1-15224\)\).](#)
- 4.32 [Summary of Private Contract for Investment in Transmission Assets, among CEMIG, CEMIG GT and TAESA dated May 17, 2012 \(incorporated by reference to the Form 20-F filed on April 30, 2013 \(File No. 1-15224\)\).](#)
- 4.33 [Summary of the Share Purchase Agreement between CEMIG Capim Branco Energia S.A., Suzano Papel e Celulose S.A., and Suzano Holding S.A., intervening by Comercial Agrícola Paineiras LTDA. \(“Paineiras”\) e Epícares Empreendimentos e Participações LTDA. \(“Epícares”\), dated March 12, 2013 \(incorporated by reference to the Form 20-F filed on April 30, 2013 \(File No. 1-15224\)\).](#)
- 4.34 [Summary of the Commitment Undertaking for Settlement, signed between the State of Minas Gerais and CEMIG, dated November 22, 2012 \(incorporated by reference to the Form 20-F filed on April 30, 2013 \(File No. 1-15224\)\).](#)
- 4.35 [Fifth Amendment to Concession Contracts No. S 002/1997–DNAEE, 003/1997–DNAEE, 004/1997–DNAEE and 005/1997–DNAEE, dated December 21, 2015, between the Federal Republic of Brazil and us, related to energy distribution service \(incorporated by reference to the Form 20-F filed on November 14, 2016 \(File No. 1-15224\)\).](#)
- 4.36 Excerpts from concession contracts for energy generation Nos. 8, 9, 10, 11, 12, 13, 14, 15 and 16 between the Mining and Energy Ministry and CEMIG GT.

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- 8 [List of Subsidiaries \(incorporated by reference to Exhibit 8 to our Annual Report on Form 20-F filed on May 25, 2005 \(File No. 1-15224\)\).](#)
 - 11 [Statement of Ethical Principles And Code of Professional Conduct – \(incorporated by reference to Exhibit 11 to our Registration Statement on Form 20-F filed on May 17, 2019 \(File No. 001-15224\)\).](#)
 - 12.1 [Chief Executive Officer Certification pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, dated May 22, 2020.](#)
 - 12.2 [Chief Officer for Finance and Investor Relations Certification pursuant to Section 302 of the Sarbanes-Oxley Act of 2002, dated May 22, 2020.](#)
 - 13.1 [Chief Executive Officer Certification pursuant to 18 U.S.C. section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, dated May 22, 2020.](#)
 - 13.2 [Chief Officer for Finance and Investor Relations Certification pursuant to 18 U.S.C. section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, dated May 22, 2020.](#)
-
- 101.INS XBRL Instance Document
 - 101.SCH XBRL Taxonomy Extension Schema Document
 - 101.CAL XBRL Taxonomy Extension Calculation Linkbase Document
 - 101.DEF XBRL Taxonomy Extension Definition Linkbase Document
 - 101.LAB XBRL Taxonomy Extension Label Linkbase Document
 - 101.PRE XBRL Taxonomy Extension Presentation Linkbase Document

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The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this annual report on its behalf.

COMPANHIA ENERGÉTICA DE MINAS GERAIS – CEMIG

Date: May 22, 2020

By: /s/ Reynaldo Passanezi Filho

Name: Reynaldo Passanezi Filho

Title: Chief Executive Officer

By: /s/ Leonardo George de Magalhães

Name: Leonardo George de Magalhães

Title: Chief Officer for Finance and Investor Relations

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***Companhia Energética de Minas
Gerais – CEMIG***

Consolidated Financial Statements as of December 31, 2019 and 2018 and for each of the Years Ended December 31, 2019, 2018 and 2017 and Report of Independent Registered Public Accounting Firm

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Shareholders and the Board of Directors of
Companhia Energética de Minas Gerais – CEMIG

Opinion on the Financial Statements

We have audited the accompanying consolidated statement of financial position of Companhia Energética de Minas Gerais – CEMIG (the Company) as of December 31, 2019 and 2018, the related consolidated statements of income, comprehensive income, changes in equity and cash flows for each of the three years in the period ended December 31, 2019, and the related notes (collectively referred to as the consolidated financial statements). In our opinion, based on our audits and the report of other auditors, the consolidated financial statements present fairly, in all material respects, the financial position of the Company at December 31, 2019 and 2018, and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019, in conformity with International Financial Reporting Standards (IFRS), as issued by the International Accounting Standards Board (IASB).

We did not audit the financial statements of Madeira Energia S.A., a corporation in which the Company has, directly and indirectly, 15.5% interest. In the consolidated financial statements, the Company's investment in Madeira Energia S.A. is stated at R\$552 million and R\$740 million as of December 31, 2019 and 2018, respectively, and the Company's equity in the losses of Madeira Energia S.A., is stated at R\$188 million in 2019, R\$302 million in 2018 and R\$204 million in 2017. Those statements were audited by other auditors whose report has been furnished to us, and our opinion, insofar as it relates to the amounts included for Madeira Energia S.A., is based solely on the report of the other auditors.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States) (PCAOB), the Company's internal control over financial reporting as of December 31, 2019, based on criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (2013 framework), and our report dated May 22, 2020, expressed an adverse opinion thereon.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audits. We are a public accounting firm registered with the PCAOB and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.



We conducted our audits in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits and the report of other auditors provide a reasonable basis for our opinion.

Critical Audit Matters

The critical audit matters communicated below are matters arising from the current period audit of the financial statements that were communicated or required to be communicated to the audit committee and that: (1) relate to accounts or disclosures that are material to the financial statements and (2) involved our especially challenging, subjective or complex judgments. The communication of critical audit matters does not alter in any way our opinion on the consolidated financial statements, taken as a whole, and we are not, by communicating the critical audit matters below, providing separate opinions on the critical audit matters or on the accounts or disclosures to which they relate.

Impairment of investments in associates and joint ventures

Description of the matter

As described in Note 18 to the financial statements the Company periodically assesses the need to recognize any additional impairment loss on the Company's total net investment in its equity investees. In 2019, as a result of this analysis, the Company concluded that there was indication of impairment of its direct and indirect investments in Madeira Energia S.A., Norte Energia S.A., Renova Energia S.A. and Guanhães Energia S.A. and consequently, proceeded with the analysis and determination of its recoverable value, recognizing losses when applicable.

Auditing the Company's impairment assessment was specially challenging as estimates underlying the fair value of evaluated assets were based on assumptions affected by future market and economic conditions, and to the existence of specific circumstances related to certain investees and joint ventures' delayed operations start-up and going concern risks.

How we addressed the matter in our audit

We obtained an understanding, evaluated the design and tested the operating effectiveness of controls over the Company's impairment assessment process. For example, we tested controls over the determination of the fair value of the investments and the assessment of any impairment, including controls over management's review of the significant assumptions underlying the fair value determination.



To test the Company's impairment assessment our audit procedures included, among others, evaluating the significant assumptions and financial and operating data used to estimate fair value; comparing the significant assumptions used to estimate cash flows to current industry and economic trends; comparing relevant inputs to Company's financial and operating data; performing a sensitivity analysis to evaluate the fair value estimate and involving our valuation specialists to assist in evaluating the discount rate and methodology used in the fair value calculation. We also evaluated the financial statements disclosures included in Note 18.

PIS/Pasep and COFINS tax credits

Description of the matter

As described in Note 10 to the consolidated financial statements, in 2019 the Company recognized PIS/Pasep and COFINS tax credits over ICMS of R\$ 6,070 million arising from an Ordinary Action decided in favor of the Company and against which there is no appeal. In connection with such case, the Company recorded an account payable of R\$ 3,038 million, based on the Company's evaluation of the amount to be refunded to its customers of the distribution segment, supported by its legal advisors' opinion.

Auditing the PIS/Pasep and COFINS tax credits recorded and amounts to be refunded to the Company's customers was specially challenging because the assessment process is complex, involves significant judgment, high volume of documentation to be analyzed, some divergences on the calculation methodology interpretation between some court decisions and the Brazilian tax authorities' position, and the absence of a formal and specific guidance from the regulator regarding the customers' reimbursement definition.

How we addressed the matter in our audit

We obtained an understanding, evaluated the design and tested the operating effectiveness of the controls over PIS/Pasep and COFINS tax credits. For example, we tested controls over Management's projections used in its recoverability assessment, and the underlying significant assumptions used to determine the amounts to be refunded to the costumers.

To test the PIS/Pasep and COFINS tax credits recorded and the amounts to be refunded to the Company's customers our audit procedures included, among others, testing the completeness and accuracy of the underlying data used by the Company; reconciling the reports used to calculate the tax credits amounts with the general ledger and appropriate tax documentation; reprocessing the financial income calculation and involving our tax professionals to assist in evaluating the court dispute decision, application of tax law used in the Company's assessment, including the analyses of legal advisor's opinions that support the amounts to be refunded to its customers, and the data used to support the tax credit recorded. We also evaluated the consolidated financial statements disclosures included in Note 10.



Allegations of non-compliance with laws and regulations

Description of the matter

As described in Note 18 to the consolidated financial statements, currently investigations and other legal measures are being conducted by public authorities in connection with the Company and certain investees regarding certain expenditures and their allocations. The investigations of these investees also involve some of their executives and other shareholders, and certain executives or former executives of the Company. The governance bodies of the Company have authorized engaging a third-party investigator to analyze the internal procedures related to these investees and to ascertain such claims.

Auditing the Company's assessment and conclusions over this matter was specially challenging as it involves significant judgment and due to inherent complexity of the internal investigation process.

How we addressed the matter in our audit

We obtained an understanding, evaluated the design and tested the operating effectiveness of the controls over the evaluation of allegations of non-compliance. For example, we tested controls on the identification, risk assessment, measurement, accounting recognition and disclosure of information related to ongoing investigations, including analysis of the reporting channel, handling complaints and communicating the results to the Company's governance bodies.

To test the Company's assessment and conclusions of the internal investigation our audit procedures included, among others, evaluating the report issued by a third party engaged by the Company to assist in the investigation of such allegations; understanding and evaluating the main actions taken by Management and governance bodies in relation to such allegations; inquiring of the Audit Committee, members of the Investigation Committee and Management, as well as the Company's Compliance department; testing unusual transactions; involving our investigations professionals to assist in our assessment of the Company's investigation procedures and conclusions. We also evaluated the financial statements disclosures included in Note 18.

/s/ Ernst & Young Auditores Independentes S.S.

We have served as the Company's auditor since 2017.

Belo Horizonte, Brazil

May 22, 2020



Report of Independent Registered Public Accounting Firm

To the Board of Directors and Shareholders
Madeira Energia S.A. - MESA

Opinion on the Financial Statements

We have audited the consolidated balance sheets of Madeira Energia S.A.–MESA and its subsidiary (the “Company”) as of December 31, 2019 and 2018 and the related consolidated statements of operations, of comprehensive (loss) income, of changes in equity and of cash flows for each of the three years in the period ended December 31, 2019, including the related notes (collectively referred to as the “consolidated financial statements”) (not presented herein). In our opinion, the consolidated financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2019 and 2018 and the results of its operations and its cash flows for each of the three years in the period ended December 31, 2019 in conformity with International Financial Reporting Standards as issued by the International Accounting Standards Board.

Basis for Opinion

These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's consolidated financial statements based on our audits. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits of these consolidated financial statements in accordance with the standards of the PCAOB. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the consolidated financial statements are free of material misstatement, whether due to error or fraud.

*PricewaterhouseCoopers, Av. Tancredo Neves, 2539, Caminho das Árvores, Ed. CEO Salvador Shopping - Torre Nova Iorque
Salvador - BA, Brasil, CEP 41820-021 T: (71) 3417-7500, F: (71) 3417-7698, www.pwc.com/br*



Madeira Energia S.A. - MESA

Our audits included performing procedures to assess the risks of material misstatement of the consolidated financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the consolidated financial statements. We believe that our audits provide a reasonable basis for our opinion.

/s/ PricewaterhouseCoopers
Auditores Independentes
Salvador-Bahia, Brazil
May 19, 2020

We have served as the Company's auditor since 2009.

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CONSOLIDATED STATEMENT OF FINANCIAL POSITION
AS OF DECEMBER 31, 2019 AND 2018
ASSETS
(IN MILLIONS OF REAIS – R\$ mn)

	Note	2019	2018
CURRENT			
Cash and cash equivalents	6	536	891
Marketable securities	7	740	704
Receivables from customers and traders and concession holders - Transport of electricity	8	4,524	4,092
Concession financial assets	16	1,080	1,071
Concession contract assets	17	172	131
Recoverable taxes	9	99	124
Income tax and social contribution tax credits	11a	621	387
Dividends receivables	18	186	120
Restricted cash	12	12	91
Inventories		39	36
Public lighting contribution		165	148
Advances to suppliers		40	7
Reimbursement of tariff subsidies payments	15	97	91
Low-income customer subsidy		30	30
Derivative financial instruments	33b	235	69
Others		304	358
		8,880	8,350
Assets classified as held for sale	34	1,258	19,446
TOTAL CURRENT		10,138	27,796
NON-CURRENT			
Marketable securities	7	13	109
Advances to suppliers		–	87
Receivables from customers and traders and concession holders - Transport of electricity	8	77	81
Recoverable taxes	9	6,349	242
Income tax and social contribution tax recoverable	11a	228	6
Deferred income tax and social contribution tax	11c	2,430	2,147
Escrow deposits	14	2,540	2,502
Derivative financial instruments	33b	1,456	744
Accounts receivable from the State of Minas Gerais	13	115	246
Concession financial assets	16	4,851	4,927
Concession contract assets	17	1,833	1,598
Investments – Equity method	18	5,400	5,235
Property, plant and equipment	19	2,450	2,662
Intangible assets	20	11,624	10,777
Leasing - right-of-use assets	21a	277	–
Others		145	696
TOTAL NON-CURRENT		39,788	32,059
TOTAL ASSETS		49,926	59,855

The Notes are an integral part of these Consolidated Financial Statements.

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CONSOLIDATED STATEMENT OF FINANCIAL POSITION
AS OF DECEMBER 31, 2019 AND 2018
LIABILITIES
(IN MILLIONS OF REAIS – R\$ mn)

	<u>Note</u>	<u>2019</u>	<u>2018</u>
Suppliers	22	2,080	1,801
Regulatory charges	25	457	514
Profit sharing		212	79
Taxes payable	23	359	410
Income tax and social contribution tax	11b	134	112
Interest on equity and dividends payable	28f	744	864
Loans, financing and debentures	24	2,747	2,198
Payroll and related charges		200	284
Public lighting contribution		252	281
Post-employment obligations	26	288	253
Lease liabilities	21b	85	–
Advances from customers	8	–	79
Others		355	247
		<u>7,913</u>	<u>7,122</u>
Liabilities directly associated to assets held for sale	34	–	16,272
TOTAL CURRENT		<u>7,913</u>	<u>23,394</u>
NON-CURRENT			
Regulatory charges	25	147	179
Loans, financing and debentures	24	12,030	12,574
Taxes payable	23a	1	29
Deferred income tax and social contribution tax	11c	661	728
Provisions	27	1,888	641
Post-employment obligations	26	6,421	4,736
Pasep and Cofins taxes to be refunded to customers	23	4,193	1,124
Derivative financial instruments	33	483	419
Lease liabilities		203	–
Others		95	92
TOTAL NON-CURRENT		<u>26,122</u>	<u>20,522</u>
TOTAL LIABILITIES		<u>34,035</u>	<u>43,916</u>
EQUITY	28		
Share capital		7,294	7,294
Capital reserves		2,250	2,250
Profit reserves		8,750	6,362
Equity valuation adjustments		(2,407)	(1,327)
Deemed cost of property, plant and equipment		586	611
Accumulated other comprehensive income		(2,993)	(1,938)
EQUITY ATTRIBUTABLE TO EQUITY HOLDERS OF THE PARENT		<u>15,887</u>	<u>14,579</u>
NON-CONTROLLING INTERESTS	28	<u>4</u>	<u>1,360</u>
TOTAL EQUITY		<u>15,891</u>	<u>15,939</u>
TOTAL LIABILITIES AND EQUITY		<u>49,926</u>	<u>59,855</u>

The Notes are an integral part of these Consolidated Financial Statements.

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CONSOLIDATED STATEMENT OF INCOME
FOR THE YEARS ENDED DECEMBER 31, 2019, 2018 AND 2017
(IN MILLIONS OF REAIS – R\$ mn, except earnings per share)

	Notes	2019	2018	2017
CONTINUING OPERATIONS				
NET REVENUE	29	25,390	22,266	21,712
OPERATING COSTS				
COST OF ENERGY AND GAS	30			
Energy purchased for resale		(11,286)	(11,084)	(10,919)
Charges for use of the national grid		(1,426)	(1,480)	(1,174)
Gas purchased for resale		(1,436)	(1,238)	(1,071)
		<u>(14,148)</u>	<u>(13,802)</u>	<u>(13,164)</u>
OTHER OPERATING COSTS	30			
Personnel		(1,002)	(1,098)	(1,270)
Materials		(74)	(81)	(73)
Outsourced services		(1,043)	(913)	(759)
Depreciation and amortization		(815)	(761)	(787)
Operating provisions, net		(1,214)	(40)	(226)
Infrastructure construction cost		(1,200)	(897)	(1,119)
Others		(102)	(85)	(90)
		<u>(5,450)</u>	<u>(3,875)</u>	<u>(4,324)</u>
TOTAL COST		(19,598)	(17,677)	(17,488)
GROSS PROFIT		5,792	4,589	4,224
OPERATING EXPENSES	30			
Selling expenses		(238)	(264)	(248)
General and administrative expenses		(642)	(672)	(763)
Operating provisions		(950)	(167)	(353)
Other operating (expenses) income, net		(1,051)	(640)	34
		<u>(2,881)</u>	<u>(1,743)</u>	<u>(1,330)</u>
Share of profit (loss), net, of affiliates and jointly-controlled entities	18	125	(104)	(252)
Dividends declared by investee classified as held for sale		73	–	–
Remeasurement of previously held equity interest in subsidiaries acquired		–	(119)	–
Impairment loss on investments		–	(127)	–
		<u>–</u>	<u>(127)</u>	<u>–</u>
Income before finance income (expenses) and taxes		3,109	2,496	2,642
Finance income	31	3,207	1,706	804
Finance expenses	31	(1,847)	(2,224)	(1,800)
		<u>4,469</u>	<u>1,978</u>	<u>1,646</u>
Income before income tax and social contribution tax		4,469	1,978	1,646
Current income tax and social contribution tax	11d	(1,454)	(583)	(446)
Deferred income tax and social contribution tax	11d	(111)	(16)	(198)
		<u>(1,565)</u>	<u>(600)</u>	<u>(644)</u>
Net income for the year from continuing operations		2,904	1,379	1,002
DISCONTINUED OPERATIONS				
Net income after tax for the year from discontinued operations	34	224	363	–
NET INCOME FOR THE YEAR		<u>3,128</u>	<u>1,742</u>	<u>1,002</u>

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	Notes	2019	2018	2017
Total of net income for the year attributed to:				
Equity holders of the parent				
Net income from continuing operations		2,903	1,378	1,001
Net income from discontinued operations		224	322	–
Net income for the year attributed to equity holders of the parent		<u>3,127</u>	<u>1,700</u>	<u>1,001</u>
Non-controlling interests				
Net income from continuing operations		1	1	1
Net income from discontinued operations		–	41	–
		<u>1</u>	<u>42</u>	<u>1</u>
NET INCOME FOR THE YEAR		<u>3,128</u>	<u>1,742</u>	<u>1,002</u>
Basic and diluted earnings per preferred share – R\$	28	2.14	1.17	0.84
Basic and diluted earnings per common share – R\$	28	2.14	1.17	0.37
Basic and diluted earnings per preferred share from continuing operations – R\$	28	1.99	0.95	0.84
Basic and diluted earnings per common share from continuing operations – R\$	28	1.99	0.95	0.37
Basic and diluted earnings per preferred share from discontinued operations – R\$	28	0.15	0.22	–
Basic and diluted earnings per common share from discontinued operations – R\$	28	0.15	0.22	–

The Notes are an integral part of these Consolidated Financial Statements.

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CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME
FOR THE YEARS ENDED DECEMBER 31, 2019, 2018 AND 2017
(IN MILLIONS OF REAIS – R\$ mn)

	<u>2019</u>	<u>2018</u>	<u>2017</u>
NET INCOME FOR THE YEAR	3,128	1,742	1,002
OTHER COMPREHENSIVE INCOME			
Items not to be reclassified to profit or loss in subsequent periods			
Post retirement liabilities—remeasurement of obligations of the defined benefit plans	(1,599)	(702)	(394)
Income tax and social contribution tax on restatement of defined benefit plans	544	239	133
Equity gain (loss) on other comprehensive income in subsidiary and jointly—controlled entity	—	—	(3)
	<u>(1,055)</u>	<u>(463)</u>	<u>(264)</u>
Items that may be reclassified to the profit or loss in subsequent periods			
Equity gain (loss) on other comprehensive income of subsidiaries and jointly—controlled entities, relating to fair value of financial asset and conversion of transactions outside Brazil	—	—	(38)
	<u>—</u>	<u>—</u>	<u>(38)</u>
COMPREHENSIVE INCOME FOR THE YEAR	<u>2,073</u>	<u>1,279</u>	<u>700</u>
Total of comprehensive income for the year attributed to:			
Equity holders of the parent	2,072	1,237	699
Non—controlling interests	1	42	1
	<u>2,073</u>	<u>1,279</u>	<u>700</u>

The Notes are an integral part of these Consolidated Financial Statements.

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CONSOLIDATED STATEMENT OF CHANGES IN EQUITY
FOR THE YEARS ENDED DECEMBER 31, 2019, 2018 AND 2017
(IN MILLIONS OF REAIS – R\$ mn, except where otherwise indicated)

	Attributable to the equity holders of the parent					Non- controlling interests	Total Equity	
	Share capital	Capital reserves	Profit reserves	Equity valuation adjustments	Retained earnings			Total
AS OF DECEMBER 31, 2018	<u>7,294</u>	<u>2,250</u>	<u>6,362</u>	<u>(1,327)</u>	<u>–</u>	<u>14,579</u>	<u>1,360</u>	<u>15,939</u>
Non-controlling interests (Note 28h)	–	–	–	–	–	–	(1,357)	(1,357)
Net income for the year	–	–	–	–	3,127	3,127	1	3,128
Remeasurement of obligations of the defined benefit plans, net of taxes	–	–	–	(1,055)	–	(1,055)	–	(1,055)
Realization of PP&E deemed cost	–	–	–	(25)	25	–	–	–
Appropriation of Net income for the year								
Tax incentives reserve	–	–	18	–	(18)	–	–	–
Proposed dividends (R\$0.52 per share)	–	–	–	–	(764)	(764)	–	(764)
Retained earnings reserve	–	–	1,535	–	(1,535)	–	–	–
Unrealized profit reserve	–	–	835	–	(835)	–	–	–
AS OF DECEMBER 31, 2019	<u>7,294</u>	<u>2,250</u>	<u>8,750</u>	<u>(2,407)</u>	<u>–</u>	<u>15,887</u>	<u>4</u>	<u>15,891</u>

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Attributable to the equity holders of the parent

	Share capital	Subscription of shares to be capitalized	Capital reserves	Profit reserves	Equity valuation adjustments	Retained earnings	Total	Non- controlling interests	Total Equity
AS OF DECEMBER 31, 2017	6,294	1,215	1,925	5,729	(837)	-	14,326	4	14,330
First time adoption of IFRS 9 and IFRS 15	-	-	-	-	-	(157)	(157)	-	(157)
AS OF JANUARY 01, 2018	6,294	1,215	1,925	5,729	(837)	(157)	14,169	4	14,173
Proposed dividends from prior years	-	-	-	(127)	-	-	(127)	-	(127)
Expired dividends of previous years	-	-	-	-	-	42	42	-	42
Subscription of shares, to be capitalized	-	110	-	-	-	-	110	-	110
Subscription of capital	1,000	(1,000)	-	-	-	-	-	-	-
Goodwill on subscription of shares	-	(325)	325	-	-	-	-	-	-
Non-controlling interests	-	-	-	-	-	-	-	1,314	1,314
Net income for the year	-	-	-	-	-	1,700	1,700	42	1,742
Remeasurement of obligations of the defined benefit plans, net of taxes	-	-	-	-	(463)	-	(463)	-	(463)
Realization of PP&E deemed cost	-	-	-	-	(27)	42	15	-	15
Appropriation of Net income for the year									
Tax incentives reserve	-	-	-	9	-	(9)	-	-	-
Proposed dividends (R\$ 0,59 per share)	-	-	-	-	-	(867)	(867)	-	(867)
Retained earnings reserve	-	-	-	751	-	(751)	-	-	-
AS OF DECEMBER 31, 2018	7,294	-	2,250	6,362	(1,327)	-	14,579	1,360	15,939

Attributable to the equity holders of the parent

	Share capital	Subscription of shares to be capitalized	Capital reserves	Profit reserves	Equity valuation adjustments	Retained earnings	Total	Non- controlling interests	Total Equity
AS OF DECEMBER 31, 2016	6,294	-	1,925	5,200	(489)	-	12,930	4	12,934
Subscription of shares, to be capitalized	-	1,215	-	-	-	-	1,215	-	1,215
Net income for the year	-	-	-	-	-	1,001	1,001	1	1,002
Remeasurement of obligations of the defined benefit plans, net of taxes	-	-	-	-	(261)	-	(261)	-	(261)
Equity gain (loss) on other comprehensive income in subsidiary and jointly-controlled entity	-	-	-	-	(41)	-	(41)	-	(41)
Realization of PP&E deemed cost	-	-	-	-	(46)	28	(18)	-	(18)
Appropriation of Net income for the year									
Tax incentives reserve	-	-	-	1	-	(1)	-	-	-
Proposed dividends (R\$ 0.51 per share)	-	-	-	-	-	(500)	(500)	-	(500)
Additional dividends proposed, non-controlling interests	-	-	-	-	-	-	-	(1)	(1)
Retained earnings reserve	-	-	-	528	-	(528)	-	-	-
AS OF DECEMBER 31, 2017	6,294	1,215	1,925	5,729	(837)	-	14,326	4	14,330

The Notes are an integral part of these Consolidated Financial Statements.

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CONSOLIDATED STATEMENT OF CASH FLOWS
FOR THE YEARS ENDED DECEMBER 31, 2019, 2018 AND 2017
(IN MILLIONS OF REAIS – R\$ mn)

	Note	2019	2018	2017
CASH FLOW FROM OPERATIONS				
Net income for the year from continuing operations		2,904	1,379	1,002
Net income for the year from discontinuing operations		224	363	–
Net income for the year		3,128	1,742	1,002
Adjustments to reconcile net income to net cash flows:				
Non-controlling interests		(1)	(42)	(1)
Deferred income tax and social contribution tax	11c	111	16	198
Depreciation and amortization	19, 20 and 21	958	850	850
Loss on write-off of net residual value of unrecoverable concession financial assets, concessional contract asset, PP&E and Intangible assets	16,17, 19 and 20	130	61	48
Impairment of concession contract assets and intangible assets	17 and 20	24	42	–
Gain on sale of investments		–	–	(197)
Adjustment to Remuneration Assets Base – BRR for transmission assets		–	–	(75)
Share of (gain) loss, net, of subsidiaries and joint ventures	18	(125)	104	252
Dividends declared by investee classified as held for sale	34	(73)	–	–
Remeasurement of previously held equity interest in subsidiaries acquired		–	119	–
Impairment loss on Investments		–	127	–
Generation Indemnity Revenue	16	–	(55)	(271)
Remeasuring of concession financial and concession contract assets	16 and 17	(507)	(585)	(753)
Interest and monetary variation		1,190	1,207	1,498
Recovery of PIS/Pasep and Cofins taxes credits over ICMS	10	(2,952)	–	–
Exchange variation on loans	24	226	582	56
Reversal of monetary updating on Advance for Future Capital Increase – AFAC		–	–	(239)
Tax Amnesty Program (PRCT)		–	–	283
Appropriation of transaction costs	24	38	33	67
Provisions for operating losses	30d	2,401	466	854
Provision for reimbursement for suspension of energy supply – Renova		–	(60)	–
Net gain on derivative instruments at fair value through profit or loss	33	(998)	(893)	32
CVA (<i>Parcel A items Compensation</i>) Account and <i>Other financial components</i> in tariff adjustments	16	(58)	(1,973)	(988)
Post-employment obligations	26	464	405	(164)
Others		(22)	12	–
		3,934	2,158	2,452
Working capital adjustments				
<i>(Increase) / decrease in assets</i>				
Receivables from customers and traders and Concession holders - Transport of electricity		(666)	(391)	(818)
Accounts Receivable from the State of Minas Gerais		–	–	46
CVA and <i>Other financial components</i> in tariff adjustments	16	362	909	586
Recoverable taxes		(12)	38	10
Income tax and social contribution tax credits		(71)	615	385
Escrow deposits		11	(109)	(4)
Dividends received from investees	18	283	311	354
Concession contract and financial assets	16 and 17	373	1,704	398
Advances to suppliers		54	29	(116)
Others		(28)	48	649
		306	3,154	1,490
Increase (decrease) in liabilities				
Suppliers		279	(553)	403
Taxes payable		(162)	(291)	(248)
Income tax and social contribution tax payable		1,433	(6)	14
Payroll and related charges		(84)	77	(18)
Regulatory charges		(89)	(70)	(73)
Advances from customers		(81)	(153)	52
Post-employment obligations	26	(343)	(307)	(282)
Derivative financial instruments – Put options	33	–	(555)	(830)
Others		4	(165)	(357)
		957	(2,023)	(1,339)
Cash generated by operating activities				
		5,197	3,289	2,603
Interest paid on loans and financing	24	(1,265)	(1,290)	(1,797)
Interest paid on leasing contracts	21	(5)	–	–
Income tax and social contribution tax paid		(1,767)	(650)	(226)
Cash inflows from settlement of derivatives instruments		100	37	–
Net cash flows from continuing operating activities		2,260	1,386	580
Net cash flows used in discontinued operating activities	34	(224)	(378)	–
NET CASH FLOWS FROM OPERATING ACTIVITIES		2,036	1,008	580

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	Note	2019	2018	2017
INVESTING ACTIVITIES				
Marketable securities		80	276	(4)
Restricted cash		79	15	261
Investments				
Acquisition of equity investees	18	–	(109)	(38)
Capital contributions in investees	18	(38)	(241)	(254)
Cash arising from business combination	18	–	71	–
Disposal of investments	17	–	–	766
Loans to related parties		(7)	–	–
Property, plant and equipment	19	(70)	(77)	(83)
Intangible assets and contract assets – gas and distribution of energy infrastructure	17 and 20	(1,857)	(801)	(1,034)
Net cash flows used in continuing investment activities		(1,813)	(866)	(386)
Net cash flows from discontinued investment activities		625	655	–
NET CASH FLOWS USED IN INVESTING ACTIVITIES		(1,188)	(211)	(386)
FINANCING ACTIVITIES				
Subscription of shares, to be capitalized		–	–	1,215
Proceeds from Loans, financings and debentures	24	4,477	2,990	3,308
Interest on capital and dividends paid	28f	(701)	(509)	(540)
Capital increase		–	110	–
Borrowing costs	24	–	–	(11)
Payment of loans, financing and debentures	24	(4,883)	(3,527)	(4,131)
Payment of principal portion of lease liabilities	21	(96)	–	–
NET CASH FLOWS USED IN FINANCING ACTIVITIES		(1,203)	(936)	(159)
Net (decrease) increase in cash and cash equivalents for the year		(355)	(139)	35
Cash and cash equivalents at the beginning of the year	6	891	1,030	995
Cash and cash equivalents at the end of the year	6	536	891	1,030

The Notes are an integral part of these Consolidated Financial Statements.

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**NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS
AS OF DECEMBER 31, 2019 AND 2018 AND FOR THE YEARS ENDED ON DECEMBER 31, 2019, 2018 AND 2017
(IN MILLIONS OF REAIS - R\$ mn - except where otherwise indicated)**

1. OPERATING CONTEXT

a) The Company

Companhia Energética de Minas Gerais ('Parent company' or 'Holding company') is a listed corporation, with shares traded on the São Paulo Stock Exchange ('B3') at Corporate Governance Level 1; through ADRs on the New York Stock Exchange ('NYSE'); and on the stock exchange of Madrid ('Latibex'). The Company is a state-controlled mixed capital company controlled by the State of Minas Gerais. It is domiciled in Brazil, with head office at Avenida Barbacena 1200, Belo Horizonte, Minas Gerais. It operates exclusively as a holding company, with subsidiaries and investments in affiliates or jointly-controlled entities (collectively refer to as 'Cemig' or the 'Company'), which are engaged in the construction and operation of infrastructure used in the generation, transformation, transmission, distribution and sale of energy, and also activities in the various fields of energy sector, for the purpose of commercial operation.

Cemig has equity interests in the following subsidiaries, jointly-controlled entities and affiliates, all of which principal activities are construction and operation of systems of production, distribution and sale of energy and gas (information in MWh has not been audited by the external auditors):

Investments	Classification	Description
SUBSIDIARIES:		
Cemig Geração e Transmissão S.A. ('Cemig GT' or 'Cemig Geração e Transmissão')	Subsidiary	Wholly-owned subsidiary engaged in the energy generation and transmission services. Its shares are listed in Brazil, but are not actively traded. Cemig GT has interests in 83 power plants (76 of which are hydroelectric, 6 are wind power, 1 is a thermal plant and 1 is solar), of which 45 are controlled by Cemig GT, and associated transmission lines, most of which are part of the Brazilian national generation and transmission grid system, with total installed generation capacity of 3,235 MW (information not reviewed by the external auditors).
Cemig Baguari	Subsidiary	Corporation engaged in the production and sale of energy as an independent power producer and in interests in investees or joint operations that are engaged in the production and sale of energy in future projects.
Cemig Geração Três Marias S.A.	Subsidiary	Corporation engaged in the production and sale of energy as public service concession holder, by commercial operation of the Três Marias Hydroelectric Plant, and sale and trading of energy in the Free Market. This subsidiary has installed capacity of 396 MW, and guaranteed offtake level of 239 MW average.

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Investments	Classification	Description
Cemig Geração Salto Grande S.A.	Subsidiary	Corporation engaged in the production and sale of energy as public service concession holder, by commercial operation of the Salto Grande Hydroelectric Plant, and sale and trading of energy in the Free Market. This subsidiary has installed capacity of 102 MW, and guaranteed offtake level of 75 MW average.
Cemig Geração Itutinga S.A.	Subsidiary	Corporation engaged in the production and sale of energy as public service concession holder, by commercial operation of the Itutinga Hydroelectric Plant, and sale and trading of energy in the Free Market. This subsidiary has installed capacity of 52 MW, and guaranteed offtake level of 28 MW average.
Cemig Geração Camargos S.A.	Subsidiary	Corporation engaged in the production and sale of energy as public service concession holder, by commercial operation of the Camargos Hydroelectric Plant, and sale and trading of energy in the Free Market. This subsidiary has installed capacity of 46 MW, and guaranteed offtake level of 21 MW average.
Cemig Geração Sul S.A.	Subsidiary	Corporation engaged in the production and sale of energy as public concession holder, by commercial operation of the Coronel Domiciano, Marmelos, Joasal, Paciência and Piau Small Hydroelectric Plants, and trading in energy in the Free Market. Aggregate installed generation capacity is 39.53 MW; guaranteed offtake level of 27.42 MW average.
Cemig Geração Leste S.A.	Subsidiary	Corporation engaged in the production and sale of energy as public concession holder, by operation of the Dona Rita, Sinceridade, Neblina, Ervália, Tronqueiras and Peti Small Hydroelectric Plants, and trading in energy in the Free Market. Aggregate installed generation capacity of these plants is 35.16 MW; guaranteed offtake level of 18.64 MW average.
Cemig Geração Oeste S.A.	Subsidiary	Corporation engaged in the production and sale of energy as public service concession holder, by commercial operation of the Gafanhoto, Cajuru and Martins Small Hydroelectric Plants, and sale and trading of energy in the Free Market. It has aggregate installed capacity of 28.90 MW, and guaranteed offtake level of 11.21 MW average.
Rosal Energia S.A. ('Rosal')	Subsidiary	Corporation that holds the concession to generate and sell energy, operating the Rosal Hydroelectric Plant, on the border between the states of Rio de Janeiro and Espírito Santo.
Sá Carvalho S.A. ('Sá Carvalho')	Subsidiary	Corporation that holds the concession to generate and sell energy, operating the Sá Carvalho Hydroelectric Plant.
Horizontes Energia S.A. ('Horizontes')	Subsidiary	Corporation that is classified as an independent power producer operating the Machado Mineiro and Salto do Paraopeba Hydroelectric Plants in Minas Gerais; and the Salto do Voltão and Salto do Passo Velho Hydroelectric Plants, in the state of Santa Catarina.
Cemig PCH S.A. ('PCH')	Subsidiary	Corporation that is classified as an independent power producer operating the Pai Joaquim hydroelectric power plant.
Cemig Comercializadora de Energia Incentivada S.A.	Subsidiary	Corporation engaged in the production and sale as independent thermal generation power producer, in future projects.
Cemig Trading S.A. ('Cemig Trading')	Subsidiary	Corporation engaged in trading and intermediation of energy.
Empresa de Serviços e Comercialização de Energia Elétrica S.A.	Subsidiary	Corporation engaged in the production and sale of energy as an independent power producer, in future projects.
Cemig Geração Poço Fundo	Subsidiary	Corporation engaged in the production and sale of energy, as an independent producer, through construction and operation of the hydroelectric power plant Poço Fundo, located in Machado river, in the State of Minas Gerais.

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Investments	Classification	Description
Central Eólica Praias de Parajuru S.A. ('Central Eólica Praias de Parajuru')	Subsidiary	Corporation engaged in the production and sale of energy at the wind power plant of the same name in the northeastern Brazilian state of Ceará.
Central Eólica Volta do Rio S.A. ('Central Eólica Volta do Rio')	Subsidiary	Corporation engaged in the production and sale of energy at the wind power plant of the same name in Acaraú, northeastern Brazilian state of Ceará.
Cemig Distribuição S.A. ('Cemig D' or 'Cemig Distribuição')	Subsidiary	Wholly owned subsidiary, whose shares are listed in Brazil but are not actively traded; engaged in the distribution of energy through networks and distribution lines throughout almost the whole of Minas Gerais State.
Companhia de Gás de Minas Gerais ('Gasmig')	Subsidiary	Corporation engaged in the acquisition, transportation and distribution of combustible gas or sub-products and derivatives, through a concession for the distribution of gas in the State of Minas Gerais.
Cemig Geração Distribuída	Subsidiary	Wholly owned subsidiary engaged in: building and maintaining projects and equipment associated with energy efficiency and micro- and mini- distributed generation; providing consultancy and studies for distributed generation projects and equipment, for subscription to systems for customers to supply to the grid as generators, and technical, regulatory and economic feasibility analyses for these purposes.
Efficientia S.A. ('Efficientia')	Subsidiary	Corporation that provides energy efficiency and optimization services and energy solutions through studies and execution of projects; and services of operation and maintenance of energy supply facilities.
JOINTLY-CONTROLLED ENTITIES		
Guanhães Energia S.A. ('Guanhães Energia')	Jointly-controlled entity	Corporation engaged in the production and sale of energy through building and commercial operation of the following Small Hydro Plants: Dores de Guanhães, Senhora do Porto and Jacaré, in the county of Dores de Guanhães; and Fortuna II, in the county of Virgíniópolis, in Minas Gerais.
LightGer S.A. ('LightGer')	Jointly-controlled entity	Corporation classified as independent power producer, formed to build and operate the Paracambi Small Hydro Plant (or PCH), on the Ribeirão das Lages river in the county of Paracambi, Rio de Janeiro State.
Usina Hidrelétrica Itaocara S.A. ('UHE Itaocara')	Jointly-controlled entity	Corporation, comprising the partners of the UHE Itaocara Consortium, formed by Cemig GT and Itaocara Energia (of the Light group), responsible for construction of the Itaocara I Hydroelectric Plant.
Axxiom Soluções Tecnológicas S.A. ('Axxiom')	Jointly-controlled entity	Unlisted corporation, providing technology and systems solutions for operational management of public service concession holders, including companies operating in energy, gas, water and sewerage, and other utilities. Jointly controlled by Light (51%) and Cemig (49%).
Hidrelétrica Cachoeirão S.A. ('Cachoeirão')	Jointly-controlled entity	Production and sale of energy as an independent power producer, through the Cachoeirão hydroelectric power plant located at Pocrane, in the State of Minas Gerais.
Hidrelétrica Pipoca S.A. ('Pipoca')	Jointly-controlled entity	Independent production of energy, through construction and commercial operation of the Pipoca Small Hydro Plant (SHP, or Pequena Central Hidrelétrica – PCH), on the Manhuaçu River, in the municipalities of Caratinga and Ipanema, in Minas Gerais State.
Retiro Baixo Energética S.A. ('RBE')	Jointly-controlled entity	Corporation that holds the concession to operate the Retiro Baixo Hydroelectric Plant, on the Paraopeba River, in the São Francisco river basin, in the municipalities of Curvelo and Pompeu, in Minas Gerais.
Amazônia Energia Participações S.A. ('Amazônia Energia')	Jointly-controlled entity	Special-purpose company created by Cemig GT (74.50% ownership) and Light (25.50%), for acquisition of an equity interest of 9.77% in Norte Energia S.A. ('Nesa'), the company holding the concession for the Belo Monte Hydroelectric Plant, on the Xingu River, in the Northern Brazilian State of Pará.
Aliança Norte Energia Participações S.A. ('Aliança Norte')	Jointly-controlled entity	Special-purpose company created by Cemig GT (49% ownership) and Vale S.A. 51%, for acquisition of an equity interest of 9% in Norte Energia S.A. ('Nesa'), the company holds the concession for the Belo Monte Hydroelectric Plant, on the Xingu River, in the Northern Brazilian State of Pará.
Baguari Energia S.A. ('Baguari Energia')	Jointly-controlled entity	Corporation engaged in the construction, operation, maintenance and commercial operation of the Baguari Hydroelectric Plant, through participation in the UHE Baguari Consortium (Baguari Energia 49%, Neoenergia 51%), on the Doce river in Governador Valadares, Minas Gerais.
Renova Energia S.A. ('Renova Energia')	Jointly-controlled entity	Listed company engaged in the development, construction and operation of plants generating power from renewable sources – wind power, small hydro plants (SHPs), and solar energy; trading of energy; and related activities.
Aliança Geração de Energia S.A. ('Aliança')	Jointly-controlled entity	Unlisted company created by Cemig GT and Vale S.A. as a platform for consolidation of generation assets held by the two parties in generation consortia, and investments in future generation projects. For their

shares, the two parties subscribed the following generation plant assets: Porto Estrela, Igarapava, Funil, Capim Branco I, Capim Branco II, Aimorés, and Candonga. With these assets Aliança has total installed generation capacity, in operation, of 1,257 MW (physical offtake guarantee 668 MW average). It also has other generation projects. Vale and Cemig GT respectively hold 55% and 45% of the total capital.

Transmissora Aliança de Energia Elétrica S.A. ('TAESA')	Jointly-controlled entity	Corporation engaged in the construction, operation and maintenance of energy transmission facilities in 18 states of Brazil through direct and indirect equity interests in investees
Companhia de Transmissão Centroeste de Minas ('Centroeste') (1)	Jointly-controlled entity	Corporation engaged in the construction, operation and maintenance of the Furnas-Pimenta transmission line – part of the national grid.

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Investments	Classification	Description
Affiliated Company		
Madeira Energia S.A. ('Madeira')	Affiliated company	Corporation engaged in the construction and commercial operation of the Santo Antônio Hydroelectric Plant, through its subsidiary Santo Antônio Energia S.A., in the basin of the Madeira river, in the State of Rondônia.
Ativas Datacenter S.A. ('Ativas')	Affiliated entity	Corporation engaged in the supply of IT and communication infrastructure services, including physical hosting and related services for medium-sized and large corporations.
FIP Melbourne (Usina de Santo Antônio)	Affiliated entity	Investment fund managed by Banco Modal S.A., whose objective is to seek appreciation of capital invested through acquisition of shares, convertible debentures or warrants issued by listed or unlisted companies, and/or other assets. This fund held 83% of the share capital of SAAG Investimentos S.A. ('SAAG'), the objects of which are to own equity in Madeira Energia S.A. ('Mesa').
Affiliated Company held for sale:		
Light S.A. ('Light')	Affiliated entity	Listed company engaged in the following activities: energy generation, transmission, trading, distribution, and related services; and holding direct or indirect interest in companies engaged in similar activities.

(1) On January 13, 2020, the Company concluded the acquisition of 49% of the share capital held by Eletrobras in Centroeste, becoming the sole owner of the investee since then. For more details see Note 18 – Investments.

Investments in which the Company exercises joint control it does so through Shareholders' agreements entered into with the other shareholders of the investment. See further information on the subsidiaries, jointly-controlled entities and affiliates in Notes 3 and 18; and on transactions between related parties in Note 32.

Management has assessed the capacity of the Company to continue as a going concern, and believes that its operations will generate sufficient future cash flows to enable continuity of its businesses. In addition, Management is not aware of any material uncertainties that could generate significant doubts about its ability to continue as a going concern. Therefore, these financial statements are prepared on a going concern basis.

Disposal of interest and control of Light

On July 17, 2019, Light completed a public offering for initial and secondary distribution of its nominal, book-entry common shares without par value, all free of any liens or encumbrances, carried out in accordance with the procedures of Brazilian Securities Commission (CVM) Instruction 476 of January 16, 2009.

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In the Public Offering, Light placed: (i) 100,000,000 new shares ('the Primary Offering'), consequently increasing its share capital; and (ii) 33,333,333 shares owned by the Company at the price of R\$ 18.75 per share.

With the settlement of the restricted offering, the Company's equity interest in the total share capital of Light was reduced from 49.99% to 22.58%, limiting its voting rights in Shareholders' Meetings and, as a result, its ability to direct the relevant activities of the investee. Thus, as from that date, the Company no longer has power that gives it control of this investee. In accordance with IFRS 10 – Consolidated financial statements, the investee is no longer considered a subsidiary, and therefore it is no longer consolidated.

Since the Company continues to have a firm commitment to dispose of the remaining interest in Light, the investment continues to be classified as an asset held for sale, in accordance with IFRS 5 – Non-current assets held for sale, and discontinued operations. For more details please see Note 34.

2. BASIS OF PREPARATION

2.1 Statement of compliance

The financial statements of the Company have been prepared in accordance with International Financial Reporting Standards (IFRS) as issued by the International Accounting Standards Board (IASB).

Company's management certifies that all relevant and material information in financial statements is being disclosed, which is used by management in its administration of the Company.

On May 22, 2020, the Company's Audit Committee authorized the issuance of the consolidated financial statements as of December 31, 2019 and 2018 and for the years ended December 31, 2019, 2018 and 2017.

2.2 Basis of measurement

The consolidated financial statements were prepared on a historical cost basis, except in the case of certain financial instruments and assets as held for sale which are measured at fair value and fair value less costs to sell, in accordance with the standards applicable, as detailed in Note 33 and 34, respectively.

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Functional currency and presentation currency

The consolidated financial statements are presented in Reais, which is the functional currency of the Company and its subsidiaries, joint ventures and affiliates, and all amounts are rounded to the nearest million, except when otherwise indicated.

Transactions in foreign currency were converted to Reais at the exchange rate as of the transaction date. Balances of monetary assets and liabilities denominated in foreign currency are translated to Reais at the exchange rates at the reporting date. Foreign exchange gains and losses resulting from the settlement or translation of assets and liabilities denominated in foreign currency are recorded in finance income and cost in the consolidated statement of income.

2.3 Use of estimates and judgments

Preparation of the consolidated financial statements requires management to make judgments, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, revenues and expenses. Uncertainties about these assumptions and estimates could result in outcomes that could require a material adjustment to the carrying amount of assets or liabilities affected in future periods.

Estimates and assumptions are periodically reviewed, using as a reference both historical experience and any significant change in scenarios that could affect the Company's financial position or results of operations. Revisions in relation to accounting estimates are recognized in the period in which the estimates are reviewed, and in any future periods affected.

The principal estimates and judgments that have a significant effect in the amounts recognized in the financial statements are as follows:

- Adjustments for loss on doubtful accounts – Note 8;
- Amounts to be refunded to customers – Note 10;
- Deferred income tax and social contribution tax – Note 11;
- Financial assets and liabilities of the concession – Note 16;
- Concession contract assets – Note 17;
- Investments – Note 18;
- Property, plant and equipment (“PP&E”) and useful life of assets – Note 19;
- Intangible assets and useful life of assets – Note 20;
- Leasing transaction – Note 21;
- Employee post-employment obligations – Note 26;
- Provisions – Note 27;
- Unbilled revenue – Note 29;

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- Financial instruments measurement and fair value measurement – Note 33;
- Assets held for sale measurement – Note 34.

The settlement of the transactions involving those estimates may result in amounts that are significantly different from those recorded in the financial statements due to the uncertainty inherent to the estimation process. The Company reviews its significant estimates at least annually.

2.4 New accounting standards, interpretation or amendments of accounting standards, applied for the first time in 2019

The Company has applied, for the first time, new accounting standards that became effective for annual periods beginning January 1, 2019 or later, as described below:

IFRS 16 – Leases ("IFRS 16")

IFRS 16, establishes principles for recognition, measurement, presentation and disclosure of leasing transactions and requires that lessees account all the leasing transactions in accordance with a single balance sheet model, similar to the accounting of finance leases. At the leasing operation beginning date, the lessee recognizes a liability to make the payments (a lease liability) and an asset, representing the right of use the subject asset during the period of the leasing (a right-of-use asset). Lessees are required to recognize separately the interest expenses from the lease liability and the depreciation or amortization expense of the right-of-use asset.

Lessees are also required to revalue the lease liability when certain events occur (for example, change in the period of leasing, a change in the future payments of the leasing as a result of a change in an index, or a rate used to determine such payments). In general, the lessee will recognize the amount of the revaluation of the lease liability as an adjustment to the right-of-use asset.

The Company has performed an analysis of the initial adoption of IFRS 16 in their financial statements as from January 1, 2019, and elected to apply the recognition exemptions for short-term leases (contracts that, at the commencement date, have a lease term of 12 months or less and do not contain a purchase option), and leases for which the underlying asset is of low value. The Company adopted IFRS 16 using the modified retrospective method, therefore, prior periods information are not comparative.

The Company carried out an assessment of impacts of the initial adoption of IFRS 16 , which affect the following contracts:

- Leasing of commercial real estate used for serving customers;
- Leasing of buildings used as administrative headquarters;
- Leasing of commercial vehicles used in operations.

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The right-of-use asset was assigned at the same value as the lease liability on the initial adoption date. The impacts of adoption of IFRS 16, on January 1, 2019 are as follows:

	<u>Consolidated</u>
Right-of-use assets	342
Lease liabilities – Obligations referring to operational leasing agreements	(342)

IFRIC 23 – Uncertainty on treatment of taxes on profit

The interpretation addresses the accounting of income taxes when tax treatments involve uncertainty affecting application of IAS 12– *Income taxes*. It does not apply to taxes outside the scope of IAS 12, nor does it specifically include requirements relating to interest and penalty payments associated with uncertain tax treatments. The Interpretation specifically addresses the following:

- Whether the entity considers uncertain tax treatments separately.
- The assumptions that the entity makes about examination of the tax treatments by taxation authorities.
- How an entity determines taxable profit (tax loss), tax bases, unused tax credits and tax rates.
- How the entity considers changes of facts and circumstances.

The entity determines whether to consider each uncertain tax treatment separately or together with one or more uncertain tax treatments based on an approach that better predicts the resolution of the uncertainty. The interpretation is in effect for annual periods starting on or after January 1, 2019.

The Company has adopted the interpretation as from the date of coming into effect and have analyzed the tax treatments adopted which could generate uncertainties in the calculation of income taxes and which might potentially expose the Company to material risks of loss. The conclusion of these analyses is that none of the significant positions adopted by the Company has been changed in relation to expectation of losses due to any questioning or challenge by the tax authorities.

Amendments of accounting standards, effective as from January 1, 2019

Amendments to IAS 28, Long-term interests in affiliates and joint ventures: The amendments clarify that an entity applies IFRS 9 to long-term interests in an affiliate or joint venture to which the equity method is not applied but that, in substance, form part of the net investment in the affiliate or joint venture (long-term interests). This clarification is relevant because it implies that the expected credit loss model in IFRS 9 applies to such long-term interests. The amendments also clarified that, in applying IFRS 9, an entity does not take account of any losses of the affiliate or joint venture, or any impairment losses on the net investment, recognized as adjustments to the net investment in the affiliate or joint venture that arise from applying IAS 28 Investments in Associates and Joint Ventures. These amendments had no impact on the consolidated financial statements as the Company does not have long term interests in its affiliate and joint venture to which the equity method is not applied.

IAS 12 Income Taxes: The amendments clarify that the income tax consequences of dividends are linked more directly to past transactions or events that generated distributable profits than to distributions to owners. Therefore, an entity recognizes the income tax consequences of dividends in profit or loss, other comprehensive income or equity according to where it originally recognized those past transactions or events. The amendments does not affect the Company's consolidated financial statements, due to the Brazilian tax legislation over dividends applicable to its transactions, according to which dividends are not taxable.

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Amendments to IAS 19 – Employee benefits: The amendments to IAS 19 address the accounting when a plan amendment, curtailment or settlement occurs during a reporting period. The amendments specify that when a plan amendment, curtailment or settlement occurs during the annual reporting period, an entity is required to determine the current service cost for the remainder of the period after the plan amendment, curtailment or settlement, using the actuarial assumptions used to remeasure the net defined benefit liability (asset) reflecting the benefits offered under the plan and the plan assets after that event. An entity is also required to determine the net interest for the remainder of the period after the plan amendment, curtailment or settlement using the net defined benefit liability (asset) reflecting the benefits offered under the plan and the plan assets after that event, and the discount rate used to remeasure that net defined benefit liability (asset). The amendments had no impact on the consolidated financial statements of the Company as it did not have any plan amendments, curtailments, or settlements during the period.

Several other amendments and interpretations applied for the first time in 2019 do not have a significant impact on the consolidated financial statements of the Company.

2.5 Standards issued but not yet effective

The new and amended standards and interpretations that are issued, but not yet effective, up to the date of issuance of the Company's financial statements are disclosed below. The Company intends to adopt these new and amended standards and interpretations, if applicable, when they become effective.

Amendments to IFRS 3, Definition of a Business: In October 2018, the IASB issued amendments to the definition of a business in IFRS 3 Business Combinations to help entities determine whether an acquired set of activities and assets is a business or not. They clarify the minimum requirements for a business, remove the assessment of whether market participants are capable of replacing any missing elements, add guidance to help entities assess whether an acquired process is substantive, narrow the definitions of a business and of outputs, and introduce an optional fair value concentration test. New illustrative examples were provided along with the amendments. Since the amendments apply prospectively to transactions or other events that occur on or after the date of first application, the Company will not be affected by these amendments on the date of transition.

Amendments to IAS 1 and IAS 8, Definition of Material: In October 2018, the IASB issued amendments to IAS 1 Presentation of Financial Statements and IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors to align the definition of 'material' across the standards and to clarify certain aspects of the definition. The new definition states that, 'Information is material if omitting, misstating or obscuring it could reasonably be expected to influence decisions that the primary users of general purpose financial statements make on the basis of those financial statements, which provide financial information about a specific reporting entity.' The amendments to the definition of material is not expected to have a significant impact on the Company's consolidated financial statements.

IFRS 17 Insurance Contracts: In 2017, the IASB issued IFRS 17 – Insurance contracts, which has the general aim of supplying an accounting model for insurance contracts that is more useful and consistent for insurance companies. It is not applicable to the Company.

2.6 Summary of significant accounting policies

The significant accounting policies described below have been applied consistently to all the periods presented in the consolidated financial statements, except for the practices which were applied prospectively as from 2019, in accordance with the standards and regulations described in Item 2.1 – Compliance statement.

The accounting policies relating to Company's present operations that require judgment and the use of specific valuation criteria are the following:

[Table of Contents](#)a) Financial instruments

Financial instruments are classified, at initial recognition, as subsequently measured at amortized cost, fair value through other comprehensive income (OCI), and fair value through profit or loss, depending on the financial asset's contractual cash flow characteristics and the Company's business model for managing them.

Fair value through profit or loss: this includes the concession financial assets related to distribution segment infrastructure. These financial assets are measured at the expected New Replacement Value (*Valor Novo de Reposição*, or VNR), as defined in the concession agreement, which represent the fair value of the residual value of the infrastructure as of the balance sheet date. The Company recognizes a financial asset resulting from a concession contract when it has an unconditional contractual right to receive cash or another financial asset from, or under the direction of the grantor for the services of construction and maintenance of the infrastructure.

This category also include cash equivalents, marketable securities not classified at amortized cost, derivative financial instruments and indemnities receivable from the generation assets.

Cash and cash equivalents comprise cash at banks and on hand and short-term highly liquid deposits, subject to an insignificant risk of changes in value, maintained to carry out the Company's short-term cash management.

The disclosures about the main assumptions used in fair value measurement are summarized in the respective notes.

Derivative financial instruments (Swap transactions and call spread): The Company maintains derivative instruments to manage its exposure to the risks of changes in foreign currency exchange rates (US dollar). Derivative instruments are recognized initially at their fair value and the related transaction costs are recognized in the Statement of income when they are incurred. After initial recognition, derivatives are measured at fair value and changes in fair value are recorded in the Consolidated Statement of Income.

Derivative financial instruments (Put options) – The options to sell to Cemig GT units of the FIP Melbourne and FIP Malbec funds ('the SAAG PUT') were measured at fair value using the Black-Scholes-Merton (BSM) method, using as reference the related put options obtained by the BSM model valued on the closing date of the financial statements for the year ended December 31, 2019. See note 33 for further details.

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Amortized cost: This includes accounts receivables from customers, traders and power transport concession holders; advances to suppliers; accounts receivable from Minas Gerais State; restricted cash; escrow deposits in litigation; marketable securities with the intention of holding them until maturity and the terms of their contracts originate known cashflows that constitute exclusively payments of principal and interest; concession financial assets related to the concession grant fee; indemnifiable receivable for transmission assets; accounts receivable from related parties; suppliers; loans and debentures; debt agreed with the pension fund (Forluz); concessions payable; the Minas Gerais State PRCT Tax Amnesty Program; advances from customers; assets and liabilities related to the *CVA* account and *Other financial components* in tariff adjustments; the low-income subsidy; reimbursement of tariff subsidies; and other credits.

Amortized cost is calculated by taking into account any discount or premium on acquisition and fees or costs that are an integral part of the effective interest rate (EIR).

b) Receivables from customers, traders and power transport concession holders

Accounts receivable from customers, traders and power transport concession holders are initially recognized at the sales value and subsequently measured at amortized cost. These receivables are stated including sales tax and net of withholding taxes, which are recognized as recoverable taxes.

In order to estimate future losses on receivables, the Company adopted a simplified approach, considered that the accounts receivable from customers do not have significant financial components, and calculated the expected loss considering the historical average of non-collection over the total billed in each month (based on the last 24 months of billing), segregated by type of customer and projected for the next 12 months, taking into account the age of maturity of invoices, including those not yet due and unbilled.

In 2019, the Company changed the assumption applied for the calculation of the historic percentages of default in the provision matrix, from 12 to 24 months, with the aim of enhancing the estimation method, based on studies of its customers' debt behavior after more than 12 and 24 months from the due date, using the existing collection tools. See note 8.

The expected losses for overdue accounts of customers that renegotiated their debt is measured based on the maturity date of the original invoice, despite the new terms negotiated. Expected losses are fully recognized for accounts overdue for more than 12 months.

Expected losses for invoices unbilled, not yet due or less than 12 months past due are measured according to the potential default events, or losses of credit expected for the whole life of a financial instrument, if the credit risk has significantly increased since its initial recognition.

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For large customers, the provision for doubtful receivables is recorded based on estimates by Management, in an amount sufficient to cover probable losses. The main criteria used by the Company are: (i) customers with significant open balances, the receivable balance is analyzed based on the debt history, negotiations in progress, and asset guarantees; and (ii) for large customers, an individual analysis of the debtors and the initiatives in progress to realize the receivables.

c) Investments in affiliates and jointly-controlled entities

The Company has investments in affiliates and jointly-controlled entities. The considerations made in determining significant influence or joint control are similar to those necessary to determine control over subsidiaries. These investments are accounted using the equity method and are initially recognized at acquisition cost, equivalent to the consideration transferred measured at fair value at the acquisition date.

The investments of the Company includes the intangible assets representing the right to commercial operation of the regulated activity identified in the process of allocation of the price for acquisition of the affiliates and jointly-controlled entities. Those intangible assets relating to the affiliates and jointly-controlled entities are included in the carrying amount of the investment and are amortized by the straight-line method, during the period of the concessions.

After application of the equity method, the Company determines whether it is necessary to recognize an impairment loss on its investment in its affiliates or jointly-controlled entities. At each reporting date, the Company determines whether there is objective evidence that the investment in the affiliates or jointly-controlled entities is impaired. If there is such evidence, the investment carrying amount is subject to impairment testing.

d) Business combinations

Business combinations are accounted for using the acquisition method of accounting. The cost of an acquisition is measured as the aggregate of the consideration transferred, which is measured at acquisition date at fair value, as well as the amount of any non-controlling interests. Goodwill is initially measured at cost, as the excess of the aggregate of the consideration transferred and the amount recognized for non-controlling interests and any previous interest held over the net identifiable assets acquired and liabilities assumed.

In the process of allocating the purchase price for of the acquisition of subsidiaries that is a concession holder, the fair value relating to the identifiable right to commercial operation of the regulated activity is recognized as intangible assets with a finite useful life.

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When a business combination is carried out in stages (“step-acquisition method”), the interest previously held by the Company in its investee is remeasured at the fair value at the acquisition date and the corresponding gain or loss, if any, is recognized in the statement of income.

e) Concession assets

Concession infrastructure under construction are initially recorded as contract assets, in accordance with IFRS 15 and IFRIC 12, considering that the Company is entitled to consideration for performance completed to date, and, only when the construction phases ends, has the right to charge for the services provided to customers or receive an indemnity at the end of the concession period for assets not yet amortized. In accordance with IFRS 15 and IFRIC 12, construction revenues equivalent to new infrastructure are initially recorded as contract assets, measured at construction cost plus margin (which, for the construction business, is deemed as zero). Construction cost include borrowing costs.

Energy and Gas Distribution segment: When the construction phase ends and the infrastructure is incorporated to the distribution grid, the satisfaction of performance obligation related to its construction is considered fully completed, and the contract asset is bifurcated between a financial asset and an intangible asset.

The portion of the infrastructure to be amortized during the concession period is recorded as an intangible asset, as provided for in IFRIC 12 – Concession contracts, and subsequently measured at cost less amortization. The main amortization rates, which take into account the useful life that management expects for the intangible asset, and reflect the expected pattern of their consumption, are presented in Note 20.

The Company recognizes a financial asset for the residual value of the infrastructure at the end of the concession, representing an unconditional right to receive cash or another financial asset directly from the grantor. The financial assets is subsequently measured at the estimated fair value.

Transmission segment: When construction is finalized, concession infrastructure assets remains as contract asset, considering the existence of performance obligations during the concession period, represented by the network construction, operation and maintenance, as there is no unconditional right to receive the consideration for the construction service unless the company operates and maintains the infrastructure. The contract asset is reclassified as a financial asset (accounts receivable) only after the performance obligation to operate and maintain the infrastructure is satisfied, since from that point nothing more than the passage of time is necessary for the consideration to be received. The costs related to the infrastructure construction are recognized as incurred in the statement of income. The construction revenues are recognized in accordance with the stage of completion of the construction service, including construction margin, when applicable.

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Consideration monthly received is allocated to revenue related to the operation and maintenance service and to the collection of the contract asset related to the construction service based on their relative fair value. Costs of expansion and upgrades of the infrastructure are recorded as contract assets.

Due to the acceptance of the terms of renewal of the old transmission concessions, part of the transmission assets of the concessions terminated on December 31, 2012, is subject of reimbursement by the granting authority, and a financial asset was recognized corresponding to the estimated indemnity to be received over a period of eight years.

Generation segment: The concession fee right paid for the concession contracts granted by the Brazilian Regulator (Aneel) in November 2015, are classified as a financial asset, at amortized cost, as it represents an unconditional right to receive cash, adjusted by the IPCA index, and remuneratory interest, during the period of the concession.

[Table of Contents](#)f) Intangible assets

Intangible assets are mainly comprised of the intangible assets related to the service concession contracts as described in topic (e) above as well as software. Intangible assets are stated at cost, less amortization, and any accumulated impairments when applicable.

Any gain or loss arising on derecognition of an intangible asset, calculated as the difference between the net disposal proceeds and the carrying amount of the asset, is included in the statement of income when the asset is derecognized.

g) Property, plant and equipment

Property, plant and equipment are stated at the cost, including deemed cost (upon initial application of IFRSs) and capitalized borrowing costs, less accumulated depreciation.

Depreciation is calculated on a straight-line basis over the estimated useful lives of the assets, or in certain circumstances, the concession term, whatever is shorter. Depreciation rates are shown in Note 19.

Any gain or loss arising on derecognition of a property, plant and equipment, calculated as the difference between the net disposal proceeds and the carrying amount of the asset, is included in the statement of income when the asset is derecognized.

h) Impairment

In assessing impairment of financial assets, the Company uses historical trends of the probability of default, timing of recovery and the amounts of loss incurred, adjusted to reflect management's judgment as to whether current economic and credit conditions are such that the actual losses are likely to be greater or less than suggested by historical trends.

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Additionally, management revises, annually, the carrying amount of non-financial assets, for the purpose of assessing if there is any indication, such as events or changes in the economic, operational or technological conditions that an asset may be impaired. If any indication exists, or when annual impairment testing of an asset is required, the Company estimates the asset's recoverable amount. The recoverable amount of an asset or cash generating unit is defined as the higher between its value in use and its fair value less costs to sell. When the carrying amount of an asset or cash generating unit exceeds its recoverable amount, an impairment loss is recognized, adjusting the carrying amount of the asset or cash generating unit to its recoverable amount.

i) Employee benefits

The liability recorded in the consolidated statement of financial position related the Company's retirement benefit pension plan obligations, is the greater of: (a) the amount to be paid in accordance with the terms of the pension plan for amortization of the actuarial obligations, and (b) the present value of the actuarial obligation, as calculated by a qualified actuary, less the fair value of the plan's assets, and adjusted for unrecognized actuarial gains and losses. Expenses related to the debt agreed upon with the pension trust fund were recorded in finance income (expenses), because they represent financial interest and inflation adjustment. Other expenses related to the pension fund were recorded as operating expenses.

The Company offers post-employment healthcare benefits to its employees as well as life insurance for active and retired employees. The expected costs of these benefits are accrued over the period of employment using the same accounting methodology that is used for defined benefit pension plans. These obligations are measured annually by a qualified independent actuary.

Actuarial gains and losses arising as a result of changes in actuarial assumptions are recognized in other comprehensive income.

Short-term benefits to employees: Employees' profit sharing as determined in the Company's by-laws are recorded in accordance with the collective agreement established with the employees' union and recorded in employees' and managers' profit sharing in the statement of income.

j) Income tax and social contribution tax

Current

Advances, or tax credits, are presented as current or non-current assets, in accordance with the expected date of their realization at the balance sheet date, when the tax amounts are duly calculated and offset against advances made.

Deferred

Deferred tax is recognized for temporary differences between the carrying amount of an asset or liability in the statement of financial position and its tax base at the reporting date.

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Deferred tax liabilities are recognized for unused tax loss carryforwards and all taxable temporary differences, except for the situations listed below. Deferred tax assets are recognized for all the deductible temporary differences, except for the situations listed below, to the extent that it is probable that future taxable profit will be available for the temporary differences to be offset. These taxes are measured at the tax rates that are expected to apply in the year when the asset is recovered or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the reporting date.

The follow exemptions apply to the deferred tax recognition:

When the deferred tax arises from the initial recognition of goodwill or an asset or liability in a transaction that is not a business combination and, at the time of the transaction, affects neither the accounting profit nor taxable profit or loss

In respect of taxable temporary differences associated with investments in subsidiaries, associates and interests in joint arrangements, when the timing of the reversal of the temporary differences can be controlled and it is probable that the temporary differences will not reverse in the foreseeable future.

The carrying amount of deferred income tax and social contribution tax assets is reviewed at each reporting date, and are reduced to the extent that is no longer probable that sufficient taxable profit will be available to allow the deferred tax asset to be utilized. Unrecognized deferred tax assets are re-assessed at each reporting date and are recognized to the extent that it has become probable that future taxable profits will allow the deferred tax asset to be recovered.

Deferred tax assets and liabilities are measured at the tax rates that are expected to apply in the year when the asset is realized or the liability is settled, based on tax rates (and tax laws) that have been enacted or substantively enacted at the reporting date.

k) Government grants

Government grants are recognized when there is reasonable assurance that the grant will be received, and all attached conditions will be complied with.

The Company has operations in an area incentivized by SUDENE and recognize its right to a 75% reduction in income tax, including the 10% additional. Such tax incentives, in the form of exemption or reduction of income tax, comply with the concept of government grants and are recognized as income on a systematic basis over the periods that the related income tax expense for which it is intended to compensate, is recorded

Given the legal restriction on the profit distribution corresponding to the tax incentive, the Company maintains the amount related to the incentive granted in a tax incentive reserve.

In addition, the Company receives amounts from the Energy Development Account (CDE) as reimbursement for subsidies on tariffs granted to users of the public energy distribution service. These amounts are recognized as revenue in the income statement in a monthly basis, at the moment that the Company acquire the right of receive them.

l) Non-current assets classified as held for sale and discontinued operations

The Company classify non-current assets as held for sale when their carrying amount will be recovered, principally, through a sale transaction rather than through continuous use. This condition is met only when the asset (or group of assets) is available for immediate sale in its current condition subject only to usual and customary terms for the sale of the asset (or group of assets) and its sale is considered highly probable. Management must be committed to the sale which is expected to be completed within one year from the date of classification. Assets held for sale are measured at the lower of its carrying amount and fair value less costs to sell. Costs to sell are the incremental costs directly attributable to the disposal of an asset, excluding finance expenses and income tax expenses.

Fixed assets (PP&E) and Intangible assets are not depreciated or amortized as long as they are classified as held for sale. Assets and liabilities classified as held for sale are presented separately as current items in the Statement of financial position.

Dividends received from jointly-controlled entities and affiliates, classified as held for sale, are recognized in the Income statement, in view of the discontinuation of measurement by the equity method, under IFRS 5.

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A disposal group qualifies as discontinued operation if it is a component of an entity that either has been disposed of, or is classified as held for sale, and:

- Represents a separate major line of business or geographical area of operations
- Is part of a single coordinated plan to dispose of a separate major line of business or geographical area of operations; or
- Is a subsidiary acquired exclusively with a view to resale.

Discontinued operations are excluded from the reported profit from continuing operations, and are presented as a single amount, after taxes, based on discontinued operations, in the statement of income.

Additional disclosures are presented in Note 34. All the other notes to the financial statements include amounts for continuing operations, except when otherwise stated.

m) Revenue recognition

Through December 31, 2017, revenue was measured at fair value of the consideration received or receivable, less any estimates or refunds and other similar deductions.

As from January 1, 2018 in general, revenue from contracts with customers is recognized when the performance obligation is satisfied, at an amount that reflects the consideration to which the Company expects to be entitled in exchange for the goods or services transferred, which must be allocated to that performance obligation. The revenue is recognized only when it is probable that the Company will collect the consideration to which it is entitled in exchange for the goods or services transferred to the customer, considering the customer's ability and intention to pay that amount of consideration when it is due.

Revenues from the sale of energy are measured based on the energy supplied and the tariffs specified in the terms of the contract or in effect in the market. Revenues from supply of energy to final customers are recorded when the delivery has taken place. The billing is carried out monthly. Unbilled supply of energy, from the period between the last billing and the end of each month, is estimated based on the supply contracted and on the volume of energy delivered but not yet billed. Historically, the differences between the estimated amounts and the actual revenues recognized are not significant.

Revenues from use of the distribution system (TUSD) received by the Company from other concession holders and other customers that use the distribution network are recognized in the period in which the services are provided. Unbilled retail supply of energy, from the period between the last measured consumption, according to the schedules specified in the concession regulation, and the end of each month is estimated based on the billing from the previous month or the contractual amount. Historically, the differences between the estimated amounts and the actual revenues recognized are not significant.

Construction revenue – Corresponds to the performance obligation to build the transmission and distribution infrastructure during the construction phase;

Revenues from transmission concession services are recognized in the Statement of income monthly and include:

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- Operation and maintenance revenue arising from costs incurred and necessary to comply with the performance obligation of operation and maintenance specified in the transmission concession contract, after termination of the construction phase;
- Revenue from remuneration of the contract asset recognized, recorded as transmission concession gross revenue in statement income

The services provided include charges for connection and other related services; the revenues are recognized when the services are rendered.

The 'Parcel A' revenue and *other financial components* in tariff adjustments are recognized in the Statement of income when the non-controllable costs (including energy acquisition) effectively incurred are different from those considered by the Grantor to determine the energy distribution tariff. For further details, see Note 16.

Any adjustment of expected cash flows from the concession financial asset of the energy distribution concession contract is presented as operating revenue, together with the other revenues related to the energy distribution services.

n) Finance income and expenses

Finance income is mainly comprised of interest income on funds invested, monetary adjustments on overdue receivables and interest income on other financial assets. Interest income is recognized in the Statement of income using the effective interest method.

Finance expenses include interest expense on borrowings; and foreign exchange and monetary adjustments on borrowing costs of debt, financings and debentures. Interest expense on the Company's borrowings that is not capitalized is recognized in the Statement of income using the effective interest method.

[Table of Contents](#)o) Cash dividends

A liability to pay a dividend is recognized when the distribution is authorized or is enforced by law or Company's bylaws and the distribution is no longer at the discretion of the Company.

p) Segment reporting

The operating results of all operating segments for which discrete financial information is available, are reviewed regularly by the Company's CEO, to make decisions about resources to be allocated to the segment, and to assess its performance.

Segment results that are reported to the CEO include items directly attributable to the segment as well as those that can be allocated on a reasonable basis. Unallocated items comprise mainly corporate assets (primarily the Company's headquarters) and head office expenses.

Segment capital expenditure is the total cost incurred during the year to acquire concession financial assets, intangible assets, concession contract assets and property, plant and equipment.

q) Leases

As from January 1, 2019, Company assesses at contract inception whether a contract is, or contains, a lease. That is, if the contract conveys the right to control the use of an identified asset for a period of time in exchange for consideration. Company applies a single recognition and measurement approach for all leases, except for short-term leases and leases of low-value assets. Company recognizes lease liabilities to make lease payments and right-of-use assets representing the right to use the underlying assets.

Right-of-use assets:

Company recognizes right-of-use assets at the commencement date of the lease (i.e., the date the underlying asset is available for use). Right-of-use assets are measured at cost, less any accumulated amortization and impairment losses, and adjusted for any remeasurement of lease liabilities. The cost of right-of-use assets includes the amount of lease liabilities recognized, initial direct costs incurred, and lease payments made at or before the commencement date less any lease incentives received. Right-of-use assets are amortized on a straight-line basis over the shorter of the lease term and the estimated useful lives of the assets, as described in Note 21.

If ownership of the leased asset transfers to the Company at the end of the lease term or the cost reflects the exercise of a purchase option, amortization is calculated using the estimated useful life of the asset.

Lease liabilities:

At the commencement date of the lease, the Company recognizes lease liabilities measured at the present value of lease payments to be made over the lease term. The lease payments include fixed payments (including insubstance fixed payments) less any lease incentives receivable, variable lease payments that depend on an index or a rate, and amounts expected to be paid under residual value guarantees. The lease payments also include the exercise price of a purchase option reasonably certain to be exercised by the Company and payments of penalties for terminating the lease, if the lease term reflects the Company exercising the option to terminate. Variable lease payments that do not depend on an index or a rate are recognized as expenses in the period in which the event or condition that triggers the payment occurs.

In calculating the present value of lease payments, the Company uses its incremental borrowing rate at the lease commencement date because the interest rate implicit in the lease is not readily determinable. After the commencement date, the amount of lease liabilities is increased to reflect the accretion of interest and reduced for the lease payments made. In addition, the carrying amount of lease liabilities is remeasured if there is a modification, a change in the lease term, a change in the lease payments (e.g., changes to future payments resulting from a change in an index or rate used to determine such lease payments) or a change in the assessment of an option to purchase the underlying asset.

Short-term leases and leases of low-value assets:

The Company applies the short-term lease recognition exemption to its short-term leases. It also applies the lease of low-value assets recognition exemption to leases that are considered to be low value. Lease payments on short-term leases and leases of low value assets are recognized as expense on a straight-line basis over the lease term.

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3. PRINCIPLES OF CONSOLIDATION

The year end of the financial statements of subsidiaries and jointly-controlled entities is the same as Cemig's year end. Accounting practices are applied uniformly in line with those used by Cemig.

The following subsidiaries are included in the consolidated financial statements:

Subsidiary	Form of valuation	2019		Form of valuation	2018	
		Direct interest, %	Indirect interest, %		Direct interest, %	Indirect interest, %
Cemig Geração e Transmissão	Consolidation	100.00	–	Consolidation	100.00	–
Cemig Distribuição	Consolidation	100.00	–	Consolidation	100.00	–
Gasmig	Consolidation	99.57	–	Consolidation	99.57	–
Cemig Geração Distribuída (Usina Térmica Ipatinga)	Consolidation	100.00	–	Consolidation	100.00	–
Efficientia	Consolidation	100.00	–	Consolidation	100.00	–
Luce Empreendimentos e Participações S.A. (1)	Consolidation	–	–	Consolidation	100.00	–
Rio Minas Energia e Participações (1)	Consolidation	–	–	Consolidation	100.00	–
Assets classified as held for sale						
Light (2)		22.58	–	Consolidation	26.06	23.93
LightGer(3)	Equity method	–	49.00	Consolidation	–	74.49
Guanhães (3)	Equity method	–	49.00	Consolidation	–	74.49
Axxion (4)	Equity method	49.00	–	Consolidation	49.00	25.49
UHE Itaocara (3)	Equity method	–	49.00	Consolidation	–	74.49

(1) Merged with Cemig on April 24, 2019.

(2) With the settlement of the restricted offering, on July 17th, 2019, the Company's equity interest in the total share capital of Light was reduced from 49.99%, on December 31st, 2018, to 22.58% on December 31st, 2019. This transaction resulted in the company ceasing to have control over this investee, and the Company recognized the remaining investment in Light in the consolidated financial position, as an Investment in affiliate or jointly-controlled entity, in accordance with IAS 28. Since the Company continues to have a firm commitment to dispose of the remaining interest in Light, the investment in that investee continues to be classified as assets held for sale, in accordance with IFRS 5 – Non-current assets held for sale, and discontinued operations. For more information, see Notes 1, 18 and 34.

(3) On December 31, 2018, the Company holds indirect equity interests in LightGer, Guanhães and Itaocara, of 74.49% and 49%, held through Cemig GT, and 25.49%, held through Light. As from the cessation of control of Light, the Company no longer holds control of these investees and the remaining indirect interest through Cemig GT is, from that date, measured by the equity method in the consolidated financial statements, in accordance with IAS 28. For more information, see Notes 18 and 34.

(4) On December 31, 2018 the Company holds direct and indirect interests (through Light) in Axxiom of 49% and 25.49%, respectively. As from the cessation of control of Light, the Company no longer holds control of these investees and the remaining direct interest is, from that date, measured by the equity method in the consolidated financial statements, in accordance with IAS 28. For more information, see Notes 18 and 34

a) Subsidiaries, jointly-controlled and affiliated entities

The financial statements of subsidiaries are included in the consolidated financial statements as from the date on which control is obtained, until the date on which control ceases. The assets, liabilities and profit (loss) of the subsidiaries are consolidated using full consolidation. The accounting policies of the subsidiaries and jointly-controlled entities are aligned with the policies adopted by the Company.

The Company controls an investee when its existing rights give it the current ability to direct the relevant activities of the investee. Control is achieved when the Company is exposed, or has rights, to variable returns from its involvement with the investee and has the ability to affect those returns through its power over the investee.

When the Company loses controls of an investee, it derecognizes the assets and liabilities of the former subsidiary from the consolidated statement of financial position, at the date when control is lost. Any investment retained in the former subsidiary is recognized at its fair value and any resulting difference is recognized as gain or loss in the statement of income.

Jointly-controlled and affiliated entities are accounted for under the equity method.

[Table of Contents](#)**b) Consortia**

The Company recognizes the proportional interest in assets, liabilities, and profits (losses) of consortium operations, since these investments are considered to be 'joint operations' in accordance with the requirements of IFRS 11.

c) Transactions eliminated in consolidation

Intra-group balances and transactions, and any unrealized gains and losses arising from intra-group transactions, are eliminated in preparing the consolidated financial statements. Unrealized gains arising from transactions with investee companies accounted for under the equity method are eliminated against the investment in proportion to the Company's equity interests in the investee. Unrealized losses are eliminated in the same way as unrealized gains are eliminated, but only up to the point at which there is no evidence of impairment.

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4. CONCESSIONS AND AUTHORIZATIONS

Cemig, through its subsidiaries, holds the following concessions or authorizations:

	<u>Company holding concession or authorization</u>	<u>Concession or authorization contract*</u>	<u>Expiration date</u>
POWER GENERATION			
Hydroelectric plants			
Emborcação (1)	Cemig GT	07/1997	07/2025
Nova Ponte (1)	Cemig GT	07/1997	07/2025
Santa Luzia (1)	Cemig GT	07/1997	02/2026
Sá Carvalho (1)	Sá Carvalho	01/2004	12/2024
Rosal (1)	Rosal Energia	01/1997	05/2032
Machado Mineiro (1)	Horizontes Energia	Resolution 331/2002	07/2025
Salto Voltão (1)			10/2030
Salto Paraopeba (1)			10/2030
Salto do Passo Velho (1)			10/2030
PCH Pai Joaquim (1)	Cemig PCH	Authorizing Resolution 377/2005	04/2032
Irapé (1)	Cemig GT	14/2000	02/2035
Queimado (Consórcio) (1)	Cemig GT	06/1997	01/2033
Salto Morais (1)	Cemig GT	02/2013	07/2020
Rio de Pedras (1)	Cemig GT	02/2013	09/2024
Luiz Dias (1)	Cemig GT	02/2013	08/2025
Poço Fundo (1)	Cemig GT	02/2013	08/2025
São Bernardo (1)	Cemig GT	02/2013	08/2025
Xicão (1)	Cemig GT	02/2013	08/2025
Três Marias (2)	Cemig Geração Três Marias	08/2016	01/2046
Salto Grande (2)	Cemig Geração Salto Grande	09/2016	01/2046
Itutinga (2)	Cemig Geração Itutinga	10/2016	01/2046
Camargos (2)	Cemig Geração Camargos	11/2016	01/2046
Coronel Domiciano, Joasal, Marmelos, Paciência and Piau (2)	Cemig Geração Sul	12/2016 and 13/2016	01/2046
Dona Rita, Ervália, Neblina, Peti, Sinceridade and Tronqueiras (2)	Cemig Geração Leste	14/2016 and 15/2016	01/2046
Cajurú, Gafanhoto and Martins (2)	Cemig Geração Oeste	16/2016	01/2046
Thermal plants			
Igarapé (1) (5)	Cemig GT	07/1997	08/2024
Wind power plants			
Central Geradora Eólica Praias de Parajuru (3)	Parajuru	Resolution 526/2002	09/2032
Central Geradora Eólica Volta do Rio (3)	Volta do Rio	Resolution 660/2001	01/2031
POWER TRANSMISSION			
National grid (4)	Cemig GT	006/1997	01/2043
Substation – SE Itajubá (4)	Cemig GT	79/2000	10/2030
ENERGY DISTRIBUTION (6)			
	Cemig D	002/1997	
		003/1997	12/2045
		004/1997	
		005/1997	
GAS DISTRIBUTION (6) (7)			
	Gasmig	State Law 11.021/1993	01/2053

* Cemig has grants for hydroelectric generation with potential of 5MW or less, and thus under Law 9074/95, these are dispensed from concession, permission or authorization, and do not have a final concession date.

- (1) Generation concession contracts that are not within the scope of IFRIC 12, whose infrastructure assets are recorded as PP&E since the concession grantor does not have control over whom the service is provided to as the output is being sold mainly in the Free Market ('ACL').
- (2) Generation concession contracts within the scope of IFRIC 12, under which Cemig has the right to receive cash and therefore, recognizes a concession financial assets.
- (3) This refers to concessions, given by the process of authorization, for generation, as an independent power producer, of wind power, sold under the Proinfra program. The assets tied to the right of commercial operation are recorded in PP&E. The rights of authorization of commercial operation that are classified as an Intangible.
- (4) These refer to transmission concession contracts, for which a contract asset was recognized upon the application of IFRS 15, for being subject to satisfaction of performance obligations.
- (5) On December 6, 2019, Aneel suspended Igarapé Plant commercial operation upon Cemig GT's claim for early termination of its concession contract.
- (6) Concession contracts that are within the scope of IFRIC 12 and under which the concession infrastructure assets are recorded under the intangible and financial assets bifurcation model, and in compliance with IFRS 15, the infrastructure under construction has been classified as a contract asset. Despite the segregation of distribution concession contract into four regions of State of Minas Gerais, its terms and conditions are the same.
- (7) On September 19, 2019, Gasmig executed with the State of Minas Gerais, as Granting Authority, the Third Amendment to the Concession Agreement, assuring Gasmig the extension of its concession term until 2053. For further information, please see Note 20 – Intangible Assets.

[Table of Contents](#)**Generation concessions**

In the generation business, the Company sells energy:

- (1) Through auctions, to distributors to meet the demands of their captive markets; and
- (2) To free customers in the free market (*Ambiente de Contratação Livre*, or ACL).

In the free market, energy is traded by the generation concession holders, small hydro plants (PCHs, or SHPs), self-producers, traders, and importers of energy.

There is also revenue from the spot market, which remunerates agents for de-contracted energy, which is settled at the Spot Price (PLD).

Transmission concessions

Under the transmission concession contracts, the Company, through its subsidiaries, is authorized to charge a Tariff for use of the Transmission System (*Tarifa de Uso do Sistema de Transmissão*, or TUST). Tariffs are adjusted annually on the same date the Permitted Annual Revenue (*Receitas Anuais Permitidas*, or RAP) of transmission concessions contracts is adjusted by the regulator. This tariff is in effect from July 1 of each year, upon its publication, until June 30 of the subsequent year.

The payment for use of transmission service also applies to generation provided by the Itaipu Binacional. However, due to the legal characteristics of that plant, the corresponding charges are assumed by the holders of distribution concessions that hold quotas of its output.

Onerous concessions

When obtaining the concessions for construction of certain generation projects, the Company is required to make payments to the regulator over the period of the contract or for up to 5 years upon signature of the concession contract for plants with installed capacity between 1 and 50 MW, as compensation for the right to operate them. The information on the concessions and the amounts to be paid are as follows:

Project	Nominal value in 2019	Present value in 2019	Period of the concession	Updating indexer
Irapé	33	15	03/2006 – 02/2035	IGPM
Queimado (Consortium)	8	4	01/2004 – 12/2032	IGPM
Salto Morais Small Hydro Plant (1)	–	–	06/2013 – 07/2020	IPCA
Rio de Pedras Small Hydro Plant (1)	–	–	06/2013 – 09/2024	IPCA
Various Small Hydro Plants (*) (1)	–	–	06/2013 – 08/2025	IPCA

(*) SHPs, with installed capacity less than 50 MW: Luiz Dias, Poço Fundo, São Bernardo and Xicão.

(1) Under Aneel Resolution 467/2011 the power plants with total installed generation capacity of 1 to 50 MW must pay Aneel for five years, starting on the date that the concession contract is signed. The power plants contracts of Salto Morais, Rio de Pedras, Luis Dias, Poço Fundo, São Bernardo and Xicão were signed in 06/2013, completing five years in 2018, therefore, they didn't make any payments in 2019.

The concessions fee are paid monthly to the grantor for an amount that changes over time. These payments are recorded as an intangible asset, representing a right to operate the concession and to charge users through the concession period, they are recorded as from the date of signature of the contracts at the present value of the future payment obligations.

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The amounts paid to the grantor in 2019, the nominal value and the present value of the amounts to be paid in the next 12 months, are as follows:

Project	Interest, %	Amounts paid in 2019	Amounts to be paid in the next 12 months
Irapé	100.00	2	2
Queimado (Consortium)	82.50	1	1

The rate used by the Company to discount the above liabilities to its present value, was 12.50%, and represents the average cost of funding in normal conditions on the date the concession contract was entered into.

Distribution concessions

The Company operates the concession for the distribution of energy in the greater part of the State of Minas Gerais, which expires in December 2045.

According to the concession contract, all assets and facilities that are used in the provision of the distribution service and which have been constructed by the concession holder are considered part of the assets of the related concession and must be returned to the grantor at the end of the contract. Cemig is entitled to receive a payment for the residual value of the infrastructure assets at the end of the concession contract taking into consideration the amounts involved and the timing when they became part of the infrastructure.

The Company is not subject to make any payments to the grantor in order to operate the distribution concessions, but is required to comply with certain quality standards and make infrastructure investments.

The concession contracts and the Brazilian legislation establish a mechanism of maximum prices that allows for three types of adjustments to tariffs: (i) an annual tariff adjustment; (ii) periodic review of tariffs; and (iii) extraordinary reviews.

Each year the Company has the right to request for the annual adjustment, the purpose of which is to be compensated the effects of inflation on the tariffs, and to allow for certain changes in costs that are outside the Company's control to be passed through to customers – for example the cost of energy purchased for resale and sector charges including charges for the use of the transmission and distribution facilities.

Also, the regulator performs a Periodic Review of tariffs every five years, which aims to make adjustments due to changes in the Company's costs, and to establish a factor based on scale gains, which will be applied in the annual tariff adjustments, for the purpose of sharing such gains with the Company's customers.

The Company also has the right to request an extraordinary review of tariffs in the event that any unforeseen development significantly affects the economic-financial equilibrium of the concession. The Periodic Review and the Extraordinary Review are subject, to a certain degree, to the discretion of the regulator, although there are pre-established provisions for each revision cycle.

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Under the distribution concession contracts, the Company is authorized to charge customers a tariff consisting of two components: (i) A component related to costs of energy purchased for resale, charges for use of the transmission grid and charges for use of the distribution system that are not under its control ('Parcel A costs'); and (ii) a portion relating to operating costs ('Parcel B costs').

Fifth Amendment to concession contract

On December 21, 2015, the Company signed, with the Mining and Energy Ministry, the Fifth Amendment to its concession contracts, extending its energy distribution concessions for an additional 30 years, starting January 1, 2016.

The principal characteristics and terms of the Amendment are as follows:

- The annual tariff adjustment will occur on May 28 of each year, starting in 2016; with the adjustment provisions specified in the previous concession contract remained unchanged. For the subsequent tariff adjustments the rules set for in Clause 6 of the Amendment will be applied;
- Limitation of in the distribution of dividends and/or payment of Interest on Equity to the minimum established by law, in the event of non-compliance with the annual indicators for outages (DECi and FECi) for two consecutive years, or three times in a period of five years, until the regulatory parameters are restored;
- There is a requirement for injections of capital from the controlling shareholder in an amount sufficient to meet the minimum conditions for economic and financial sustainability;
- Subject to the compliance of efficiency criteria related to continuity of supply and the economic and financial management to guarantee the concession's operations as follows: (i) for five years starting January 1, 2016, any non-compliance for two consecutive years, or non-compliance with any of the conditions at the end of five years, will result in cancelation of the concession contract; (ii) starting January 1, 2021, any non-compliance for three consecutive years with the criteria of efficiency in continuity of supply, or for two consecutive years with the criteria of efficiency in economic and financial management, will result in proceedings to establish expiration of the concession.

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The criteria of efficiency in economic and financial management are as follows:

- Operational cash generation (-) QRR¹ (-) interest on the debt² ≥ 0 ;
- Ebitda³ ≥ 0 (by the end of 2017, maintained in 2018, 2019 and 2020);
- [Ebitda (-) QRR] ≥ 0 (by the end of 2018, maintained in 2019 and 2020);
- {Net debt⁴ / [Ebitda (-) QRR]} ≤ 1 / (80% of the Selic rate) (by the end of 2019); and,
- {Net debt / [Ebitda (-) QRR]} ≤ 1 / (111% of the Selic rate) (by the end of 2020).

1. QRR = 'Regulatory reintegration quota', or Regulatory depreciation expense.
2. Net debt x 111% of the Selic rate.
3. Calculated according to the method defined by the regulator (Aneel), contained in distribution concession contract.
4. Gross debt, less financial assets.

The Company was in compliance with the above criteria as of December 31, 2019.

Gas distribution concessions

The concessions for distribution of natural gas are granted by each Brazilian state. In the state of Minas Gerais, the tariffs for natural gas are set by the regulator, the State's Economic Development Secretariat, by market segment. The tariffs is comprised of a portion for the cost of gas and a portion for the distribution of gas. Each quarter the tariffs are adjusted to pass through the cost of gas, and once a year they are adjusted to update the portion allocated to cover the costs relating to the provision of the distribution service – remuneration of invested capital and to cover all the operating, commercial and administrative expenses of the concession holder.

In addition to these adjustments, there are periodic reviews of tariffs. The first periodic review of tariff, referred to the 2018-22 cycle, was concluded in 2019. These reviews may occur every five years from the end of the first cycle, to evaluate the changes in the costs of the Gasmig and update the tariffs. The concession contract also specifies the possibility of an extraordinary review of tariffs if any event occurs that puts the economic-financial balance of the concession at risk.

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On December 14, 2018, the Minas Gerais State Department for Economic, Scientific, Technological and Higher Education Development ('Sedectes') or ('the Grantor' and actually 'Sede') presented a study, prepared by *Fundação Getulio Vargas* Business school ("FGV"), related to financial economic rebalancing of the Gasmig concession agreement, also supported by consultation from General Attorney's Office of the State. The rebalancing that has been requested by the grantor consisted of replacing the contractual obligation to build a gas pipeline to serve the Nitrogen Fertilizers Unit (UFN), which should have been built by Petrobras, for the payment of a grant fee estimated by 'Sedectes' in R\$ 852. Based on the study, Sedectes requested a response from Gasmig and began discussion for solution related to imbalance referred to, considering that one of its conditions for extension of the concession contract from 2023 to 2053, as specified in the second amendment to the contract) was the requirement to make investments for the construction of the gas pipeline. For further information, see Note 20 – Intangible Assets.

On September 19, 2019 the Company signed, with the State of Minas Gerais as Grantor, the third amendment to the concession contract for distribution of natural gas in the State of Minas Gerais, which represents conclusion of the process of economic-financial rebalancing of the concession contract, upon payment of a grant fee of R\$852, updated from January 1, 2019 to the date of payment, by the DI (Interbank Deposit) rate. This guarantees maintenance of Gasmig's concession period up to 2053.

On September 26, 2019, Gasmig issued Commercial Promissory Notes, in a single series, in the amount of R\$850, with maturity in 12 months and interest at 107% of the DI rate, without guarantee or surety. The proceeds of this issuance were used on September 26, 2019, to pay the concession grant fee, updated by the variation in the DI rate from January 1, 2019, in a total amount of R\$891.

Also under the third amendment to the concession contract, the total value paid for the compensatory grant fee will be added to the Company's Remuneration Base of Assets, and considered in the process of tariff review by the grantor as an intangible asset to be amortized until the end of the concession period, producing immediate effect in terms of setting and review of tariffs.

5. OPERATING SEGMENTS

The operating segments of the Company reflect their management and their organizational structure, used to monitoring its results.

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The tables below show segment information for 2019, 2018 and 2017:

INFORMATION BY SEGMENT AS OF AND FOR THE YEAR ENDED DECEMBER 31, 2019

DESCRIPTION	ENERGY			GAS	OTHER	ELIMINATIONS	TOTAL
	GENERATION	TRANSMISSION	DISTRIBUTION				
SEGMENT ASSETS	14,749	4,113	25,616	2,689	3,887	(1,128)	49,926
INVESTMENTS IN SUBSIDIARIES AND JOINTLY-CONTROLLED ENTITIES	4,133	1,237	–	–	30	–	5,400
INVESTMENTS IN AFFILIATES CLASSIFIED AS HELD FOR SALE	–	–	1,258	–	–	–	1,258
ADDITIONS TO THE SEGMENT	102	221	936	934	9	–	2,202
CONTINUING OPERATIONS							
NET REVENUE	6,882	714	15,919	1,858	324	(307)	25,390
COST OF ENERGY AND GAS							
Energy bought for resale	(3,841)	–	(7,517)	–	–	72	(11,286)
Charges for use of the national grid	(190)	–	(1,459)	–	–	223	(1,426)
Gas bought for resale	–	–	–	(1,436)	–	–	(1,436)
Total	(4,031)	–	(8,976)	(1,436)	–	295	(14,148)
OPERATING COSTS AND EXPENSES							
Personnel	(208)	(115)	(869)	(46)	(34)	–	(1,272)
Employees' and managers' profit sharing	(36)	(27)	(183)	–	(17)	–	(263)
Post-employment obligations	(50)	(38)	(276)	–	(44)	–	(408)
Materials	(17)	(6)	(63)	(2)	(3)	–	(91)
Outsourced services	(125)	(45)	(1,016)	(20)	(40)	7	(1,239)
Depreciation and amortization	(210)	(5)	(652)	(86)	(5)	–	(958)
Operating provisions (reversals)	(975)	(134)	(1,102)	(2)	(188)	–	(2,401)
Construction costs	–	(221)	(936)	(43)	–	–	(1,200)
Other operating expenses, net	(176)	(20)	(298)	(10)	–	5	(499)
Total cost of operation	(1,797)	(611)	(5,395)	(209)	(331)	12	(8,331)
OPERATING COSTS AND EXPENSES	(5,828)	(611)	(14,371)	(1,645)	(331)	307	(22,479)
Equity in earnings of unconsolidated investees, net	(88)	214	–	–	(1)	–	125
Dividends declared by investee classified as held for sale	–	–	73	–	–	–	73
OPERATING INCOME BEFORE FINANCE INCOME (EXPENSES)	966	317	1,621	213	(8)	–	3,109
Finance income	1,282	98	1,535	21	271	–	3,207
Finance expenses	(1,035)	(115)	(632)	(46)	(19)	–	(1,847)
INCOME BEFORE INCOME TAX AND SOCIAL CONTRIBUTION TAX	1,213	300	2,524	188	244	–	4,469
Income tax and social contribution tax	(551)	(36)	(806)	(47)	(125)	–	(1,565)
NET INCOME FROM CONTINUING OPERATIONS	662	264	1,718	141	119	–	2,904
DISCONTINUED OPERATIONS							
NET INCOME AFTER TAX FROM DISCONTINUED OPERATIONS	–	–	224	–	–	–	224
NET INCOME (LOSS) FOR THE YEAR	662	264	1,942	141	119	–	3,128
Equity holders of the parent	662	264	1,942	140	119	–	3,127
Non-controlling interests	–	–	–	1	–	–	1
	662	264	1,942	141	119	–	3,128

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The following is a breakdown of the revenue of the Company by activity:

	ENERGY			GAS	OTHER	ELIMINATIONS	TOTAL
	GENERATION	TRANSMISSION	DISTRIBUTION				
2019							
Revenue from supply of energy	7,038	–	19,967	–	–	(77)	26,928
Revenue from Use of Distribution Systems (the TUSD charge)	–	–	2,746	–	–	(24)	2,722
<i>CVA</i> and <i>Other financial components</i> in tariff adjustment	–	–	58	–	–	–	58
Transmission concession revenue	–	703	–	–	–	(199)	504
Transmission construction revenue	–	220	–	–	–	–	220
Transmission assets - indemnity revenue	–	156	–	–	–	–	156
Distribution construction revenue	–	–	937	43	–	–	980
Adjustment to expectation of cash flow from Financial assets of distribution concession to be indemnified	–	–	18	–	–	–	18
Gain on inflation updating of Concession Grant Fee	318	–	–	–	–	–	318
Transactions in energy on the CCEE	439	–	(7)	–	–	–	432
Supply of gas	–	–	–	2,298	–	–	2,298
Fine for violation of continuity indicator	–	–	(58)	–	–	–	(58)
PIS/Pasep and Cofins taxes credits over ICMS	414	–	830	–	184	–	1,428
Other operating revenues	81	27	1,469	–	152	(7)	1,722
Sector / Regulatory charges reported as Deductions from revenue	(1,408)	(392)	(10,041)	(483)	(12)	–	(12,336)
Net operating revenue	6,882	714	15,919	1,858	324	(307)	25,390

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INFORMATION BY SEGMENT AS OF AND FOR THE YEAR ENDED DECEMBER 31, 2018

DESCRIPTION	ENERGY			GAS	TELECOM*	OTHER	ELIMINATIONS	TOTAL
	GENERATION	TRANSMISSION	DISTRIBUTION					
SEGMENT ASSETS	14,671	3,862	37,840	1,822	10	2,607	(957)	59,855
INVESTMENTS IN SUBSIDIARIES AND JOINTLY-CONTROLLED ENTITIES	4,055	1,163	-	-	-	17	-	5,235
ADDITIONS TO THE SEGMENT CONTINUING OPERATIONS	559	96	856	70	9	-	-	1,590
NET REVENUE	6,374	675	13,757	1,619	-	134	(293)	22,266
COST OF ENERGY AND GAS								
Energy bought for resale	(3,917)	-	(7,238)	-	-	-	71	(11,084)
Charges for use of the national grid	(216)	-	(1,463)	-	-	-	200	(1,480)
Gas bought for resale				(1,238)				(1,238)
Total	(4,133)	-	(8,701)	(1,238)	-	-	271	(13,802)
OPERATING COSTS AND EXPENSES								
Personnel	(230)	(108)	(965)	(60)	(18)	(29)	-	(1,410)
Employees' and managers' profit sharing	(10)	(7)	(51)	-	-	(10)	-	(77)
Post-employment obligations	(46)	(27)	(224)	-	-	(41)	-	(337)
Materials	(39)	(4)	(58)	(2)	(1)	-	-	(104)
Outsourced services	(123)	(40)	(880)	(20)	(9)	(30)	15	(1,087)
Depreciation and amortization	(164)	-	(595)	(74)	(1)	(1)	-	(835)
Operating provisions (reversals)	(107)	(12)	(332)	2	1	(18)	-	(466)
Construction costs	-	(96)	(757)	(45)	-	-	-	(897)
Other operating expenses, net	(65)	(17)	(203)	(13)	(3)	(109)	7	(405)
Total cost of operation	(784)	(311)	(4,065)	(212)	(31)	(238)	22	(5,618)
OPERATING COSTS AND EXPENSES	(4,917)	(311)	(12,766)	(1,450)	(31)	(238)	293	(19,420)
Equity in earnings of unconsolidated investees, net	(353)	231	33	-	(1)	(14)	-	(104)
Remeasurement of previously held equity interest in subsidiaries acquired	80	-	(52)	-	-	(147)	-	(119)
Impairment of investments	(127)	-	-	-	-	-	-	(127)
OPERATING INCOME BEFORE FINANCE INCOME (EXPENSES)	1,057	595	972	169	(32)	(265)	-	2,496
Finance income	1,113	61	434	84	1	13	-	1,706
Finance expenses	(1,536)	(5)	(621)	(38)	(5)	(19)	-	(2,224)
INCOME BEFORE INCOME TAX AND SOCIAL CONTRIBUTION TAX	634	651	785	215	(36)	(271)	-	1,978
Income tax and social contribution tax	(276)	(122)	(217)	(53)	12	57	-	(599)
NET INCOME (LOSS) FROM CONTINUING OPERATIONS	358	529	568	162	(24)	(214)	-	1,379
DISCONTINUED OPERATIONS								
NET INCOME AFTER TAX FROM DISCONTINUED OPERATIONS	11	-	62	-	290	-	-	363
NET INCOME (LOSS) FOR THE YEAR	369	529	630	162	266	(214)	-	1,742
Equity holders of the parent	361	529	599	161	266	(216)	-	1,700
Non-controlling interests	8	-	31	1	-	2	-	42
	369	529	630	162	266	(214)	-	1,742

(*) On March 31, 2018 Cemig Telecom assets and liabilities were merged into the Company.

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The following is a breakdown of the revenue of the Company by activity:

	ENERGY			GAS	OTHER	ELIMINATIONS	TOTAL
	GENERATION	TRANSMISSION	DISTRIBUTION				
2018							
Revenue from supply of energy	7,065	–	17,885	–	–	(78)	24,872
Revenue from Use of Distribution Systems (the TUSD charge)	–	–	2,067	–	–	(22)	2,045
<i>CVA and Other financial components</i> in tariff adjustment	–	–	1,973	–	–	–	1,973
Transmission concession revenue	–	589	–	–	–	(178)	411
Transmission construction revenue	–	96	–	–	–	–	96
Transmission assets – indemnity revenue	–	250	–	–	–	–	250
Generation assets – indemnity revenue	55	–	–	–	–	–	55
Distribution construction revenue	–	–	757	45	–	–	802
Adjustment to expectation of cash flow from Financial assets of distribution concession to be indemnified	–	–	–	–	–	–	–
Gain on inflation updating of Concession Grant Fee	321	–	–	–	–	–	321
Transactions in energy on the CCEE	217	–	–	–	–	–	217
Supply of gas	–	–	–	1,995	–	–	1,995
Fine for violation of continuity indicator	–	–	(44)	–	–	–	(44)
Other operating revenues	82	29	1,345	–	144	(15)	1,585
Sector / Regulatory charges reported as Deductions from revenue	(1,366)	(288)	(10,226)	(421)	(11)	–	(12,312)
Net operating revenue	6,374	676	13,757	1,619	133	(293)	22,266

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INFORMATION BY SEGMENT AS OF AND FOR THE YEAR ENDED DECEMBER 31, 2017

DESCRIPTION	ENERGY			TELECOMS	GAS	OTHER	ELIMINATIONS	TOTAL
	GENERATION	TRANSMISSION	DISTRIBUTION					
SEGMENT ASSETS	14,366	3,955	20,021	347	2,000	1,582	(32)	42,239
INVESTMENTS IN SUBSIDIARIES AND JOINTLY-CONTROLLED ENTITIES	4,723	1,122	1,918	–	–	29	–	7,792
ADDITIONS TO THE SEGMENT	308	25	1,083	47	56	1	–	1,520
NET REVENUE	7,190	777	12,312	127	1,482	112	(288)	21,712
COST OF ENERGY AND GAS								
Energy bought for resale	(4,209)	–	(6,783)	–	–	–	73	(10,919)
Charges for use of the national grid	(353)	–	(1,002)	–	–	–	181	(1,174)
Gas bought for resale	–	–	–	–	(1,071)	–	–	(1,071)
Operational costs, total	(4,562)	–	(7,785)	–	(1,071)	–	254	(13,164)
OPERATING COSTS AND EXPENSES								
Personnel	(281)	(106)	(1,123)	(20)	(56)	(41)	–	(1,627)
Employees' and managers' profit sharing	(1)	–	(3)	–	–	(1)	–	(5)
Post-employment obligations	39	19	180	–	–	(9)	–	229
Materials	(11)	(4)	(43)	–	(2)	(1)	–	(61)
Raw materials and inputs for production of energy	(10)	–	–	–	–	–	–	(10)
Outsourced services	(127)	(31)	(785)	(28)	(17)	(16)	30	(974)
Depreciation and amortization	(176)	–	(567)	(35)	(71)	(1)	–	(850)
Operating provisions (reversals)	(139)	(10)	(469)	(1)	(2)	(233)	–	(854)
Construction costs	–	(25)	(1,045)	–	(49)	–	–	(1,119)
Other operating expenses, net	(117)	(11)	(408)	(23)	(15)	187	4	(383)
Total cost of operation	(823)	(168)	(4,263)	(107)	(212)	(115)	34	(5,654)
OPERATING COSTS AND EXPENSES	(5,385)	(168)	(12,048)	(107)	(1,283)	(115)	288	(18,818)
OPERATING INCOME BEFORE EQUITY GAINS (LOSSES) AND FINANCE INCOME (EXPENSES)	1,805	609	264	20	199	(3)	–	2,894
Equity in earnings of unconsolidated investees, net	(519)	234	42	(2)	–	(7)	–	(252)
Finance income	226	9	397	3	49	120	–	804
Finance expenses	(1,161)	(3)	(815)	(15)	(43)	237	–	(1,800)
INCOME BEFORE INCOME TAX AND SOCIAL CONTRIBUTION TAX	351	849	(112)	6	205	347	–	1,646
Income tax and social contribution tax	(257)	(189)	31	(3)	(71)	(155)	–	(644)
NET INCOME (LOSS) FOR THE YEAR	94	660	(81)	3	134	192	–	1,002
OTHER COMPREHENSIVE INCOME								
Items that will not be reclassified to profit or loss								
Post retirement liabilities – restatement of obligations of the defined benefit plans, net of taxes	(47)	(23)	(145)	–	–	(46)	–	(261)
Equity gain (loss) on Other comprehensive income in subsidiary and jointly-controlled entity, net of tax	–	–	–	–	–	(3)	–	(3)
	(47)	(23)	(145)	–	–	(49)	–	(264)
Items that may be reclassified to profit or loss								
Equity gain on Other comprehensive income, in subsidiary and jointly-controlled entity, relating to fair value of financial asset available for sale, net of tax	(34)	–	–	–	–	(4)	–	(38)
	(34)	–	–	–	–	(4)	–	(38)
COMPREHENSIVE INCOME FOR THE YEAR	13	637	(226)	3	134	139	–	700
Equity holders of the parent	13	637	(226)	3	133	139	–	699
Non-controlling interests	–	–	–	–	1	–	–	1
	13	637	(226)	3	134	139	–	700

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The following is a breakdown of the revenue of the Company by activity:

2017	ENERGY			TELECOMS	GAS	OTHER	ELIMINATIONS	TOTAL
	GENERATION	TRANSMISSION	DISTRIBUTION					
Revenue from supply of energy	7,340	–	16,442	–	–	–	(81)	23,701
Revenue from Use of Distribution Systems (the TUSD charge)	–	–	1,643	–	–	–	(32)	1,611
<i>CVA and Other financial components in tariff adjustment</i>	–	–	988	–	–	–	–	988
Transmission concession revenue	–	519	–	–	–	–	(148)	371
Transmission construction revenue	–	25	–	–	–	–	–	25
Transmission assets - indemnity revenue	–	373	–	–	–	–	–	373
Generation assets - indemnity revenue	271	–	–	–	–	–	–	271
Distribution construction revenue	–	–	1,045	–	49	–	–	1,094
Adjustment to expectation from reimbursement of distribution concession financial assets	–	–	9	–	–	–	–	9
Gain on inflation updating of concession grant fee	317	–	–	–	–	–	–	317
Transactions in energy on the CCEE	860	–	–	–	–	–	–	860
Supply of gas	–	–	–	–	1,759	–	–	1,759
Other operating revenues	37	9	1,175	168	1	120	(26)	1,484
Sector / Regulatory charges reported as								
Deductions from revenue	(1,430)	(167)	(9,177)	(41)	(327)	(9)	–	(11,151)
Net operating revenue	7,395	759	12,125	127	1,482	111	(287)	21,712

For further details of operating revenue, see Note 29.

6. CASH AND CASH EQUIVALENTS

	2019	2018
Bank accounts	210	108
Cash equivalents		
Bank certificates of deposit (CDBs) (1)	290	555
Overnight (2)	36	228
	326	783
	536	891

- (1) *Bank Certificates of Deposit (Certificados de Depósito Bancário, or CBDs)*, accrued interest at 80% to 106%, of the CDI Rate (Interbank Rate for Interbank Certificates of Deposit or *Certificados de Depósito Inter-bancário* – CDIs) published by the Custody and Settlement Chamber (*Câmara de Custódia e Liquidação, or Cetip*) in 2019 (40% to 106% in 2018 and 50% to 106% in 2017). For these CBDs, the Company has repo transactions which state, on their trading notes, the bank's commitment to repurchase the security, on demand, on the maturity date of the transaction, or earlier.
- (2) *Overnight* transactions are repos available for redemption on the following day. They are usually backed by Treasury Bills, Notes or Bonds and referenced to a pre-fixed rate of 4.39% in 2019 (6.39%, in 2018 and 6.89% in 2017). Their purpose is to settle the short-term obligations of the Company, or to be used in the acquisition of other assets with better return to replenish the portfolio.

Note 33 provides information in relation to the exposure of the Company to interest rate risks, and a sensitivity analysis of their effects on financial assets and liabilities.

[Table of Contents](#)**7. MARKETABLE SECURITIES**

	<u>2019</u>	<u>2018</u>
Investments		
Current		
Financial Notes (LFs) – Banks (1)	645	435
Treasury Financial Notes (LFTs) (2)	94	254
Debentures (3)	–	11
Others	<u>1</u>	<u>4</u>
	740	704
Non-current		
Financial Notes (LFs) – Banks (1)	11	109
Debentures	<u>2</u>	<u>–</u>
	13	109
	<u>753</u>	<u>813</u>

- (1) Bank Financial Notes (*Letras Financeiras*, or LFs) are fixed-rate fixed-income securities, issued by banks and that accrued interest a percentage of the CDI rate published by Cetip. The LFs had remuneration rates varying between 101.95% and 113% of the CDI rate in 2019 (102% and 111.25% in 2018 and 102.01% to 112% in 2017).
- (2) *Treasury Financial Notes (LFTs)* are fixed-rate securities, their yield follows the daily changes in the Selic rate between the date of purchase and the date of maturity.
- (3) *Debentures* are medium and long term debt securities, which give their holders a right of credit against the issuing company. The debentures have remuneration varying from 108.25% to 113% of the CDI Rate in 2019 (104.25% to 151% of CDI in 2018 and 104.25% to 161.54% of CDI in 2017).

Note 33 provides a classification of these marketable securities. Investments in marketable securities of related parties are shown in Note 32.

8. RECEIVABLES FROM CUSTOMERS, TRADERS AND POWER TRANSPORT CONCESSION HOLDERS

	<u>Balances not yet due</u>	<u>Up to 90 days past due</u>	<u>More than 91 up to 360 days past due</u>	<u>More than 361 days past due</u>	<u>2019</u>	<u>2018</u>
Billed supply	1,396	707	431	596	3,130	2,989
Unbilled supply	1,204	–	–	–	1,204	1,048
Other concession holders – wholesale supply	–	32	15	–	47	47
Other concession holders – wholesale supply, unbilled	204	–	–	–	204	282
CCEE (Power Trading Chamber)	–	–	386	–	386	166
Concession Holders – power transport	80	20	6	81	187	180
Concession Holders – power transport, unbilled	253	–	–	–	253	212
(–) Provision for doubtful receivables	<u>(171)</u>	<u>(12)</u>	<u>(38)</u>	<u>(589)</u>	<u>(810)</u>	<u>(751)</u>
	<u>2,966</u>	<u>747</u>	<u>800</u>	<u>88</u>	<u>4,601</u>	<u>4,173</u>
Current assets					4,524	4,092
Non-current assets					77	81

The Company's exposure to credit risk related to customers and traders is provided in Note 33.

The allowance for doubtful accounts is considered to be sufficient to cover any potential losses in the realization of accounts receivable, and the breakdown by type of customers is as follows:

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	<u>2019</u>	<u>2018</u>
Residential	131	137
Industrial	197	172
Commercial, services and others	161	189
Rural	32	33
Public authorities	201	119
Public lighting	2	6
Public services	31	27
Charges for use of the network (TUSD)	<u>55</u>	<u>68</u>
	<u>810</u>	<u>751</u>

Changes in the allowance for doubtful accounts in 2019, 2018 and 2017 are as follows:

Balance at December 31, 2016	<u>660</u>
Additions, net	248
Write-off	<u>(340)</u>
Balance at December 31, 2017	<u>568</u>
Effect of adoption of IFRS 9 on Jan. 1, 2018	150
Additions, net (Note 30 d)	264
Write-off	<u>(231)</u>
Balance at December 31, 2018	<u>751</u>
Additions, net (Note 30 d)	238
Disposals	<u>(179)</u>
Balance at December 31, 2019	<u>810</u>

In 2019, as a result of changes in assumptions of allowance for doubtful accounts computation presented in note 2.7 b), the expected percentage of loss in relation to the distribution segment receivable from energy supply decreased reducing the allowance for doubtful accounts by an amount of R\$46 as of December 31, 2019.

Advances from customers

The Company receives advance payments for the sale of energy from certain customers. Advance payments related to services not yet provided are as follows:

Balance at December 31, 2017	<u>233</u>
Additions	50
Energy supplied	(215)
Inflation adjustment (Note 31)	<u>11</u>
Balance at December 31, 2018	<u>79</u>
Energy supplied	(80)
Inflation adjustment (Note 31)	<u>1</u>
Balance at December 31, 2019	<u>-</u>

Revenues from advanced sales of energy supply was recognized in the Statement of income only upon the actual supply of energy

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9. RECOVERABLE TAXES

	<u>2019</u>	<u>2018</u>
Current		
ICMS (VAT)	65	80
PIS/Pasep	3	4
Cofins	7	21
Others	<u>24</u>	<u>19</u>
	99	124
Non-current		
ICMS (VAT)	277	240
PIS/Pasep	1,102	–
Cofins	4,968	–
Others	<u>2</u>	<u>2</u>
	6,349	242
	<u>6,448</u>	<u>366</u>

The ICMS (VAT) credits that are reported in non-current assets arise mainly from acquisitions of property, plant and equipment, and intangible assets, and can be offset against taxes payable in the next 48 months. The transfer to non-current is made in accordance with management's best estimate of the amounts which will likely be realized after 2020.

Credits of PIS/Pasep and Cofins generated by the acquisition of machinery and equipment can be offset immediately.

The credits of PIS/Pasep and Cofins taxes recorded as non-current assets refer to the amounts paid for these taxes including ICMS tax in their basis of calculation. For more information see Note 10.

10. PIS/PASEP AND COFINS TAXES CREDITS OVER ICMS – FINAL COURT JUDGMENT

On July 16, 2008, the Company and its wholly-owned subsidiaries Cemig GT and Cemig D filed an Ordinary Action for a declaration that it was unconstitutional to include the ICMS value added tax within the taxable amount for calculation of PIS/Pasep and Cofins; and for recognition of its right to offsetting of amounts unduly paid for the 10 years prior to the action being filed, with monetary updating by the Selic rate.

In July 2008 the Company and the wholly-owned subsidiaries above referred obtained an interim injunction, and from that time, made escrow deposits into court relating to the inclusion of ICMS tax amounts in the basis for calculation of PIS/Pasep and Cofins taxes. The Company maintained this procedure from August 2008 to August 2011, and from then on, although they continued to challenge the basis of calculation in the courts, opted to pay the taxes monthly.

In October 2017, the Federal Supreme Court (STF) published its Joint Judgment on the Extraordinary Appeal, in the form that creates overall precedent, in favor of the Company's argument. In 2017, based on the opinion of its legal advisors, the Company reversed the provision related to the escrow deposits made from 2008 to 2011, and also recognized a liability for reimbursement to their customers of the distribution segment.

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On May 8, 2019 the Regional Federal Appeal Court of the First Region passed final judgment – against which there is no appeal – on the Ordinary Action, in favor of the Company and its wholly-owned subsidiaries Cemig D and Cemig GT, and recognizing their right to exclude the ICMS amounts from the calculation basis of PIS/Pasep and Cofins taxes, backdated as from five years prior to the action initial filing – that is, from July 2003.

On June 11, 2019, following judgment against which there is no further appeal, the subsidiaries Cemig D and Cemig GT applied for release of the escrow deposits amounting R\$1,377 as of December 31, 2019. On February 13, 2020, the escrow deposits were released for an amount of R\$1,382, including monetary update. Of this amount, R\$1,155 will be restituted to customers of the distribution segment, after Aneel specifies the mechanisms and criteria for such reimbursement. The Company is also entitled to recover the overpaid tax for the period after August 2011, when the company ceased to make the escrow deposits.

Final court judgment has also been given, against which there is no further appeal, in favor of similar actions filed by Cemig's wholly-owned subsidiaries Sá Carvalho, Cemig Geração Distribuída, Cemig Geração Poço Fundo S.A. (previously denominated UTE Barreiro S.A.) and Horizontes Energia S.A..

Based on the opinion of its legal advisers, the Company believes that a portion of the credits to be received should be refunded to its customers of the distribution segment, considering a maximum period for calculation of the reimbursement of 10 years. Thus, the Company has recorded a liability corresponding to the credits to be refunded to its customers, which comprises the period of the last 10 years, from June 2009 to May 2019, net of PIS/Pasep and Cofins taxes over monetary updating.

The amounts will be refunded to customers of the distribution segment as from the date when the tax credits are in fact offset and the mechanisms and criteria for the reimbursement will be discussed with Aneel.

The Company has two ways to recover the tax credit: (i) offsetting of the amount receivable against amounts payable of PIS/Pasep and Cofins taxes, monthly, within the five-year period specified by the relevant law of limitation; or (ii) receipt of specific credit instruments '*precatórios*' from the federal government.

The credits of the Company's wholly-owned subsidiaries will be offset, to accelerate recovery. For the Parent company itself, the priority will be given to receipt of the credits through precatório letters of credit, since the Parent company does not make enough monthly payments of PIS/Pasep and Cofins taxes to enable offsetting.

Shown below are the accounting effects relating to the recognition of the PIS/Pasep and Cofins taxes credits, including their monetary updating by the Selic rate, and the amounts to be refunded to customers at December 31, 2019:

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	<u>Parent</u>	<u>Cemig D</u>	<u>Cemig GT</u>	<u>Other subsidiaries (4)</u>	<u>Total</u>
PIS/Pasep and Cofins taxes credits					
Effects on the statement of financial position					
Recoverable taxes (July/2003 to May/2019)	490	4,926	626	28	6,070
Amounts to be refunded to customers (1)	–	(3,038)	–	–	(3,038)
Taxes payable (2)	(4)	(45)	(6)	–	(55)
Income tax and social contribution tax	(165)	(627)	(211)	(9)	(1,012)
Equity	<u>321</u>	<u>1,216</u>	<u>409</u>	<u>19</u>	<u>1,965</u>
Effects on net income					
Recovery of PIS/Pasep and Cofins taxes credits – Other operating revenues (3)	184	830	397	17	1,428
Finance income (5)	306	1,034	229	11	1,580
PIS/Pasep and Cofins taxes charged on financial revenues (5)	(4)	(21)	(6)	–	(31)
Income tax and social contribution tax	(165)	(627)	(211)	(9)	(1,012)
	<u>321</u>	<u>1,216</u>	<u>409</u>	<u>19</u>	<u>1,965</u>

- (1) Amounts to be refunded to customers on the PIS/Pasep and Cofins taxes credits for Cemig D, recognized in 2019. The total amount to be restituted to customers presented in the consolidated Statements of Financial Position, as Pasep and Cofins taxes to be refunded to customers – Note 23, is R\$ 4,193. The difference of R\$ 1,155 is due to the constitution of a liability corresponding to the reversal of the provision related to the escrow deposits made from 2008 to 2011, recorded in 2017.
- (2) PIS/Pasep and Cofins taxes on the financial revenues comprising the monetary updating of the tax credits that have been recognized. These taxes applicable to the credits to be refunded to customers reduce their total, without effects in the Statement of income.
- (3) This refers to the credits recognized in operating profit of 2019, amounting R\$ 3,826, net of the amounts to be refunded to customers, of R\$ 2,398.
- (4) This refers to the credits recognized by the wholly-owned subsidiaries Sá Carvalho, Cemig Geração Distribuída, Cemig Geração Poço Fundo S.A. (previously denominated UTE Barreiro S.A.) and Horizontes Energia S.A..
- (5) It includes financial updating from the date of credits recognition until December 31, 2019, net of PIS/Pasep and Cofins taxes on finance income, in the amounts of R\$25.

As a result of the court decision, amounts of ICMS tax were no longer included in the calculation basis of PIS/Pasep and Cofins taxes in the billing to the distribution segment customers as from June 2019, representing an average reduction of approximately 1% in the invoice amount.

On May 12, 2020, the Brazilian tax authority (*Receita Federal*) granted the Company's request for ratification of the credits of PIS/Pasep and Cofins taxes arising from the legal action on which final judgment, subject to no further appeal, was given in favor of Cemig D and Cemig GT in 2019.

11. INCOME AND SOCIAL CONTRIBUTION TAXES

a) Income tax and social contribution tax recoverable

The balances of income tax and social contribution tax refer to tax credits in the corporate income tax returns of previous years and to advance payments which will be offset against federal taxes eventually payable.

	<u>2019</u>	<u>2018</u>
Income tax	608	253
Social contribution tax	241	140
	<u>849</u>	<u>393</u>
Current	<u>621</u>	<u>387</u>
Non-current	<u>228</u>	<u>6</u>

The balances of income tax and social contribution tax posted in non-current assets arise from advanced payments required by tax law and withholding taxes, which the expectation of offsetting is greater than 12 months.

[Table of Contents](#)**b) Income tax and social contribution tax payable**

The balances of income tax and social contribution tax recorded in current liabilities refer mainly to the taxes owed by the subsidiaries which report by the Real Profit method and have opted to make monthly payments based on estimated revenue, and also by the subsidiaries that have opted for the Presumed Profit method, in which payments are made quarterly.

	<u>2019</u>	<u>2018</u>
Current		
Income tax	99	83
Social contribution tax	35	29
	<u>134</u>	<u>112</u>

c) Deferred income tax and social contribution tax

The Company has deferred taxed assets from unused tax loss carryforwards, negative base for the social contribution tax, and deductible temporary differences, at the statutory rates applicable to each legal entity in Brazil of 25% (for Income tax) and 9% (for the social contribution tax), as follows:

	<u>2019</u>	<u>2018</u>
Deferred tax assets		
Tax loss carryforwards	116	373
Provisions for contingencies	544	218
Impairment on investments	660	882
Fair value of derivative financial instruments (PUT SAAG)	164	143
Operating provisions	66	39
Provisions for profit sharing	72	25
Post-employment obligations	2,090	1,477
Estimated provision for doubtful receivables	283	279
Onerous concession	8	8
Others	25	27
Total	<u>4,028</u>	<u>3,471</u>
Deferred tax liabilities		
Funding cost	(16)	(25)
Deemed cost	(232)	(239)
Acquisition costs of equity interests	(503)	(501)
Borrowing costs capitalized	(166)	(168)
Taxes on revenues not redeemed – Presumed Profit accounting method	(1)	(5)
Adjustment to expectation of cash flow – Concession assets	(761)	(804)
Adjustment to fair value: Swap/Gains	(575)	(277)
Others	(5)	(33)
Total	<u>(2,259)</u>	<u>(2,052)</u>
Total, net	<u>1,769</u>	<u>1,419</u>
Total assets	<u>2,430</u>	<u>2,147</u>
Total liabilities	<u>(661)</u>	<u>(728)</u>

The changes in deferred income tax and social contribution tax were as follows:

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	Consolidated
Balance at December 31, 2016	<u>1,215</u>
Effects allocated to net profit from continuing operations	(198)
Effect allocated to other comprehensive income	133
<i>Effects allocated to Equity</i>	
Variations in deferred tax assets and liabilities	(14)
Balance at December 31, 2017	<u>1,136</u>
Effects allocated to net profit from continuing operations	(16)
Effect allocated to other comprehensive income	239
<i>Effects allocated to Equity</i>	
First-time adoption of IFRS 9 – effects allocated to equity	51
Reversal of deemed cost	18
Transfer to assets held for sale	(3)
Variations in deferred tax assets and liabilities	(3)
Deferred taxes arising from business combination	(3)
Balance at December 31, 2018	<u>1,419</u>
Effect allocated to other comprehensive income	544
Effects allocated to net profit from continuing operations	(111)
Effects allocated to net profit from discontinuing operations (note 34)	(85)
Others	2
Balance at December 31, 2019	<u>1,769</u>

On March 19, 2020, the Board of Directors meeting approved the Company's estimated future taxable profits forecast. This forecast was also submitted for examination by the Fiscal Council in the same date.

The Company estimated that the balance of deferred tax asset as of December 31, 2019 will be recovered, as follows:

	Consolidated
2020	659
2021	571
2022	571
2023	572
2024	571
2025 to 2027	659
2028 to 2029	425
	<u>4,028</u>

d) Reconciliation of income tax and social contribution tax effective rate

This table reconciles the statutory income tax (rate 25%) and social contribution tax (rate 9%) with the current income tax expense in the Statement of income:

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	<u>2019</u>	<u>2018</u>	<u>2017</u>
Profit before income tax and social contribution tax	4,469	1,978	1,646
Income tax and social contribution tax – nominal expense (34%)	(1,520)	(672)	(560)
Tax effects applicable to:			
Gain (loss) in subsidiaries by equity method	8	(61)	(129)
Interest on Equity	136	71	–
Gain on dilution of an equity interest	–	–	8
Non-deductible contributions and donations	(13)	(6)	(6)
Tax incentives	66	29	11
Tax credits not recognized	–	(1)	–
Effects from subsidiaries taxed based on gross revenues	89	89	81
Non-deductible penalties	(135)	(12)	(14)
Impairment of accounts receivable from related parties	(234)		
Excess reactive power and demand	–	–	(2)
Others	38	(36)	(33)
Income tax and social contribution tax – effective expense	<u>(1,565)</u>	<u>(599)</u>	<u>(644)</u>
Current tax	<u>(1,454)</u>	<u>(583)</u>	<u>(446)</u>
Deferred tax	<u>(111)</u>	<u>(16)</u>	<u>(198)</u>
	<u>(1,565)</u>	<u>(599)</u>	<u>(644)</u>
Effective rate	<u>35.03%</u>	<u>30.30%</u>	<u>39.13%</u>

12. RESTRICTED CASH

Restricted cash of R\$12 (R\$91 on December 31, 2018), refers to funds used as guarantee for power purchase agreement and other regulatory and financial obligations.

13. ACCOUNTS RECEIVABLE FROM THE STATE OF MINAS GERAIS

The Company has accounts receivable from the State of Minas Gerais, arising from return of an administrative deposit made for a dispute on the rate of inflation and other adjustment to be applied to an advance for future capital increase ('AFAC'), made in prior years, which was the subject of a debt recognition agreement. The agreement provided for payment by the Minas Gerais State in 12 consecutive monthly installments, each updated by the IGP-M index up to the date of actual payment, the first to become due on November 10, 2017. The agreement states that, in the event of arrears or default by the State in payment of the agreed consecutive monthly installments, Cemig is authorized to retain dividends or Interest on Equity distributable to the State in proportion to the State's equity interest, for as long as the arrears and/or default continues.

Considering the reference in the previous paragraph, on June 28, 2019 and December 27, 2019, the Company withheld an amount of R\$18 and R\$130, respectively, corresponding to the dividends that would have been payable to Minas Gerais State on that dates. The balance receivable on December 31, 2019, R\$115 (R\$246 on December 31, 2018), was classified as Non-current asset, as a result of the delays in installments past due since January 2018.

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Management believes that it will not suffer losses on these receivables, as the amounts due are subject to the guarantees mentioned above, which the Company intends to execute in the event of default of the amount agreed in the debt recognition agreement.

14. ESCROW DEPOSITS

	<u>2019</u>	<u>2018</u>
Labor claims	355	335
Tax contingencies		
Income tax on Interest on Equity	29	28
PIS/Pasep and Cofins taxes (1)	1,448	1,402
Donations and legacy tax (ITCD)	53	51
Urban property tax (IPTU)	79	87
Finsocial tax	40	38
Income tax and social contr. tax on indemnity for employees' 'Anuênio' benefit (2)	282	275
Income tax withheld at source on inflationary profit	9	8
Contribution tax effective rate (3)	18	18
ICMS (VAT) credits on PP&E	39	38
Others (4)	92	118
	<u>2,089</u>	<u>2,063</u>
Others		
Regulatory	43	53
Third party	11	9
Customer relations	7	6
Court embargo	12	12
Others	23	24
	<u>96</u>	<u>104</u>
	<u>2,540</u>	<u>2,502</u>

- (1) This refers to escrow deposits in the action challenging the constitutionality of inclusion of ICMS value added tax within the taxable amount for calculation of PIS/Pasep and Cofins taxes. On February 13, 2020 Company's wholly-owned subsidiaries Cemig D and Cemig GT escrow deposits were released, totaling R\$1,382, comprising monetary update. The expectation is that the escrow deposits from the others wholly-owned subsidiaries will be received as their judicial claims reach the final judgement. See more details in Note 10 – PIS/Pasep and Cofins taxes credits over ICMS – Final court judgement.
- (2) See more details in Note 27 – Provisions under the section relating to the 'Anuênio indemnity'.
- (3) Escrow deposit in the legal action challenging an infringement claim relating to application of social contribution tax to amounts of cultural and artistic donations and sponsorship, expenses on punitive fines, and taxes with liability suspended.
- (4) Includes escrow deposits from legal actions related to INSS and PIS/Pasep and Cofins taxes

15. REIMBURSEMENT OF TARIFF SUBSIDIES

Subsidies on tariffs charged to users of distribution services – TUSD and EUST (Charges for Use of the Transmission System) are refunded to distributors through the funds from the Energy Development Account (CDE).

In 2019, the amount recognized as subsidies revenues was R\$1,097 (R\$953 in 2018 and R\$ 842 in 2017). Of such amounts, Cemig D has a receivable of R\$94, as of December 31, 2019 (R\$ 82 in 2018) and Cemig GT has a receivable of R\$3 (R\$9 in 2018) in current assets.

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16. CONCESSION FINANCIAL AND SECTOR ASSETS AND LIABILITIES

Concession financial assets	2019	2018
Energy distribution concession (16.1)	460	396
Gas distribution concession (16.1)	24	–
Indemnifiable receivable – Transmission (16.2)	1,281	1,296
Indemnifiable receivable – Generation (16.3)	816	816
Concession grant fee – Generation concessions (16.4)	2,468	2,409
	5,049	4,917
Concession sector assets	2019	2018
Amounts receivable from Parcel A (CVA) and Other Financial Components (16.5)	882	1,081
Total	5,931	5,998
Current assets	1,080	1,071
Non-current assets	4,851	4,927

The changes in concession financial assets related to infrastructure are as follows:

	<u>Transmission</u>	<u>Generation</u>	<u>Distribution</u>	<u>Gas</u>	<u>Total</u>
Balances at December 31, 2016	2,287	2,800	216	–	5,303
Additions	25	–	–	–	25
Transfers of indemnity – plants not renewed	–	1,082	–	–	1,082
Amounts received	(264)	(232)	–	–	(496)
Transfers between PP&E, Financial assets and Intangible assets	2	–	146	–	148
Monetary updating	224	317	–	–	541
Adjustment of expectation of cash flow from the Concession financial assets	54	–	9	–	63
Disposals	(2)	–	–	–	(2)
Adjustment of BRR of Transmission Assets	149	–	–	–	149
Adjustment on indemnities of plants not renewed (Ministerial Order 291) – including financial updating	–	271	–	–	271
Balances at December 31, 2017	2,475	4,238	371	–	7,084
Effects of first-time adoption of IFRS 15	(1,092)	–	–	–	(1,092)
Amounts received	(249)	(1,389)	–	–	(1,638)
Transfers from PP&E	–	–	27	–	27
Others transfers	–	(1)	(1)	–	(2)
Monetary updating	162	377	–	–	539
Disposals	–	–	(1)	–	(1)
Balances at December 31, 2018	1,296	3,225	396	–	4,917
Amounts received	(181)	(259)	–	–	(440)
Transfers from contract assets	44	–	48	–	92
Transfers from (to) intangible assets	–	–	(1)	24	23
Monetary updating	122	318	18	–	458
Disposals	–	–	(1)	–	(1)
Balances at December 31, 2019	1,281	3,284	460	24	5,049

16.1 Distribution - Financial assets

The energy and gas distribution concession contracts are within the scope of IFRIC 12. The financial assets under these contracts refer to the investments made in infrastructure that will be paid by grantor at the end of the concession period. These financial assets are measured at fair value through profit or loss.

[Table of Contents](#)**16.2 Transmission – Indemnifiable receivable**

On August 16, 2016, the regulator approved the amount of R\$ 892 as of November 2012, for the portion of the residual value of assets to be indemnified to the Company relating to the infrastructure not yet amortized nor depreciated nor yet refunded by the Grantor, related to the concession contracts renewed under Law 12,783/2013.

The amount of the receivable, updated to December 31, 2019, of R\$1,281 (R\$1,296 on December, 31, 2018), for which only passage of time is required for their payment, is classified as a financial asset, at amortized cost, in accordance with IFRS 9, as follows:

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- *Portion of remuneration and depreciation unpaid since the extensions of concessions*

An amount of R\$ 833 (R\$937 in 2018), corresponding to the portion of remuneration and depreciation unpaid from the date of the extension of the concessions until the tariff adjustment of 2017, which is inflation adjusted using the IPCA (Expanded National Customer Price) index and bears interest at the weighted average cost of capital of the transmission segment as defined by the regulator for the periodic tariff review, to be paid over a period of eight years through the RAP, since July of 2017.

- *Residual Value of transmission assets – injunction awarded to industrial customers*

On April 10, 2017, a preliminary injunction was granted to the Brazilian Large Free Customers' Association (*Associação Brasileira de Grandes Consumidores Livres*), the Brazilian Auto Glass Industry Technical Association (*Associação Técnica Brasileira das Indústrias Automáticas de Vidro*) and the Brazilian Ferro-alloys and Silicon Metal Producers' Association (*Associação Brasileira dos Produtores de Ferroligas e de Silício Metálico*) in their legal action against the regulator and the Federal Government requesting suspension of the effects on their tariffs of payment of a portion of the indemnity related to the concession contracts renewed under Law 12,783/2013.

The preliminary injunction was partial, with effects related to suspension of the inclusion in the customer tariffs paid by these associations of the portion of the indemnity corresponding to the capital cost remuneration, included since the date of extension of the concessions – amounting to R\$448 at December 31, 2019 (R\$359 at December 31, 2018), inflation-adjusted by the IPCA index.

In compliance with the court decision, the Regulator, presented a new calculation, excluding the amounts that refer to the capital cost remuneration. The Company believes that this is a provisional decision, and that its right to receive such amount is enforceable by law, so no adjustment to the amount recorded at December 31, 2019 is necessary.

16.3 Generation – Indemnity receivable

As from August 2013, with the extinction of the concession for various plants operated by Company under Concession Contract 007/1997, it has a right to receive an amount corresponding to the residual value of the infrastructure assets, as specified in the concession contract. These balances are recorded as financial assets at fair value through profit or loss, and totaled R\$ 816 on December 31, 2019 and 2018.

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Generation plant	Concession expiration date	Installed capacity (MW)	Net balance of assets based on historical cost	Net balance of assets based on fair value (replacement cost)
Lot D				
UHE Três Marias	July 2015	396	71	413
UHE Salto Grande	July 2015	102	11	39
UHE Itutinga	July 2015	52	3	7
UHE Camargos	July 2015	46	8	23
PCH Piau	July 2015	18.01	2	9
PCH Gafanhoto	July 2015	14	1	10
PCH Peti	July 2015	9.4	1	8
PCH Dona Rita	Sep. 2013	2.41	1	1
PCH Tronqueiras	July 2015	8.5	2	12
PCH Joasal	July 2015	8.4	1	8
PCH Martins	July 2015	7.7	2	4
PCH Cajuru	July 2015	7.2	4	4
PCH Paciência	July 2015	4.08	1	4
PCH Marmelos	July 2015	4	1	4
Others				
UHE Volta Grande	Feb. 2017	380	26	70
UHE Miranda (1)	Dec. 2016	408	27	23
UHE Jaguará (1)	Aug. 2013	424	40	174
UHE São Simão (1)	Jan. 2015	1,710	2	3
		3,601.70	204	816

- (1) Investments made after the Jaguará, São Simão and Miranda plants came into operation, in the amounts of R\$174, R\$3 and R\$23, respectively, are recorded as concession financial assets, and the determination of the final amounts to be paid to the Company is in a process of discussion with Aneel (the regulator). Company does not expect losses in realization of these amounts.

On August 31, 2018 the Company received indemnity, of R\$ 1,139 for the basic plan construction of the *São Simão* and *Miranda* plants. This amount had been adjusted by the Selic rate up to the date of its receipt.

As specified by the regulator (Aneel), the valuation reports that support the amounts to be received by the Company in relation to the residual value of the plants, previously operated by Company, that were included in Lot D and for the *Volta Grande* plant have been submitted to the regulator. The Company does not expect any losses in the realization of these amounts

In 2019, Public Hearing 003/2019 was opened to obtain inputs on improvement of the criteria and procedures for calculation of investments in assets returnable to the Grantor, not yet amortized or not depreciated, of generation concessions (whether extended or not), under Law 12,783/2013 and a Technical Note 096/2019 related to this matter was published on September 30, 2019. However the Normative Resolution has not yet been voted on by the Council of Aneel. The Company does not expect losses in realization of these amounts.

16.4 Concession grant fee – Generation concessions

The concession grant fee paid by the Company for a 30-year concession contracts, related to 18 hydroelectric plants, as an amount of R\$ 2,216. The amount of the concession fee was recognized as a financial asset measured at amortized cost, as the Company has an unconditional right to receive the amount paid, updated by the IPCA Index and remuneratory interest (the total amount of which is equal to the internal rate of return on the project), during the period of the concession.

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The changes in these concession financial assets are as follows:

SPE	Plants	2018	Monetary updating	Amounts received	2019
Cemig Geração Três Marias S.A.	Três Marias	1,370	171	(139)	1,402
Cemig Geração Salto Grande S.A.	Salto Grande	430	54	(44)	440
Cemig Geração Itutinga S.A.	Itutinga	161	23	(19)	165
Cemig Geração Camargos S.A.	Camargos	120	17	(13)	124
Cemig Geração Sul S.A.	Coronel Domiciano, Joasal, Marmelos, Paciência and Piau	157	24	(20)	161
Cemig Geração Leste S.A.	Dona Rita, Ervália, Neblina, Peti, Sinceridade and Tronqueiras	107	18	(15)	110
Cemig Geração Oeste S.A.	Cajurú, Gafanhoto and Martins	64	11	(9)	66
Total		2,409	318	(259)	2,468

SPE	Plants	2017	Monetary updating	Amounts received	2018
Cemig Geração Três Marias S.A.	Três Marias	1,330	174	(134)	1,370
Cemig Geração Salto Grande S.A.	Salto Grande	417	55	(42)	430
Cemig Geração Itutinga S.A.	Itutinga	156	23	(18)	161
Cemig Geração Camargos S.A.	Camargos	116	17	(13)	120
Cemig Geração Sul S.A.	Coronel Domiciano, Joasal, Marmelos, Paciência and Piau	152	24	(19)	157
Cemig Geração Leste S.A.	Dona Rita, Ervália, Neblina, Peti, Sinceridade and Tronqueiras	103	18	(14)	107
Cemig Geração Oeste S.A.	Cajurú, Gafanhoto and Martins	63	11	(10)	64
Total		2,337	322	(250)	2,409

SPE	Plants	2016	Monetary updating	Amounts received	2017
Cemig Geração Três Marias S.A.	Três Marias	1,283	172	(125)	1,330
Cemig Geração Salto Grande S.A.	Salto Grande	403	54	(40)	417
Cemig Geração Itutinga S.A.	Itutinga	150	23	(17)	156
Cemig Geração Camargos S.A.	Camargos	112	17	(13)	116
Cemig Geração Sul S.A.	Coronel Domiciano, Joasal, Marmelos, Paciência, Piau Dona Rita, Ervália, Neblina, Peti, Sinceridade,	147	23	(18)	152
Cemig Geração Leste S.A.	Tronqueiras	99	17	(13)	103
Cemig Geração Oeste S.A.	Cajurú, Gafanhoto, Martins	60	11	(8)	63
Total		2,254	317	(234)	2,337

Of the energy produced by these plants, 70% is sold in the Regulated Market (ACR) and 30% in the Free Market (ACL).

Sector assets and liabilities

16.5 Account for compensation of variation of parcel A items (CVA) and Other financial components

Cemig D concession contract guarantees that, in the event of termination of the concession contract, for any reason, the remaining balances (assets and liabilities) of any shortfall in payment or reimbursement through the tariff must also be paid by the grantor. The balances on (i) the CVA (*Compensation for Variation of Parcel A items*) Account, (ii) the account for Neutrality of Sector Charges, and (iii) *Other financial components* in the tariff calculation, refer to the positive and negative differences between the estimate of the Company's non-controllable costs and the costs actually incurred. The variations are subject to adjustment using the Selic rate and considered in the subsequent tariff adjustments.

The balance of these sector financial assets and liabilities, which are presented at net value, in assets or liabilities, in accordance with the tariff adjustments that have been authorized, are as follows:

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	2019			2018		
	Amounts ratified by Aneel in the last tariff adjustment	Amounts to be ratified by Aneel in the next tariff adjustments	Total	Amounts ratified by Aneel in the last tariff adjustment	Amounts to be ratified by Aneel in the next tariff adjustments	Total
Financial position						
Assets	1,286	2,144	3,430	1,184	2,545	3,729
Current assets	1,286	1,269	2,555	1,184	1,505	2,689
Non-current assets	-	875	875	-	1,040	1,040
Liabilities	(882)	(1,666)	(2,548)	(1,140)	(1,509)	(2,649)
Current liabilities	(882)	(1,033)	(1,915)	(1,140)	(902)	(2,042)
Non-current liabilities	-	(633)	(633)	-	(607)	(607)
Total current, net	404	236	640	44	603	647
Total non-current, net	-	242	242	-	433	433
Total, net	404	478	882	44	1,036	1,080

	2019			2018		
	Amounts ratified by Aneel in the last tariff adjustment	Amounts to be ratified by Aneel in the next tariff adjustments	Total	Amounts ratified by Aneel in the last tariff adjustment	Amounts to be ratified by Aneel in the next tariff adjustments	Total
Financial components						
Items of 'Parcel A'						
Energy Development Account (CDE) quota	119	29	148	1	220	221
Tariff for use of transmission facilities of grid participants	(18)	114	96	24	(6)	18
Tariff for transport of Itaipu supply	9	16	25	2	16	18
Alternative power source program (Proinfa)	11	(6)	5	3	5	8
ESS/EER System Service/Energy Charges	(161)	(136)	(297)	(246)	(287)	(533)
Energy bought for resale	661	632	1,293	667	1,402	2,069
Other financial components						
Over contracting of supply (1)	(84)	216	132	(204)	(13)	(217)
Neutrality of Parcel A	(30)	(12)	(42)	53	(15)	38
Other financial items	(71)	(206)	(277)	(236)	(212)	(448)
Tariff Flag balances (2)	-	(103)	(103)	-	(11)	(11)
Excess demand and reactive power	(32)	(66)	(98)	(21)	(62)	(83)
TOTAL	404	478	882	43	1,037	1,080

- (1) The wholly-owned subsidiary Cemig D was over contracted in 2017 and 2018 and the gain arising from the sale of the excess of energy in the spot market was provisionally passed through to customers by Aneel in the tariff adjustments of 2018 and 2019, including the portion in excess of the limit of 105% of the regulatory load – thus reducing the tariff that was determined. To establish whether this is a voluntary over contracting, the Company considers that the portion above the regulatory limit will be recovered in the subsequent tariff adjustment, when Aneel approves them. The Company has no expectation of loss in relation to realization of these amounts. The Company recognizes this right, in the amount of R\$ 216,852, as 'Other financial components', to be approved by Aneel in the next forthcoming tariff adjustments.
- (2) Billing arising from the 'Flag' Tariff System (see below) not yet approved by the regulator (Aneel).

Changes in balances of these sector assets and liabilities:

Balance at December 31, 2016	(407)
Additions	811
Amortization	177
Payments from the Flag Tariff Centralizing Account	(586)
Updating – Selic rate (Note 31)	(41)
Balance at December 31, 2017	(46)
Additions	1,638
Amortization	335
Others – R&D Reimbursement	(115)
Payments from the Flag Tariff Centralizing Account	(794)
Updating – Selic rate (Note 31)	62
Balance at December 31, 2018	1,080
Additions	724
Amortization	(666)
Payments from the Flag Tariff Centralizing Account	(361)
Updating – Selic rate (Note 31)	105
Balance at December 31, 2019	882

[Table of Contents](#)Payments from the Flag Tariff Centralizing Account

The 'Flag Account' (*Conta Centralizadora de Recursos de Bandeiras Tarifárias* – CCRBT or '*Conta Bandeira*') manages the funds that are collected from captive customers of distribution concession and permission holders operating in the national grid, and are paid, on behalf of the CDE, directly to the Flag Account. The resulting funds are passed through by the Power Trading Chamber (CCEE) to distribution agents, based on the difference between the realized amounts of costs of thermal generation and the exposure to short term market prices, and the amount covered by the tariff in force.

Pass-through of funds from the Flag Account in 2019 totaled R\$361 (R\$794 in 2018 and R\$586 in 2017) and were recognized as a partial realization of the CVA receivable previously constituted.

17. CONCESSION CONTRACT ASSETS

Under IFRS 15 – *Revenue from contracts with customers*, the infrastructure construction revenue for which the right to consideration depends on satisfaction of performance obligations related to the completion of its construction, or its future operation and maintenance are classified as contract assets as follows:

	<u>2019</u>	<u>2018</u>
Distribution – Infrastructure assets under construction	740	518
Gas – Infrastructure assets under construction	68	82
Transmission – Assets reincorporated into the assets remuneration base	348	492
Transmission – Assets remunerated by tariff	849	637
	<u>2,005</u>	<u>1,729</u>
Current	<u>172</u>	<u>131</u>
Non-current	<u>1,833</u>	<u>1,598</u>

Changes in concession contract assets are as follows:

	<u>Transmission</u>	<u>Distribution</u>	<u>Gas</u>	<u>Total</u>
Balances at December 31, 2017	–	–	–	–
Effects of adoption of IFRS 15	1,092	532	90	1,714
Additions	96	727	70	893
Inflation adjustment	88	–	–	88
Adjustment to expected contract cash flow from the concession	13	–	–	13
Amounts received	(161)	–	–	(161)
Transfers to financial assets	–	(27)	–	(27)
Transfers to intangible assets	–	(672)	(78)	(750)
Transfers from PP&E	1	–	–	1
Impairment	–	(42)	–	(42)
Balances at December 31, 2018	<u>1,129</u>	<u>518</u>	<u>82</u>	<u>1,729</u>
Additions	221	903	43	1,167
Inflation adjustment	34	–	–	34
Adjustment to expected contract cash flow from the concession	15	–	–	15
Amounts received	(154)	–	–	(154)
Disposals	(4)	–	(2)	(6)
Transfers to financial assets	(44)	(48)	–	(92)
Transfers to intangible assets	–	(630)	(55)	(685)
Impairment	–	(3)	–	(3)
Balances at December 31, 2019	<u>1,197</u>	<u>740</u>	<u>68</u>	<u>2,005</u>

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The amount of additions in the period ended December 31, 2019 includes R\$21 of borrowing costs, as presented in Note 24.

On December 31, 2019 the Company recorded an additional impairment of certain assets in progress, totaling R\$29 (R\$42 on December 31, 2018) and a reversal of impairment amounting to R\$26 recorded in prior years. The Company has not identified any evidence of impairment of its other contract assets with finite useful life. The Company doesn't have any contract asset with indefinite useful life.

Energy and gas distribution activities

In accordance with IFRS 15 – *Revenue from contracts with customers*, the concession infrastructure assets still under construction are recognized initially as contract assets, considering the right of the subsidiaries Cemig D and Gasmig to charge for the services provided to customers or receive an indemnity at the end of the concession for assets not yet amortized. New assets are recorded initially as contract assets, measured at amortized cost, including capitalized borrowing costs. When the asset start operations, the construction performance obligation is concluded, and the assets are split into financial assets and intangible assets.

The transmission activity

The transmission concession infrastructure is classified as contract assets, considering the performance obligations during the period of the concession, represented by construction, operation, maintenance and availability of the transmission lines.

The above mentioned assets are as follows:

Assets reincorporated into the assets remuneration base

The remaining balance of the indemnity for transmission, due to acceptance of the terms of Law 12,783/13, of R\$ 348, at December 31, 2019 (R\$ 492 at December 31, 2018) was incorporated into the Assets Remuneration Base and will be received for the remaining period of their useful life through the Annual Permitted Revenue (RAP), whilst the services of operation and maintenance are rendered.

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Transmission – Assets remunerated by tariff - For new assets related to improvements and upgrades of facilities constructed by transmission concession holders, the regulator (ANEEL) calculates an additional portion of Permitted Annual Revenue (RAP) from the date that the new facilities enter commercial operation.

In the periods between tariff reviews, the revenues associated with the improvements and upgrades of facilities are provisional. They are then ultimately determined in the review immediately subsequent to the start of commercial operation of the facilities; this review then has effect starting on the date when commercial operations begin. At December 31, 2019, the receivable amounts to R\$849 (R\$637 on December 31, 2018).

The construction of infrastructure grants to the operator a right to receive consideration due to performance obligations represented by the construction, which is not unconditional until the satisfaction of performance obligations related to the operation and maintenance of the transmission lines. The revenue and costs related to construction of these assets are recognized in the statement of income as expenditures incurred.

18. INVESTMENTS

	Control	2019	2018
Hidrelétrica Cachoeirão	Jointly-controlled	54	49
Guanhães Energia (1)	Jointly-controlled	131	–
Hidrelétrica Pipoca	Jointly-controlled	31	31
Retiro Baixo	Jointly-controlled	180	171
Aliança Norte (Belo Monte plant)	Jointly-controlled	671	664
Madeira Energia (Santo Antônio plant)	Affiliated	167	270
FIP Melbourne (Santo Antônio plant)	Affiliated	385	470
Lightger (1)	Jointly-controlled	128	–
Baguari Energia	Jointly-controlled	157	162
Aliança Geração	Jointly-controlled	1,192	1,217
Amazônia Energia (Belo Monte plant)	Jointly-controlled	1,028	1,013
Taesa	Jointly-controlled	1,213	1,143
Ativas Data Center	Affiliated	16	16
UFV Janaúba Geração de Energia Elétrica Distribuída	Affiliated	10	9
Companhia de Transmissão Centroeste de Minas	Jointly-controlled	24	20
Axxiom Soluções Tecnológicas (1)	Jointly-controlled	13	–
Total of investments		5,400	5,235
Itaocara – equity deficit (2)	Jointly-controlled	(22)	–
Total		5,378	5,235

- (1) With the cessation of control of Light, the remaining equity interest in these investees was recognized as an investment in affiliate or jointly-controlled entities, and measured by the equity method, in accordance with IFRS 10. For more details please see Notes 1 and 34.
- (2) On December 31, 2019, the investee has negative net equity. Thus, after reducing the accounting value of its interest to zero, the Company recognized the provision for losses to the extent of its obligations, in the amount of R\$22, resulting from contractual obligations assumed with the jointly-controlled entity and the other shareholders.

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The Company's investees that are not consolidated are jointly-controlled entities, with the exception of the interests in the affiliates 'Santo Antônio' power plant, UFV Janaúba Geração de Energia Elétrica Distribuída and Ativas Data Center. As per Note 1, on July 17, 2019 the Company ceased to control Light, which has been classified as an investment held for sale, in Current assets, as per Note 34.

a) Right to exploitation of the regulated activity

In the process of allocating the purchase price for of the acquisition of the jointly-controlled subsidiaries and affiliates, a valuation was made for the intangible assets relating to the right to operate the infrastructure. These assets are presented together with the acquisition cost of the investments in the previous table. These assets will be amortized over the remaining period of the concessions on a straight-line basis.

Changes in these assets are as follows:

Investees	2016	Amortization	Written off	2017	Additions	Amortization	Written off	2018	Amortization	2019
Taesa	288	(13)	(86)	189	-	(9)	-	180	(9)	171
Retiro Baixo	29	(1)	-	28	6	(2)	-	32	(1)	31
Central Eólica Praias de Parajuru (1)	19	(1)	(1)	17	-	(2)	(15)	-	-	-
Central Eólica Volta do Rio (1)	14	(1)	(2)	11	-	(1)	(10)	-	-	-
Central Eólica Praias de Morgado (1)	27	(2)	(1)	24	-	(2)	(22)	-	-	-
Madeira Energia (Santo Antônio plant)	157	(6)	-	151	-	(6)	(127)	18	(1)	17
Lightger	-	-	-	-	84	-	-	84	(3)	81
Light	209	(23)	-	186	-	(20)	(166)	-	-	-
Aliança Geração	428	(25)	-	403	-	(25)	-	378	(25)	353
Aliança Norte (Belo Monte plant)	57	(2)	-	55	-	(2)	-	53	(2)	51
Lepsa	49	(6)	(43)	-	-	-	-	-	-	-
RME	48	(4)	-	44	20	(5)	(59)	-	-	-
Total	1,325	(84)	(133)	1,108	110	(74)	(399)	745	(41)	704

(1) As from 2018 the investees *Central Eólica Praias de Parajuru* and *Central Eólica Volta do Rio* are being consolidated.

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b) This table shows the changes in investments in subsidiaries, jointly-controlled entities and affiliates:

<u>Investee</u>	<u>2018</u>	<u>Gain (loss) by equity method (Income statement)</u>	<u>Remeasurement of equity interest held in subsidiaries after loss of control</u>	<u>Dividends</u>	<u>Additions / acquisitions</u>	<u>Others</u>	<u>2019</u>
Companhia de Transmissão Centroeste de Minas	20	4	–	–	–	–	24
Axxiom Soluções Tecnológicas	–	–	4	–	9	–	13
Lightger	–	–	128	–	–	–	128
Guanhães Energia	–	–	131	–	–	–	131
Usina Hidrelétrica Itaocara S.A.	–	(50)	5	–	23	22	–
Hidrelétrica Pipoca	31	4	–	(4)	–	–	31
Madeira Energia (Santo Antônio plant)	270	(103)	–	–	–	–	167
FIP Melbourne (Santo Antônio plant)	470	(85)	–	–	–	–	385
Hidrelétrica Cachoeirão	49	11	–	(6)	–	–	54
Baguari Energia	162	22	–	(27)	–	–	157
Amazônia Energia (Belo Monte plant)	1,013	15	–	–	–	–	1,028
Aliança Norte (Belo Monte plant)	664	6	–	–	1	–	671
Ativas Data Center	16	–	–	–	–	–	16
Taesá	1,143	210	–	(141)	–	1	1,213
Aliança Geração	1,217	78	–	(103)	–	–	1,192
Retiro Baixo	171	12	–	(3)	–	–	180
UFV Janaúba Geração de Energia Elétrica Distribuída	9	1	–	–	–	–	10
Total of investments	5,235	125	268	(284)	33	23	5,400
Itaocara – equity deficit	–	–	–	–	–	(22)	(22)
Total	5,235	125	268	(284)	33	1	5,378

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<u>Investee</u>	<u>2017</u>	<u>Gain (loss) by equity method (Income statement)</u>	<u>Remeasurement of previously held equity interest in subsidiaries acquired (step- acquisition)</u>	<u>Dividends</u>	<u>Additions / acquisitions</u>	<u>Disposals</u>	<u>Reclassification to held for sale</u>	<u>Others</u>	<u>2018</u>
Companhia de Transmissão									
Centroeste de Minas	21	5	–	(6)	–	–	–	–	20
Light (1)	1,534	19	(231)	(8)	–	–	(1,255)	(59)	–
RME (1)	383	3	(52)	(1)	104	–	(326)	(111)	–
Axxiom Soluções Tecnológicas (1)	12	(7)	–	–	–	–	(4)	(1)	–
Lightger (1)	41	3	84	(2)	–	–	(126)	–	–
Guanhães Energia (1)	25	30	–	–	57	–	(112)	–	–
Usina Hidrelétrica Itaocara S.A. (1)	4	(4)	–	–	5	–	(5)	–	–
Hidrelétrica Pipoca	26	7	–	(2)	–	–	–	–	31
Madeira Energia (Santo Antônio plant) (2) (4)	535	(163)	–	–	25	–	–	(127)	270
FIP Melbourne (Santo Antônio plant) (4)	582	(139)	–	–	27	–	–	–	470
Hidrelétrica Cachoeirão	58	10	–	(19)	–	–	–	–	49
Baguari Energia	148	28	–	(15)	–	–	–	1	162
Central Eólica Praias de Parajuru (3)	60	(6)	21	–	74	(3)	–	(146)	–
Central Eólica Volta do Rio (3)	68	(16)	59	–	92	(22)	–	(181)	–
Central Eólica Praias de Morgado (3)	51	(15)	–	–	–	(12)	–	(24)	–
Amazônia Energia (Belo Monte plant)	867	80	–	–	69	–	–	(3)	1,013
Aliança Norte (Belo Monte plant)	577	44	–	–	43	–	–	–	664
Ativas Data Center	17	(1)	–	–	–	–	–	–	16
Taesá (1)	1,101	225	–	(208)	–	–	–	25	1,143
Renova	282	(282)	–	–	–	–	–	–	–
Aliança Geração	1,242	65	–	(90)	–	–	–	–	1,217
Retiro Baixo	158	10	–	(3)	6	–	–	–	171
UFV Janaúba Geração de Energia Elétrica Distribuída	–	–	–	–	9	–	–	–	9
Total of investments	7,792	(104)	(119)	(354)	511	(37)	(1,828)	(626)	5,235

- (1) Others arises from first adoption of the new accounting standards on January 1, 2018, recognized by the investees directly in equity without inclusion in the Income statement. The column *Reclassification to held for sale* includes the effect of the reclassification of the investment in Light, Axxion, Lightger, Guanhães and Itaocara to *Non-current assets held for sale*, in accordance with IFRS 5.
- (2) Due to the result of analysis of impairment indication, due to the recurring losses incurred by Madeira, a provision was recognized for loss of part of the residual added value of the investment in Madeira, to limit its balance to the minimum value of the excess of future economic benefits arising from use of the net fixed asset on December, 31, 2018, using the nominal WACC of 9.59% as the discount rate. The provision is presented in the statement of income for the year ended December 31, 2018 as *Impairment loss on Investments*.
- (3) Arising from the business combination between the Company and Energimp. The rights to exploitation of the regulated activity are classified in the consolidated statement of financial position under Intangible.
- (4) In October 2018 the Company subscribed capital increases in Mesa and FIP Melbourne, of R\$25 and R\$26, respectively. These funds were entirely applied in capital contributions to Santo Antônio Energia S.A. ('Saesa' or 'Santo Antônio Hydroelectric Plant').

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	2016	Gain (loss) by equity method (Income statement)	Gain (loss) by equity method (Other comprehensive income)	Dividends	Additions / acquisitions	Disposals	Others	2017
Companhia Transleste de Transmissão	22	5	–	(7)	–	(20)	–	–
Companhia Transudeste de Transmissão	21	3	–	(12)	–	(12)	–	–
Companhia Transirapé de Transmissão	24	4	–	(6)	–	(22)	–	–
Companhia de Transmissão Centroeste de Minas	21	5	–	(5)	–	–	–	21
Light (1)	1,070	35	(3)	–	–	–	432	1,534
Axxiom Soluções Tecnológicas	19	(7)	–	–	–	–	–	12
Lepsa (1)	344	–	(2)	–	–	–	(342)	–
RME	339	7	(2)	–	38	–	1	383
Hidrelétrica Cachoeirão	50	10	–	(3)	–	–	1	58
Guanhães Energia (2)	–	(13)	–	–	97	–	(59)	25
Hidrelétrica Pipoca	32	2	–	(8)	–	–	–	26
Madeira Energia (Santo Antônio plant)	644	(109)	–	–	–	–	–	535
FIP Melbourne (Santo Antônio plant)	677	(95)	–	–	–	–	–	582
Lightger	42	2	–	(3)	–	–	–	41
Baguari Energia	162	17	–	(30)	–	–	(1)	148
Central Eólica Praias de Parajuru	63	(1)	–	–	–	–	(2)	60
Central Eólica Volta do Rio	81	(12)	–	–	–	–	(1)	68
Central Eólica Praias de Morgado	60	(8)	–	–	–	–	(1)	51
Amazônia Energia (Belo Monte plant)	781	1	–	–	85	–	–	867
Ativas Data Center	18	(2)	–	–	–	–	1	17
Taesa (3)	1,583	216	–	(183)	–	(515)	–	1,101
Renova	689	(390)	(34)	–	18	–	(1)	282
Usina Hidrelétrica Itaocara S.A.	3	(2)	–	–	3	–	–	4
Aliança Geração	1,319	72	–	(149)	–	–	–	1,242
Aliança Norte (Belo Monte plant)	527	(2)	–	–	51	–	1	577
Retiro Baixo	162	10	–	(14)	–	–	–	158
Total of investments	8,753	(252)	(41)	(420)	292	(569)	29	7,792
Guanhães Energia – equity deficit (2)	(59)	–	–	–	–	–	59	–
Total	8,694	(252)	(41)	(420)	292	(569)	88	7,792

- (1) On November 30, 2017 the Company acquired all Lepsa's shares, and therefore as from that date on it consolidates that company in its financial statements. Lepsa's sole asset is its holdings in the share capital of Light. Hence, the Company no longer presents the investment that it previously held at Lepsa in its consolidated statement, presenting only the interest in Light.
- (2) Equity deficit reversed through injection of capital.
- (3) On November 2017 the Company sold part of its equity interest in the jointly-controlled entity Taesa. The Company sold 34 million Units of Taesa at the price of R\$ 21.10 per Unit. With the sale, the Company's holding in the share capital of Taesa was reduced from 31.54% to 21.68%. The shares that were sold are not part of the controlling shareholding block of Taesa, and as a result Cemig continues to be in the controlling block of Taesa.

Changes in dividends receivable are as follows:

	2019	2018
Opening balances	119	77
Dividends proposed by investees	285	354
Dividends proposed by investee classified as held for sale	73	–
Withholding income tax on Interest on equity	(8)	(7)
Amounts received	(283)	(304)
Ending balances	186	120

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c) Main information on the subsidiaries, jointly-controlled entities and affiliates, not adjusted for the percentage represented by the Company's ownership interest:

Investee	2019			2018			2017			
	Number of shares	Cemig interest %	Share capital	Equity	Cemig interest %	Share capital	Equity	Cemig interest %	Share capital	Equity
Cemig Geração e Transmissão	2,896,785,358	100.00	2,600	5,136	100.00	2,600	4,980	100.00	1,838	4,794
Madeira Energia (Santo Antônio plant)	12,034,025,147	15.51	10,620	3,705	15.51	10,620	4,657	18.13	9,547	5,327
Hidrelétrica Cachoeirão	35,000,000	49.00	35	110	49.00	35	100	49.00	35	118
Guanhães Energia	548,626,000	49.00	549	268	49.00	396	228	49.00	331	51
Hidrelétrica Pipoca	41,360,000	49.00	41	63	49.00	41	63	49.00	41	53
Baguari Energia (1)	26,157,300,278	69.39	187	227	69.39	187	234	69.39	187	214
Central Eólica Praias de Parajuru	71,834,843	100.00	72	89	100.00	72	80	49.00	71	89
Central Eólica Volta do Rio	138,867,440	100.00	139	58	100.00	139	84	49.00	117	116
Central Eólica Praias de Morgado	–	–	–	–	–	–	–	49.00	53	54
Lightger	79,078,937	49.00	79	95	49.00	79	86	49.00	79	83
Aliança Norte (Belo Monte plant)	41,893,675,837	49.00	1,208	1,266	49.00	1,206	1,247	49.00	1,119	1,066
Amazônia Energia (Belo Monte plant) (1)	1,322,597,723	74.50	1,323	1,380	74.50	1,322	1,359	74.50	1,230	1,163
Aliança Geração	1,291,582	45.00	1,291	1,858	45.00	1,291	1,858	45.00	1,291	1,858
Retiro Baixo	225,350,000	49.90	225	300	49.90	223	278	49.90	223	258
Renova (1) (2)	41,719,724	36.23	2,961	(1,091)	36.23	2,919	(76)	36.23	2,919	780
Usina Hidrelétrica Itaocara S.A. (6)	69,282,514	49.00	69	(45)	49.00	22	10	49.00	11	8
Cemig Ger.Três Marias S.A.	1,291,423,369	100.00	1,291	1,408	100.00	1,291	1,396	100.00	1,291	1,392
Cemig Ger.Salto Grande S.A.	405,267,607	100.00	405	446	100.00	405	440	100.00	405	440
Cemig Ger. Itutinga S.A.	151,309,332	100.00	151	184	100.00	151	179	100.00	151	171
Cemig Geração Camargos S.A.	113,499,102	100.00	113	136	100.00	113	132	100.00	113	130
Cemig Geração Sul S.A.	148,146,505	100.00	148	179	100.00	148	176	100.00	148	168
Cemig Geração Leste S.A.	100,568,929	100.00	101	127	100.00	101	121	100.00	101	116
Cemig Geração Oeste S.A.	60,595,484	100.00	61	73	100.00	61	70	100.00	61	69
Rosal Energia S.A.	46,944,467	100.00	47	128	100.00	47	125	100.00	47	107
Sá Carvalho S.A.	361,200,000	100.00	37	124	100.00	37	94	100.00	37	103
Horizontes Energia S.A.	39,257,563	100.00	39	57	100.00	39	55	100.00	39	53
Cemig PCH S.A.	45,952,000	100.00	46	98	100.00	46	93	100.00	36	97
Cemig Geração Poço Fundo S.A. (3)	1,402,000	100.00	1	4	100.00	17	18	100.00	17	18
Empresa de Serviços de Comercialização de Energia Elétrica S.A.	486,000	100.00	–	28	100.00	–	27	100.00	–	18
Cemig Comercializadora de Energia Incentivada S.A.	1,000,000	100.00	1	3	100.00	1	3	100.00	1	2
Cemig Trading S.A.	1,000,000	100.00	1	31	100.00	1	28	100.00	1	29
Cemig Distribuição (4)	2,359,113,452	100.00	5,372	4,708	100.00	2,772	4,642	100.00	2,772	3,737
Light	303,934,060	22.58	4,051	5,983	26.06	2,226	3,389	26.06	2,226	3,462
TAESA	1,033,496,721	21.68	3,042	4,927	21.68	3,042	4,572	21.68	3,042	4,347
Cemig Telecom	–	–	–	–	–	–	–	100.00	292	247
Ativas Data Center	456,540,718	19.60	182	82	19.60	182	84	–	–	–
Gasmig	409,255,483	99.57	665	988	99.57	665	1,001	99.57	665	1,224
Cemig Geração Distribuída	174,281	100.00	–	11	100.00	–	3	100.00	–	5
LEPSA (5)	–	–	–	–	100.00	406	447	100.00	406	456
RME (5)	–	–	–	–	100.00	403	423	75.00	403	453
Efficientia	15,121,845	100.00	15	17	100.00	15	18	100.00	6	7
Companhia de Transmissão Centroeste de Minas	28,000,000	51.00	28	47	51.00	28	39	51.00	28	40
Axxiom Soluções Tecnológicas	58,365,000	49.00	58	27	49.00	47	17	49.00	47	24

- (1) Jointly-control under a Shareholders' Agreement.
- (2) In view of Renova's negative net equity, the Company reduced to zero the carrying value of its equity interests in this investee, at December 31, 2018.
- (3) The Extraordinary General Meeting of Shareholders held on August 29, 2019 approved changes to the bylaws of the subsidiary, changing its name and its corporate objects. With the alteration, the name of Usina Termelétrica Barreiro S.A. was changed to Cemig Geração Poço Fundo S.A.
- (4) An Extraordinary General Shareholders' Meeting held on August 7, 2019 approved increase in the share capital of Cemig D by R\$2,600, through subscription of funds from Advances for Future Capital Increase (AFACs), paid in by the Company, without issuance of new shares.
- (5) These investees were merged on April 24, 2019.
- (6) On December 31, 2019, the investee has equity deficit. Thus, after reducing the accounting value of its interest to zero, the Company recognized the provision for losses to the extent of its obligations, in the amount of R\$22, resulting from contractual obligations assumed with the jointly-controlled entity and the other shareholders.

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The Company has indirect equity interests in the following investees:

	2019		2018	
	Direct interest %	Indirect interest %	Direct interest %	Indirect interest %
Amazônia	74.50%	5.76%	74.50%	12.46%
Renova (1)	36.23%	–	36.23%	8.39%
LightGer	49.00%	11.52%	49.00%	24.92%
Guanhães	49.00%	11.52%	49.00%	24.92%
Axxion	49.00%	11.52%	49.00%	24.92%
UHE Itaocara	49.00%	11.52%	49.00%	24.92%
Light	22.58%	–	26.06%	22.80%

(1) On October 15, 2019, Light sold the totality of its shares in the jointly-controlled entity Renova to *CG I Fundo de Investimento em Participações*. Further details as follows.

The main balances for the affiliated and jointly-controlled entities, at December 31, 2019, 2018 and 2017, are as follows:

2019	Centroeste	Ativas Data Center	Taesa	Axxiom Soluções Tecnológicas	Hidrelétrica Cachoeirão	Hidrelétrica Pipoca	Retiro Baixo	Aliança Norte
Assets								
Current	29	33	3,568	34	35	11	68	1
Cash and cash equivalents	27	8	83	7	30	2	56	1
Non-current	35	107	7,662	26	82	89	343	1,266
Total assets	64	140	11,230	60	117	100	411	1,267
Liabilities								
Current	6	24	996	28	7	11	34	1
Loans and financings – Current	3	13	10	8	–	7	14	–
Non-current	11	34	5,307	5	–	26	77	–
Loans and financings – Non-Current	8	31	4,159	–	–	26	68	–
Equity	47	82	4,927	27	110	63	300	1,266
Total liabilities	64	140	11,230	60	117	100	411	1,267
Statement of income								
Net sales revenue	17	83	1,795	53	38	30	70	–
Cost of sales	(5)	(75)	(574)	(54)	(17)	(15)	(30)	–
Depreciation and amortization	(1)	(18)	(5)	(2)	(3)	(3)	(9)	–
Gross profit (loss)	12	8	1,221	(1)	21	15	40	–
General and administrative expenses	(2)	(7)	(122)	(11)	–	–	(4)	(2)
Finance income	2	–	97	–	1	–	3	–
Finance expenses	(2)	(3)	(356)	(2)	–	(3)	(8)	–
Operational profit (loss)	10	(2)	840	(14)	22	12	31	(2)
Share of (loss) profit, net, of subsidiaries and joint ventures	–	–	306	–	–	–	–	19
Income tax and social contribution tax	(1)	–	(144)	5	(2)	(1)	(3)	–
Net income (loss) for the year	9	(2)	1,002	(9)	20	11	28	17
Comprehensive income (loss) for the year	9	(2)	1,002	(9)	20	11	28	17

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	Amazônia Energia	Madeira Energia	Baguari Energia	Renova	Lightger	Guanhães Energia	Aliança Geração
2019							
Assets							
Current	–	750	60	21	87	11	935
Cash and cash equivalents	–	78	9	5	69	5	435
Non-current	1,380	21,680	187	2,309	124	419	2,409
Total assets	1,380	22,430	247	2,330	211	430	3,344
Liabilities							
Current	1	1,177	16	2,928	53	27	610
Loans and financings – Current	–	73	–	1,507	9	12	161
Non-current	–	17,548	4	493	63	136	876
Loans and financings – Non-Current	–	10,925	–	55	63	127	276
Equity	1,379	3,705	227	(1,091)	95	267	1,858
Total liabilities	1,380	22,430	247	2,330	211	430	3,344
Statement of income							
Net sales revenue	–	3,198	68	98	50	51	1,103
Cost of sales	–	(2,508)	(23)	(66)	(27)	(38)	(681)
Depreciation and amortization	–	(869)	(9)	(9)	(11)	(14)	(151)
Gross profit (loss)	–	690	45	32	23	13	422
General and administrative expenses	–	(99)	–	(660)	(2)	(5)	(31)
Finance income	–	131	4	3	4	1	39
Finance expenses	–	(1,683)	(1)	(448)	(7)	(9)	(90)
Operational profit (loss)	–	(961)	48	(1,073)	18	–	340
Share of (loss) profit, net, of subsidiaries and joint ventures	20	–	–	66	–	–	–
Income tax and social contribution tax	–	10	(16)	(7)	(3)	(2)	(111)
Net income (loss) for the year	20	(951)	32	(1,014)	15	(2)	229
Comprehensive income (loss) for the year	20	(951)	32	(1,014)	15	(2)	229

	Centroeste	Ativas Data Center	Taesá	Hidrelétrica Cachoeirão	Hidrelétrica Pipoca	Retiro Baixo	Aliança Norte
2018							
Assets							
Current	19	17	1,927	23	12	47	–
Cash and cash equivalents	–	1	21	18	4	36	–
Non-current	36	106	6,689	85	95	354	1,247
Total assets	55	123	8,616	108	107	401	1,247
Liabilities							
Current	6	23	647	8	11	32	–
Loans and financings – Current	3	9	11	–	7	14	–
Non-current	10	16	3,397	–	33	91	–
Loans and financings – Non-Current	10	13	410	–	33	82	–
Equity	39	84	4,572	100	63	278	1,247
Total liabilities	55	123	8,616	108	107	401	1,247
Statement of income							
Net sales revenue	14	70	1,635	50	29	71	–
Cost of sales	(1)	(72)	(362)	(29)	(12)	(29)	–
Depreciation and amortization	–	–	–	(3)	(3)	(10)	–
Gross profit (loss)	13	(2)	1,273	21	17	42	–
General and administrative expenses	–	(16)	(144)	–	–	(4)	(3)
Finance income	1	–	63	1	–	2	1
Finance expenses	(3)	(3)	(274)	–	(4)	(11)	(1)
Operational profit (loss)	11	(21)	918	22	13	29	(3)
Share of (loss) profit, net, of subsidiaries and joint ventures	–	–	301	–	–	–	97
Income tax and social contribution tax	(1)	–	(147)	(2)	(1)	(3)	–
Net income (loss) for the year	10	(21)	1,072	20	12	26	94
Comprehensive income (loss) for the year	10	(21)	1,072	20	12	26	94

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	Amazônia Energia	Madeira Energia	Baguari Energia	Renova	Aliança Geração
2018					
Assets					
Current	–	618	44	1,738	791
Cash and cash equivalents	–	69	8	15	381
Non-current	1,360	22,453	201	891	2,440
Total assets	1,360	23,071	245	2,629	3,231
Liabilities					
Current	1	1,281	7	2,195	564
Loans and financings – Current	–	53	–	349	168
Non-current	–	17,134	5	510	809
Loans and financings – Non-Current	–	10,220	–	64	348
Equity	1,359	4,656	233	(76)	1,858
Total liabilities	1,360	23,071	245	2,629	3,231
Statement of income					
Net sales revenue	–	3,006	74	710	984
Cost of sales	–	(2,689)	(31)	(834)	(599)
Depreciation and amortization	–	(887)	(9)	(10)	(153)
Gross profit (loss)	–	317	43	(124)	385
General and administrative expenses	(1)	(195)	–	(458)	(31)
Finance income	2	128	3	3	33
Finance expenses	(2)	(1,881)	(1)	(320)	(89)
Operational profit (loss)	(1)	(1,631)	45	(899)	298
Share of (loss) profit, net, of subsidiaries and joint ventures	105	–	–	49	–
Income tax and social contribution tax	(1)	(112)	(4)	(6)	(100)
Net income (loss) for the year	103	(1,743)	41	(856)	198
Comprehensive income (loss) for the year	103	(1,743)	41	(856)	198

	Centroeste	RME	Light	Taesa	Axxiom	Aliança Norte	Itaocara	Lightger	Amazônia Energia	Aliança Geração
2017										
Assets										
Current	56	2	4,137	1,947	46	1	5	51	–	706
Cash and cash equivalents	17	1	270	57	3	–	5	1	–	540
Non-current	1	451	10,807	6,108	11	1,065	11	142	1,163	2,593
Total assets	57	453	14,944	8,055	57	1,066	16	193	1,163	3,299
Liabilities										
Current	4	–	5,493	645	29	–	1	31	–	511
Suppliers	–	–	–	–	1	–	1	20	–	–
Loans and financings – Current	3	–	1,395	9	5	–	–	–	–	98
Non-current	13	–	6,019	3,062	4	–	7	79	–	930
Equity	40	453	3,432	4,348	24	1,066	8	83	1,163	1,858
Total liabilities	57	453	14,944	8,055	57	1,066	16	193	1,163	3,299
Statement of income										
Net sales revenue	15	–	11,315	1,077	43	–	–	42	–	930
Cost of sales	(4)	–	(8,869)	(198)	(55)	–	(4)	(28)	–	(560)
Depreciation and amortization	(1)	–	(493)	(1)	(2)	–	–	(11)	–	(123)
Gross profit (loss)	11	–	2,446	879	(12)	–	(4)	14	–	370
General and administrative expenses	–	(1)	(1,071)	(122)	(7)	(1)	–	(2)	(1)	4
Finance income	2	16	100	70	1	–	–	4	2	28
Finance expenses	(2)	–	(977)	(292)	(1)	–	–	(9)	–	(73)
Operational profit (loss)	11	15	498	535	(19)	(1)	(4)	7	1	329
Share of (loss) profit, net, of subsidiaries and joint ventures	–	–	(199)	168	–	–	–	–	–	–
Income tax and social contribution tax	(1)	–	(175)	(55)	6	–	–	(3)	–	(114)
Net income (loss) for the year	10	15	124	648	(13)	(1)	(4)	4	1	215
Comprehensive income (loss) for the year	10	15	124	648	(13)	(1)	(4)	4	1	215

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	Hidrelétrica Cachoeirão	Baguari Energia	Guanhães Energia	Madeira Energia	Hidrelétrica Pipoca	Retiro Baixo	Renova	Central Eólica de Parajuru	Central Eólica de Morgado	Central Eólica Volta do Rio
2017										
Assets										
Current	51	29	8	557	15	23	144	41	11	16
Cash and cash equivalents	46	5	4	55	6	14	25	35	7	5
Non-current	87	209	223	23,593	95	366	2,786	121	136	233
Total assets	138	238	231	24,150	110	389	2,930	162	147	249
Liabilities										
Current	10	18	25	2,030	18	27	1,751	26	90	126
Suppliers	1	10	12	203	6	3	259	1	2	1
Non-current	10	6	155	16,793	39	104	399	47	3	7
Equity	118	214	51	5,327	53	258	780	89	54	116
Total liabilities	138	238	231	24,150	110	389	2,930	162	147	249
Statement of income										
Net sales revenue	39	64	–	2,971	29	67	734	21	14	22
Cost of sales	(17)	(37)	–	(1,858)	(18)	(34)	(677)	(16)	(17)	(28)
Depreciation and amortization	(4)	(9)	–	(838)	(3)	(10)	(10)	(10)	(10)	(17)
Gross profit (loss)	22	27	–	1,113	11	33	57	5	(3)	(6)
General and administrative expenses	–	–	(10)	(817)	(1)	–	(942)	(2)	(1)	(3)
Provision for loss	–	–	–	–	–	–	–	–	–	–
Financial income	4	6	1	115	2	3	12	3	2	3
Finance expenses	(2)	–	(16)	(1,551)	(5)	(11)	(470)	(6)	(8)	(12)
Operational profit (loss)	24	33	(25)	(1,140)	7	25	(1,343)	–	(10)	(18)
Share of (loss) profit, net, of subsidiaries and joint ventures	–	–	–	–	–	–	96	–	–	–
Income tax and social contribution tax	(3)	(11)	–	49	(2)	(3)	107	–	(1)	(3)
Net income (loss) for the year	21	22	(25)	(1,091)	5	22	(1,140)	–	(11)	(21)
Comprehensive income (loss) for the year	21	22	(25)	(1,091)	5	22	(1,140)	–	(11)	(21)

[Table of Contents](#)**Madeira Energia S.A. ('MESA') and FIP Melbourne**

MESA is the parent company of Santo Antônio Energia S.A. ('SAESA'), whose objects are operation and maintenance of the *Santo Antônio* Hydroelectric Plant and its transmission system, on the Madeira River. MESA's shareholders include Furnas, Odebrecht Energia, SAAG and the Company.

On December 31, 2019 MESA reported a loss of R\$951 (R\$1,743 on 2018) and current liabilities in excess of current assets by R\$427 (R\$663 on 2018). Hydroelectric plants project finances structurally present negative net working capital in the first years of operation, because they are built using high levels of financial leverage. On the other hand, they have firm long term contracts for energy supply as support and guarantee of payment of their debts. To balance the situation of negative working capital, in addition to its long-term sale contracts that ensure regularity in its operational cash flow, MESA benefits from its debt reprofiling, that adjusted its debt repayments flow to its cash generation capacity, so that the investee does not depend on additional investment from the shareholders.

Arbitration proceedings

In 2014, Cemig GT and SAAG Investimentos S.A. (SAAG), a vehicle through which Cemig GT holds an indirect equity interest in MESA, opened arbitration proceedings, in the Market Arbitration Chamber, challenging the following: (a) the approved increase in the capital of MESA of approximately R\$ 678 partially to be allocated to payment of the claims by the Santo Antonio Construction Consortium ('CCSA'), based on absence of quantification of the amounts supposedly owed, and absence of prior approval by the Board of Directors, as required by the bylaws and Shareholders' Agreement of MESA; and also on the existence of credits owed to MESA by CCSA, for an amount greater than the claims; and (b) against the adjustment for impairment carried out by the Executive Board of MESA, in the amount of R\$ 678, relating to certain credits owed to Mesa by CCSA, on the grounds that those credits are owed in their totality by express provision of contract.

The arbitration judgment recognized the right of Cemig GT and SAAG in full, and ordered the annulment of the acts being impugned. As a consequence of this decision, MESA reversed the impairment, and posted a provision for receivables in the amount of R\$ 678 in its financial statements as of December 31, 2017.

To resolve the question of the liability of the CCSA consortium to reimburse the costs of re-establishment of the collateral and use of the contractual limiting factor, the affiliated company opened arbitration proceedings with the International Chamber of Commerce (ICC) against CCSA, which are in progress. This process is confidential under the Arbitration Regulations of the ICC.

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Cemig GT and SAAG Investimentos S.A. applied to the judiciary for provisional remedy prior to the arbitration proceeding, to suspend the effects of the capital increase approved by an Extraordinary General Meeting of Shareholders of Mesa held on August 28, 2018. This process is confidential under the Arbitration Regulations of the Market Arbitration Chamber.

Renova Energia S.A. - court-supervised reorganization ('Renova')

On December 31, 2019, the jointly-controlled investee Renova, reported a consolidated loss of R\$1,014 (R\$856 on 2018 and R\$ 1,139 on 2017), accumulated losses of R\$ 4,010 (R\$3,051 on 2018), current liabilities in excess of current assets by R\$ 2,907 (R\$ 458 on 2018), an equity deficit of R\$1,091 (R\$76 on 2018) and negative gross margin and needs to obtain capital to comply with its commitments, including those for construction of wind and solar power plants.

These events or conditions indicate the existence of relevant uncertainty that may raise significant doubt about its ability to continue as a going concern as of December 31, 2019.

However, in view of the investee's equity deficit, the Company reduced the carrying value of its equity interests in Renova, at December 31, 2018, to zero and no further losses have been recognized, considering the non-existence of any legal or constructive obligations to the investee.

Additionally, considering the worsening of Renova's financial conditions and a potential application for court-supervised reorganization, the Company recorded, since June 30, 2019, an impairment of the receivables with the jointly-controlled entity in the amount of R\$ 688 on December 31, 2019.

Change in control of Renova

On October 15, 2019, Light sold, for R\$1.00, the totality of its shares held in the jointly-controlled entity Renova, equivalent in total to 17.17% of the share capital of investee, to CG I Fundo de Investimento em Participações Multiestratégia. Additionally, Lightcom Comercializadora de Energia S.A. signed an Assignment Agreement through which it assigned all the credits held against Renova to CG I. With the expiry of the period specified in the Shareholders' Agreement of Renova, the Company did not exercise its right of first refusal nor its right of joint sale, and thus there has been no change in its direct equity interest in Renova.

[Table of Contents](#)*Application by Renova for court-supervised reorganization*

On October 16, 2019, the second State of São Paulo Bankruptcy and I Court-Supervised Reorganization Court granted court-supervised reorganization petition applied by Renova, and by the other companies of the group ('the Renova Group'), and determined, among other measures, the following: (i) Appointment of an independent company to act as judicial administrator.; (ii) Suspension of actions and executions against the companies of the Renova Group for 180 days, under Article 6 of Law 11,101/2005; (iii) Presentation of accounts by the 30th of each month, while the court-supervised reorganization proceedings continue, on penalty of the controlling shareholders of the companies of the Renova Group being removed, and replaced by administrator, under Article 52, IV, of Law 11,101/2005; (iv) Waiver to present tax debt clearance certificates so that the companies of the Renova Group can carry on with their activities; and (v) Order to publish a list of creditors, with 15 day term for presentation of qualifications and/or divergences of credits in relation to the court-supervised reorganization.

On December 17, 2019, Renova filed its court-supervised reorganization plan, which has to be approved by the General Meeting of Creditors according with the terms and conditions established by Law 11,101/2005. The jointly-controlled entity is in the process of discussing such plan and until the present date has not measured the possible effects on its accounting balances.

In this context, Renova signed with the Company Debtor in Possession (DIP) loan agreements in the total amount of R\$37, comprising R\$17 in 2019 and R\$20 on January 28, 2020. The funds of these loans, made under specific rules of court-supervised reorganization proceedings, are necessary to support the expenses of maintaining the activities of Renova, and were authorized by the second State of São Paulo Bankruptcy and Court-supervised Reorganization Court. They are guaranteed by a fiduciary assignment of shares in a company owning assets of a wind power project owned by Renova, and they also have priority of receipt in the court-supervised reorganization process. Additionally, Company made an Advance for Future Capital Increase to Renova, of R\$5, on October 25, 2019. On May 2, 2020, the State of São Paulo Bankruptcy and Court-supervised Reorganization Court issued a decision ordering that the DIP loan, in the total amount of R\$ 37 million, with asset guarantee, already constituted and registered, would be subscribed as a capital increase in Renova. Company has filed a Motion for Clarification, and, based on the opinion of its legal advisors, has classified the chance of loss in the action as 'possible' and limited to the total amount of the DIP loan.

On March 20, 2020, the Board of Directors of Renova approved acceptance of a binding offer made by ARC Capital Ltda. ('ARC'), jointly with G5 Administradora de Recursos Ltda. ('G5'), and XP Vista Asset Management Ltda. ('XP') for financing to conclude the works of Phase A of the *Alto Sertão III* Wind Farm Complex, and to fund the current operational expenses of Renova. The offer is in the phase of diligence, and still pending conclusion.

Considering the non-existence of any legal or constructive obligations to the investee, the Company has concluded that the granted of court-supervised reorganization filed by Renova does not have any additional impact in its financial statements.

Amazônia Energia S.A. and Aliança Norte Energia S.A.

Amazônia Energia and Aliança Norte are shareholders of Norte Energia S.A. ('NESA'), which holds the concession to operate the *Belo Monte* Hydroelectric Plant. Through the jointly-controlled entities referred to above, Cemig GT owns an indirect equity interest in NESA of 11.69%.

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On December 31, 2019 NESA presents negative net working capital of R\$ 3,309, and will spend further amounts on projects specified in its concession contract, even after conclusion of the construction and full operation of the Belo Monte Hydroelectric Plant. According to the estimates and projections, the negative net working capital, and the future demands for investments in the hydroelectric plant, will be supported by revenues from future operations and/or raising of bank loans.

On September, 2015, NESA was awarded a preliminary injunction ordering the regulator to 'abstain, until hearing of the application for an injunction made in the original case, from applying to Appellant any penalties or sanctions in relation to the Belo Monte Hydroelectric Plant not starting operations on the date established in the original timetable for the project, including those specified in an the regulator (Aneel) Normative Resolution 595/2013 and in the Concession Contract for the Belo Monte Hydroelectric Plant'. The legal advisors of NESA have classified the probability of loss as 'possible' and estimated the potential loss on December 31, 2019 to approximately R\$ 1,962 (R\$1,643 on December 31, 2018).

d) Business combination - Centroeste

On January 13, 2020, Centroeste became a wholly own subsidiary of the Company through the acquisition of the remaining equity interest of 49% held by Eletrobras. The acquisition is the result of exercise of the right of first refusal for acquisition of the shareholding offered by Eletrobras Auction 01/2018, Lot P, held on September 27, 2018, and confirmed on January 15, 2019.

Centroeste operates in construction, operation and maintenance of the transmission facilities of the *Furnas-Pimenta* transmission line – part of the national grid.

The cash consideration paid amounted to R\$45, which was the price in the Tender Announcement, adjusted by the accumulated variation of the Selic rate up to the date of conclusion of the transaction and adjusted by the dividends and/or interest on equity paid or declared by Centroeste in favor of Eletrobras in the period.

Prior to the acquisition above and as of on December 31, 2019 the Company held a 51% share of the investee, and did not control the entity according to its shareholders agreement, therefore, the investment in Centroeste was accounted for under the equity method.

Based on the provisions of IFRS 3 – Business combinations, the Company remeasured the previously held interest at fair value on the date control was obtained, and any difference between the fair value and the carrying value of the investment will be recognized in the statement of income in 2020, as follows:

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	Centroeste
Fair value on the acquisition date	120
Equity interest held by the Company before the acquisition of control	51%
Previously held interest at fair value on the date control was obtained	61
Carrying value of the investment	(24)
Gain on remeasurement of previously held equity interest in subsidiaries acquired to be recognized in 2020	37

The remeasurement of the previously held interest based on the preliminary fair value of the net assets acquired is as follows:

	Centroeste
Cash consideration paid for 49% of the equity of Centroeste	45
Previously held interest, valued at fair value on the acquisition date – 51%	61
Bargain purchase	14
Total	120

The preliminary fair value of the assets and liabilities acquired at the acquisition date, is as follows:

<u>Assets</u>	<u>Fair value on the transaction date</u>	<u>Liabilities</u>	<u>Fair value on the transaction date</u>
Current	29	Current	6
Cash and cash equivalents	27	Loans and financings	3
Other current assets	2	Interest on equity and dividends payable	2
Non-current	108	Other current liabilities	1
Contract assets and Right to exploitation of the regulated activity	108	Non-current	11
		Loans and financings	8
		Provisions	3
		Fair value of net identifiable assets	120

The abovementioned effects will be recorded in 2020 in the transmission operating segment.

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e) Risks related to compliance with law and regulations

Jointly controlled entities and affiliates:

Norte Energia S.A. ('NESA') - through Amazônia Energia and Aliança Norte

Investigations and other legal measures are in progress since 2015, conducted by the Federal Public Attorneys' Office, which involve other shareholders of NESA and certain executives of those other shareholders. In this context, the Federal Public Attorneys have started investigations on irregularities involving contractors and suppliers of NESA and of its other shareholders, which are still in progress. At present, it is not possible to determine the outcome of these investigations, and their possible consequences. These might at some time in the future affect the investee. In addition, based on the results of the independent internal investigation conducted by NESA and its other shareholders, an infrastructure write-down of R\$ 183 was already recorded at NESA, and reflected in the Company's consolidated financial statements through the equity pick effect in 2015.

On March 9, 2018 'Operação Fortuna' started, as a 49th phase of 'Operation Lava Jato' ('Operation Carwash'). According to what has been disclosed by the media this operation investigates payment of bribes by the construction consortium of the *Belo Monte* power plant, comprising the companies Camargo Corrêa, Andrade Gutierrez, Odebrecht, OAS and J. Malucelli. Management of NESA believes that so far there are no new facts that have been disclosed by the 49th phase of 'Operation Carwash' that require additional procedures and internal independent investigation in addition to those already carried out.

The Company's management, based on its knowledge of the matters described above and on the independent procedure carried out, believes that the conclusions presented in the report of the independent investigation are adequate and appropriate. As a result, no adjustment has been made on its financial statements. The effects of any future changes in the existing scenario will be reflected appropriately in the Company's financial statements.

Madeira Energia S.A. ('MESA')

Investigations and other legal measures are in progress since 2015, conducted by the Federal Public Attorneys' Office, which involve other indirect shareholders of MESA and certain executives of those other indirect shareholders. In this context, the Federal Public Attorneys have started investigations searching for irregularities involving contractors and suppliers of MESA and of its other shareholders. In response to allegations of possible illegal activities, the investee and its other shareholders started an independent internal investigation.

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The independent internal investigation, concluded in February 2019, in the absence of any future developments such as any leniency agreements by third parties that may come to be signed or collaboration undertakings that may be signed by third parties with the Brazilian authorities, found no objective evidence enabling it to be affirmed that there were any supposed undue payments by MESA (SAESA) that should be considered for possible accounting write-off, pass-through or increase of costs to compensate undue advantages and/or linking of MESA with the acts of its suppliers, in the terms of the witness accusations and/or cooperation statements that have been made public.

The Company's management, based on its knowledge of the matters described above and on the independent procedures carried out, believes that the conclusions presented in the report of the independent investigation are adequate and appropriate. As a result, no adjustment has been made on its financial statements. The effects of any future changes in the existing scenario will be reflected appropriately in the Company's financial statements.

Renova Energia S.A. ('Renova')

Since 2017 Renova is part of a formal investigation by the Civil Police of Minas Gerais State and other public authorities related to certain capital injections made by some of its controlling shareholders, including the Company and capital injections made by Renova in certain projects under development in previous years.

On April 11, 2019, the Brazilian Federal Police commenced the 'Operation E o Vento Levou' as part of the Lava Jato Investigation, and executed a search and seizure warrant issued by a Federal Court of São Paulo at Renova's head office in São Paulo, based on allegations and indications of misappropriation of funds harmful to the interests of Cemig. Based on the allegations being investigated, these events are alleged to have taken place before 2015. On July 25, 2019 the second phase of such investigation initiated.

The 'Operation E o Vento Levou' and the police investigation of the Minas Gerais State Civil Police have not yet been concluded. Thus, there is a possibility that material information may be revealed in the future. If a criminal action is filed against agents who could have damaged Renova, Renova intends to act as auxiliary to the prosecution in any criminal proceedings, and subsequently sue for civil reparation of the damages suffered.

In 2019 the tax authority had issued infraction notices against Renova, questioning the calculation of income tax and social contribution tax, and payment of withholding income, relating to contracts of services which allegedly did not have the due consideration, in the estimated amount of R\$89. Based on the opinion of its legal advisors, Renova provided for this amount as contingency on its financial statements.

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Due to these third party investigations, the governance bodies of Renova have requested opening of an internal investigation, conducted by an independent company with the support of an external law firm, the scope of which comprises assessment of the existence of irregularities, including noncompliance with: the Brazilian legislation related to acts of corruption and money laundering; Renova's Code of Ethics; and its integrity policies. Additionally, a Monitoring Committee was established in Renova which, jointly with the Audit Committee, accompanied this investigation. The internal investigation was concluded on February 20, 2020, and no concrete evidences of acts of corruption or diversion of funds to political campaigns were identified.

However, the independent investigators identified irregularities in the conducting of business and agreement of contracts by Renova, including: (i) payments without evidence of the consideration of services, in the total amount of approximately R\$ 40; (ii) payments not in accordance with the company's internal policies and best governance practices, in the total amount of approximately R\$ 137; and (iii) deficiencies in the internal controls of the investee.

As a result of the analysis of the above mentioned values, Renova concluded that R\$35 relates to effective assets and therefore no impairment is necessary. The remaining amount of R\$142 was already impaired in previous years, producing no impact on the consolidated financial statements for the year ended December 31, 2019.

In response to the irregularities found, and based on the recommendations of the Monitoring Committee and legal advisers, the Board of Directors of Renova decided to take all the steps necessary to preserve the rights of the investee, continue with the measures to obtain reimbursement of the losses caused, and strengthen the company's internal controls.

Since the investment at Renova is fully impaired at December 31, 2019, and since no contractual or constructive obligations in relation to the investee have been assumed by the Company, it is not expected that effects resulting from the court-supervised reorganization process, or the investigations, or the operational activities of this investee can significantly impact the Company's financial statements, even if eventually not yet recorded by Renova.

Other investigations

In addition to the cases above, there are investigations being conducted by the Public Attorneys' Office of the State of Minas Gerais ('MPMG') and by the Civil Police of the State of Minas Gerais ('PCMG'), which aim to investigate possible irregularities in the investments made by the Company in Guanhães Energia and also in MESA. Additionally, on April 11, 2019 agents of the Brazilian Federal Police were in the Company's head office in Belo Horizonte to execute a search and seizure warrant issued by a São Paulo Federal Court in connection with the 'Operation E o Vento Levou', as described above.

These proceedings are being investigated through reviewing documents demanded by the respective authorities, and by hearing of witnesses.

[Table of Contents](#)*Internal procedures for risks related to compliance with law and regulations*

Taking into account the investigations that are being conducted at the Company and at certain investees, as described above, the governance bodies of the Company have authorized contracting a specialized company to analyze the internal procedures related to these investments, as well as the factors that led the Company to be assessed by federal tax authority for not paying withholding income tax in the acquisition of Light's interest from Enlighted (see Note 27). This independent investigation was subject to oversight of an independent investigation committee whose creation was approved by our Board of Directors.

The Company's internal investigation was completed and the corresponding report was issued on May 8, 2020. Considering the results of the internal investigations, no objective evidence was identified to affirm that there were illegal acts on the investments made by Company that were subject to the investigation, therefore, there was no impact in the consolidated financial statements as of December 31, 2019.

In the second semester of 2019, Company signed tooling agreements with the Securities and Exchange Commission (SEC) and US Department of Justice (DOJ). Cemig has complied with the requests and intends to continue contributing to the SEC and the DOJ.

The Company will evaluate any changes in the future scenario and eventual impacts that could affect the financial statements, when appropriate. The Company will collaborate with the relevant authorities and their analysis related to the investigations in progress.

19. PROPERTY, PLANT AND EQUIPMENT

	2019			2018		
	Historical cost	Accumulated depreciation	Net value	Historical cost	Accumulated depreciation	Net value
In service						
Land	248	(19)	229	231	(16)	215
Reservoirs, dams and watercourses	3,280	(2,200)	1,080	3,282	(2,132)	1,150
Buildings, works and improvements	1,092	(818)	274	1,114	(800)	314
Machinery and equipment	2,598	(1,869)	729	2,773	(1,919)	854
Vehicles	20	(18)	2	32	(27)	5
Furniture and utensils	14	(11)	3	16	(12)	4
	<u>7,252</u>	<u>(4,935)</u>	<u>2,317</u>	<u>7,448</u>	<u>(4,906)</u>	<u>2,542</u>
In progress	<u>133</u>	<u>-</u>	<u>133</u>	<u>120</u>	<u>-</u>	<u>120</u>
Net property, plant and equipment	<u>7,385</u>	<u>(4,935)</u>	<u>2,450</u>	<u>7,568</u>	<u>(4,906)</u>	<u>2,662</u>

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Changes in PP&E are as follows:

	2018	Additions	Disposals	Depreciation	Transfers / capitalizations (2)	2019
In service						
Land (1)	215	–	–	(3)	17	229
Reservoirs, dams and watercourses	1,150	–	(4)	(80)	14	1,080
Buildings, works and improvements	314	–	(5)	(19)	(16)	274
Machinery and equipment	854	–	(81)	(78)	34	729
Vehicles	5	–	–	(3)	–	2
Furniture and utensils	4	–	(1)	–	–	3
	<u>2,542</u>		<u>(91)</u>	<u>(183)</u>	<u>49</u>	<u>2,317</u>
In progress	120	70	(12)	–	(45)	133
Net property, plant and equipment	<u>2,662</u>	<u>70</u>	<u>(103)</u>	<u>(183)</u>	<u>4</u>	<u>2,450</u>

- (1) Certain land sites linked to concession contracts and without provision for reimbursement are amortized in accordance with the period of the concession.
(2) Balances of R\$ 4 were transferred between Intangible assets, concession contract assets and PP&E.

	2017	Additions	Disposals	Depreciation	Transfer to Held for sale	Adjustment for business combination	Transfers / capitalizations	2018
In service								
Land (1)	211	–	–	(2)	–	–	6	215
Reservoirs, dams and watercourses	1,234	–	(2)	(82)	–	–	–	1,150
Buildings, works and improvements	331	–	–	(19)	–	–	2	314
Machinery and equipment	874	–	(9)	(70)	(256)	296	19	854
Vehicles	3	–	–	(2)	–	–	4	5
Furniture and utensils	3	–	–	–	–	–	1	4
	<u>2,656</u>	<u>–</u>	<u>(11)</u>	<u>(175)</u>	<u>(256)</u>	<u>296</u>	<u>32</u>	<u>2,542</u>
In progress	106	77	(22)	–	–	–	(41)	120
Net property, plant and equipment	<u>2,762</u>	<u>77</u>	<u>(33)</u>	<u>(175)</u>	<u>(256)</u>	<u>296</u>	<u>(9)</u>	<u>2,662</u>

- (1) Certain land sites linked to concession contracts and without provision for reimbursement are amortized in accordance with the period of the concession.

	2016	Additions	Jaguara, Miranda and Volta Grande Plants (1)	Disposals	Depreciation	Transfers / capitalizations	2017
In service							
Land	279	–	(61)	(1)	(6)	–	211
Reservoirs, dams and watercourses	1,761	–	(441)	(4)	(85)	3	1,234
Buildings, works and improvements	418	–	(69)	–	(20)	2	331
Machinery and equipment	1,172	–	(305)	(5)	(93)	105	874
Vehicles	4	–	–	–	(1)	–	3
Furniture and utensils	3	–	–	–	–	–	3
	<u>3,637</u>	<u>–</u>	<u>(876)</u>	<u>(10)</u>	<u>(205)</u>	<u>110</u>	<u>2,656</u>
In progress	138	83	–	(17)	–	(98)	106
Net property, plant and equipment	<u>3,775</u>	<u>83</u>	<u>(876)</u>	<u>(27)</u>	<u>(205)</u>	<u>12</u>	<u>2,762</u>

Depreciation rates, which take into consideration the expected useful life of the assets, are revised annually by Management and are as follows:

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<u>Generation</u>	<u>(%)</u>	<u>Administration</u>	<u>(%)</u>
Reservoirs, dams and watercourses	2	Software	20
Buildings – Machine room	2	Vehicles	14.29
Buildings – Other	3.33	IT equipment in general	16.67
Generator	3.33	General equipment	6.25
Water turbine	2.5	Buildings – Other	3.33
Pressure tunnel	3.13		
Command station, panel and cubicle	3.57		
Town planning and improvements	3.33		

The average annual depreciation rate for the year 2019 is 3.13% (3.72% in 2018 and 3.14% in 2017). The segregation by activity is as follows:

<u>Hydroelectric Generation</u>	<u>Thermoelectric Generation</u>	<u>Wind Power Generation</u>	<u>Administration</u>
2.83	4.13	4.87	8.29

The Company has not identified any evidence of impairment of its Property, plant and equipment assets. The generation concession contracts provide that at the end of each concession the grantor must determine the amount to be indemnified to the Company for the residual value. Management believes that the amounts ultimately received will be higher than the historical residual value.

The residual value of the assets is the residual balance of the assets at the end of the concession contract which will be transferred to the grantor at the end of the concession contract and for which Cemig is entitled to receive in cash. For contracts under which Cemig does not have a right to receive such amounts or there is uncertainty related to collection of the amounts, such as in the case of thermal generation and hydroelectric generation as an independent power producer, no residual value is recognized, and the depreciation rates are adjusted so that all the assets are depreciated within the concession term.

20. INTANGIBLE ASSETS

The composition of the balance at December 31, 2019 and 2018 is as follow:

	2019			2018		
	<u>Historical cost</u>	<u>Accumulated amortization</u>	<u>Residual value</u>	<u>Historical cost</u>	<u>Accumulated amortization</u>	<u>Residual value</u>
In service						
Useful life defined						
Temporary easements	12	(4)	8	11	(3)	8
Onerous concession	20	(13)	7	19	(12)	7
Assets of concession (1)	20,039	(8,522)	11,517	18,674	(7,994)	10,680
Others	77	(67)	10	85	(66)	19
	<u>20,148</u>	<u>(8,606)</u>	<u>11,542</u>	<u>18,789</u>	<u>(8,075)</u>	<u>10,714</u>
In progress	82	–	82	63	–	63
Net intangible assets	<u>20,230</u>	<u>(8,606)</u>	<u>11,624</u>	<u>18,852</u>	<u>(8,075)</u>	<u>10,777</u>

- (1) The rights of authorization to generate wind power granted to the subsidiary *Parajuru* and *Volta do Rio*, valued at R\$ 127, and of the gas distribution concession, granted to Gasmig, valued at R\$ 426, are classified in the consolidated statement of financial position under intangibles assets and are amortized by the straight-line method, for the period of the concessions.

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Changes in Intangible assets are as follow:

	<u>2018</u>	<u>Additions</u>	<u>Disposals (2)</u>	<u>Amortization</u>	<u>Transfers (1)</u>	<u>2019</u>
In service						
Useful life defined						
Temporary easements	9	–	–	(1)	–	8
Onerous concession	7	–	–	–	–	7
Assets of concession	10,680	891	(41)	(698)	685	11,517
Others	18	7	–	(5)	(10)	10
	<u>10,714</u>	<u>898</u>	<u>(41)</u>	<u>(704)</u>	<u>675</u>	<u>11,542</u>
In progress	63	36	–	–	(17)	82
Net intangible assets	<u>10,777</u>	<u>934</u>	<u>(41)</u>	<u>(704)</u>	<u>658</u>	<u>11,624</u>

- (1) The transfers were made between Intangible assets, concession contract assets and property, plant and equipment are as follows: (1) R\$685 from concession contract assets to intangible assets; (2) (R\$4) from intangible assets to property, plant and equipment and; and (3) (R\$23) from intangible assets to concession financial assets.
- (2) This includes the impairment, in the amount of R\$ 22 recognized in the Income Statement under “Other expenses”. The test of impairment of intangible assets, relating to the authorization for wind power generation granted to Volta do Rio, recognized in 2018 as part of the its business combination, arises from non-achievement of the operational performance expected in 2019 for the wind generation assets of the subsidiary. The Value in Use of the assets was calculated based on the projection of future expected cash flows for the operation of the assets of the subsidiary, brought to present value by the weighted average cost of capital defined for the company’s activity, using the Firm Cash Flow (FCFF) methodology.

	<u>2017</u>	<u>Assets arising from business combination</u>	<u>Additions</u>	<u>Disposals</u>	<u>Effects of first-time adoption of IFRS 15</u>	<u>Amortization</u>	<u>Transfer to Held for sale</u>	<u>Transfers</u>	<u>2018</u>
In service									
Useful life defined									
Temporary easements	10	–	–	–	–	(1)	–	–	9
Onerous concession	8	–	–	–	–	(1)	–	–	7
Assets of concession	10,435	162	–	(23)	–	(668)	–	774	10,680
Others	17	4	1	–	–	(5)	(7)	8	18
	<u>10,470</u>	<u>166</u>	<u>1</u>	<u>(23)</u>	<u>–</u>	<u>(675)</u>	<u>(7)</u>	<u>782</u>	<u>10,714</u>
In progress	686	–	33	(4)	(621)	–	–	(31)	63
Net intangible assets	<u>11,156</u>	<u>166</u>	<u>34</u>	<u>(27)</u>	<u>(621)</u>	<u>(675)</u>	<u>(7)</u>	<u>751</u>	<u>10,777</u>

	<u>2016</u>	<u>Additions</u>	<u>Disposals</u>	<u>Amortization</u>	<u>Transfers (1)</u>	<u>2017</u>
In service						
Useful life defined						
Temporary easements	10	–	–	–	–	10
Onerous concession	9	–	–	(1)	–	8
Assets of concession	9,248	–	(11)	(638)	1,836	10,435
Others	18	–	–	(7)	6	17
	<u>9,285</u>	<u>–</u>	<u>(11)</u>	<u>(646)</u>	<u>1,842</u>	<u>10,470</u>
In progress	1,535	1,105	(8)	–	(1,946)	686
Net intangible assets	<u>10,820</u>	<u>1,105</u>	<u>(19)</u>	<u>(646)</u>	<u>(104)</u>	<u>11,156</u>

- (1) Balances transferred to financial assets.

Concession assets

The energy and gas distribution infrastructure assets already in service and that will be fully amortized during the concession term are recorded as intangible assets.

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On September 19, 2019 the third amendment to the concession contract for gas distribution of the subsidiary Gasmig was signed, replacing the contractual obligation to build the gas pipeline to serve the Nitrogenated Fertilizer Unit (UFN-V), to be built by Petrobras in the Minas Triangle region, by the payment of a concession grant fee of R\$891. This amendment extended the period of Gasmig's concession contract to 2053. The grant fee was paid on September 26, 2019. The amount will be added to the Remuneration Base of Assets of Gasmig, to be considered in the process of tariff review by the Grantor as an intangible asset to be amortized until the end of the concession contract, producing immediate effects in terms of setting and review of tariffs.

The amount of additions in 2019 includes R\$2 (R\$4 in 2018 and R\$ 71 in 2017) of borrowing costs, as presented in Note 24.

The intangible asset easements, onerous concessions, assets of concession, and others, are amortized by the straight-line method taking into account the consumption pattern of these rights.

The main amortization rates, which take into account the useful life that management expects for the asset, and reflect the expected pattern of their consumption, are as follows:

<u>Energy</u>	<u>(%)</u>	<u>Administration</u>	<u>(%)</u>
System cable – below 69 KV	6.67	Software	20.00
System cable – below 69 KV	3.57	Vehicles	14.29
Structure – Posts	3.57	General equipment	6.25
Overhead distribution transformer	4.00	Buildings	3.33
Circuit breaker – up to 69 kV	3.03		
Capacitor bank – up to 69 kV	6.67		
Voltage regulator – up to 69 kV	4.35		
<u>Gas</u>	<u>(%)</u>	<u>Administration</u>	<u>(%)</u>
Tubing	3.33	Software	20.00
Buildings, works and improvements	4.00	Vehicles	20.00
Improvements in leased properties	10.00	Data processing equipment	20.00
Machinery and equipment	5.00 a 20.00	Furniture	10.00

The annual average amortization rate is 4.01%. The segregation by activity is as follows:

<u>Hydroelectric Generation</u>	<u>Wind Power Generation</u>	<u>Gas</u>	<u>Distribution</u>	<u>Administration</u>
19.74	16.90	2.87	3.88	16.03

Under the regulations of the energy segment, property, plant and equipment used in the distribution concession are linked to these services, and cannot be withdrawn, disposed of, assigned or provided in guarantee without the prior express authorization of the Regulator.

21. LEASING TRANSACTIONS

As mentioned in Note 2.4, as from January 1, 2019, IFRS 16 – *Leases* came into effect.

The Company has made an assessment on its contracts and recognized a right to use and a lease liability for the following contracts which contain a lease:

- Leasing of commercial real estate used for serving customers;

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- Leasing of buildings used as administrative headquarters;
- Leasing of commercial vehicles used in operations.

The Company has elected to use the recognition exemptions for lease contracts that, at the commencement date, have a lease term of 12 months or less and do not contain a purchase option (short-term leases), and lease contracts for which the underlying asset is of low value (low-value assets). Thus, these leasing agreements are recognized as an expense in the income statement on the straight-line basis, over the period of the leasing. Their effects on net income from January to December 2019 were immaterial.

The discount rates were obtained by reference to the Company's incremental borrowing rate, based on the debts contracted by the Company and through quotations with potential financial institutions.

a) Right-of-use assets

The right-of-use assets were valued at cost, corresponding to the amount of the initial measurement of the lease liabilities, and amortized on a straight-line basis over the shorter of the lease term and the estimated useful lives of the assets.

The breakdown of the balance for each type of asset identified is as follows:

	<u>Dec. 31, 2019</u>	<u>Jan 1, 2019</u>
Real estate property	206	238
Vehicles	71	104
	<u>277</u>	<u>342</u>

Changes in the right-of-use assets are as follows:

	<u>Real estate property</u>	<u>Vehicles</u>	<u>Total</u>
January 1, 2019	238	104	342
Addition	28	4	32
Disposals (contracts terminated)	(13)	-	(13)
Amortization (1)	(37)	(39)	(76)
Remeasurement (2)	(10)	2	(8)
Balances at December 31, 2019	<u>206</u>	<u>71</u>	<u>277</u>

- (1) Amortization of the right-of-use assets is recognized in the Income Statement is net of use of the credits of PIS, Pasep and Cofins taxes on leasing payments of R\$5.
- (2) The Company has identified events giving rise to modifications of their principal contracts. When occurred, the lease liabilities adjustments are recognized in counterpart of the right-of-use assets.

b) Lease liabilities

The liability for leasing agreements was measured at the present value of lease payments to be made over the lease term, discounted at the Company's incremental borrowing rate.

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The changes in the lease liabilities are as follows:

	2019
January 1, 2019 (1)	342
Addition	32
Disposals (contracts terminated)	(13)
Accrued interest (2)	36
Payment of principal portion of lease liability	(96)
Payment of interest	(5)
Remeasurement (3)	(8)
Balances at December 31, 2019	288
Current liabilities	85
Non-current liabilities	203

- (1) The Company's incremental borrowing rate applied to the lease liability recognized in the statement of financial position on the date of the initial application varied between 7.96% p.a. and 10.64% p.a., depending on the leasing contract period, and 13.17% p.a., respectively, for contracts with maturities of up to two years, two to five years and longer than five years. The rates applied to the contracts entered into during 2019 were 6.87% p.a., 7.33% p.a. and 8.08% p.a., for contracts with maturities, respectively, of up to three years, three to four years, and over four years. To determine the incremental borrowing rate, the Company used as a reference quotations obtained from financial institutions, these being a function of the Company's credit risk, and market conditions on the date of contracting.
- (2) Financial expenses recognized in the income statement are net of PIS/Pasep and Cofins taxes credits on lease payments in the amounts of R\$2.
- (3) The Company identified events that give rise to modifications of their principal contracts. When occurred, the lease liabilities adjustments are recognized in counterpart of the right-of-use assets.

The potential right to recovery of PIS/Pasep and Cofins taxes embedded in the leasing consideration, according to the periods specified for payment, is as follows:

	Nominal	Adjusted to present value
Cash flow		
Consideration for the leasing	704	288
Potential PIS/Pasep and Cofins (9.25%)	56	18

The cash flows of the contracts containing a lease are, in their majority, indexed to the IPCA inflation index on an annual basis. Below is an analysis of maturity of lease contracts:

2020	86
2021	58
2022	26
2023	26
2024	26
2025 at 2045	482
Undiscounted values	704
Embedded interest	(416)
Lease liabilities	288

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	<u>2019</u>	<u>2018</u>
Energy on spot market – CCEE	401	139
Charges for use of energy network	145	122
Energy purchased for resale	764	775
Itaipu Binacional	243	268
Gas purchased for resale	143	124
Materials and services	384	373
	<u>2,080</u>	<u>1,801</u>

23. TAXES PAYABLE AND AMOUNTS TO BE REFUNDED TO CUSTOMERS

	<u>2019</u>	<u>2018</u>
Current		
ICMS	112	168
COFINS	135	146
PASEP	29	32
INSS	25	23
Others (1)	58	41
	<u>359</u>	<u>410</u>
Non-current		
COFINS	1	25
PASEP	-	4
	<u>1</u>	<u>29</u>
	<u>360</u>	<u>439</u>
Amounts to be refunded to customers		
Non-current		
PASEP/COFINS	4,193	1,124
	<u>4,193</u>	<u>1,124</u>

(1) This includes the withholding income tax on Interest on equity paid in January 2020, in accordance with the tax legislation.

The amounts of PIS/Pasep and Cofins taxes to be refunded to customers refer to the credits to be received by the Company following the court judgment which excluded ICMS tax amounts from the basis for calculation of those taxes. For further information see Note 10.

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24. LOANS, FINANCING AND DEBENTURES

Financing source	Principal maturity	Annual financial cost %	Currency	2019			2018
				Current	Non-current	Total	Total
FOREIGN CURRENCY							
Banco do Brasil: Various Bonds (1) (4)	2024	Diverse	US\$	2	16	18	26
Eurobonds (2)	2024	9.25%	US\$	46	6,046	6,092	5,856
(-) Transaction costs				-	(19)	(19)	(21)
(±) Interest paid in advance (3)				-	(30)	(30)	(34)
Debt in foreign currency				48	6,013	6,061	5,827
BRAZILIAN CURRENCY							
Banco do Brasil S.A.(4) (11)	2022	146.50% of CDI	R\$	-	-	-	503
Caixa Econômica Federal (4) (11)	2022	146.50% of CDI	R\$	-	-	-	627
Caixa Econômica Federal (5)	2021	TJLP + 2.50%	R\$	61	-	61	56
Caixa Econômica Federal (6)	2022	TJLP + 2.50%	R\$	118	-	118	108
		UFIR + 6.00% at					
Eletróbras (4)	2023	8.00%	R\$	11	9	20	33
Large customers (4)	2024	IGP-DI + 6.00%	R\$	3	2	5	5
Sonda (7)	2021	110.00% of CDI	R\$	-	49	49	46
Promissory Notes – 9th Issue – Single series (4) (11)	2019	151.00% of CDI	R\$	-	-	-	426
Promissory Notes – 1st Issue – Single series (8)	2020	107.00% of CDI	R\$	875	-	875	-
(-) FIC Pampulha – Marketable securities of subsidiary companies (9)				(3)	-	(3)	(25)
(-) Transaction costs				-	-	-	(13)
Debt in Brazilian currency				1,065	60	1,125	1,766
Total of loans and financings				1,113	6,073	7,186	7,593
Debentures – 3th Issue – 2nd Series (2)	2019	IPCA + 6.00%	R\$	-	-	-	156
Debentures – 3th Issue – 3rd Series (2)	2022	IPCA + 6.20%	R\$	396	692	1,088	1,049
Debentures – 6th Issue – 2nd Series (2)	2020	IPCA + 8.07%	R\$	17	-	17	33
Debentures – 7th Issue – Single series (2) (12)	2021	140.00% of CDI	R\$	289	289	578	1,023
Debentures – 3th Issue – 2nd Series (4)	2021	IPCA + 4.70%	R\$	568	541	1,109	1,596
Debentures – 3th Issue – 3rd Series (4)	2025	IPCA + 5.10%	R\$	42	949	991	957
Debentures – 5th Issue – Single Series (4) (11)	2022	146.50% of CDI	R\$	-	-	-	1,580
Debentures – 6th Issue – Single Series (4) (11)	2020	CDI + 1.75%	R\$	-	-	-	551
Debentures – 7th Issue – 1st Series (4)	2024	CDI + 0.45%	R\$	275	1,890	2,165	-
Debentures – 7th Issue – 2nd Series (4)	2026	IPCA + 4.10%	R\$	3	1,517	1,520	-
Debentures – 4th Issue – 1st Series (8)	2022	TJLP+1.82%	R\$	12	19	31	125
Debentures – 4th Issue – 2nd Series (8)	2022	Selic + 1,82%	R\$	5	9	14	-
Debentures – 4th Issue – 3th Series (8)	2022	TJLP + 1,82%	R\$	12	22	34	-
Debentures – 4th Issue – 4th Series (8)	2022	Selic + 1,82%	R\$	5	10	15	-
Debentures – 6th Issue – Single series (8)	2019	116.50% of CDI	R\$	-	-	-	50
Debentures – 7th Issue – Single series (8)	2023	CDI + 1.50%	R\$	20	60	80	100
(-) Discount on the issuance of debentures (10)				-	(22)	(22)	-
(-) Transaction costs				(10)	(19)	(29)	(41)
Total, debentures				1,634	5,957	7,591	7,179
Total				2,747	12,030	14,777	14,772

- (1) Net balance of the Restructured Debt comprising bonds at par and discounted, with balance of R\$ 182, less the amounts given as Deposits in guarantee, with balance of R\$ 164. Interest rates vary – from 2 to 8% p.a.; six-month Libor plus spread of 0.81% to 0.88% p.a.
- (2) Cemig Geração e Transmissão;
- (3) Advance of funds to achieve the yield to maturity agreed in the Eurobonds contract.
- (4) Cemig Distribuição;
- (5) Central Eólica Praias de Parajuru;
- (6) Central Eólica Volta do Rio;
- (7) Arising from merger of Cemig Telecom.
- (8) Gasmig;
- (9) FIC Pampulha has financial investments in marketable securities issued by subsidiaries of the Company. For more information on this fund, see Note 32.
- (10) Discount on the sale price of the 2nd series of the Seventh issue of Cemig Distribuição.
- (11) The funds incorporated into the cash position of Cemig D as a result of the distribution of its Seventh Issue of non-convertible debentures, on July 22, 2019, enabled full prepayment of the debtor balances of: the Ninth Issue of Promissory Notes, with final maturity in October 2019; the Sixth Issue of Non-convertible Debentures, with final maturity in June 2020; the Fifth Issue of Non-convertible Debentures, maturing at the end of June 2022; and Bank Credit Notes with final maturities in June 2022. These prepayments, made on July 24, 2019, total R\$3,644 including principal, interest and charges. These initiatives have balanced the cash flow and improved the Company's credit quality. The changes in the new debt profile consisted of extinction of existing contracts and signature of new contracts. The accounting effects of the transactions are reflected in accordance with IFRS 09.
- (12) On July 24, 2019 Cemig GT made extraordinary amortization of its Seventh Issue of Non-convertible ventures, in the amount of R\$125, with final maturity in December 2021.

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The debentures issued by the subsidiaries are non-convertible; there are no agreements for renegotiation, nor debentures held in treasury.

There are early maturity clauses for cross-default in the event of non-payment by Cemig GT or by the Company, of any pecuniary obligation with individual or aggregate value greater than R\$ 50.

On September 26, 2019, Gasmig issued Commercial Promissory Notes, in a single series, in the amount of R\$850, with maturity at 12 months and remunerative interest at 107% of the DI rate, without guarantee or surety. The proceeds from this issue were used in their entirety for payment of the concession grant fee for the gas distribution concession contract on September 26, 2019. For more information please see Note 20.

Funding raised

This table provides the totals of funds raised in 2019, 2018 and 2017:

Financing source 2019	Signature date	Principal maturity	Annual financial cost %	Amount
BRAZILIAN CURRENCY				
Debentures – 7th Issue – 1st Series (1)	July, 2019	2024	CDI + 0.454%	2,160
Debentures – 7th Issue – 2nd Series (1)	July, 2019	2026	4.10% of IPCA	1,500
Promissory Notes – 1st Issue (2)	September, 2019	2020	107.00% of CDI	850
(-)Transactions costs				(10)
(-)Discount on the issuance of debentures (3)				(23)
Total raised				4,477

- (1) Cemig Distribuição
- (2) Gasmig
- (3) Discount on the sale price of the 2nd series of the debentures issued by Cemig Distribuição.

Financing source 2018	Signature date	Principal maturity	Annual financial cost %	Amount
FOREIGN CURRENCY				
Eurobonds (1)	July, 2018	2024	9.25%	1,946
(-) Transactions costs				(8)
(±)Interest paid in advance (2)				10
				1,948
BRAZILIAN CURRENCY				
Promissory Notes – 9th Issue - Single Series (3)	May, 2018	2019	151% of CDI	400
(-)Transactions costs				(4)
Debentures				-
Debentures (4)	August, 2018	2023	CDI + 1.50%	100
	December, 2018	2020	CDI + 1.75%	550
Debentures – 6th Issue – Single Series (5)				(4)
(-)Transactions costs				(4)
Total raised				2,990

- (1) In July 2018, Cemig GT completed financial settlement of an additional tranche to its initial Eurobond issue completed on December 5, 2017. The new tranche, of US\$ 500, which brought the total of the issuance to R\$ 1.946 billion, has half-yearly coupon of 9.25% p.a., with maturity of the principal in 2024.
- (2) Advance of funds to achieve the yield to maturity agreed in the Eurobonds contract.
- (3) In May 2018 Cemig D made its 9th Promissory Note issue, with maturity at 18 months, annual remuneration of 151% of the CDI rate, and single bullet amortization on October 24, 2019.
- (4) In August 2018 Gasmig completed its 7th debenture issue, with maturity at 5 years, paying CDI + 1.50%, with annual amortization from August 2019.
- (5) In December 2018 the 6th Debenture Issue was placed, with maturity at 18 months, annual remuneration of CDI +1.75%, and monthly amortization in 12 payments from July 3, 2019.

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Financing source 2017	Signature date	Principal maturity	Annual financing cost – %	Amount (*)
Foreign currency				
Eurobonds	12/05/2017	2024	9.25%	3,252
(–) Transaction costs (*)				(16)
Interest paid in advance (*)				(48)
Brazilian currency				
Debentures (1)	11/04/2013	2022	CDI + 0.74%	34
			128.50% of	
Debentures (2)	04/22/2017	2019	CDI	26
			146.50% of	
Debentures – 5th Issue, single series (3)	12/14/2017	2022	CDI	1,575
(–) Transaction costs (3)				(11)
Total raised				<u>4,812</u>

(*) Includes taxes without cash effect, of R\$ 10.

- (1) Subscription by BNDESPar of Gasmig's 4th debentures Issue, in June 2017, to support the plan for investment in expansion of the gas distribution network.
- (2) Cemig Telecom (merged into Company in 2018) completed its second issue of non-convertible debentures in May 2017 with real guarantees and additional surety, in a single series, to roll over debt and strengthen cash position.
- (3) On December 14, 2017 CemigTelecom made its 5th issue of non-convertible debentures, with maturity 4.5 years, annual remuneration of 146.50% of the CDI, to be amortized in 36 monthly installments due as from July 2019. Payment for subscription of the Debentures of the 5th issue was made with debentures of the 4th issue – thus there was no cash effect.

Guarantees

The guarantees of the debt balance on loans and financing, on December 31, 2019, were as follows:

Promissory notes and Sureties	2019
Guarantee and Receivables	9,247
Receivables	3,652
Shares	310
Unsecured	609
TOTAL	<u>959</u>
	<u>14,777</u>

The composition of loans, financing and debentures, by currency and index, with the respective amortization, is as follows:

	2020	2021	2022	2023	2024	2025	2026	Total
Currency								
US dollar	48	–	–	–	6,062	–	–	6,110
Total, currency denominated	48	–	–	–	6,062	–	–	6,110
Index								
IPCA (1)	1,027	881	588	237	237	996	759	4,725
UFIR/RGR (2)	11	3	3	3	–	–	–	20
CDI (3)	1,465	907	570	560	271	–	–	3,773
URTJ/TJLP (4)	202	21	21	–	–	–	–	244
IGP-DI (5)	2	1	1	1	–	–	–	5
Total by index	2,707	1,813	1,183	801	508	996	759	8,767
(–) Transaction costs	(11)	(10)	(1)	(1)	(19)	(3)	(3)	(48)
(±) Interest paid in advance	–	–	–	–	(30)	–	–	(30)
(–) Discount	–	–	–	–	–	(11)	(11)	(22)
Overall total	<u>2,744</u>	<u>1,803</u>	<u>1,182</u>	<u>800</u>	<u>6,521</u>	<u>982</u>	<u>745</u>	<u>14,777</u>

- (1) Expanded National Customer Price (IPCA) Index.
- (2) Fiscal Reference Unit (Ufir / RGR).
- (3) CDI: Interbank Rate for Certificates of Deposit.
- (4) Interest rate reference unit (URTJ) / Long-Term Interest Rate (TJLP)
- (5) IGP-DI ('General – Domestic Availability') Price Index.

The principal currencies and index used for monetary updating of loans and financings had the following variations:

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<u>Currency</u>	<u>Accumulated change in 2019, %</u>	<u>Accumulated change in 2018, %</u>	<u>Indexer</u>	<u>Accumulated change in 2019, %</u>	<u>Accumulated change in 2018, %</u>
US dollar	4.02	17.13	IPCA	4.31	3.75
			CDI	5.97	6.40
			TJLP	(20.20)	(0.29)

The changes in loans, financing and debentures are as follows:

Balance at December 31, 2016	15,179
Loans and financing obtained	3,363
(-) Transaction costs (1)	(16)
(-) Interest paid in advance (1)	(48)
Financing obtained, net	3,299
Transaction costs (2)	(11)
Monetary variation	109
Exchange rate variation	59
Financial charges provisioned	1,537
Amortization of transaction cost	67
Financial charges paid	(1,749)
Amortization of financing	(4,131)
Subtotal	14,359
FIC Pampulha: Marketable securities of subsidiary companies	39
Balance at December 31, 2017	14,398
Liabilities arising from business combination	163
Initial balance for consolidation purposes	14,561
Loans and financing obtained	2,996
(-) Transaction costs	(16)
Interest paid in advance	10
Financing obtained, net	2,990
Monetary variation	134
Exchange rate variation	582
Financial charges provisioned	1,287
Amortization of transaction cost	33
Financial charges paid	(1,290)
Amortization of financing	(3,527)
Subtotal	14,770
FIC Pampulha: Marketable securities of subsidiary companies	2
Balance at December 31, 2018	14,772
Loans and financing obtained	4,510
(-) Transaction costs	(10)
(-) Discount in the issues of securities	(23)
Financing obtained, net	4,477
Monetary variation	142
Exchange rate variation	226
Financial charges provisioned	1,250
Amortization of transaction cost	38
Financial charges paid	(1,265)
Amortization of financing	(4,883)
Subtotal	14,757
FIC Pampulha: Marketable securities of subsidiary companies	20
Balance at December 31, 2019	14,777

(1) Includes taxes with no cash effect, of R\$10.

(2) Transaction costs arising from the 5th issue of debentures by Cemig D, which was subscribed by transfer of the debentures of the 4th issue – thus there was no cash effect in the Company.

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Borrowing costs, capitalized

Costs of loans directly related to acquisition, construction or production of an asset which necessarily requires a significant time to be concluded for the purpose of use or sale are capitalized as part of the cost of the corresponding asset. All other costs of loans are recorded as finance costs in the period in which they are incurred. Costs of loans include interest and other costs incurred by the Company in relation to the loan.

The subsidiaries Cemig D and Gasmig considered the costs of loans and financing linked to construction in progress as construction costs of intangible and concession contract assets, as follows:

	<u>2019</u>	<u>2018</u>	<u>2017</u>
Costs of loans and financing	1,250	1,287	1,604
Financing costs on intangible assets and contract assets (1) (Notes 17 and 20)	(23)	(30)	(71)
Net effect in Profit or loss	<u><u>1,227</u></u>	<u><u>1,257</u></u>	<u><u>1,533</u></u>

(1) The average capitalization rate p.a. in 2019 was 6.79% (9.64% in 2018 and 14.28% in 2017).

The amounts of the capitalized borrowing costs have been excluded from the statement of cash flows, in the additions to cash flow of investment activities, as they do not represent an outflow of cash for acquisition of the related asset.

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Restrictive covenants

The Company has contracts with financial covenants as follows:

Title - Security	Covenant	Ratio required – Issuer	Ratio required Cemig (guarantor)	Ratio required – Parajuru and Volta do Rio	Compliance required
7th Debentures Issue Cemig GT (1)	Net debt /	The following or less: 4.5 in 2019	The following or less: 3.5 in 2019	—	Semi-annual and annual
	(Ebitda + Dividends received)	3.0 in 2020 2.5 in 2021	3.0 in 2020 2.5 in 2021		
Eurobonds Cemig GT (2)	Net debt /	The following or less: 4.5 on Dec. 31, 2019	The following or less: 3.5 on Dec. 31, 2019	—	Semi-annual and annual
	Ebitda adjusted for the Covenant	4.5 on June 30, 2020	3.5 on June 30, 2020		
		3.0 on Dec. 31, 2020	3.0 on Dec. 31, 2020		
		3.0 on June 30, 2021	3.0 on June 30, 2021		
		2.5 on/after Dec. 31, 2021	3.0 on/after Dec. 31, 2021		
7th Debentures Issue Cemig D	Net debt /	The following or less: 3.8 on Dec. 31, 2019	The following or less: 3.5 on December, 31, 2019	—	Semi-annual and annual
	Ebitda adjusted	3.5 on June 30, 2020	3.5 on June, 30, 2020 3.0 on December, 31, 2020		
Debentures GASMIG (3)	Overall indebtedness (Total liabilities/Total assets)	Less than 0.6	—	—	Annual
	Ebitda / Debt servicing Ebitda / Net finance income (expenses)	1.3 or more	—	—	Annual
		2.5 or more	—	—	Annual
	Net debt / Ebitda	The following or less: 4.0 on Dec. 31, 2019 2.5 on/after Dec, 31, 2020	—	—	Annual
	Debt servicing coverage index	—	—	1.20 or more	Annual (during amortization)
Financings Caixa Econômica Federal (CEF) Parajuru and Volta do Rio (4)	Equity / Total liabilities	—	—	20.61% or more (Parajuru) 20.63% or more (Volta do Rio)	Always
	Share capital subscribed in investee / Total investments made in the project financed	—	—	20.61% or more (Parajuru) 20.63% or more (Volta do Rio)	Always

(1) 7th Issue of Debentures by Cemig GT, as of December 31, 2016, of R\$ 2,240.

(2) In the event of a possible breach of the financial covenants, interest will automatically be increased by 2% p.a. during the period in which they remain exceeded. There is also an obligation to comply with a 'maintenance' covenants – that the consolidated debt, shall have a guarantee for debt of 1.75x Ebitda (2.0 as of December 31, 2017); and a 'damage' covenant, requiring real guarantee for debt at Cemig GT of 1.5x Ebitda.

(3) If Gasmig does not achieve the required covenants, it must, within 120 days from the date of notice in writing from BNDES or BNDESPar, constitute guarantees acceptable the debenture holders fbyor the total amount of the debt, subject to the rules of the National Monetary Council (CMN), unless the required ratios are restored within that period. Certain contractually specified situations can cause early maturity of other debts (cross-default).

(4) The financing contracts with Caixa Econômica Federal for the Praias de Parajuru and Volta do Rio wind power plants have financial covenants with compliance relating to early maturity of the debt remaining balance. Compliance with the debt servicing coverage index is considered to be demandable only annually and during the period of amortization, which begins in July 2020.

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The Company is in compliance with all covenants as of December 31, 2019, with the exception of the CEF contract non-financial covenant at the loan of the subsidiaries Central Eólica Praias de Parajuru and Central Eólica Volta do Rio, for an amount of R\$ 178, which is classified in current liabilities. In the event the Company is required by the creditor to settle such amount, which is not expected, the Company has available resources to make such payments. Additionally, the Company assessed the possible consequences arising from this matter in their other contracts for loans, financings and debentures, and concluded that no further adjustments were necessary.

The information on the derivative financial instruments (swaps) contracted to hedge the debt servicing of the Eurobonds (principal, in foreign currency, plus interest), and the Company's exposure to interest rate risks, are disclosed in Note 33.

25. REGULATORY CHARGES

	<u>2019</u>	<u>2018</u>
Liabilities		
Global Reversion Reserve (RGR)	31	29
Energy Development Account (CDE)	58	122
Regulator inspection fee – ANEEL	3	2
Energy Efficiency Program	255	258
Research and development (R&D)	199	225
Energy System Expansion Research	3	2
National Scientific and Technological Development Fund	6	5
Proinfra – Alternative Energy Program	8	7
Royalties for use of water resources	10	6
Emergency capacity charge	26	31
Others	5	6
	<u>604</u>	<u>693</u>
Current liabilities	<u>457</u>	<u>514</u>
Non-current liabilities	<u>147</u>	<u>179</u>

26. POST-EMPLOYMENT OBLIGATIONS**Forluz Pension plan (a Supplementary retirement pension plan)**

Company and its subsidiaries are sponsors of Forluz – Forluminas Social Security Foundation, a non-profit legal entity whose object is to provide its associates and participants and their dependents with a finance income to complement retirement and pension, in accordance with the pension plan that they are subscribed in.

Forluz provides the following supplementary pension benefit plans available to its participants:

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Mixed Benefit Plan ('Plan B'); This plan operates as a defined-contribution plan in the fund accumulation phase for retirement benefits for normal time of service, and as a defined-benefit plan for disability or death of participants still in active employment, and for receipt of benefits for time of contribution. The Sponsors match the basic monthly contributions of the participants. This is the only plan open for joining by new participants. The actuarial risks related to Plan B occur only as from the option for the lifetime benefit at the moment of the participant's retirement. In this specific case the responsibility for the risk of insufficiency of reserves for coverage of the benefits (deficits) is in parity between sponsors and participants.

Funded Benefit Plan ('Plan A'); This plan includes all currently employed and assisted participants who opted to migrate from the Company's previously sponsored defined benefit plan, and are entitled to a benefit proportional to those balances. For participants who are still working, this benefit has been deferred to the retirement date. The benefit balances of Plan A have the characteristic of lifetime payment, and the responsibility for the risk of insufficiency of reserves to cover the benefits (deficits) is exclusively of the sponsors.

Company and its subsidiaries also maintain, independently of the plans made available by Forluz, payments of part of the life insurance premium for the retirees, and contribute to a health plan and a dental plan for the active employees, retired employees and dependents, administered by Cemig Saúde.

Actuarial obligations and recognition in the financial statements

On this Note the Company discloses its obligations and expenses incurred for purposes of the Retirement Plan, Health Plan, Dental Plan and the Life Insurance Plan in accordance with the terms of IAS 19 - *Employee Benefits*, and the independent actuarial opinion issued as of December 31, 2019.

Debt with the pension fund (Forluz)

The Company has recognized an obligation for past actuarial deficits relating to the pension fund in the amount of R\$566 on December 31, 2019 (R\$652 on December 31, 2018). This amount has been recognized as an obligation payable by Cemig and its subsidiaries, and will be amortized until June of 2024, through monthly installments calculated by the system of constant installments (known as the 'Price' table), and adjusted by the IPCA (Expanded National Customer Price) inflation index (published by the Brazilian Geography and Statistics Institute – IBGE) plus 6% per year. The Company is required to pay this debt even if Forluz has a surplus, thus, the Company maintain recorded the debt in full, and record the effects of monetary updating and interest in finance income (expenses) in the statement of income.

[Table of Contents](#)**Agreement to cover the deficit on Forluz Pension Plan 'A'**

Forluz and the Company have signed a Debt Assumption Instrument to cover the deficit of Plan A for the years of 2015, 2016 and 2017. On December 31, 2019 the total amount payable by Cemig and its subsidiaries as a result of the Plan A deficits is R\$550 (R\$378 on December 31, 2018, referring to the Plan A deficits of 2015 and 2016). The contracts were entered into in May 2017, March 2018 and April 2019, for the deficits, respectively, of 2015, 2016 and 2017. The monthly amortizations, calculated by the constant installments system (Price Table), will be paid up to 2031 for the 2015 and 2016 deficits, and up to 2033 for the 2017 deficit.

Remuneratory interest applicable to the outstanding balance is 6% p.a., plus the effect of the IPCA. If the plan reaches actuarial surplus before the full period of amortization of the debt, also Company will not be required to pay the remaining installments and the contract will be extinguished.

Actuarial information

	Pension plans and retirement supplement plans	Health plan	Dental plan	Life insurance	Total
2019					
Present value of obligations	13,285	3,102	61	574	17,022
Fair value of plan assets	(10,366)	–	–	–	(10,366)
Initial net liabilities	2,919	3,102	61	574	6,656
Adjustment to asset ceiling	53	–	–	–	53
Net liabilities in the statement of financial position	2,972	3,102	61	574	6,709
	Pension plans and retirement supplement plans	Health plan	Dental plan	Life insurance	Total
2018					
Present value of obligations	11,073	2,344	48	427	13,892
Fair value of plan assets	(9,062)	–	–	–	(9,062)
Initial net liabilities	2,011	2,344	48	427	4,830
Adjustment to asset ceiling	159	–	–	–	159
Net liabilities in the statement of financial position	2,170	2,344	48	427	4,989

The *asset ceiling* is the present value of any economic benefits available in the form of restitutions coming from the plan or reductions in future contributions to the plan.

The present value of the liabilities of the pension plan is adjusted to the asset ceiling, which corresponds to the surplus result of Plan B, which has a specific destination allocation under the regulations of the National Private Pension Plans Council (CNPC).

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The changes in the present value of the defined benefit obligation are as follows:

	Pension plans and retirement supplement plans	Health plan	Dental plan	Life insurance	Total
Defined-benefit obligation at December 31, 2016	9,743	1,711	38	814	12,306
Cost of current service	5	11	–	3	19
Interest on actuarial obligation	980	178	3	85	1,246
Actuarial losses (gains):					
Due to changes in demographic assumptions	191	–	–	–	191
Due to changes in financial assumptions	414	66	2	55	537
Due to adjustments based on experience	53	(44)	(2)	(60)	(53)
	658	22	–	(5)	675
Plan amendment – Past service	–	–	–	(619)	(619)
Benefits paid	(841)	(113)	(2)	(8)	(964)
Defined-benefit obligation at December 31, 2017	10,545	1,809	39	270	12,663
Cost of current service	3	10	–	2	15
Interest on actuarial obligation	959	173	4	25	1,161
Actuarial losses (gains):					
Due to changes in demographic assumptions	–	–	–	–	–
Due to changes in financial assumptions	467	402	8	26	903
Due to adjustments based on experience	(20)	68	–	113	161
	447	470	8	139	1,064
Benefits paid	(881)	(118)	(3)	(9)	(1,011)
Defined-benefit obligation at December 31, 2018	11,073	2,344	48	427	13,892
Cost of current service	1	14	–	3	18
Interest on actuarial obligation	963	208	4	38	1,213
Actuarial losses (gains):					
Due to changes in demographic assumptions	6	–	–	–	6
Due to changes in financial assumptions	2,058	576	11	130	2,775
Due to adjustments based on experience	83	91	–	(14)	160
	2,147	667	11	116	2,941
Benefits paid	(899)	(131)	(2)	(10)	(1,042)
Defined-benefit obligation at December 31, 2019	13,285	3,102	61	574	17,022

On 2017, the Company changed its life insurance policy, resulting in reduction of the retirees' capital insured by 20% at each 5-year interval, from aged 60, down to a minimum of 20%. These changes resulted in a reduction of R\$ 619 in the post-employment obligations reported on December 31, 2017, with counterpart in the Statement of income in 2017.

Changes in the fair values of the plan assets are as follows:

	Pension plans and retirement supplement plans
Fair value of plan assets at December 31, 2016	8,128
Return on investments	1,100
Contributions from employer	159
Benefits paid	(841)
Fair value of plan assets at December 31, 2017	8,546
Return on investments	1,220
Contributions from employer	178
Benefits paid	(881)
Fair value of the plan assets at December 31, 2018	9,063
Return on investments	2,003
Contributions from employer	199
Benefits paid	(899)
Fair value of the plan assets at December 31, 2019	10,366

The amounts recognized in 2019, 2018 and 2017 statement of income are as follows:

	Pension plans and retirement supplement plans	Health plan	Dental plan	Life insurance	Total
2019					
Current service cost	1	14	–	2	17
Interest on the actuarial obligation	963	208	5	38	1,214
Expected return on the assets of the Plan	(767)	–	–	–	(767)
Expense (recovery of expense) in 2019 according to actuarial calculation	197	222	5	40	464

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	Pension plans and retirement supplement plans	Health plan	Dental plan	Life insurance	Total
2018					
Current service cost	4	10	0	1	15
Interest on the actuarial obligation	959	172	4	26	1,161
Expected return on the assets of the Plan	(771)	–	–	–	(771)
Expense (recovery of expense) in 2018 according to actuarial calculation	192	182	4	27	405

	Pension plans and retirement supplement plans	Health plan	Dental plan	Life insurance	Total
2017					
Current service cost	5	11	–	3	19
Interest on the actuarial obligation	980	178	3	85	1,246
Expected return on the assets of the Plan	(810)	–	–	–	(810)
Past service cost	–	–	–	(619)	(619)
Expense (recovery of expense) in 2017 according to actuarial calculation	175	189	3	(531)	(164)

Changes in net liabilities were as follows:

	Pension plans and retirement supplement plans	Health plan	Dental plan	Life insurance	Total
Net liabilities at December 31, 2016	1,679	1,711	38	814	4,242
Expense recognized in Statement of income	175	189	3	88	455
Contributions paid	(160)	(113)	(2)	(7)	(282)
Plan amendment – Past service	–	–	–	(619)	(619)
Actuarial losses (gains)	374	22	(1)	(5)	390
Net liabilities at December 31, 2017	2,068	1,809	38	271	4,186
Expense recognized in Statement of income	193	183	4	25	405
Contributions paid	(178)	(118)	(2)	(9)	(307)
Actuarial losses	87	470	8	140	705
Net liabilities at December 31, 2018	2,170	2,344	48	427	4,989
Expense recognized in Statement of income	197	222	5	40	464
Contributions paid	(200)	(131)	(2)	(10)	(343)
Actuarial losses	805	667	10	117	1,599
Net liabilities at December 31, 2019	2,972	3,102	61	574	6,709
Current liabilities				2019	2018
Non-current liabilities				288	253
				6,421	4,736

Amounts recorded as current liabilities refer to contributions to be made by Cemig and its subsidiaries in the next 12 months for the amortization of the actuarial liabilities.

The amounts reported as 'Expense recognized in the Statement of income' refer to the costs of post-employment obligations, totaling R\$408 in 2019 (R\$ 337 in 2018 and R\$ 391 in 2017), plus the finance expenses and monetary updating on the debt with Forluz, in the amounts of R\$56 in 2019 (R\$ 68 in 2018 and R\$65 in 2017).

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The independent actuary's estimation for the expense to be recognized for 2020 is as follows:

	Pension plans and retirement supplement plans	Health plan	Dental plan	Life insurance	Total
Current service cost	1	21	1	3	26
Interest on the actuarial obligation	887	215	4	41	1,147
Expected return on the assets of the Plan	(682)	–	–	–	(682)
Estimated total expense in 2020 as per actuarial report	206	236	5	44	491

The expectation for payment of benefits for 2020 is as follows:

	Pension plans and retirement supplement plans – Forluz	Health plan	Dental plan	Life insurance	Total
Estimated payment of benefits	898	141	3	17	1,059

The Company have expectation of making contributions to the pension plan in 2020 of R\$286 for amortization of the deficit of Plan A, and R\$79 for the Defined Contribution Plan (recorded directly in the Statement of income for the year).

The average maturity periods of the obligations of the benefit plans, in years, are as follows:

Pension plans and retirement supplement plans		Health plan	Dental plan	Life insurance
Plan A	Plan B			
9.54	11.55	12.82	13.17	16.93

The main categories plan's assets, as a percentage of total plan's assets are as follows:

	2019	2018
Shares	9.51%	7.11%
Fixed income securities	72.28%	71.92%
Real estate property	3.79%	4.69%
Others	14.42%	16.28%
Total	100.00%	100.00%

The following assets of the pension plan, measured at fair value, are related to the Company:

	2019	2018
Non-convertible debentures issued by the Company	398	380
Shares issued by the Company	24	35
Real estate properties of the Foundation, occupied by the Company	503	662
	925	1,077

This table provides the main actuarial assumptions:

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	2019		
	Pension plans and retirement supplement plans	Health plan and Dental plan	Life insurance
Annual discount rate for present value of the actuarial obligation	6.87%	7.09%	7.19%
Annual expected return on plan assets	6.87%	Not applicable	Not applicable
Long-term annual inflation rate	3.61%	3.61%	3.61%
Estimated future annual salary increases	3.61%	Not applicable	4.85%
General mortality table	AT-2000 M S10% D10%	AT-2000 M S10% D20%	AT-2000 M S10% D20%
Disability table	Not applicable	Álvaro Vindas D30%	Álvaro Vindas D30%
Disabled mortality table	AT-49 M	MI-85 F	MI-85 F
Real growth of contributions above inflation	–	1%	–

	2018		
	Pension plans and retirement supplement plans	Health plan and Dental plan	Life insurance
Annual discount rate for present value of the actuarial obligation	9.02%	9.60%	9.57%
Annual expected return on plan assets	9.02%	Not applicable	Not applicable
Long-term annual inflation rate	4.01%	4.00%	4.00%
Estimated future annual salary increases	4.01%	Not applicable	6.08%
General mortality table	AT-2000 M S10% D10%	AT-2000 M S10% D20%	AT-2000 M S10% D20%
Disability table	Not applicable	Álvaro Vindas D30%	Álvaro Vindas D30%
Disabled mortality table	AT 49 M	Winklevoss D30%	Winklevoss D30%
Real growth of contributions above inflation (1)	–	1%	–

(1) Starting in 2018, Company adopted the assumption of real growth of the contributions above inflation at the rate of 1% p.a.

	2017		
	Pension plans and retirement supplement plans	Health and Dental plans	Life insurance
Annual discount rate for present value of the actuarial obligation	9.48%	9.60%	9.57%
Annual expected return on plan assets	9.48%	9.60%	9.57%
Long-term annual inflation rate	4.00%	4.00%	4.00%
Estimated future annual salary increases	4.00%	Not applicable	6.08%
General mortality table	AT-2000 M S10% D10%	AT-2000 M S10% D20%	AT-2000 M S10% D20%
Disability table	Not applicable	Álvaro Vindas D30%	Álvaro Vindas D30%
Disabled mortality table	AT 49 M	Winklevoss D30%	Winklevoss D30%

Below is a sensitivity analysis of the effects of changes in the main actuarial assumptions used to determine the defined-benefit obligation at December 31, 2019:

<u>Effects on the defined-benefit obligation</u>	Pension plans and retirement supplement plans	Health plan	Dental plan	Life insurance	Total
Reduction of one year in the mortality table	335	84	1	(15)	405
Increase of one year in the mortality table	(336)	(61)	(1)	16	(382)
Reduction of 1% in the discount rate	1,583	496	10	122	2,211

In the presentation of the sensitivity analysis, the present value of the defined-benefit obligation was calculated using the Unit Projected Credit method, the same method used to calculate the defined-benefit obligation recognized in the Statement of financial position.

The Company has not made changes in the methods used to calculate its post-employment obligations for the years ended December 31, 2019 and 2018.

27. PROVISIONS

Company is involved in certain legal and administrative proceedings at various courts and government bodies, arising in the normal course of business, regarding employment-law, civil, tax, environmental and regulatory matters, and other issues.

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Actions in which the Company is defendant

Company recorded provisions for contingencies in relation to the legal actions in which, based on the assessment of the Company's management and its legal advisors, the chances of loss are assessed as 'probable' (i.e. an outflow of funds to settle the obligation will be necessary), as follows:

	<u>2018</u>	<u>Additions</u>	<u>Reversals</u>	<u>Settled</u>	<u>2019</u>
Labor	457	180	(44)	(96)	497
Civil					
Customer relations	19	21	(1)	(20)	19
Other civil actions	29	16	(12)	(15)	18
	<u>48</u>	<u>37</u>	<u>(13)</u>	<u>(35)</u>	<u>37</u>
Tax	52	1,236	(8)	(20)	1,260
Environmental	1	-	(1)	-	-
Regulatory	37	2	(1)	(2)	36
Others	46	13	(1)	-	58
Total	<u>641</u>	<u>1,468</u>	<u>(68)</u>	<u>(153)</u>	<u>1,888</u>
	<u>2017</u>	<u>Additions</u>	<u>Reversals</u>	<u>Settled</u>	<u>2018</u>
Labor	474	67	(25)	(59)	457
Civil					
Customer relations	18	17	-	(16)	19
Other civil actions	43	10	(14)	(10)	29
	<u>61</u>	<u>27</u>	<u>(14)</u>	<u>(26)</u>	<u>48</u>
Tax	57	5	(10)	-	52
Environmental	-	1	-	-	1
Regulatory	40	8	(10)	(1)	37
Others	46	7	(5)	(2)	46
Total	<u>678</u>	<u>115</u>	<u>(64)</u>	<u>(88)</u>	<u>641</u>
	<u>2016</u>	<u>Additions</u>	<u>Reversals</u>	<u>Settled</u>	<u>2017</u>
Labor	350	210	(4)	(82)	474
Civil					
Customer relations	15	21	(2)	(16)	18
Other civil actions	40	10	(2)	(5)	43
	<u>55</u>	<u>31</u>	<u>(4)</u>	<u>(21)</u>	<u>61</u>
Tax	68	9	(2)	(18)	57
Regulatory	44	15	(18)	(1)	40
Corporate	239	-	(239)	-	-
Other	59	13	(19)	(7)	46
Total	<u>815</u>	<u>278</u>	<u>(286)</u>	<u>(129)</u>	<u>678</u>

The Company's management, in view of the extended period and the Brazilian judiciary, tax and regulatory systems, believes that it is not practical to provide information that would be useful to the users of these financial statements in relation to the timing of any cash outflows, or any possibility of reimbursements, might occur.

The Company's believes that any disbursements in excess of the amounts provisioned, when the respective claims are completed, will not significantly affect the Company's result of operations or financial position.

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The details on the main provisions and contingent liabilities are provided below, with the best estimation of expected future disbursements for these contingencies:

Provisions, made for legal actions in which the chances of loss have been assessed as 'probable' and contingent liabilities, for actions in which the chances of loss are assessed as 'possible'

Labor claims

The Company is involved in various legal claims filed by its employees and by employees of service providing companies. Most of these claims relate to overtime and additional pay, severance payments, various benefits, salary adjustments and the effects of such items on a supplementary retirement plan. In addition to these actions, there are others relating to outsourcing of labor, complementary additions to or re-calculation of retirement pension payments by Forluz, and salary adjustments.

The aggregate amount of the contingency is approximately R\$ 1,679 (R\$1,725 at December 31, 2018), of which R\$ 487 (R\$457 at December 31, 2018) has been recorded – the amount estimated as probably necessary for settlement of these disputes.

Alteration of the monetary updating index of employment-law cases

The Higher Employment-Law Appeal Court (*Tribunal Superior do Trabalho*, or TST), considering a position adopted by the Federal Supreme Court (*Supremo Tribunal Federal*, STF) in two actions on constitutionality that deal with the index for monetary updating of federal debts, decided on August 4, 2015 that employment-law debts in actions not yet decided that discuss debts subsequent to June 30, 2009 should be updated based on the variation of the IPCA-E (Expanded National Customer Price Index), rather than of the TR reference interest rate. On October 16, 2015 the STF gave an interim injunction suspending the effects of the TST decision, on the grounds that general repercussion of constitutional matters should be adjudicated exclusively by the STF.

In a joint judgment published on November 1, 2018, the TST decided that the IPCA-E should be adopted as the index for inflation adjustment of employment-law debts for cases filed from March 25, 2015 to November 10, 2017, and the TR would continue to be used for the other periods. The estimated amount of the contingency is R\$106 (R\$88 at December 31, 2018), of which R\$10 has been provisioned upon assessment by the Company of the effects of the decision of the Regional Employment-Law Appeal Court of the third region (TRT3) in May 2019, on the subject of the joint judgment published by the TST, in the cases for which the chances of loss have been classified as 'probable' and which are at execution phase. No additional provision has been made, since the Company, based on the assessment by its legal advisers, has assessed the chances of loss in the action as 'possible', as a result of the decision by the Federal Supreme Court, and of there being no established case law, nor analysis by legal writers, on the subject, after the injunction given by the Federal Supreme Court.

[Table of Contents](#)Customers claims

The Company is involved in various civil actions relating to indemnity for personal injury and for material damages, arising, principally, from allegations of irregularity in measurement of consumption, and claims of undue charging, in the normal course of business, totaling R\$68 (R\$66 at December 31, 2018), of which R\$19 (R\$19 at December 31, 2018) has been recorded – this being the probable estimate for funds needed to settle these disputes.

Other civil proceedings

The Company is involved in various civil actions claiming indemnity for personal injury and for material damages, among others, arising from incidents occurred in the normal course of business, in the amount of R\$300 (R\$277 at December 31, 2018), of which R\$18 (R\$29 at December 31, 2018) has been recorded – the amount estimated as probably necessary for settlement of these disputes.

Tax

The Company is involved in numerous administrative and judicial claims actions relating to taxes, including, among other matters, subjects relating to the Urban Property Tax (*Imposto sobre a Propriedade Territorial Urbana*, or IPTU); the Rural Property Tax (ITR); the Tax on Donations and Legacies (ITCD); the Social Integration Program (*Programa de Integração Social*, or PIS); the Contribution to Finance Social Security (*Contribuição para o Financiamento da Seguridade Social*, or Cofins); Corporate Income tax (*Imposto de Renda Pessoa Jurídica*, or IRPJ); the Social Contribution (*Contribuição Social sobre o Lucro Líquido*, or CSLL); and motions to tax enforcement. The aggregate amount of this contingency is approximately R\$204 (R\$160 at December 31, 2018), of which R\$43 (R\$46 at December 31, 2018) has been recorded – the amount estimated as probably necessary for settlement of these disputes.

In addition to the issues above the Company is involved in various proceedings on the applicability of the IPTU Urban Land Tax to real estate properties that are in use for providing public services. The aggregate amount of the contingency is approximately R\$79 (R\$142 at December 31, 2018). Of this total, R\$4 has been recognized (R\$5 at December 31, 2018) – this being the amount estimated as probably necessary for settlement of these disputes. The company has been successful in its efforts to have its IPTU tax liability suspended, winning judgments in favor in some cases – this being the principal factor in the reduction of the total value of the contingency.

[Table of Contents](#)*Social Security contributions on profit sharing payments*

The Brazilian tax authority (*Receita Federal*) has filed administrative and court proceedings against the Company, relating to social security contributions on the payment of profit sharing to its employees over the period 1999 to 2016, alleging that the Company did not comply with the requirements of Law 10,101/2000 on the argument that it did not previously establish clear and objective rules for the distribution of these amounts. In August 2019, the Regional Federal Court of the First Region published a decision against the Company on this issue. As a result the Company, based on the opinion of its legal advisers, reassessed the chances of loss from 'possible' to 'probable' for some portions paid as profit-sharing amounts, maintaining the classification of the chance of loss as 'possible' for the other portions, since it believes that it has arguments on the merit for defense and/or because it believes that the amounts questioned are already within the period of limitation.

The amount of the contingencies is approximately R\$1,451 (R\$1,264 on December 31, 2018), of which R\$1,213 has been provisioned, this being the estimate of the probable amount of funds to settle these disputes.

Environmental

The Company is involved in environmental matters, in which the subjects include protected areas, environmental licenses, recovery of environmental damage, and other matters, in the approximate total amount of R\$47 (R\$15 at December 31, 2018) classified as 'possible' and for which the amount of the provision recognized was not material.

Regulatory

The Company is involved in numerous administrative and judicial proceedings, challenging, principally: (i) tariff charges in invoices for use of the distribution system by a self-producer; (ii) alleged violation of targets for continuity indicators in retail supply of energy; and (iii) the tariff increase made during the federal government's economic stabilization plan referred to as the 'Cruzado Plan', in 1986. The aggregate amount of the contingency is approximately R\$280 (R\$260 at December 31, 2018), of which R\$36 (R\$37 at December 31, 2018) has been recorded as provision – the amount estimated as probably necessary for settlement of these disputes.

Other legal actions in the normal course of business*Breach of contract – Power line pathways and accesses cleaning services contract*

Company is involved in disputes alleging losses suffered as a result of supposed breaches of contract at the time of provision of services of cleaning of power line pathways and firebreaks. The amount recorded is R\$41 (R\$36 at December 31, 2018), this being estimated as the likely amount of funds necessary to settle this dispute.

[Table of Contents](#)*'Luz Para Todos' Program*

The Company is a party in disputes alleging losses suffered by third parties as a result of supposed breach of contract at the time of implementation of part of the rural electrification program known as the '*Luz Para Todos*'. The estimated amount of the contingency is approximately R\$322 (R\$291 on December 31, 2018). Of this total, R\$4 has been provided for – the amount estimated as probably necessary for settlement of these disputes.

Other legal proceedings

The Company is involved as plaintiff or defendant, in other less significant claims, related to the normal course of their operations including: environmental matters; provision of cleaning service in power line pathways and firebreaks, removal of residents from risk areas; and indemnities for rescission of contracts, on a lesser scale, related to the normal course of its operations, with an estimated total amount of R\$452 (R\$189 at December, 31, 2018), of which R\$13 (R\$11 at December, 31, 2018), the amount estimated as probably necessary for settlement of these disputes – has been provisioned.

Contingent liabilities – loss assessed as 'possible'Taxes and contributions

The Company is involved in numerous administrative and judicial proceedings in relation to taxes. Below are details of the main claims:

Indemnity of employees' future benefit (the 'Anuênio')

In 2006 the Company paid an indemnity to its employees, totaling R\$178, in exchange for rights to future payments (referred to as the *Anuênio*) for time of service, which would otherwise be incorporated, in the future, into salaries. The Company did not pay income tax and Social Security contributions on this amount because it considered that those obligations are not applicable to amounts paid as an indemnity. However, to avoid the risk of a future fine, the Company obtained an injunction, which permitted to make an escrow deposit of R\$122, which updated now represents the amount of R\$282 (R\$275 at December 31, 2018). The updated amount of the contingency is R\$289 (R\$304 at December 31, 2018) and, based on the arguments above, management has classified the chance of loss as 'possible'.

[Table of Contents](#)*Social Security contributions*

The Brazilian federal tax authority (*Secretaria da Receita Federal*) has filed administrative proceedings related to various matters: employee profit sharing; the Workers' Food Program (*Programa de Alimentação do Trabalhador*, or PAT); education benefit; food benefit; Special Additional Retirement payment; overtime payments; hazardous occupation payments; matters related to Sest/Senat (transport workers' support programs); and fines for non-compliance with accessory obligations. The Company have presented defenses and await judgment. The amount of the contingency is approximately R\$112 (R\$155 at December 31, 2018). Management has classified the chance of loss as 'possible', also taking into account assessment of the chance of loss in the judicial sphere, (the claims mentioned are in the administrative sphere), based on the evaluation of the claims and the related case law.

Non-homologation of offsetting of tax credit

The federal tax authority did not ratify the Company's declared offsetting, in Corporate income tax returns, of carry-forwards and undue or excess payment of federal taxes – IRPJ, CSLL, PIS/Pasep and Cofins – identified by official tax deposit receipts ('DARFs' and 'DCTFs'). The Company is contesting the non-homologation of the amounts offset. The amount of the contingency is R\$160 (R\$146 at December 31, 2018), and the chance of loss was classified as 'possible', since the relevant requirements of the National Tax Code (CTN) have been complied with.

Income tax withheld on capital gain in a shareholding transaction

The federal tax authority issued a tax assessment against Cemig as a jointly responsible party with its jointly-controlled entity Parati S.A. Participações em Ativos de Energia Elétrica (Parati), relating to withholding income tax (*Imposto de Renda Retido na Fonte*, or IRRF) allegedly applicable to returns paid by reason of a capital gain in a shareholding transaction relating to the purchase by Parati, and sale, by Enlighted, at July 7, 2011, of 100.00% of the equity interests in Luce LLC (a company with head office in Delaware, USA), holder of 75.00% of the shares in the Luce Brasil equity investment fund (FIP Luce), which was indirect holder, through Luce Empreendimentos e Participações S.A., of approximately 13.03% of the total and voting shares of Light S.A. (Light). The amount of the contingency is approximately R\$230 (R\$221 at December 31, 2018), and the loss has been assessed as 'possible'.

[Table of Contents](#)*The social contribution tax on net income (CSLL)*

The federal tax authority issued a tax assessment against the Company for the years of 2012 and 2013, alleging undue non-addition, or deduction, of amounts relating to the following items in calculating the social contribution tax on net income: (i) taxes with liability suspended; (ii) donations and sponsorship (Law 8,313/91); and (iii) fines for various alleged infringements. The amount of this contingency is R\$400 (R\$350 at December 31, 2018). The Company has classified the chances of loss as 'possible', in accordance with the analysis of the case law on the subject.

ICMS (local state value added tax)

From December 2019 to March 2020 the Tax Authority of Minas Gerais State issued infraction notices against the subsidiary Gasmig, in the total amount of R\$55, relating to reduction of the calculation base of ICMS tax in the sale of natural gas to its customers over the period from December 2014 to December 2015, alleging a divergence between the form of calculation used by Gasmig and the opinion of that tax authority. The claims comprises: principal of R\$17, penalty payments of R\$27 and interest of R\$11.

Considering that the State of Minas Gerais, over a period of more than 25 years, has never made any allegations against the methodology of calculation by Gasmig, Management and Company's legal advisors, believe that there is a defense under Article 100, III of the National Tax Code, which removes claims for penalties and interest; and that the contingency for loss related to these amounts is 'remote'. In relation to the argument on the difference between the amount of ICMS tax calculated by Gasmig and the new interpretation by the state tax authority, the probability of loss was considered 'possible'. On December 31, 2019 the amount of the contingency for the period relating to the rules on expiry by limitation of time is R\$ 89.

Regulatory matters*Public Lighting Contribution (CIP)*

Cemig and Cemig D are defendants in several public civil claims (class actions) requesting nullity of the clause in the Electricity Supply Contracts for public illumination signed between the Company and the various municipalities of its concession area, and restitution by the Company of the difference representing the amounts charged in the last 20 years, in the event that the courts recognize that these amounts were unduly charged. The actions are grounded on a supposed error by Cemig in the estimation of the period of time that was used in calculation of the consumption of energy for public illumination, funded by the Public Lighting Contribution (*Contribuição para Iluminação Pública*, or CIP).

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The Company believes it has arguments of merit for defense in these claims, since the charge at present made is grounded on Aneel Normative Resolution 456/2000. As a result, it has not constituted a provision for this action, the amount of which is estimated at R\$959 (R\$975 at December 31, 2018). The Company has assessed the chances of loss in this action as 'possible', due to the Customer Defense Code (Código de Defesa do Consumidor, or CDC) not being applicable, because the matter is governed by the specific regulation of the electricity sector, and because Cemig complied with Aneel Resolutions 414 and 456, which deal with the subject.

Accounting of energy sale transactions in the Power Trading Chamber (CCEE)

In a claim dating from August 2002, AES Sul Distribuidora challenged in the court the criteria for accounting of energy sale transactions in the wholesale energy market (*Mercado Atacadista de Energia*, or MAE) (predecessor of the present Power Exchange Chamber – *Câmara de Comercialização de Energia Elétrica*, or CCEE), during the period of rationing. It obtained a favorable interim judgment on February 2006, which ordered the regulator (Aneel), working with the CCEE, to comply with the claim by AES Sul and recalculate the settlement of the transactions during the rationing period, not considering the regulator (Aneel) Dispatch 288 of 2002.

This should take effect in the CCEE as from November 2008, resulting in an additional disbursement for Cemig GT, related to the expense on purchase of energy in the spot market on the CCEE, in the approximate amount of R\$343 (R\$317 at December 31, 2018). On November 9, 2008 Cemig GT obtained an interim decision in the Regional Federal Appeal Court (*Tribunal Regional Federal*, or TRF) suspending the obligatory nature of the requirement to pay into court the amount that would have been owed under the Special Financial Settlement made by the CCEE. Cemig GT has classified the chance of loss as 'possible', since this action deals with the General Agreement for the Electricity Sector, in which the Company has the full documentation to support its arguments.

System Service Charges (ESS) – Resolution of the National Energy Policy Council

Resolution 3 of the National Energy Policy Council (*Conselho Nacional de Política Energética*, or CNPE) of March 6, 2013 established new criteria for the prorating of the cost of additional dispatch of thermal plants. Under the new criteria, the costs of the System Service Charges for Electricity Security (*Encargos do Serviço do Sistema*, or ESS), which were previously prorated in full between free customers and distributors, was now to be prorated between all the agents participating in the National Grid System, including generators and traders.

In May 2013, the Brazilian Independent Electricity Producers' Association (*Associação Brasileira dos Produtores Independentes de Energia Elétrica*, or Apine), of which Cemig GT is a member, obtained an interim court decision suspending the effects of Articles 2 and 3 of Resolution CNPE 3, exempting generators from payment of the ESS under that Resolution.

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As a result of the interim decision, the CCEE carried out the financial settlement for transactions from April through December 2013 using the criteria prior to Resolution. As a result, Cemig GT recorded the costs of the ESS in accordance with the criteria for financial settlement published by the CCEE, without the effects of Resolution CNPE 3.

In June 2019 the case was dismissed, since the action for annulment brought by APINE reached final judgment against which there was no further appeal. This made final and irreversible the court judgment that declared nullity of CNPE Resolution 3/2013 as to the part in which generation agents were included in the proportional sharing of the cost of the additional dispatch of plant to guarantee supply of energy. This results in the systemic structure of CNPE Resolution 8/2007 remaining definitively intact.

Tariff increases*Exclusion of customers classified as low-income*

The Federal Public Attorneys' Office filed a class action against the Company and the regulator (Aneel), to avoid exclusion of customers from classification in the *Low-income residential tariff* sub-category, requesting an order for Cemig D to pay twice the amount paid in excess by customers. A decision was given in favor of the plaintiffs, but the Company and the regulator (Aneel) have filed an interlocutory appeal and await judgment. The amount of the contingency is approximately R\$327 (R\$303 at December 31, 2018). Cemig D has classified the chances of loss as 'possible' due to other favorable decisions on this matter.

Environmental claims*Impact arising from construction of power plants*

The Public Attorneys of Minas Gerais State, together with an association and individuals, have brought class actions requiring Cemig GT to invest, since 1997, at least 0.5% of the annual gross operating revenue of the *Emborcação, Pissarrão, Funil, Volta Grande, Poquim, Paraúna, Miranda, Nova Ponte, Rio de Pedras* and *Peti* plants in environmental protection and preservation of the water tables of the counties where these power plants are located, and proportional indemnity for allegedly irrecoverable environmental damage caused, arising from omission to comply with Minas Gerais State Law 12,503/1997. Cemig GT has filed appeals to the Higher Appeal Court (STJ) and the Federal Supreme Court (STF). Based on the opinions of its legal advisers, Cemig GT believes that this is a matter involving legislation at infra-constitutional level (there is a Federal Law with an analogous object) and thus a constitutional matter, on the issue of whether the state law is constitutional or not, so that the final decision is one for the national Higher Appeal Court (STJ) and the Federal Supreme Court (STF). No provision has been made, since based on the opinion of its legal advisers management has classified the chance of loss as 'possible'. The amount of the contingency is R\$165 (R\$148 at December 31, 2018).

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The Public Attorneys' Office of Minas Gerais State has filed class actions requiring the formation of a Permanent Preservation Area (APP) around the reservoir of the *Capim Branco* hydroelectric plant, suspension of the effects of the environmental licenses, and recovery of alleged environmental damage. Based on the opinion of its legal advisers in relation to the changes that have been made in the new Forest Code and in the case law on this subject, Cemig GT has classified the chance of loss in this dispute as 'possible'. The estimated value of the contingency is R\$95 (R\$87 at December 31, 2018).

Other contingent liabilities*Early settlement of the CRC (Earnings Compensation) Account*

The Company is involved in an administrative proceeding at the Audit Court of the State of Minas Gerais which challenges: (i) a difference of amounts relating to the discount offered by Cemig for early repayment of the credit owed to Cemig by the State under the Receivables Assignment Contract in relation to the CRC Account (*Conta de Resultados a Compensar*, or Earnings Compensation Account) – this payment was completed in the first quarter of 2013; and also (ii) possible undue financial burden on the State after the signature of the Amendments that aimed to re-establish the economic and financial balance of the Contract. The amount of the contingency is approximately R\$426 (R\$412 at December 31, 2018), and, based on the Opinion of the Public Attorneys' Office of the Audit Board of the State of Minas Gerais (Tribunal de Contas), the Company believes that it has met the legal requirements. Thus, it has assessed the chances of loss as 'possible', since it believes that the adjustment was made in faithful obedience to the legislation applicable to the case.

Contractual imbalance

Company is party in other disputes arising from alleged non-compliance with contracts in the normal course of business, for an estimated total of R\$149 (R\$90 at December 31, 2018). Company has classified the chance of loss as 'possible', after analysis of the case law on this subject.

28. EQUITY AND REMUNERATION TO SHAREHOLDERS**a) Share capital**

As of December 31, 2019, the Company's issued and share capital is R\$7,294 (R\$7,294 at December 31, 2018 and 2017), represented by 487,614,213 common shares (487,614,213 at December 31, 2018) and 971,138,388 preferred shares (971,138,388 at December 31, 2018), both of them with nominal value of R\$5.00 (five Reais), as follows:

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Shareholders	Number of shares on December 31, 2019					
	Common	%	Preferred	%	Total	%
State of Minas Gerais	248,516,953	51	11,323	–	248,528,276	17
Other entities of Minas Gerais State	19,896	–	1,411,276	–	1,431,172	–
FIA Dinâmica Energia S.A.	48,700,000	10	55,133,744	6	103,833,744	7
BNDES Participações	54,342,992	11	26,220,938	3	80,563,930	6
Others						
In Brazil	101,170,317	21	328,982,856	34	430,153,173	29
Foreign shareholders	34,864,055	7	559,378,251	57	594,242,306	41
Total	487,614,213	100	971,138,388	100	1,458,752,601	100

Shareholders	Number of shares on December 31, 2018					
	Common	%	Preferred	%	Total	%
State of Minas Gerais	248,480,146	51	–	–	248,480,146	17
Other entities of Minas Gerais State	56,703	–	647,647	–	704,35	–
FIA Dinâmica Energia S.A.	48,200,000	10	55,905,344	6	104,105,344	7
BNDES Participações	54,342,992	11	26,220,938	3	80,563,930	5
Others						
In Brazil	105,402,202	22	370,338,947	38	475,741,149	33
Foreign shareholders	31,132,170	6	518,025,512	53	549,157,682	38
Total	487,614,213	100	971,138,388	100	1,458,752,601	100

Shareholders	Number of shares on December 31, 2017					
	Common	%	Preferred	%	Total	%
State of Minas Gerais	214,414,739	51	–	–	214,414,739	17
Other entities of Minas Gerais State	56,703	–	4,860,228	1	4,916,931	1
FIA Dinâmica Energia S.A.	41,635,754	10	62,469,590	7	104,105,344	8
BNDES	54,342,992	13	26,220,938	3	80,563,930	6
Others						
In Brazil	56,000,217	13	210,953,069	25	266,953,286	21
Foreign shareholders	54,314,303	13	533,573,121	64	587,887,424	47
Total	420,764,708	100	838,076,946	100	1,258,841,654	100

The Company's Share Capital may be increased by up to a limit of 10% (ten percent) of the share capital set in the by-laws, without need for change in the by-laws and upon decision of the Board of Directors, having previously heard statement of opinion issued by the Fiscal Council.

Capital increase

On April 23, 2018, the Shareholders' Extraordinary General Meeting approved an increase in the Company's capital, of R\$ 1,000, from R\$ 6,294 to R\$ 7,294, through issuance of 199,910,947 new shares, each with nominal value of R\$ 5.00, comprising 66,849,505 common shares and 133,061,442, preferred shares.

The amount subscribed and paid-up by the shareholders was R\$ 1,325. The difference between the capital increase and the amount subscribed, of R\$ 325 was allocated to the Capital reserve.

b) Earnings per share

Number of shares	2019	2018	2017
Common shares already paid up	487,614,213	487,614,213	420,764,708
Common shares to be paid up	–	–	66,849,505
Shares in treasury	(69)	(69)	(69)
	487,614,144	487,614,144	487,614,144
Preferred shares already paid up	971,138,388	971,138,388	838,076,946
Preferred shares to be paid up	–	–	133,061,442
Shares in treasury	(560,649)	(560,649)	(560,649)
	970,577,739	970,577,739	970,577,739
Total	1,458,191,883	1,458,191,883	1,458,191,883

[Table of Contents](#)Basic and diluted earnings per share

The Company's preferred shares carry the right to a minimum mandatory dividend, as shown in more detail in item 'e'.

The shares that were subscribed in the capital increase of April 23, 2018, were considered in full in the calculation of basic and diluted profit for 2017, since the proposal for subscription of new shares was decided in an Extraordinary Shareholders' Meeting on October 26, 2017, and these new shares already had potential for subscription since that date, as decided by the shareholders.

The purchase and sale options of investments described in Note 33 could potentially dilute basic profit per share in the future; however, they have not caused dilution of profit per share in 2019, 2018 and 2017.

The calculation of basic and diluted earnings per share is as follows:

	<u>2019</u>	<u>2018</u>	<u>2017</u>
Net income for the year attributed to equity holders of the parent	3,127	1,700	1,001
Minimum mandatory dividend from net income for the year - preferred shares	509	577	486
Net income for the year not distributed - preferred shares	1,573	554	333
Total earnings - preferred shares (A)	2,082	1,131	819
Minimum mandatory dividend from net income for the year - common shares	255	290	15
Net income for the year not distributed - common shares	790	279	167
Total earnings - common shares (B)	1,045	569	182
Basic and diluted earnings per preferred share (A / number of preferred shares)	2.14	1.17	0.84
Basic and diluted earnings per common share (B / number of common shares)	2.14	1.17	0.37
	<u>2019</u>	<u>2018</u>	<u>2017</u>
Net income for the year from continuing operations attributed to equity holders of the parent	2,903	1,378	1,001
Minimum mandatory dividend from net income for the year from continuing operations – preferred shares	509	527	486
Net income for the year from continuing operations not distributed – preferred shares	1,424	390	333
Total earnings from continuing operations - preferred shares (A.1)	1,933	917	819
Minimum mandatory dividend from net income for the year from continuing operations - common shares	255	290	15
Net income for the year from continuing operations not distributed – common shares	715	171	167
Total earnings from continuing operations - common shares (B.1)	970	461	182
Basic and diluted earnings from continuing operations per preferred share (A.1 / number of preferred shares)	1.99	0.95	0.84
Basic and diluted earnings from continuing operations per common share (B.1 / number of common shares)	1.99	0.95	0.37

c) ReservesCapital reserves

	<u>2019</u>	<u>2018</u>	<u>2017</u>
Investment-related donations and subsidies	1,857	1,857	1,857
Goodwill on issuance of shares	394	394	69
Shares in treasury	(1)	(1)	(1)
	<u>2,250</u>	<u>2,250</u>	<u>1,925</u>

The Reserve for investment-related donations and subsidies basically refers to the compensation by the Federal Government for the difference between the profitability obtained by Cemig up to March 1993 and the minimum return guaranteed by the legislation in effect at the time.

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The reserve for treasury shares refers to the pass-through by Finor of shares arising from funds applied in Cemig projects in the area covered by Sudene (the development agency for the Northeast) under tax incentive programs.

Profit reserves

	<u>2019</u>	<u>2018</u>	<u>2017</u>
Legal reserve	853	853	853
Statutory reserve	57	57	57
Retained earnings reserve	5,500	3,965	3,341
Unrealized profit reserve	835	-	-
Incentive tax reserve	85	67	58
Reserve for mandatory dividends not distributed	1,420	1,420	1,420
	<u>8,750</u>	<u>6,362</u>	<u>5,729</u>

Legal reserve

Constitution of the legal reserve is mandatory, up to the limits established by law. The purpose of the reserve is to ensure the security of the share capital, its use being allowed only for offsetting of losses or increase capital. The Company did not record legal reserve due to that reserve had reached its legal limit.

Statutory reserve

The reserve under the By-laws is for future payment of extraordinary dividends, in accordance with Article 37 of the by-laws.

Retained earnings reserve

Retained earnings reserves refers to profits not distributed in prior years, to guarantee execution of the Company's Investment Program, and amortization of loans and financing. The retentions are supported by capital budgets approved by the Board of Directors in the respective years.

The calculation of the retained earnings reserve is as follows:

	<u>2019</u>	<u>2018</u>	<u>2017</u>
Net income for the year	3,127	1,700	1,001
Expired dividends	-	42	-
Incentives tax reserve	(18)	(9)	(1)
Deemed cost realization	25	42	28
Adjustment for initial adoption of IFRS 9 and IFRS 15.	-	(157)	-
Dividends proposed	(764)	(867)	(500)
Unrealized profit reserve	(835)	-	-
Retained earnings reserve	<u>1,535</u>	<u>751</u>	<u>528</u>

[Table of Contents](#)Unrealized profit reserve

Article 197 of the Brazilian corporate law n° 6,404/76 allows the Company to pay the mandatory dividend, calculated as required by the Bylaws (see e) below), up to the amounts of the realized portion of the net income for the year (received in cash). The excess between such mandatory dividend amount and the dividends that will be actually paid was recorded in the “Unrealized profit reserve”.

In 2019, Company presented a positive net share of profit of subsidiaries, jointly-controlled entities and affiliates of R\$2,834, which can be regarded as unrealized portion of net income for the year, in accordance with the Brazilian corporate law. The share of profit of subsidiaries and joint ventures might not be realized in 2020, which means it might not be converted into cash, considering the macro-economic scenario and the fact that is not possible yet to forecast the impacts of COVID-19 – coronavirus on investees’ cash flows and financial results, as stated in Note 39.

Additionally, the above does not apply to the payment of the minimum mandatory dividends on preferred shares, which are required to be paid in full for an amount of R\$486, as described in further details in f) below. In addition, since the creation of the unrealized profit reserve is optional, Management decided to propose the same proportion of dividend payment to shareholders owning common shares, considering Company’s expected financial capacity.

Thus, since the mandatory dividends if distributed in their totality represents 50% of net income and an amount of R\$1,564 and considering the expectations of realized profit for the year, as stated above, Management proposed the constitution of unrealized profit reserve in the amount of R\$835, whose calculation is described as follows.

	2019
Minimum mandatory dividend required by Bylaws (50% of net income)	1,564
Minimum mandatory dividend required by the Bylaws for the preferred shares	(486)
Minimum mandatory dividend proposed for the common shares	(243)
Unrealized profit reserve	<u><u>835</u></u>

The unrealized profit reserve amounts can only be used to pay mandatory dividends. Hence, when the Company realizes such profits in cash, it must distribute the corresponding dividend in the subsequent period, after offsetting of any losses in subsequent years.

Incentives tax reserve

The Company has a right to a 75% reduction in income tax, including the tax paid at the additional rate, calculated on the basis of the operating profit in the region of Sudene (the Development Agency for the Northeast), for 10 years starting in 2014. The amount of the incentive recognized in the Statement of income was R\$18 in 2019 (R\$9 in 2018 and R\$1 in 2017), and it was subsequently transferred to the Incentives Tax reserve. The amount of the Tax incentives reserve on December 31, 2019 was R\$85 (R\$67 at December 31, 2018). This reserve cannot be used for payment of dividends.

[Table of Contents](#)Reserve for mandatory dividends not distributed

	<u>2019</u>
Dividends withheld, arising from the net income of 2015	623
Dividends withheld, arising from the net income of 2014	797
	<u>1,420</u>

These dividends were retained in Equity, in years 2015 and 2014, in the account Reserve for mandatory dividends not distributed; and as per the proposal approved in the Annual General Meetings of 2016 and 2015, the dividends retained will be paid as soon as the Company's financial situation permits. The Company's Management, in view of the uncertainties present in the current macroeconomic scenario, concluded that the financial situation does not yet allow the payment of these retained dividends.

d) Rights and preferences of the common and preferred shares.

Every holder of Cemig common shares has a tag-along right to receive 80% of the value paid per share owned by the controlling stockholder in the event of a change of control.

Every holder of Cemig common shares has the right to vote in an election for members of our Board of Directors. Under the Brazilian Corporate Law, any shareholder holding at least 5% of Cemig's common shares in circulation may request adoption of a multiple vote procedure, which confers upon each share a number of votes equal to the present number of members of the Board of Directors and gives the shareholder the right to accumulate his or her votes in one sole candidate, or distribute them among several.

Under the Brazilian Corporate Law, holders of preferred shares representing at least 10% of Cemig's share capital, and also holders of common shares representing at least 15% of its share capital (other than the controlling shareholder) have the right to appoint a member of the Board of Directors and his or her respective substitute member in a separate election. If none of the holders of common or preferred shares qualifies under the minimum limits specified above, shareholders representing, in the aggregate, a minimum of 10% of the share capital may combine their holdings to elect a member of the Board of Directors, and that member's substitute member.

Under Article 171 of the Corporate Law, every shareholder has a generic right of first refusal in subscription of new shares, or securities convertible into shares, issued in any capital increase, in proportion to their percentage shareholding, except in the event of exercise of any option to acquire shares in our share capital. Shareholders are required to exercise their right of first refusal within 30 days from publication of the notice of increase of capital.

Every holder of Cemig preferred shares has preference in the event of share redemption.

The dividend rights of the preferred and common shares are described below:

e) Dividends

Under its by-laws, Cemig is required to pay to its shareholders, as mandatory dividends, 50% of the net income of each year.

The preferred shares have preference in the event of reimbursement of capital and participate in profits on the same conditions as the common shares have the right, when there is net income, to a minimum annual dividends equal to the greater of:

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- (a) 10% of their par value, and
- (b) 3% of the portion of equity that they represent.

Under its by-laws, Cemig's shares held by private individuals and issued up to August 5, 2004 have the right to a minimum dividend of 6% per year on their par value in all years when Cemig does not obtain sufficient profits to pay dividends to its Shareholders. This guarantee is given by the State of Minas Gerais by Article 9 of State Law 828 of December 14, 1951 and by State Law 15,290 of August 4, 2004.

Under the by-laws, if the Company is able to pay dividends higher than the mandatory minimum dividends required for the preferred Shareholders, and the remaining net income is sufficient to offer equal dividends for both the common and preferred shares, then the dividends per share will be the same for the holders of common shares and preferred shares. Dividends declared are paid in two equal installments, the first by June 30 and the second by December 30, of the year following the generation of the profit to which they refer. The Executive Board decides the location and processes of payment, subject to these periods.

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[Table of Contents](#)*Calculation of the minimum dividends proposed*

The calculation of the minimum dividends proposed for distribution to Shareholders, considering the 2019 unrealized profit assumption mentioned in the previous paragraphs, is as follows:

	<u>2019</u>	<u>2018</u>	<u>2017</u>
Calculation of Minimum Dividends required by the By-laws for the preferred shares			
Nominal value of the preferred shares	4,856	4,856	4,191
Nominal value of the preferred shares to be capitalized	—	—	665
	<u>4,856</u>	<u>4,856</u>	<u>4,856</u>
Percentage applied to the nominal value of the preferred shares	10.00%	10.00%	10.00%
Amount of the dividends by the first payment criterion	486	486	486
Equity	15,887	14,579	14,326
Preferred shares as a percentage of Equity (net of shares held in Treasury)	66.56%	66.56%	66.58%
Portion of Equity represented by the preferred shares	<u>10,574</u>	<u>9,704</u>	<u>9,538</u>
Percentage applied to the portion of Equity represented by the preferred shares	3.00%	3.00%	3.00%
Amount of the dividends by the second payment criterion	<u>317</u>	<u>291</u>	<u>286</u>
Minimum Dividends required by the Bylaws for the preferred shares	<u>486</u>	<u>486</u>	<u>486</u>
Calculation of the Minimum Dividend under the by-laws based on the net income for the period			
Mandatory dividend			
Net income for the year	3,127	1,700	1,001
Mandatory dividends – 50% of Net income	1,564	850	500
Unrealized profit reserve	(835)		
Withholding income tax on Interest on equity	<u>35</u>	<u>17</u>	<u>—</u>
	764	867	500
Dividends recorded, as specified in the by-laws			
Interest on Equity	400	210	-
Ordinary dividends	<u>364</u>	<u>657</u>	<u>500</u>
	764	867	500
Total dividends for the preferred shares	509	577	486
Total dividends for the common shares	255	290	14
Unit value of dividends – R\$			
Minimum dividends required by the by-laws for the preferred shares	0.50	0.50	0.50
Mandatory dividends (including withholding income tax on Interest on Equity)	0.52	0.59	0.34
Dividends proposed: Common (ON) shares	0.52	0.59	0.03
Dividends proposed: Preferred (PN) shares	0.52	0.59	0.50

This table provides the changes on dividends and interest on capital payable:

Balances at December 31, 2017	428
Proposed dividends and interest on equity	867
Withholding income tax on interest on capital	(17)
Dividends proposed for non-controlling shareholder	127
Proposed dividends of previous years	(42)
Expired dividends	(8)
Dividends retained – Minas Gerais state government	<u>(491)</u>
Balances at December 31, 2018	864
Proposed dividends	764
Withholding income tax on interest on capital	(35)
Dividends retained – Minas Gerais state government (Note 13)	(148)
Dividends paid	<u>(701)</u>
Balances at December 31, 2019	<u>744</u>

[Table of Contents](#)**f) Allocation of net income for 2019 – Management’s proposal**

The Board of Directors decided to propose to the Annual General Meeting (AGM) to be held on July 31, 2020 the following allocation of the net income for 2019, totaling R\$3,127, less R\$25 from realization of the deemed cost of PP&E.

- R\$764 for payment of the mandatory minimum dividends to Company’s holders, as follows:
 - R\$400 in the form of Interest on Equity, to be paid in two equal installments, by June 30, 2020 and by December 31, 2020, to shareholders whose names were on the Company’s Nominal Share Registry on December 23, 2019;
 - R\$364 as dividends of 2019, to be paid by December 31, 2020, to holders whose names are in the Company’s Nominal Share Registry on the date of the AGM.
- R\$835 to be recorded as Unrealized Profit Reserve, considering the positive net share of profit of subsidiaries, jointly-controlled entities and affiliates not yet converted into cash. See item c) Reserves - Unrealized profit reserve above.
- R\$1,535 to be held in the Retained earnings reserve, to ensure the Company’s consolidated investments planned for 2020, as per capital budget.
- R\$18 to be recorded as Incentives Tax reserve, in reference to the tax incentive amounts obtained in 2019 in relation to the investments made in the region of Sudene.

Under the Brazilian corporate law, if Company's subsidiaries pay dividends for the year of 2019, which are not yet converted into cash by the investees until the present date, the reversal of unrealized profit reserve will be included as part of the calculation of minimum dividend required by the Bylaws for the year of 2020.

g) Capital increase – Proposal by management

Considering that on December 31, 2019 the profit reserves, with the exclusion of the Tax Incentive reserves, exceed the registered share capital by R\$537, the Board of Directors will submit to the Annual General Meeting a proposal for increase of the registered share capital to R\$7,594, as per Article 199 of the Brazilian Corporate Law.

[Table of Contents](#)**h) Non-controlling shareholders interests**

The changes in the equity held by non-controlling shareholders are shown below:

Investee	UHE						Total
	Gasmig	Light S.A	LightGer	Guanhães	Axxion	Itaocara	
Balances at Dec. 31, 2017	4	-	-	-	-	-	4
Net profit attributed to non-controlling shareholders	1	41	-	-	-	-	42
Non-controlling interests arising from business combination	-	1,236	22	50	4	3	1,315
Others	(1)	-	-	-	-	-	(1)
Balances at Dec. 31, 2018	4	1,277	22	50	4	3	1,360
Net profit attributed to non-controlling shareholders	1	-	-	-	-	-	1
Capital Increase to non-controlling shareholders	-	-	-	10	-	-	10
Proposed dividends to non-controlling shareholders	(1)	-	-	-	-	-	(1)
Derecognition of the non-controlling interests in Light (Note 34)	-	(1,277)	(22)	(60)	(4)	(3)	(1,366)
Balances at Dec. 31, 2019	4	-	-	-	-	-	4

Net profit allocated to non-controlling interests:

Company	2019	2018
Gasmig	1	1
Total	1	1

29. REVENUE

Revenues are measured at the fair value of the consideration received or to be received and are recognized on a monthly basis as and when: (i) Rights and obligations of the contract with the customer are identified; (ii) the performance obligation of the contract is identified; (iii) the price for each transaction has been determined; (iv) the transaction price has been allocated to the performance obligations defined in the contract; and (v) the performance obligations have been complied.

	2019	2018	2017
Revenue from supply of energy(a)	26,928	24,872	23,701
Revenue from use of the electricity distribution systems (TUSD) (b)	2,722	2,045	1,611
CVA, and Other financial components (c)	58	1,973	988
Transmission revenue			
Transmission concession revenue (d)	504	411	371
Transmission construction revenue (e)	220	96	25
Transmission assets - indemnity revenue (f)	156	250	373
Generation assets - indemnity revenue	-	55	271
Distribution construction revenue (e)	980	802	1,094
Adjustment to expectation of cash flow from indemnifiable financial assets of distribution concession (g)	18	-	9
Revenue on financial updating of the Concession Grant Fee (h)	318	321	317
Energy transactions on the CCEE (i)	432	217	860
Supply of gas	2,298	1,995	1,759
Fine for violation of service continuity indicator (1)	(58)	(44)	-
Recovery of PIS/Pasep and Cofins (note 10)	1,428	-	-
Other operating revenues (j)	1,722	1,585	1,484
Deductions on revenue (k)	(12,336)	(12,312)	(11,151)
Net operating revenue	25,390	22,266	21,712

(1) As from January 1, 2018 these amounts began to be recognized as a reduction of revenue, rather than as operational expenses, as per the change contained in IFRS 15.

[Table of Contents](#)**a) Revenue from energy supply**

These items are recognized upon delivery of supply, and the revenue is recorded as and when billed, based on the tariff approved by the regulator for each class of customer.

This table shows energy supply by type of customer:

	GWh (1)			R\$		
	2019	2018	2017	2019	2018	2017
Residential	10,538	10,267	10,008	9,668	8,658	7,842
Industrial	16,024	17,689	17,761	4,760	4,893	4,907
Commercial, services and others	9,567	8,380	7,507	5,439	4,683	4,342
Rural	3,795	3,615	3,651	2,058	1,794	1,629
Public authorities	905	871	866	654	575	532
Public lighting	1,357	1,384	1,367	614	585	537
Public services	1,372	1,316	1,301	725	646	589
Subtotal	43,558	43,522	42,461	23,918	21,834	20,378
Own consumption	38	41	37	–	–	–
Unbilled revenue	–	–	–	134	48	61
	43,596	43,563	42,498	24,052	21,882	20,439
Wholesale supply to other concession holders (2)	11,448	11,992	12,777	2,943	3,002	1,727
Wholesale supply unbilled, net	–	–	–	(67)	(12)	1,535
Total	55,044	55,555	55,275	26,928	24,872	23,701

(1) Data not audited by external auditors.

(2) Includes a CCEAR (Regulated Market Sales Contract), 'bilateral contracts' with other agents, and the revenues from management of generation assets (GAG) for the 18 hydroelectric plants of Lot D of Auction no 12/2015.

b) Revenue from Use of the Distribution System (the TUSD charge)

These are recognized upon the distribution infrastructure becoming available to customers, and the fair value of the consideration is calculated according to the TUSD tariff of those customers, set by the regulator.

c) The CVA account, and Other financial components

The results from variations in (i) the CVA account (*Parcel A Costs Variation Compensation Account*), and in (ii) *Other financial components* in calculation of tariffs, refer to the positive and negative differences between the estimated non-manageable costs of the subsidiary Cemig D and the cost actually incurred. The amounts recognized arise from balances recorded in the current year, homologated or to be homologated in tariff adjustment processes. For more information please see Note 16.

d) Transmission concession revenue

Transmission revenue comprises the amount received from agents of the energy sector for operation and maintenance of transmission lines of the national grid, in the form of the Permitted Annual Revenue (*Receita Anual Permitida*, or RAP), plus an adjustment for expectation of cash flow arising from the variation in the fair value of the Remuneration Assets Base, in the amount of R\$15 in 2019 (R\$13 in 2018). The Company is subject to the penalty named Variable Portion (*Parcela Variável*, or PV) which is applied by the regulator as a result of any unavailabilities or operational restrictions on facilities that are part of the National Grid. This penalty is recognized as a reduction of revenue from operation and maintenance of the transmission network in the period in which it occurs. The effects of the Variable Portion in transmission revenue were R\$9 in 2019 (R\$11 in 2018).

[Table of Contents](#)**e) Construction revenue**

Construction revenue corresponds to the performance obligation to build the transmission and distribution infrastructure during the construction phase. Considering that constructions and improvements are substantially executed through outsourced parties; and that all construction revenues is related to the construction of the infrastructure of the energy distribution and transmission services, Company's management concluded that construction contract revenue has zero profit margin.

f) Transmission assets - indemnity revenue

Corresponded to updating, by the IPCA index, of the balance of transmission indemnity receivable. For further information, please see Note 16.

g) Adjustment to expected cash flow from financial assets on residual value of infrastructure asses of distribution concessions

Income from fair value change of the Regulatory Remuneration Asset Base.

h) Revenue on financial updating of the Concession Grant Fee

Represents the inflation adjustment using the IPCA inflation index, plus interest, on the Concession Grant Fee for the concession awarded as Lot D of Auction 12/2015. See Note 16.

i) Energy transactions on the CCEE (Power Trading Chamber)

The revenue from transactions made through the Power Trading Chamber (*Câmara de Comercialização de Energia Elétrica*, or CCEE) is the monthly positive net balance of settlements of transactions for purchase and sale of energy in the Spot Market, through the CCEE, for which the consideration corresponds to the product of energy sold at the Spot Price.

[Table of Contents](#)**j) Other operating revenues**

	<u>2019</u>	<u>2018</u>	<u>2017</u>
Charged service	17	14	10
Telecoms services	–	–	149
Services rendered	183	188	156
Subsidies (1)	1,266	1,136	1,034
Rental and leasing	189	90	121
Reimbursement for decontracted supply	65	145	–
Other	2	12	14
	<u>1,722</u>	<u>1,585</u>	<u>1,484</u>

(1) Revenue recognized for the tariff subsidies applied to users of distribution and transmission services, including low income tariff incentive refunded by Eletrobras.

k) Deductions on revenue

	<u>2019</u>	<u>2018</u>	<u>2017</u>
Taxes on revenue			
ICMS	6,358	5,657	5,847
Cofins	2,395	2,547	2,237
PIS/Pasep	521	553	455
Others	8	8	8
	<u>9,282</u>	<u>8,765</u>	<u>8,547</u>
Charges to the customer			
Global Reversion Reserve (RGR)	16	19	17
Energy Efficiency Program (PEE)	69	64	56
Energy Development Account (CDE)	2,448	2,603	1,822
Research and Development (R&D)	41	38	38
National Scientific and Technological Development Fund (FNDCT)	41	38	38
Energy System Expansion Research (EPE of MME)	20	19	19
Customer charges – Proinfra alternative sources program	52	40	39
Energy services inspection fee	30	26	29
Royalties for use of water resources	43	45	92
Customer charges – the ‘Flag Tariff’ system	294	655	454
	<u>3,054</u>	<u>3,547</u>	<u>2,604</u>
	<u>12,336</u>	<u>12,312</u>	<u>11,151</u>

30. OPERATING COSTS AND EXPENSES

The operating costs are as follows:

	<u>2019</u>	<u>2018</u>	<u>2017</u>
Personnel (a)	1,272	1,410	1,627
Employees’ and managers’ profit sharing	263	77	5
Post-employment benefits (reversals) – <i>Note 26</i>	408	337	(229)
Materials	91	104	61
Raw materials and inputs for production of energy	–	–	10
Outsourced services (b)	1,239	1,087	974
Energy bought for resale (c)	11,286	11,084	10,919
Depreciation and amortization (1)	958	835	850
Operating provisions and adjustments for operating losses (d)	2,401	466	854
Charges for use of the national grid	1,426	1,480	1,174
Gas bought for resale	1,436	1,238	1,071
Construction costs (e)	1,200	897	1,119
Other operating expenses, net (f)	499	405	383
	<u>22,479</u>	<u>19,420</u>	<u>18,818</u>

(1) Net of PIS/Pasep and Cofins taxes applicable to amortization of the right-of-use assets in the amount of R\$5.

For details about the discontinued operating costs and expenses, see Note 34.

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a) Personnel

2019 Programmed Voluntary Retirement Plan ('PDVP')

On December 2018, the Company launched the Programmed Voluntary Retirement Plan for 2019 ('the 2019 PDVP'). Those eligible – any employees who had worked with the Company for 25 years or more by December 31, 2018 – were able to join from January 7 to 31, 2019. The program will pay the standard legal payments for severance – including: payment for the period of notice, and especially, an amount equal to the 'penalty' payment of 40% of the Base Value of the employee's FGTS fund, as well as the other payments under the legislation, but with no additional premium.

On March 2019 the Company re-launched the 2019 PDVP program, for those joining between April 1 and 10, 2019, with some changes in the requirements for joining, but with the same financial conditions.

A total of R\$87 has been recorded as expense related to the 2019 PDVP, corresponding to acceptance by 613 employees, R\$66 (458 employees) in 2018 and R\$21 (155 employees) in 2019.

b) Outsourced services

	<u>2019</u>	<u>2018</u>	<u>2017</u>
Meter reading and bill delivery	128	129	142
Communication	69	80	66
Maintenance and conservation of electrical facilities and equipment	404	323	266
Building conservation and cleaning	110	110	108
Contracted labor	17	21	15
Freight and airfares	7	7	8
Accommodation and meals	14	12	13
Security services	18	20	23
Consultant	24	16	16
Maintenance and conservation of furniture and utensils	5	4	4
Information technology	63	59	62
Maintenance and conservation of vehicles	3	2	2
Disconnection and reconnection	70	62	35
Environmental services	14	14	11
Legal services	26	25	22
Legal procedural costs	2	2	3
Tree pruning	46	28	21
Cleaning of power line pathways	61	41	16
Copying and legal publications	21	21	23
Inspection of customer units	14	10	1
Printing of tax invoices and energy bills	–	–	3
Other expenses	123	101	114
	<u>1,239</u>	<u>1,087</u>	<u>974</u>

[Table of Contents](#)**c) Energy purchased for resale**

	<u>2019</u>	<u>2018</u>	<u>2017</u>
Supply from Itaipu Binacional	1,429	1,351	1,243
Physical guarantee quota contracts	715	679	461
Quotas for Angra I and II nuclear plants	269	267	244
Spot market	1,886	1,818	1,498
Proinfa Program	376	324	303
'Bilateral' contracts	311	484	385
Energy acquired in Regulated Market auctions	3,021	3,346	3,555
Energy acquired in the Free Market	4,098	3,871	4,283
Distributed generation ('Geração distribuída')	207	-	-
PIS/Pasep and Cofins credits	(1,026)	(1,056)	(1,053)
	<u>11,286</u>	<u>11,084</u>	<u>10,919</u>

d) Operating provision (reversals) and adjustments for operating losses

	<u>2019</u>	<u>2018</u>	<u>2017</u>
Estimated losses on doubtful accounts receivables (Note 8)	238	264	248
Estimated losses on other accounts receivables (1)	11	(4)	27
Estimated losses on accounts receivables from related parties (3) (note 32)	688		
Contingency provisions (reversals) (Note 27) (2)			
Labor claims	136	42	206
Civil	24	13	27
Tax	1,228	(5)	7
Environmental	(1)	1	-
Regulatory	1	(2)	(3)
Other	12	2	(6)
	<u>1,400</u>	<u>51</u>	<u>231</u>
	<u>2,337</u>	<u>311</u>	<u>506</u>
Adjustment for losses			
Put option – Sonda	-	-	1
Put option – RME and LEPSA	-	48	231
Put option – SAAG (Note 33)	64	107	116
	<u>64</u>	<u>155</u>	<u>348</u>
	<u>2,401</u>	<u>466</u>	<u>854</u>

(1) The estimated losses on other accounts receivable are presented in the consolidated Statement of income as operating expenses.

(2) The provisions for contingencies of the holding company are presented in the consolidated statement of income for the year as operating expenses.

(3) Estimated losses on accounts receivable from Renova, as a result of the assessment of the jointly-controlled entity credit risk, which deteriorated in the current year.

e) Construction costs

	<u>2019</u>	<u>2018</u>	<u>2017</u>
Personnel and managers	85	70	36
Materials	595	379	550
Outsourced services	421	364	406
Others	99	84	127
	<u>1,200</u>	<u>897</u>	<u>1,119</u>

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f) Other operating expenses (revenues), net

	<u>2019</u>	<u>2018</u>	<u>2017</u>
Leasing and rentals (1)	20	93	103
Advertising	9	19	30
Own consumption of energy	21	27	24
Subsidies and donations	40	22	19
Onerous concession	3	3	3
Insurance	12	7	8
CCEE annual charge	6	6	8
Net loss (gain) on deactivation and disposal of assets	92	7	193
Forluz – Administrative running cost	30	28	26
Collection agents	88	78	71
Gain on disposal, Taesa	–	–	(207)
Fine for violation of service continuity standard	–	–	42
Obligations deriving from investment contracts (2)	32	–	–
Taxes and charges	10	9	–
Other expenses (3)	136	106	63
	<u>499</u>	<u>405</u>	<u>383</u>

- (1) As from January 1, 2019, the amounts related to leasing and rentals are recognized in accordance with IFRS 16, as shown in notes 2.4 and 21. The Company has operational leasing contracts relating, mainly, to vehicles and buildings used in its operational activities. Their amounts are not material in relation to the total costs of the Company. Actual leasing and rentals expenses are related to remaining leasing arrangements and rentals that do not qualify for recognition under IFRS 16.
- (2) This refers to claims under the agreement made between Aliança Geração, Vale S.A. and Cemig. The action is provisioned at the cost of R\$98, of which Cemig is responsible for R\$32.
- (3) The losses recorded on assets in progress (canceled works) are net of the reversal of the provisions constituted in prior periods. Includes the adjustment of R\$22 for impairment of intangible assets.

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31. FINANCE INCOME AND EXPENSES

	<u>2019</u>	<u>2018</u>	<u>2017</u>
FINANCE INCOME			
Income from financial investments	102	116	205
Interest on sale of energy	361	352	261
Foreign exchange variations	–	–	19
Monetary variations	30	19	46
Monetary variations – CVA (Note 16)	105	62	–
Monetary updating of escrow deposits	50	34	191
PIS/Pasep and Cofins charged on finance income (1)	(128)	(68)	(53)
Gains on financial instruments – swap (Note 33)	998	893	–
Finance income from advance payments	5	29	–
Inflation adjustment in arbitration case	–	77	–
Borrowing costs paid by related parties (Note 32)	48	56	–
Monetary updating on PIS/Pasep and Cofins taxes credits over ICMS (Note 10)	1,580	–	–
Others	56	136	135
	<u>3,207</u>	<u>1,706</u>	<u>804</u>
FINANCE EXPENSES			
Charges on loans and financings (Note 24)	(1,227)	(1,257)	(1,466)
Cost of debt – amortization of transaction cost (Note 24)	(38)	(33)	(67)
Foreign exchange variations – loans and financing (Note 24)	(226)	(582)	(73)
Foreign exchange variations – Itaipu	(13)	(29)	–
Monetary updating – loans and financings (Note 24)	(142)	(134)	(109)
Monetary updating – onerous concessions	(3)	(3)	–
Charges and monetary updating on post–employment obligations (Note 26)	(56)	(68)	(65)
Losses on financial instruments (Note 33)	–	–	(32)
Monetary variations – CVA (Note 16)	–	–	(41)
Monetary updating – AFAC	–	–	239
Monetary updating – Advance sales of energy supply (Note 8)	(1)	(11)	(45)
Adjustment to present value	–	–	(2)
Monetary updating – Lease liabilities (Note 21)	(34)	–	–
Finance income of P&D and PEE	(24)	(23)	–
Others	(83)	(84)	(139)
	<u>(1,847)</u>	<u>(2,224)</u>	<u>(1,800)</u>
NET FINANCE INCOME (EXPENSES)	<u>1,360</u>	<u>(518)</u>	<u>(996)</u>

(1) The PIS/Pasep and Cofins expenses apply to Interest on Equity.

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32. RELATED PARTY TRANSACTIONS

Cemig's main balances and transactions with related parties and its jointly-controlled entities are as follows:

COMPANY	ASSETS		LIABILITIES		REVENUE			EXPENSES		
	2019	2018	2019	2018	2019	2018	2017	2019	2018	2017
Shareholder										
Minas Gerais State Government										
Current										
Receivables from customers and traders (1)	346	245	-	-	166	163	163	-	-	-
ICMS tax – early payment (2)	-	-	-	-	-	11	12	-	-	-
Non-current										
Accounts Receivable – AFAC (3)	115	246	-	-	17	18	18	-	-	-
Jointly-controlled entity										
Aliança Geração										
Current										
Transactions with energy (4)	-	-	14	13	40	35	34	(166)	(165)	(147)
Provision of services (5)	1	2	-	-	7	12	12	-	-	-
Interest on Equity, and dividends	103	91	-	-	-	-	-	-	-	-
Contingency (6)	-	-	32	-	-	-	-	(32)	-	-
Baguari Energia										
Current										
Transactions with energy (4)	-	-	1	1	-	-	-	(8)	(11)	(7)
Provision of services (5)	-	-	-	-	1	1	1	-	-	-
Madeira Energia										
Current										
Transactions with energy (4)	6	6	58	64	68	70	70	(730)	(778)	(686)
Advance for future energy supply (7)	-	7	-	-	-	9	9	-	-	-
Reimbursement due to cancelled contract (8)	4	42	-	-	4	2	2	-	-	-
Non-current										
Reimbursement for cancelled contract (8)	-	4	-	-	-	-	-	-	-	-
Norte Energia										
Current										
Transactions with energy (4)	-	-	24	23	22	16	16	(228)	(202)	(122)
Advance for future power supply (9)	40	-	-	-	-	-	-	-	-	-
Lightger										
Current										
Transactions with energy (4)	-	-	2	-	-	-	-	(21)	(21)	(19)
Hidrelétrica Pipoca										
Current										
Transactions with energy (4)	-	-	1	1	-	-	-	(19)	(19)	(15)
Retiro Baixo										
Current										
Transactions with energy (4)	-	-	-	-	5	4	-	(5)	(5)	(6)
Interest on Equity, and dividends	6	6	-	-	-	-	-	-	-	-
Hidrelétrica Cachoeirão										
Current										
Interest on Equity, and dividends	3	2	-	-	-	-	-	-	-	-
Renova										
Current										
Transactions with energy (4)	-	-	-	1	4	-	-	-	(81)	(179)
Non-current										
Advance for future energy supply (8)	-	-	-	-	-	-	7	-	-	-
Accounts Receivable (10)	-	594	-	-	94	106	37	(688)	-	-
Loans from related parties (11)	17	-	6	-	-	-	-	-	-	-
Reimbursement for suspension of supply of power	-	-	-	-	-	-	52	-	-	-
Reimbursement for cessation of power purchase agreement	-	-	-	-	-	-	10	-	-	-
Empresa Amazonense de Transmissão de Energia (EATE)										
Current										
Transactions with energy (4)	-	-	-	-	-	-	-	-	-	(26)

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COMPANY	ASSETS		LIABILITIES		REVENUE			EXPENSES		
	2019	2018	2019	2018	2019	2018	2017	2019	2018	2017
Light										
Current										
Transactions with energy (4)	-	-	1	1	98	60	54	(9)	(1)	(1)
Interest on Equity, and dividends	73	10	-	-	-	-	-	-	-	-
Taesá										
Current										
Transactions with energy (4)	-	-	9	8	-	-	-	(96)	(109)	(127)
Provision of services (5)	-	-	-	-	1	1	1	-	-	-
Hidrelétrica Itaocara										
Current										
Adjustment for losses (12)	-	-	22	-	-	-	-	-	-	-
Cia. Transirapé de Transmissão										
Current										
Transactions with energy (4)	-	-	-	-	-	-	-	-	-	(10)
Provision of services (5)	-	-	-	-	-	-	1	-	-	-
Axxiom										
Current										
Provision of services (13)	-	-	3	-	-	-	-	-	-	-
Transudeste										
Current										
Transactions with energy (4)	-	-	-	-	-	-	-	-	-	(2)
Provision of services (5)	-	-	-	-	-	-	1	-	-	-
Transleste										
Current										
Transactions with energy (4)	-	-	-	-	-	-	-	-	-	(3)
Provision of services (5)	-	-	-	-	-	-	1	-	-	-
Centroeste										
Current										
Interest on Equity, and dividends	1	1	-	-	-	-	-	-	-	-
Other related parties										
FIC Pampulha										
Current										
Cash and cash equivalents	36	274	-	-	-	-	-	-	-	-
Marketable securities	743	727	-	-	8	1,106	9	-	-	-
(-) Marketable securities issued by subsidiary companies (Note 24)	(3)	(24)	-	-	-	-	-	-	-	-
Non-current										
Marketable securities	2	101	-	-	-	-	-	-	-	-
Forluz										
Current										
Post-employment obligations (14)	-	-	145	123	-	-	-	(197)	(192)	(174)
Supplementary pension contributions – Defined contribution plan (15)	-	-	-	-	-	-	-	(78)	(78)	(84)
Administrative running costs (16)	-	-	-	-	-	-	-	(30)	(28)	(26)
Operating leasing (17)	179	-	35	2	-	-	-	(55)	(46)	(55)
Non-current										
Post-employment obligations (14)	-	-	2,827	2,046	-	-	-	-	-	-
Operating leasing (17)	-	-	149	-	-	-	-	-	-	-
Cemig Saúde										
Current										
Health Plan and Dental Plan (18)	-	-	141	120	-	(227)	-	-	(186)	(193)
Non-current										
Health Plan and Dental Plan (18)	-	-	3,022	2,271	-	-	-	-	-	-

The main conditions and characteristics of interest with reference to the related party transactions are:

- Refers to sale of energy supply to the Minas Gerais State government. The price of the supply is set by the regulator (Aneel) through a Resolution relating to the annual tariff adjustment of Cemig D. In 2017 the government of Minas Gerais State signed a debt recognition agreement with Cemig D for payment of debits relating to the supply of power due and unpaid, in the amount of R\$ 113, up to November 2019. Twenty installments were unpaid at December 31, 2019. These receivables have guarantee in the form of Cemig's right to retain dividends and Interest on Equity otherwise payable to the State (in proportion to the State's equity interest in the Company), for as long as any payments are overdue or in default. The amount of the Public Lighting Contribution relating to the debt recognition agreement at December 31, 2019 is R\$190.
- Refers to financial income from ICMS tax anticipation, as per Minas Gerais State Decree 47,488.
- This refers to the recalculation of the inflation adjustment of amounts relating to the Advance against Future Capital Increase (AFAC), which were returned to the State of Minas Gerais. These receivables have guarantee in the form of Cemig's right to retain dividends and Interest on Equity otherwise payable to the State (in proportion to the State's equity interest in the Company), for as long as any payments are overdue or in default. For further information, see Note 13.

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- (4) The transactions in sale and purchase of energy between generators and distributors take place through auctions in the Regulated Market, and are organized by the federal government. In the Free Market, transactions are made through auctions or through direct contracting, under the applicable legislation. Transactions for transport of energy, on the other hand, are carried out by transmission companies and arise from the centralized operation of the National Grid, executed by the National System Operator (ONS).
- (5) Refers to a contract to provide plant operation and maintenance services.
- (6) This refers to the aggregate amounts of legal actions realized and legal actions provisioned arising from the agreement made between Aliança Geração, Vale S.A. and Cemig. The action is provisioned in the amount of R\$98, of which Cemig's portion is R\$32.
- (7) In 2017, payments of R\$70 were made to Santo Antônio Energia, subsidiary of Madeira Energia: R\$52 was advanced by Cemig GT; R\$ 12 by Sá Carvalho; and R\$ 6 by Rosal. The last installment was paid in January 2019.
- (8) Refers to reimbursement due to termination of contract related to change of the "power purchase agreements" (CCEARs) between Santo Antônio Energia S.A., a subsidiary of Madeira Energia, and Cemig Distribuição – totaling R\$ 84, to be settled in 24 monthly installments, with inflation adjustment by the Selic rate and maturities up to January 2020. The outstanding amount at December 31, 2019 was R\$4.
- (9) Refers to advance payments for energy supply made in 2019 to Norte Energia, established by auction and by contract registered with the CCEE (Power Trading Chamber). In full-year 2020 Norte Energia S.A. will deliver contracted supply in the amount of R\$40. There is no financial updating of the contract.
- (10) As mentioned in Note 18, in June 2019, due to the uncertainties related to continuity of Renova, an estimated loss on realization of the receivables was recorded for the full value of the balance in the amount of R\$688.
- (11) On November 25 and December 27, 2019, DIP loan contracts under court-supervised reorganization proceedings, referred to as 'DIP' and 'DIP 2', were entered into between the Company and Renova Energia S.A., in the amounts of R\$10 and R\$6.5, respectively. The contracts specify interest equal to 100% of the accumulated variation in the DI rate, plus an annual spread, applied pro rata die (on 252-business-days basis), of 1.083% for the DIP contract and 2.5% for the DIP2 contract, up to the date of respective full payment. The proceeds of this loan were allocated to the investee's minimum cash needs. The contracts specify a guarantee, given by the investee and its guarantor, through surety and a fiduciary assignment on the shares of the special-purpose company Mina de Ouro, which represents 120% of the principal value of the loan, according to an independent valuation.
- (12) A liability was recognized corresponding to the Company's interest in the share capital of Hidrelétrica Itaocara, due to its negative equity (see Note 18).
- (13) This refers to a contract for development of management software between Cemig D and Axxiom Soluções Tecnológicas S.A., instituted in Aneel Dispatch 2657/2017;
- (14) The contracts of Forluz are updated by the Expanded Customer Price Index (*Índice Nacional de Preços ao Consumidor Amplo*, or IPCA) calculated by the Brazilian Geography and Statistics Institute (IBGE) plus interest of 6% p.a. and will be amortized up to the business year of 2031 (see Note 26).
- (15) The Company's contributions to the pension fund for the employees participating in the Mixed Plan, and calculated on the monthly remuneration, in accordance with the regulations of the Fund.
- (16) Funds for annual current administrative costs of the Pension Fund in accordance with the specific legislation of the sector. The amounts are estimated as a percentage of the Company's payroll.
- (17) Rental of the Company's administrative head offices, in effect until November 2020 (able to be extended every five years, up to 2035) and August 2024 (able to be extended every five years, up to 2034), with annual inflation adjustment by the IPCA index and price reviewed every 60 months. Aiming at costs reduction, in November 2019, Cemig returned the Aureliano Chaves building to Forluz.
- (18) Post-employment obligations relating to the employees' health and dental plan (see Note 26).

Dividends receivable from equity investees

Dividends receivable from Company's equity investees are as follows:

Dividends receivable	2019	2018
Light	73	–
Aliança Geração	103	91
Others (1)	10	29
	186	120

- (1) The subsidiaries grouped in 'Others' are identified in the table above under "Interest on Equity, and Dividends".

[Table of Contents](#)**Guarantees on loans, financing and debentures**

Cemig has provided guarantees on loans, financing and debentures of the following related parties – not consolidated in the financial statements because they relate to jointly-controlled entities or affiliated companies:

Related party	Relationship	Type	Objective	2019	Maturity
Norte Energia (NESA)	Affiliated	Surety	Financing	2,555	2042
Light (1)	Affiliated	Counter-guarantee	Financing	684	2042
Santo Antônio Energia (SAESA) (2)	Affiliated	Guarantee	Financing	939	2034
Santo Antônio Energia (SAESA) (2)	Affiliated	Surety	Debentures	424	2037
Centroeste	Jointly-controlled entity	Surety	Financing	5	2023
				<u>4,607</u>	

(1) Related to execution of guarantees of the Norte Energia financing.

(2) Corporate guarantee given by Cemig to Saesa.

At December 31, 2019, Management believes that there is no need to recognize any provisions in the Company's financial statements for the purpose of meeting any obligations arising under these sureties and/or guarantees.

Cash investments in FIC Pampulha – the investment fund of Cemig and its subsidiaries and affiliates

Cemig and its subsidiaries and affiliates invest part of their financial resources in an investment fund which has the characteristics of fixed income and obeys the Company's cash investment policy. The amounts invested by the fund at December 31, 2019 are reported as Cash and cash equivalents, marketable securities or as a deduction of debentures account balances.

The funds applied are allocated only in public and private fixed income securities, subject only to credit risk, with various maturity periods, obeying the unit holders' cash flow needs.

The financial investments of the investment fund in marketable securities of related parties are as follows:

Issuer of security	Type	Annual contractual conditions	Maturity	2019 29.93%	2018 44.20%
ETAU (1)	Debentures	108.00% of CDI	Dec. 01, 2019	–	5
Light	Promissory Note	CDI + 3.50%	Jan. 22, 2019	–	3
				<u>–</u>	<u>8</u>

(1) Empresa de Transmissão do Alto Uruguai S.A.

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The total costs of key personnel, comprising the Executive Board, the Fiscal Council, the Audit Committee and the Board of Directors in 2019, 2018 and 2017, are within the limits approved at a General Shareholders' Meeting, and the effects on the income statements of the years ended, are as follows:

	<u>2019</u>	<u>2018</u>	<u>2017</u>
Remuneration	25	34	32
Profit sharing (reversal)	6	4	1
Assistance benefits	1	3	2
Total	<u><u>32</u></u>	<u><u>41</u></u>	<u><u>35</u></u>

[Table of Contents](#)**33. FINANCIAL INSTRUMENTS AND RISK MANAGEMENT****a) Financial instruments classification and fair value**

The main financial instruments, classified in accordance with the accounting principles adopted by the Company, are as follows:

	Level	2019		2018	
		Balance	Fair value	Balance	Fair value
Financial assets					
Amortized cost (1)					
Marketable securities – Cash investments	2	102	102	117	117
Accounts receivable from Customers and traders; Concession holders (transmission service)	2	4,601	4,601	4,173	4,173
Restricted cash	2	12	12	91	91
Accounts receivable from the State of Minas Gerais (AFAC)	2	115	115	246	246
Concession financial assets – <i>CVA</i> (Parcel ‘A’ Costs Variation Compensation) Account and <i>Other financial components</i>	3	882	882	1,081	1,081
Reimbursement of tariff subsidies	2	97	97	91	91
Low-income subsidy	2	30	30	30	30
Escrow deposits	2	2,540	2,540	2,502	2,502
Concession grant fee – Generation concessions	3	2,468	2,468	2,409	2,409
Indemnifiable receivable – Transmission		1,281	1,281	1,296	1,296
Accounts receivable – Renova	2	–	–	532	532
Reimbursement – Decontracting of supply	2	–	–	97	97
Reimbursement – Assignment of contract		–	–	10	10
		12,128	12,128	12,675	12,675
Fair value through profit or loss					
Cash equivalents – Cash investments		326	326	783	783
Marketable securities					
Treasury Financial Notes (LFTs)	1	94	94	254	254
Financial Notes – Banks	2	557	557	435	435
Debentures	2	–	–	7	7
		977	977	1,479	1,479
Derivative financial instruments (Swaps)	3	1,691	1,691	813	813
Derivative financial instruments (Ativas and Sonda Put options)	3	3	3	4	4
Concession financial assets – Distribution infrastructure	3	483	483	396	396
Indemnifiable receivable – Generation	3	816	816	816	816
		3,970	3,970	3,508	3,508
		16,098	16,098	16,183	16,183
Financial liabilities					
Amortized cost (1)					
Loans, financing and debentures	2	(14,777)	(14,777)	(14,772)	(14,772)
Debt with pension fund (Forluz)	2	(566)	(566)	(652)	(652)
Deficit of pension fund (Forluz)	2	(550)	(550)	(378)	(378)
Concessions payable	3	(20)	(20)	(19)	(19)
Suppliers	2	(2,080)	(2,080)	(1,801)	(1,801)
Leasing transactions (2)	2	(288)	(288)	–	–
Advances from customers	2	–	–	(79)	(79)
		(18,281)	(18,281)	(17,701)	(17,701)
Fair value through profit or loss					
Derivative financial instruments (SAAG put options)	3	(483)	(483)	(419)	(419)
		(483)	(483)	(419)	(419)
		(18,764)	(18,764)	(18,120)	(18,120)

(1) On December 31, 2019 and 2018, the book values of financial instruments reflect their fair values.

(2) Leasing transactions recognized in accordance with IFRS 16. For more information see Note 21.

At initial recognition the Company measures its financial assets and liabilities at fair value and classifies them according to the accounting standards currently in effect. *Fair value* is a measurement based on assumptions that market participants would use in pricing an asset or liability as follows:

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- Level 1 – Active market – Quoted prices: A financial instrument is considered to be quoted in an active market if the prices quoted are promptly and regularly made available by an exchange or organized over-the-counter market, by operators, by brokers or by a market association, by entities whose purpose is to publish prices, or by regulatory agencies, and if those prices represent regular arm's length market transactions made without any preference.
- Level 2 – No active market – Valuation technique: For an instrument that does not have an active market, fair value should be found by using a method of valuation/pricing. Criteria such as data on the current fair value of another instrument that is substantially similar, or discounted cash flow analysis or option pricing models, may be used. The objective of the valuation technique is to establish what would be the transaction price on the measurement date in an arm's-length transaction motivated by business model.
- Level 3 – No active market – No observable inputs: The fair value of investments in securities for which there are no prices quoted on an active market, and/or of derivatives linked to them which are to be settled by delivery of unquoted securities. Fair value is determined based on generally accepted valuation techniques, such as on discounted cash flow analysis or other valuation techniques such as, for example, New Replacement Value (*Valor novo de reposição*, or VNR).

For assets and liabilities that are recognized at fair value on a recurring basis, the Company determines whether transfers have occurred between levels in the hierarchy by re-assessing categorization.

Fair value calculation of financial positions

Distribution infrastructure concession financial assets, and transmission concession financial assets – Assets remunerated by tariff: These are measured at New Replacement Value (*Valor novo de reposição*, or VNR), according to criteria established by the Concession-granting power ('Grantor'), based on fair value of the concession assets in service and which will be revertible at the end of the concession, and on the weighted average cost of capital (WACC) defined by the Grantor, which reflects the concession holder's return on the operations of the concession. The VNR and the WACC are public information disclosed by the Grantor and by Cemig respectively. Changes in concession financial assets are disclosed in Note 16.

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Indemnifiable receivable – transmission: These are measured at New Replacement Value (*Valor novo de reposição*, or VNR), according to criteria established by the Concession-granting power (“Grantor”), based on fair value of the assets to be indemnify as a result of acceptance of the terms of Law 12,783/13, and on the weighted average cost of capital (WACC) used by the Grantor, which reflects the concession holder’s return on the operations of the concession. The VNR and the WACC are public information disclosed by the Grantor and by Cemig.

Indemnifiable receivable – generation: measured at New Replacement Value (VNR), as per criteria set by regulations of the grantor power, based on the fair value of the assets to be indemnify at the end of the concession.

Marketable securities: Fair value of marketable securities is determined taking into consideration the market prices of the investment, or market information that makes such calculation possible, considering future interest rates and exchange of investments to similar securities. The market value of the security is deemed to be its maturity value discounted to present value by the discount rate obtained from the market yield curve.

Put options: The Company adopted the Black-Scholes-Merton method for measuring fair value of the SAAG, RME and Sonda options. The fair value of these options was calculated on the basis of the estimated exercise price on the day of exercise of the option, less the fair value of the underlying shares, also estimated for the date of exercise, brought to present value at the reporting date.

Swaps: Fair value was calculated based on the market value of the security at its maturity adjusted to present value by the discount rate from the market yield curve.

Other financial liabilities: Fair value of its loans, financing and debentures were determined using 133.37% of the CDI rate – based on its most recent funding. For the loans, financing, debentures and debt renegotiated with Forluz, with annual rates between IPCA + 4.70% to 8.07% and CDI + 0.38% to 2.24%, Company believes that their carrying amount is approximated to their fair value.

b) Derivative financial instruments**Put options**

Company holds options to sell certain securities (put options) for which it has calculated the fair value based on the *Black and Scholes Merton* (BSM) model, considering the following assumptions: exercise price of the option; closing price of the underlying asset as of December 31, 2019; risk-free interest rate; volatility of the price of the underlying asset; and the time to maturity of the option.

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Analytically, calculation of the exercise price of the options, the risk-free interest rate and the time to maturity is primarily deterministic, so that the main divergence in the put options takes place in the measurement of the closing price and the volatility of the underlying asset.

On December 31, 2019 and 2018, the options values were as follows:

	<u>2019</u>	<u>2018</u>
Put option – SAAG	483	419
Put / call options – Ativas and Sonda	(3)	(4)
	<u>480</u>	<u>415</u>

Put option – SAAG

Option contracts were signed between Cemig GT and the private pension entities that participate in the investment structure of SAAG (comprising FIP Melbourne, Parma Participações S.A. and FIP Malbec, jointly, 'the Investment Structure'), giving those entities the right to sell units in the Funds that comprise the Investment Structure, at the option of the Funds, in the 84th (eighty-fourth) month from June 2014. The exercise price of the Put Options will correspond to the amount invested by each private pension plan in the Investment Structure, updated *pro rata temporis* by the Expanded National Customer Price (IPCA) index published by the IBGE, plus interest at 7% per year, less such dividends and Interest on Equity as shall have been paid by SAAG to the pension plan entities. This option was considered to be a derivative instrument, accounted at fair value through profit and loss.

For measurement of the fair value of SAAG put options Cemig GT uses the Black-Scholes-Merton ('BCM') model. The assumption was made that the future expenditures of FIP Malbec and FIP Melbourne are insignificant, so that the options are valued as if they hold direct equity interests at Mesa. However, neither SAAG nor Mesa have its share traded on a securities exchange, so that some assumptions are necessary for calculation of the price of the asset and its volatility for application of the BSM model. The closing price of the share of Mesa on December 31, 2019 is ascertained based on free cash flow (FCFE), expressed by equity pick-up of the indirect interests held by the FIPs. Volatility, in turn, is measured as an average of historic volatility (based on the hypothesis that the series of the difference of continuously capitalized returns follows a normal distribution) of comparable companies in the energy generation sector that are traded at Bovespa.

Based on the analysis performed, a liability of R\$483 was recorded in the Company's financial statements (R\$419 on December 31, 2018), for the difference between the exercise price and the estimated fair value of the assets.

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The changes in the value of the options are as follows:

Balance at December 31, 2016	196
Variation in fair value	121
Reversals	(5)
Balance at December 31, 2017	312
Adjustment to fair value	107
Balance at December 31, 2018	419
Adjustment to fair value	64
Balance at December 31, 2019	483

Cemig GT performed the sensitivity analysis of the exercise price of the option, varying the risk-free interest rate and the volatility, keeping the other variables of the model unchanged. In this context, scenarios for the risk-free interest rate at -0.81% to 3.19% p.a., and for volatility between 10% and 70% p.a., were used, resulting in estimates of minimum and maximum price for the put option of R\$492 and R\$525, respectively.

This option can potentially dilute basic profit per share in the future; however, they have not caused dilution of profit per share in the years presented.

Put options of RME and Lepsa's shares

Cemig had a contract under which Fundo de Participações Redentor had the option to sell to Cemig all of its shares at RME and Lepsa. The exercise price of the option was calculated from the sum of the value of the amounts injected by the Fund into the investee, plus the operating expenses of the fund, less Interest on equity, and dividends, distributed by RME and Lepsa. The exercise price was subject to monetary adjustment by the CDI (Interbank CD) Rate plus financial remuneration at 0.9% per year. The exercise of the options occurred in 2016, 2017 and 2018.

The change in the value of the options – the difference between the estimated fair value for the assets and the corresponding exercise price, on December 31, 2018 and 2017 is as follows:

Balance at December 31, 2016	1,150
Variation in fair value	187
Written down, due to exercise of Put	(830)
Balance at December 31, 2017	507
Variation in fair value	48
Written down, due to exercise of Put	(555)
Balance at December 31, 2018	-

The effects of the options contract on the net income for 2018 and 2017 were recognized at fair value based on the Black-Scholes-Merton analysis, considering: exercise price of the option; closing price of the stock of Light on the record dates (as a reference for the value of the indirect equity interest held by the direct shareholders of RME and Lepsa in Light); risk-free interest rate; volatility of the price of the underlying asset; and time to maturity of the option.

After the exercise of the option, which resulted in the acquisition of the remaining shares of the the investees, the Company completed the merger of its wholly-owned subsidiaries on April 24, 2019, at book value, with consequent extinction of these companies. With extinction of RME and Lepsa, the Shareholders' agreement of Light S.A. ("Light") immediately ceased to exist, losing its object, and obligations under it terminated. Since this was a merger of wholly-owned subsidiaries, there was no capital increase nor issuance of new shares. Also, this merger did not change the aggregate percentage equity interest in Light held by Cemig in that date.

Sonda options

As part of the shareholding restructuring, CemigTelecom and Sonda signed a Purchase Option Agreement (issued by Cemig Telecom) and a Sale Option Agreement (issued by Sonda). With the merger of Cemig Telecom into Cemig, on March 31, 2018, the option contract became an agreement between Cemig and Sonda.

This resulted in Cemig simultaneously having a right (put option) and an obligation (call option). The exercise price of the put option will be equivalent to fifteen times the adjusted net income of Ativas in the year prior to the exercise date. The exercise price of the call option will be equivalent to seventeen times the adjusted net income of Ativas in the business year prior to the exercise date. Both options, if exercised, result in the sale of the shares in Ativas currently owned by the Company, and the exercise of one of the options results in nullity of the other. The options may be exercised as from January 1, 2021.

The put and call options in Ativas ('the Ativas Options') were measured at fair value and posted at their net value, i.e. the difference between the fair values of the two options on the reporting date of the financial statements for 2019. Depending on the value of the options, the net value of the Ativas Options may be an asset or a liability of the Company.

The measurement has been made using the Black-Scholes-Merton (BSM) model. In the calculation of the fair value of the Ativas Options based on the BSM model, the following variables are taken into account: closing price of the underlying asset in 2019; the risk-free interest rate; the volatility of the price of the underlying asset; the time to maturity of the option; and the exercise prices on the exercise date.

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The closing price of the underlying asset was based on the valuation prepared by the same specialized consulting firm responsible for calculating the options. The valuation base date is December 31, 2019, the same date as the closing of the Company's Financial Statements, and the methodology used to calculate the fair value of the company is discounted cash flow (DCF) based on the value of the shares transaction of Ativas by Sonda, occurred on October 19, 2016. The calculation of the risk-free interest rate was based on yields of National Treasury Bills. Maturity was calculated assuming exercise date of December 31, 2021.

Considering that the exercise prices of the options are contingent upon the future financial results of Ativas, the estimated exercise prices on the maturity date was based on statistical analyses and information of comparable listed companies.

Swap transactions

Considering that part of the loans and financings of the Company's subsidiaries is denominated in foreign currency, the companies use derivative financial instruments (swaps) to protect the servicing associated with these debts (principal plus interest).

The derivative financial instruments contracted have the purpose of protecting the operations against the risks arising from foreign exchange variation and are not used for speculative purposes.

The notional amount of derivative transactions are not presented in the statement of financial position, since they refer to transactions that do not require cash as only the gains or losses actually incurred are recorded. The net result of those transactions on December 31, 2019 was a positive adjustment of R\$998 (positive adjustment of R\$893 on December 31, 2018), which was posted in finance income (expenses).

The counterparties of the derivative transactions are the banks Bradesco, Itaú, Goldman Sachs and BTG Pactual and Cemig is guarantor of the derivative financial instruments contracted by Company.

This table presents the derivative instruments contracted by Company as of December 31, 2019 and 2018.

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<u>Assets (1)</u>	<u>Liability (1)</u>	<u>Maturity period</u>	<u>Trade market</u>	<u>Notional amount (2)</u>	<u>Unrealized gain / loss</u>		<u>Unrealized gain / loss</u>	
					<u>Carrying amount 2019</u>	<u>Fair value 2019</u>	<u>Carrying amount 2018</u>	<u>Fair value 2018</u>
US\$ exchange variation + Rate (9.25% p.y.)	Local currency + R\$ 150.49% of CDI	Interest: Half-yearly Principal: Dec. 2024	Over the counter	US\$1,000	814	1,235	679	627
US\$ exchange variation + Rate (9.25% p.y.)	Local currency + R\$125.52% of CDI	Interest: Half-yearly Principal: Dec. 2024	Over the counter	US\$500	108	456	33	186
					<u>922</u>	<u>1,691</u>	<u>712</u>	<u>813</u>

- 1) For the US\$1 billion Eurobond issued on December 2017: (i) for the principal, a call spread was contracted, with floor at R\$ 3.25/US\$ and ceiling at R\$ 5.00/US\$; and (ii) a swap was contracted for the total interest, for a coupon of 9.25% p.a. at an average rate equivalent to 150.49% of the CDI. For the additional US\$500 issuance of the same Eurobond issued on July 2018: (1) a call spread was contracted for the principal, with floor at R\$ 3.85/US\$ and ceiling at R\$ 5.00/US\$; and (2) a swap was contracted for the interest, resulting in a coupon of 9.25% p.a., with an average rate equivalent to 125.52% of the CDI rate.
- 2) In millions of US\$.

In accordance with market practice, the Company uses a mark-to-market method to measure its derivatives financial instruments for its Eurobonds. The principal indicators for measuring the fair value of the swap are the B3 future market curves for the DI rate and the dollar. The Black & Scholes model is used to price the call spread, and one of parameters of which is the volatility of the dollar, measured on the basis of its historic record over 2 years.

The fair value at December 31, 2019 was R\$1,691 (R\$ 813 in December 31, 2018), which would be the reference if Cemig GT would liquidate the financial instrument on that date, but the swap contracts protect the Company's cash flow up to the maturity of the bonds in 2024 and they have carrying value of R\$922 at December 31, 2019 (R\$ 712 in December 31, 2018).

Company is exposed to market risk due to having contracted this hedge, the principal potential impact being a change in future interest rates and/or the future exchange rates. Based on the futures curves for interest rates and dollar, Company prepare a sensitivity analyses and estimates that in a probable scenario its results would be affected by the swap and call spread at the end of the period in the amount of R\$1,705 for the option (call spread), and R\$1,511 for the swap – comprising a total of R\$3,216.

Company has measured the effects on its net income of reduction of the estimated fair value for the 'probable' scenario, analyzing sensitivity for the risks of interest rates, exchange rates and volatility changes, by 25% and 50%, as follows:

	<u>Base scenario Dec. 31, 2019</u>	<u>'Probable' scenario:</u>	<u>'Possible' scenario exchange rate depreciation and interest rate increase 25%</u>	<u>'Remote' scenario: exchange rate depreciation and interest rate increase 50%</u>
Swap (asset)	6,427	7,193	6,087	5,052
Swap (liability)	(5,774)	(5,682)	(5,794)	(5,896)
Option / Call spread	1,038	1,705	1,183	481
Derivative hedge instrument	<u>1,691</u>	<u>3,216</u>	<u>1,476</u>	<u>(363)</u>

The same methods of measuring marked to market of the derivative financial instruments described above were applied to the estimation of fair value.

[Table of Contents](#)**c) Financial risk management**

Corporate risk management is a management tool that is part of the Company's corporate governance practices, and is aligned with the process of planning, which sets the Company's strategic business objectives.

The Company monitor the financial risk of transactions that could negatively affect the Company's liquidity or profitability, recommending hedge protection strategies to minimize the Company's exposure to foreign exchange rate risk, interest rate risk, and inflation risks, which are effective, in alignment with the Company's business strategy.

The main risks to which the Company is exposed are as follows:

Exchange rate risk

Cemig and its subsidiaries are exposed to the risk of appreciation in exchange rates, with effect on loans and financing, suppliers, and cash flow. The net exposure to exchange rates is as follows:

	2019		2018	
	Foreign currency	R\$	Foreign currency	R\$
Exposure to exchange rates				
US dollar				
Loans and financing	1,516	6,110	1,518	5,882
Suppliers (Itaipu Binacional)	60	243	70	268
	1,576	6,353	1,588	6,150
Net liabilities exposed		6,353		6,150

Sensitivity analysis

Based on information from its financial consultants, the Company estimates that in a probable scenario the variation of the exchange rates of foreign currencies in relation to the Real at the end of 2020 will be an appreciation of the dollar by 29.01% to R\$5.20. The Company has prepared a sensitivity analysis of the effects on the Company's net income arising from depreciation of the Real exchange rate by 25%, and by 50%, in relation to this 'probable' scenario.

	Base Scenario	'Probable' scenario	'Possible' scenario	'Remote' scenario
		US\$1=R\$5.20	25.00% US\$1=R\$6.50	50.00% US\$1=R\$7.80
Risk: foreign exchange rate exposure				
US dollar				
Loans and financings	6,110	7,883	9,853	11,824
Suppliers (Itaipu Binacional)	243	313	392	470
	6,353	8,196	10,245	12,294
Net liabilities exposed	6,353	8,196	10,245	12,294
Net effect of exchange rate fluctuation	-	1,843	3,892	5,941

Company has entered into swap operations to replace the exposure to the US dollar fluctuation with exposure to fluctuation in the CDI Rate, as described in more detail in the item 'Swap Transactions' in this Note.

[Table of Contents](#)**Interest rate risk**

The Company is exposed to the risk of increase in Brazilian domestic interest rates. This exposure occurs as a result of net liabilities indexed to variation in interest rates, as follows:

Risk: Exposure to domestic interest rate changes	2019	2018
Assets		
Cash equivalents – Cash investments (Note 6) – CDI	326	783
Marketable securities (Note 7) – CDI / SELIC	753	813
Accounts receivable – Renova (Note 32) – CDI	–	532
Restricted cash – CDI	12	91
CVA and in tariffs (Note 16) – SELIC	882	1,081
Reimbursement due to termination of contract (Note 32) – SELIC / CDI	–	97
Reimbursement related to cancelled contracts – CDI	–	10
	1,973	3,407
Liabilities		
Loans, financing and debentures (Note 24) – CDI	(3,773)	(4,920)
Loans, financing and debentures (Note 24) – TJLP	(244)	(249)
Advance sales of energy supply - CDI	–	(79)
	(4,017)	(5,248)
Net liabilities exposed	(2,044)	(1,841)

Sensitivity analysis

In relation to the most significant interest rate risk, Company estimates that, in a probable scenario, at December 31, 2020 Selic and TJLP rates will be 1.50% and 4.95%, respectively. The Company has made a sensitivity analysis of the effects on its net income arising from increases in rates of 25% and 50% in relation to the 'probable' scenario. Fluctuation in the CDI rate accompanies the fluctuation of Selic rate.

	2019	2020		
		'Probable' scenario Selic 1.50% TJLP 4.95%	'Possible' scenario Selic 1.88% TJLP 6.19%	'Remote' scenario Selic 2.25% TJLP 7.43%
<u>Risk: Increase in Brazilian interest rates</u>	<u>Book value</u>			
Assets				
Cash equivalents (Note 6)	326	331	332	333
Marketable securities (Note 7)	753	764	767	770
Restricted cash	12	12	12	12
CVA and Other financial components – SELIC	882	895	899	902
	1,973	2,002	2,010	2,017
Liabilities				
Loans and financing (Note 24) – CDI	(3,773)	(3,830)	(3,844)	(3,858)
Loans and financing (Note 24) – TJLP	(244)	(256)	(259)	(262)
	(4,017)	(4,086)	(4,103)	(4,120)
Net assets (liabilities) exposed	(2,044)	(2,084)	(2,093)	(2,103)
Net effect of fluctuation in interest rates		(40)	(49)	(59)

[Table of Contents](#)**Increase in inflation risk**

This table presents the Company's net exposure to inflation index:

<u>Exposure to increase in inflation</u>	<u>2019</u>	<u>2018</u>
Assets		
Concession financial assets related to Distribution infrastructure - IPCA (1)	483	396
Receivable from Minas Gerais state government (Debt recognition agreement) – IGPM index (Note 13 and 32)	–	247
Receivable from Minas Gerais state government (AFAC) – IGPM (Note 13 and 32)	115	246
Receivable for residual value – Transmission – IPCA (Note 16)	2,468	1,296
Concession Grant Fee – IPCA (Note 16)	1,281	2,409
	4,347	4,594
Liabilities		
Loans, financing and debentures – IPCA and IGP-DI (Note 24)	(4,730)	(3,791)
Debt with pension fund (Forluz) – IPCA	(566)	(652)
Deficit of pension plan (Forluz) – IPCA	(550)	(378)
	(5,846)	(4,821)
Net assets (liabilities) exposed	(1,499)	(227)

(1) Portion of the concession financial assets relating to the Regulatory Remuneration Base of Assets ratified by the regulator (Aneel) after the 3rd tariff review cycle.

Sensitivity analysis

In relation to the most significant risk of reduction in inflation index, reflecting the consideration that the Company has more assets than liabilities indexed to inflation indices, the Company estimates that, in a probable scenario, at December 31, 2020 the IPCA inflation index will be 1.31% and the IGPM inflation index will be 4.23%. The Company has prepared a sensitivity analysis of the effects on its net income arising from an increase in inflation of 25% and 50% in relation to the 'probable' scenario.

	<u>2019</u>	<u>2020</u>		
	<u>Amount Book value</u>	<u>'Probable' scenario IPCA 1.31% IGPM 4.23%</u>	<u>'Possible' scenario (25%) IPCA 1.64% IGPM 5.29%</u>	<u>'Remote' scenario (50%) IPCA 1.97% IGPM 6.35%</u>
<u>Risk: increase in inflation</u>				
Assets				
Concession financial assets related to Distribution infrastructure – IPCA (1)	483	489	491	493
Accounts receivable from Minas Gerais state government (AFAC) – IGPM index (Note 32)	115	120	121	122
Receivable for residual value – Transmission – IPCA (Note 16)	2,468	2,500	2,508	2,517
Concession Grant Fee – IPCA (Note 16)	1,281	1,298	1,302	1,306
	4,347	4,407	4,422	4,438
Liabilities				
Loans, financing and debentures – IPCA and IGP-DI	(4,730)	(4,792)	(4,808)	(4,823)
Debt agreed with pension fund (Forluz) – IPCA	(566)	(573)	(575)	(577)
Deficit of pension plan (Forluz)	(550)	(557)	(559)	(561)
	(5,846)	(5,922)	(5,942)	(5,961)
Net liability exposed	(1,499)	(1,515)	(1,520)	(1,523)
Net effect of fluctuation in IPCA and IGP-M indices		(16)	(21)	(24)

(1) Portion of the Concession financial assets relating to the Regulatory Remuneration Base of Assets ratified by the regulator (Aneel) after the 4th tariff review cycle.

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Liquidity risk

Cemig has sufficient cash flow to cover the cash needs related to its operating activities.

The Company manages liquidity risk with a group of methods, procedures and instruments that are coherent with the complexity of the business, and applied in permanent control of the financial processes, to guarantee appropriate risk management.

Cemig manages liquidity risk by permanently monitoring its cash flow in a budget-oriented manner. Balances are projected monthly, for each one of the companies, over a period of 12 months, and daily liquidity is projected over 180 days.

Short-term investments must comply with investing principles established in the Company's Cash Investment Policy. These include applying its resources in private credit investment funds, without market risk, and investment of the remainder directly in bank CDs or repo contracts which earn interest at the CDI rate.

In managing cash investments, the Company seeks to obtain profitability through a rigid analysis of financial institutions' credit risk, applying operational limits for each bank, based on assessments that take into account their ratings, exposures and balance sheet. It also seeks greater returns on investments by strategically investing in securities with longer investment maturities, while bearing in mind the Company's minimum liquidity control requirements.

Any reduction in the Company's ratings could result in a reduction of its ability to obtain new financing and could also make refinancing of debts not yet due more difficult or more costly. In this situation, any financing or refinancing of the Company's debt could have higher interest rates or might require compliance with more onerous covenants, which could additionally cause restrictions to the operations of the business.

The flow of payments of the Company's obligation to suppliers, debts with the pension fund, loans, financing and debentures, at floating and fixed rates, including future interest up to contractual maturity dates, is as follows:

	<u>Up to 1 month</u>	<u>1 to 3 months</u>	<u>3 months to 1 year</u>	<u>1 to 5 years</u>	<u>Over 5 years</u>	<u>Total</u>
Financial instruments at (interest rates):						
- Floating rates						
Loans, financing and debentures	36	1,119	1,335	14,572	1,912	18,974
Onerous concessions	-	-	2	9	13	24
Debt with pension plan (Forluz) (Note 26)	12	24	111	557	-	704
Deficit of the pension plan (FORLUZ) (Note 26)	5	11	123	212	630	981
	<u>53</u>	<u>1,154</u>	<u>1,571</u>	<u>15,350</u>	<u>2,555</u>	<u>20,683</u>
- Fixed rate						
Suppliers	1,786	293	1	-	-	2,080
	<u>1,839</u>	<u>1,447</u>	<u>1,572</u>	<u>15,350</u>	<u>2,555</u>	<u>22,763</u>

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The distribution concession contract requires levels of service on a very wide basis within the concession area, and disconnection of supply of defaulting customers is permitted. Additionally, the Company uses numerous tools of communication and collection to avoid increase in default. These include telephone contact, emails, text messages, collection letters, posting of customers with credit protection companies, and collection through the courts.

The risk arising from the possibility of Cemig and its subsidiaries incurring losses as a result of difficulty in receiving amounts billed to its customers is considered to be low. The credit risk is also reduced by the extremely wide customers' base.

The allowance for doubtful accounts receivable recorded on December 31, 2019, considered to be adequate in relation to the credits in arrears receivable by the Company, was R\$810 (R\$840 on December 31, 2018).

In relation to the risk of losses resulting from insolvency of the financial institutions at which the Company or its subsidiaries have deposits, a Cash Investment Policy was approved and has been in effect since 2004.

Company manage the counterparty risk of financial institutions based on an internal policy.

This Policy assesses and scales the credit risks of the institutions, the liquidity risk, the market risk of the investment portfolio and the Treasury operational risk. All investments are made in financial securities that have fixed-income characteristics, always indexed to the CDI rate. The Company does not carry out any transactions that would bring volatility risk into its financial statements.

As a management instrument, Company divide the investment of its funds into direct purchases of securities (own portfolio) and investment funds. The investment funds invest the funds exclusively in fixed income products, having companies of the Group as the only unit holders. They obey the same policy adopted in the investments for the Company's directly-held own portfolio.

The minimum requirements for concession of credit to financial institutions are centered on three items:

1. Rating by three risk rating agencies.
2. Equity greater than R\$ 400.
3. Basel ratio one percentage point above the minimum set by the Brazilian Central Bank.

Banks that exceed these thresholds are classified in three groups, by the value of their equity; and within this classification, limits of concentration by group and by institution are set:

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Group	Equity	Concentration	Limit per bank (% of equity)*
A1	Over R\$ 3.5 billion	Minimum of 50%	Between 6% and 9%
A2	R\$ 1.0 billion to R\$ 3.5 billion	Maximum 30%	Between 5% and 8%
B	R\$ 400 to R\$ 1.0 billion	Maximum 30%	Between 5% and 7%

* The percentage assigned to each bank depends on individual assessment of indicators, e.g. liquidity, and quality of the credit portfolio.

Further to these points, Cemig also sets two concentration limits:

1. No bank may have more than 30% of the Group's portfolio.
2. No bank may have more than 50% of the portfolio of any individual company.

Risk of over-contracting and under-contracting of energy supply

Sale or purchase of energy supply in the spot market to cover a positive or negative exposure of supply contracted, to serve the captive market of Cemig D, is an inherent risk to the energy distribution business. The regulatory agent limits for 100% pass-through to customers the exposure to the spot market, valued at the difference between the distributor's average purchase price and the spot price (PLD), is only the margin between 95% and 105% of the distributor's contracted supply. Any exposure that can be proved to have arisen from factors outside the distributor's control ('involuntary exposure') may also be passed through in full to customers. Company's management is continually monitors its contracts for purchase of energy supply to mitigate the risk of exposure to the spot market.

Risk of continuity of the concession

The risk to continuity of the distribution concession arises from the new terms included in the extension of Cemig D's concession for 30 years from January 1, 2016, as specified by Law 12,783/13. The extension introduced changes to the present contract, conditional upon compliance by the distributor with new criteria for quality, and for economic and financial sustainability.

The extension is conditional on compliance with indicators contained in the contract itself, which aim to guarantee quality of the service provided and economic and financial sustainability of the company. These are determinant for actual continuation of the concession in the first five years of the contract, since non-compliance with them in two consecutive years, or in the fifth year, results in cancellation of the concession.

Additionally, as from 2021, non-compliance with the quality criteria for three consecutive years, or the minimum parameters for economic/financial sustainability for two consecutive years, results in opening of proceedings for termination of the concession.

The efficiency criteria for continuity of supply and for economic and for financial management, required to maintain the distribution concession, were met in the year ended December 31, 2019.

[Table of Contents](#)**Hydrological risk**

The greater part of the energy sold by the Company's subsidiaries is generated by hydroelectric plants. A prolonged period of drought can result in lower water volumes in the reservoirs of these plants, which can lead to an increase in the cost of acquisition of energy, due to replacement by thermoelectric generation, or reduction of revenues due to reduction in consumption caused by implementation of wide-ranging programs for saving of energy. Prolongation of the generation of energy using the thermal plants could pressure costs of acquisition of supply for the distributors, causing a greater need for cash, and could result in future increases in tariffs.

Risk of debt early maturity

The Company's subsidiaries have loan contracts with restrictive covenants normally applicable to this type of transaction, related to compliance with a financial index. Non-compliance with these covenants could result in earlier maturity of debts.

On December 31, 2019, the Company was compliant with all the covenants for financial index requiring half-yearly and annual compliance. Exception was noticed for the CEF contract non-financial covenant at the loan contracts of the subsidiaries Central Eólica Praias de Parajuru and Central Eólica Volta do Rio. More details in Note 24.

Covid 19 and the Coronavirus – Impacts for the Company

The assessment of the risks and possible impacts of Covid-19 on Company's business and the market in which it operates is disclosed in Note 39.

Capital management

This table shows comparisons of the Company's net liabilities and its Equity on December 31, 2019 and 2018:

	2019	2018
Total liabilities	34,035	43,916
(-) Cash and cash equivalents	(536)	(891)
(-) Restricted cash	(12)	(91)
Net liabilities	33,487	42,934
Total equity	15,891	15,939
Net liabilities / equity	2.11	2.70

34. ASSETS AS HELD FOR SALE AND DISCONTINUED OPERATIONS

Assets and liabilities classified as held for sale, and the results of discontinued operations, were as follows:

	2019	2018		
	Investments	Investments	Telecom assets	Total
Assets	1,258	19,446	-	19,446
Liabilities	-	(16,272)	-	(16,272)
Net Asset	1,258	3,174	-	3,174
Attributed to equity holders of the parent	1,258	1,818	-	1,818
Attributed to non-controlling interests	-	1,356	-	1,356
Net income from discontinued operations	224	73	290	363
Attributed to equity holders of the parent	224	32	290	322
Attributed to non-controlling interests	-	41	-	41
Net income from continuing operations	73	-	-	-
Attributed to equity holders of the parent	73	-	-	-
Attributed to non-controlling interests	-	-	-	-

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On November 27, 2018, the Board of Directors of the Company decided, in the context of Cemig's divestment program, to maintain as a priority for 2019 the firm commitment to sale of its shares in Light S.A., on conditions that are compatible with the market and also in accordance with the interests of shareholders.

Additionally, the Company has assessed that its investment in Light meets the criteria of IFRS 5 – *Non-current assets held for sale and discontinued operations*; and that its sale in the near future is considered to be highly probable. The Company has also evaluated the effects on the investments held in the companies LightGer, Axiom, Guanhões and UHE Itaocara, which are jointly controlled by the Company and by Light.

Disposal of interest in and control of Light

On July 17, 2019, together with the public offering of shares by Light, the Company sold 33,333,333 shares that it held in that investee, at the price per share of R\$ 18.75, in the total amount of R\$625.

Additionally, with completion of the public offering of shares by Light, the Company's equity interest in the total capital of this investee was reduced from 49.99% to 22.58%. This limited its right of voting in meetings of shareholders, and consequently its ability to direct material activities of the investee.

Thus, as from that date, with the changes of the equity interest in Light, the Company ceased to control the investee. In these circumstances, the Company wrote down the values of assets and liabilities of its former subsidiary, and recognized, at fair value, its remaining equity interest as an investment in an affiliate or jointly-controlled entity, in accordance with IFRS 10– *Consolidated financial statements*.

Since the Company maintains its firm commitment to dispose of the remaining equity interest in Light in the near future, the investment in Light continues to be classified as Assets held for sale, in accordance with IFRS 5 – *Non-current assets held for sale, and discontinued operations*, at the lower of its carrying amount and its fair value less cost to sale. The difference between the book value of the remaining equity interest and its fair value was recognized in the net income for the period from continuing operations.

The Company also wrote down the assets and liabilities of the former subsidiaries *Itaocara*, *Guanhões*, *LightGer* and *Axiom*, and recognized its remaining equity interest in these investees at fair value as investments in jointly-controlled entities, accounted for by the equity method. These investments, which are jointly controlled with Light, were not classified as held for sale and discontinued operations, since the Company does not have the intention of selling them. For more information, see Note 18.

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The accounting effects arising from the sale of equity interest and control of Light are shown in this table:

	Profit/loss on disposal of equity interest	Remeasurement of remaining equity interest					Total
		Light	Lightger	Guanhães	Axxion	Itaocara	
2019							
Prior equity interest – Assets held for sale	(515)	(1,060)	(126)	(141)	(4)	(4)	(1,850)
Proceeds from disposal of equity interest	625	–	–	–	–	–	625
Remeasurement at fair value of remaining equity interest		1,258	128	131	4	4	1,525
Others	–	–	–	4	5	–	9
Effects on the income statement, before taxes	110	198	2	(6)	5	–	309
Income tax and social contribution tax	(38)	(47)	–	–	–	–	(85)
Net income from discontinued operations	72	151	2	(6)	5	–	224

Of the total gain resulting from the disposal of control of Light, totaling R\$ R\$224, the amount of R\$72 refers to the capital gain, net of tax, resulting from the sale of 33,333,333 shares, considering as a cost of these shares the proportion of the equity interest sold in relation to the total amount of the asset held for sale on the date of the disposal. The remeasurement at fair value of the remaining equity interest in Light considered its shares' sales price on the date of the loss of control (Level 1 in the fair value hierarchy), less the estimated costs to sale of R\$29.

This table gives information on the assets and liabilities of Light, which Company's interest is classified as asset held for sale on December 31, 2019:

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	<u>2019</u>		<u>2019</u>
<u>ASSETS</u>		<u>LIABILITIES</u>	
Cash and cash equivalents	1,678	Suppliers	2,546
Receivables from customers and traders	2,537	Loans and financings	1,387
Recoverable taxes	216	Taxes	172
Financial assets of sector	549	Other current liabilities	1,071
Other current assets	374	Total, current liabilities	5,176
Total, current assets	5,354		
Receivables from customers and traders	1,113	Loans and financings	7,379
Recoverable taxes	6,257	Taxes	348
Concession financial assets	5,358	Deferred taxes	400
Property, plant and equipment	1,587	Other non-current liabilities	4,308
Intangible assets	2,837	Total, non-current liabilities	12,435
Investments	579		
Other non-current assets	758	Share capital	4,051
Total, non-current assets	18,489	Capital reserves	3
		Profit reserves	1,958
		Equity valuation adjustments	220
		Shareholders' Equity	6,232
Total Assets	23,843	Total, Liabilities	23,843

Maintenance of the interest in Light as an asset held for sale

In 2019, Management has not completed the process of divestment of the entire investment in Light due to external factors, beyond its control and to unfavorable market conditions.

Company's management continues to have a firm commitment to dispose of the remaining equity interest in Light and estimates that conclusion of the process in 2020 is highly probable. Considering that it is an investment in an affiliate, it was classified as an asset held for sale, but no longer as a discontinued operation, in accordance with the provisions established in IFRS 5 – *Non-current assets held for sale, and discontinued operations*.

As the investment is no longer accounted for by the equity method as from the date when it is classified as held for sale, the dividends declared by the investee in December 2019, in the amount of R\$73, were recognized in net income from continuing operations.

35. INSURANCE

The Company maintains insurance policies to cover damages on certain assets, in accordance with orientation by specialists, as listed below, taking into account the nature and the degree of risk, for amounts considered sufficient to cover any significant losses related to its assets and responsibilities. The risk assumptions adopted, due to their nature, are not part of the scope of an audit of the financial statements, and consequently were not examined by the external auditors.

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	Coverage	Coverage period	Amount insured (1)		Annual premium (1)	
Companhia Energética de Minas Gerais						
Facilities in buildings	Fire	Jan. 8, 2020 to Jan. 8, 2021	R\$	8,661	R\$	2
Cemig Geração e Transmissão						
Air transport / Aircraft	Fuselage Third party	April 29, 2019 to April 29, 2020 April 29, 2019 to April 29, 2020	US\$	4,385	US\$	49
Warehouse stores	Fire	Nov. 2, 2019 to Nov. 2, 2020	R\$	20,771	R\$	20
Buildings	Fire	Jan. 8, 2020 to Jan. 8, 2021	R\$	275,773	R\$	75
Telecoms equipment (3)	Fire	Jan. 8, 2019 to Jan. 8, 2020	R\$	2,650	R\$	2
Operational risk - Transformers above 15MVA and other power distribution equipment with value above R\$1,000	(2)	Dec. 7, 2019 to Dec. 7, 2020	R\$	959,243	R\$	1,262
Cemig Distribuição						
Air transport / Aircraft / Guimbal equipment	Fuselage Third party	April 29, 2019 to April 29, 2020	US\$	3,370	US\$	34
Warehouse stores	Fire	Nov. 2, 2019 to Nov. 2, 2020	R\$	120,007	R\$	117
Buildings	Fire	Jan. 8, 2019 to Jan. 8, 2020	R\$	744,134	R\$	201
Telecoms equipment (3)	Fire		R\$	31,083	R\$	28
Operational risk – Transformers above 15MVA and other energy distribution equipment with value above R\$ 1,000 (2)	Total	Dec. 7, 2019 to Dec. 7, 2020	R\$	528,071	R\$	695
Gasmig						
Gas distribution network / Third party	Third party	Dec. 15, 2019 to Dec. 15, 2020	R\$	60,000	R\$	398
Own vehicle fleet (Operation)	Damage to third parties only	Jul. 7, 2019 to Jul. 7, 2020	R\$	500	R\$	3
Own vehicle fleet (Directors)	Full cover	Oct. 25, 2019 to Oct. 25, 2020	R\$	100	R\$	2
Facilities – multirisk	Robbery, theft and fire	Jan. 1, 2020 to Jan. 1, 2021	R\$	41,374	R\$	44.8

(1) Amounts expressed in R\$ '000 or US\$'000.

(2) Maximum indemnity limit: R\$ 231

(3) Contracting of a new policy is in progress.

The Company, except for its aircraft, does not have third party liability insurance covering accidents, and is not seeking proposals for this type of insurance. Additionally, Company has not sought proposals for, and does not have current policies for, insurance against events that could affect its facilities such as earthquakes, floods, systemic failures or business interruption. The Company has not suffered significant losses arising from the above-mentioned risks.

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Cemig and its subsidiaries have contractual obligations and commitments as follows:

	<u>2020</u>	<u>2021</u>	<u>2022</u>	<u>2023</u>	<u>2024</u>	<u>After 2025</u>	<u>Total</u>
Purchase of energy from Itaipu	1,701	1,538	1,538	1,568	1,551	32,724	40,620
Purchase of energy – auctions	4,408	4,081	4,035	4,281	4,724	55,730	77,259
Purchase of energy – ‘bilateral contracts’	334	334	334	334	223	148	1,707
Quotas of Angra 1 and Angra 2	296	289	291	299	302	6,352	7,829
Transport of energy from Itaipu	240	251	264	251	238	1,441	2,685
Other energy purchase contracts	3,619	3,347	3,808	3,679	3,913	35,082	53,448
Physical quota guarantees	845	757	718	681	653	13,601	17,255
Total	<u>11,443</u>	<u>10,597</u>	<u>10,988</u>	<u>11,093</u>	<u>11,604</u>	<u>145,078</u>	<u>200,803</u>

37. THE ANNUAL TARIFF ADJUSTMENT

On May 28, 2019, the regulator (Aneel) approved the Annual Tariff Adjustment for Cemig D. This provided a tariff increase of 8.73%, whereas 1.60% corresponded to Cemig D's manageable costs (Portion B) and the remaining portion, of 7.13%, has zero economic effect, not affecting profitability, since it represents direct pass-through, within the tariff, relating to the following items: (i) increase of 0.34% in non-manageable ('Parcel A') costs – mainly purchase of energy supply and transmission charges; (ii) increase of 9.24% in the financial components of the current process, led by the CVA currently being processed, which had an effect of 10.79%; and (iii) 2.45% was withdrawn from the financial components of the prior process. The increase is in effect from May 28, 2019 to May 27, 2020.

38. NON-CASH TRANSACTIONS

On 2019, 2018 and 2017, the Company had the following transactions not involving cash, which are not reflected in the Cash flow statement:

- Capitalized financial costs of R\$23 on 2019 (R\$ 30 on 2018, R\$ 71 on 2017).
- Except for the cash arising from the merger of the subsidiaries RME and LUCE amounting R\$ 22, this transaction did not generate effects in the Company's cash flow on 2019.
- Settlement of receivables from State of Minas Gerais through retention of dividends in the total amount of R\$148 on 2019.
- Except for the cash arising from the acquisition of the subsidiaries Parajuru and Volta do Rio amounting R\$ 4, and the payment of R\$ 5, this business combination did not generate effects in the Company's cash flow on 2018.
- Except for the consideration paid for acquisition of an additional equity interest at RME and control of Light, in the amount of R\$ 104, and the cash arising from RME, of R\$ 67, this business combination did not generate effects in the Company's cash flow on 2018.

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39. SUBSEQUENT EVENTS

Covid-19 Pandemic

General Context

On March 11, 2020, the World Health Organization characterized Covid-19 as a pandemic, reinforcing the restrictive measures recommendations to prevent the virus dissemination worldwide. These measures are based, mainly, on social distancing, which have been causing major negative impact on entities, affecting their production process, interrupting their supply chains, causing workforce shortages and closing of stores and facilities. The economies around the world are developing measures to handle the economic crisis, especially by their central banks and fiscal authorities, but the economic downturn and its effects are not yet accurately measurable.

Government measures aimed at Brazilian energy sector

Several measures were implemented by the Brazilian government, specifically aimed at energy sector, which include:

- The provisional normative act. 950/2020 issued in April 8, 2020, which provides for 100% discount in the calculation of social energy tariff ('Tarifa Social de Energia Elétrica'), from April 1, 2020 to June 20, 2020, applicable to customers included in low-income residential subclass, with energy consumption less than or equal to 220 kWh/month. The act also authorizes the Federal Government to allocate resources to Energy Development Account (CDE), limited to R\$900, to cover the tariff discounts established.
- Expansion on the limit of total amount of energy that can be declared by energy distributors in the process of the surplus sales mechanism ('Mecanismo de Venda de Excedentes' - MVE), during 2020, from 15% to 30%, for the purpose of facilitating contractual reductions.
- Provision of financial resources available in the reserve fund, by CCEE, dedicated to reduce future regulatory fees. Cemig D was granted with R\$122 million.
- Under Resolution 878/2020, issued on March 24, 2020, the regulator has implemented some measures in an attempt to maintain the public service of energy supply, which include: prohibiting energy supply suspension due to default of certain categories of customers (residential), for 90 days, prioritizing emergency assistance and energy supply to services and activities regarded as essential, drawing up specific contingency plans to assist health care units and hospital services, among others.

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On May 18, 2020, the Federal Government published the Decree n. 10,350/20 to support the energy distribution sector, which is the segment that deals directly with customers and firstly affect by the Covid-19 pandemic crisis. Based on this decree, CCEE (Power Trading Chamber) will create and manage the “Covid Account” in order to either cover the distribution agents revenue/cash flow deficit or to anticipate their revenues, related to (i) over-contracted purchases due to market retraction, (ii) “CVA” sector assets (iii) maintaining the neutrality of regulatory charges, (iv) compensation for the delay in applying tariff adjustments and (v) anticipation of “parcel B” revenues as determined by Aneel regulation.

Aneel will determine on a monthly basis the total amount to be paid to each distribution agent from Covid-Account. There are some rules applied to distribution agents to be entitled to the Covid-Account resources, such as relinquishing any intention to reduce or end the purchase of energy from generators because of a reduction in the sales until December 2020, and, in the event of default on payments, limiting their dividend payments to the legal minimum of 25% of net income. Notwithstanding, the right to request an extraordinary tariff review is fully preserved.

Aneel will determine the amount of contribution to the “CDE” sector fund in order to rebuild it, which will be implemented in the tariff adjustment/review processes to happen in 2021 and normally charged to the customers until full repayment.

In addition, the regulator have been discussing other measures to support the energy sector by providing short-term resources in order to offset the liquidity reduction due to decrease in revenue and collection.

Company's initiatives

On March 23, 2020, the Company established the Coronavirus Crisis Management Committee (“Comitê Diretor de Gestão da Crise do Coronavírus”) to ensure its readiness to making decisions and responding to the impact of Covid-19, because of the fast-changing situation, which became more widespread, complex and systemic

Also, in line with recommendations to maintain social-distancing measures, the Company has implemented an operational contingency plan and several precautionary measures to keep its employees healthy and safe, including: security and health technicians contacting operational staff on a daily basis; interacting daily with subcontractors Social Service department to monitor the evolution of suspicious cases; changing the schedule to prevent gatherings; restricting national and international travel; suspending technical visits and events at Company's facilities; using remote means of communication; adopting work-from-home policies for a substantial number of employees, providing face masks for employees in external service or in service into its facilities, and requiring outsourcings providers to put the same procedures in place. In addition, the Company has suspended in-store assistance to the general public temporarily.

The Company maintain the communication with its customers on virtual channels and essential assistance in customers' facilities, ensuring the appropriate energy supply.

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The Company also adopted the follow measures in order to contribute with society, which are assessed continuously:

- Providing payment flexibility to low-income residential subclass customers, registered as social tariff, who will be able to pay their debts in up to six installments, without interests or penalties.
- Providing payment flexibility to public and philanthropic hospitals as well as to emergency rooms units, which will be able to pay the bills not yet collected in up to six installments, without interests or penalties;
- Offering the entities regarded as small business by Brazilian law the option for payment in up to six installments, without interests or penalties.
- A donation program linked to its customers established for the purchase of medical equipment to hospitals located in several regions in the State of Minas Gerais, in addition to a donation made directly by the Company, which has already committed an amount around R\$10 million.

The company is working diligently to mitigate the crisis impacts on its liquidity, implementing the following measures, among others:

- reviewing its program of investments and expenses for 2020, which planned capital investments amounting to approximately R\$2,042 million, in order to postpone R\$266 (13%) of those capital investments to 2021, being R\$168 million, R\$17 million and R\$81 million originally budgeted to be applied on the distribution, generation and transmission segments, respectively;
- payment of minimum mandatory dividends to shareholders, and concentration of the greater part of the dividend's payment at the end of 2020;
- negotiating with its customers on the free market the volumes and delivery times on their contracts;
- deferral payment of taxes and social charges, as authorized by legislation.

Impact of Covid-19 on Financial Statements

Considering the significant restrictions on business and social interaction during the Covid-19 pandemic in combination with the latest movements in exchange and interest rates, the Company estimates that the resulting economic contraction might have a negative effect on its liquidity, but the overall impact of the Covid-19 outbreak on its financial position and performance is still difficult to be accurately measured at this point.

In such a scenario, the significant intervention in the local market policies and the initiatives to reduce the transmission of Covid-19 are likely to cause a reduction in energy consumption and consequently in revenue from sale of energy, as well as an increase in expected credit losses. The energy demand (load) measured by Brazilian Interconnected Power Grid (SIN) has decreased 18.3% since the second half of March 2020.

From the observation of the pandemic's immediate economic effects, the Company assessed the assumptions used for calculating fair value and recoverable amount of certain financial and non-financial assets, as follows:

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- The Company assessed whether the greater pressure on the exchange rate, combined with a lack of financial market liquidity, will have a negative impact on derivative financial instruments hired to protect its operations against the risks arising from foreign exchange rate changes. At this point, given the current market conditions, the change in derivative instrument's fair value, based on the forecasts of future interest and exchanges rates, cannot offset the Company's total exposure to foreign exchange rate variability, resulting in a net loss of R\$438 million in the first quarter of 2020. The long-term projections carried out for the foreign exchange rate are lower than the current dollar quotation, which may represent a decrease in Company's foreign exchange variation expense, if the projected scenario occurs.
- As a result of Covid-19 situation, the market conditions have deteriorated, and, under the current circumstances, the fair value of the Company's interest in Light has decreased significantly. The estimated negative impact arising from the remeasurement of the asset at fair value less cost to sell is R\$609 on March 31, 2020.
- The Company is assessing the circumstances arising from Covid-19 pandemic and associated measures aimed at reducing its systematic impact when measuring expected credit losses. Under the Resolution 878/2020, the regulator has implemented some measures in an attempt to maintain the public service of energy supply, including prohibiting energy supply suspension due to default of certain customers categories. This measures can increase delinquency and bring further cash flow pressure. The Company believes it is still too early to assess accurately these measures potential impact, which may be mitigated by the possible interventions from federal government in order to support the Brazilian energy distributors.
- The Company estimates that the assumptions applied to determine the recoverable amount of the relevant investments in subsidiaries, joint-controlled entities and associates were not influenced significantly by the Covid-19 situation, since these investees' cash flows are mainly related to long-term rights to commercial operation of the regulated activity. Therefore, except for the effects described above, related to the negative impact arising from the remeasurement of Company's interest in Light, classified as asset held for sale, no additional impairment losses was recognize to its investments in subsidiaries, joint-controlled entities and associates.
- The Company has also made an assessment attempting to identify the behavior of the interest rates and discount rates that are the basis for the calculation of post-employment obligations, and believes that at this moment, due to the high volatility of the market, it is not possible to conclude whether the present rates reflect an alteration in the macroeconomic fundamentals that would indicate a need for recalculation of the actuarial liabilities.
- Despite the uncertainties related to the crisis unfolding and its potential long-term effects, the Company does not expect that the negative impact on its projections of likely future taxable profits might compromise the recoverability of its deferred tax assets

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The sensitivity analysis for interest rate, exchange rate and inflation risks presented in Note 33 were prepared in the current pandemic context.

The Company estimates that the effects of the pandemic may temporarily affect its liquidity in 2020, however, significant long-term effects are not expected. Based on the market projections and on the crisis measurable effects, the Company has observed the following effects in 2020:

- The Company expects that the return of economic activities after the peak of the coronavirus outbreak will reestablish the collection behavior, which reduced in April 2020. In addition, the negotiations to enable the recovery of past due receivables and the possible regulator's measures to reestablish economic balance, which are currently being discussed in the sector, may mitigate the negative effects of the economic crisis on collection.
- The energy demand (load) measured by the Brazilian Interconnected Power Grid (SIN) has decreased in March and April 2020. Measured up to the initial days of May 2020, the reduction in the market of Cemig D's captive customers was approximately 11%. We believe there is a possibility that the effect of this temporary market reduction on the Company's cash flow will be mitigated by the possible actions of the federal government to support the energy distributors. Further, the Company expects that the market will recover as the requirements for social distancing are made more flexible, as is happening in several cities of Minas Gerais and the country.
- The Company is starting negotiations and deferrals with its customers and energy suppliers, in order to maintain Cemig GT liquidity during the economic crisis.

2020 Programmed Voluntary Retirement Plan ('PDVP')

On April 2020, the Company approved the Programmed Voluntary Retirement Plan for 2020 ('the 2020 PDVP'). Those eligible – any employees who had worked with the Company for 25 years or more by December 31, 2020 – are able to join from May 4 to 22, 2020. The program will pay the standard legal payments for severance, 50% of the period of notice, an amount equal to 20% of the Base Value of the employee's FGTS fund, an additional premium equal to 50% of the period of notice plus 20% of the Base Value of the employee's FGTS fund, as well as the other payments under the legislation.