# CEMIG DAY

### **29<sup>TH</sup> INVESTOR MEETING**

















# Reynaldo Passanezi Filho CEO



# SOCEMIG MANAGEMENT EFFICIENCY CAPEX INCREASE LEADERSHIP

CEMIG DAY 29TH INVESTOR MEETING

### **FOCUS ON EFFICIENCY AND CORE BUSINESS**

### **STRATEGY FOR 2009–2018**

**7 NON-COMPLIANCE WITH REGULATORY** PARAMETERS OF OPERATIONAL EFFICIENCY, in excess of BRL 15.2 BILLION

**INVESTIMENTS IN MINORITY HOLDINGS, OUTSIDE** MINAS GERAIS - OVER BRL 39 BILLION, **Destruction of value: BRL 14 BILLION** 

**INVESTMENT IN MINAS GERAIS: ABANDONED TOTAL INVESTED = LESS THAN REGULATORY DEPRECIATION** 

LOSS OF CONCESSION OF THE PLANTS: São Simão, Jaguara, Miranda and Volta Grande, exceeding 50% of the installed capacity of 2,922 MW

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### **STRATEGY SINCE 2019**

#### FRAMEWORK IN THE PARAMETERS **REGULATORY OPERATIONAL EFFICIENCY MEASURES.** allowing full return of regulatory profitability

▲ DIVESTMENT OF MINORITY INTERESTS and non-core businesses, with cash recovery MORE THAN BRL13 BILLION

LARGEST CAPEX PLAN IN HISTORY: BRL 49.2 BILLION FOR 2024-28; FOCUS ON **REGULATED SECTORS** 

FINANCIAL CAPACITY TO RENEW THE CONCESSIONS of Sá Carvalho, Nova Ponte and Emborcação with an installed capacity of 1,780 MW

Values adjusted to IPCA+6%

# **OCUS AND WIN:** LARGEST CAPEX PLAN IN HISTORY

# BRL 49.2\* BILLION INVESTIMENTS IN 2019/2028

\* BRL13.6 BILLION realized by 2023

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### 2019/28

BRL 33.2 BILLION DISTRIBUTION



**BRL 5.0 BILLION** TRANSMISSION



**BRL 3.6 BILLION** GENERATION



**BRL 2.2 BILLION** NATURAL GAS



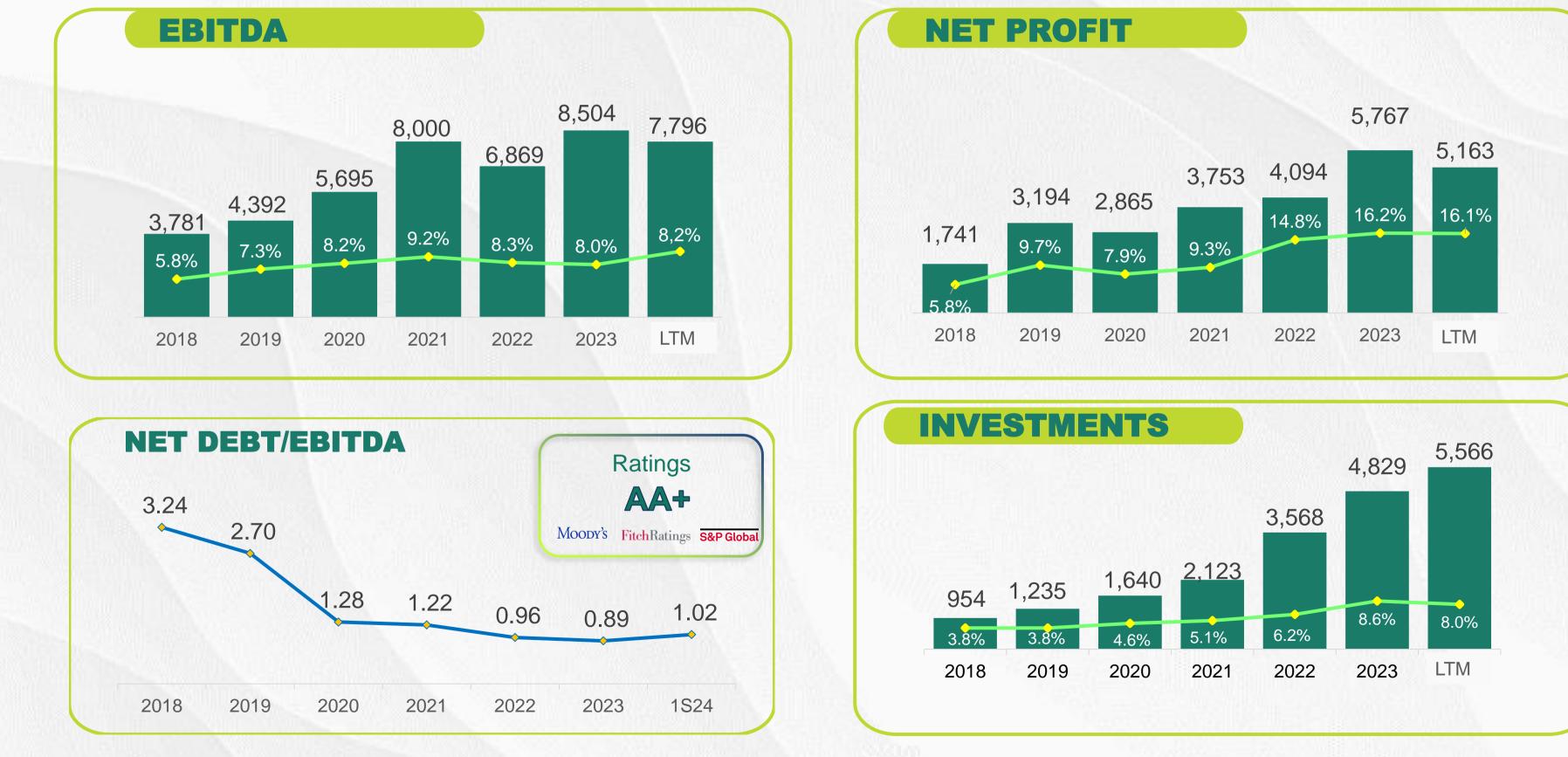
**BRL 3.6 BILLION** DISTRIBUTED SOLAR GENERATION



**BRL 1.6 BILLION** INNOVATION & IT

## TURNAROUND

### Improvement in all key physical and financial indicators



#### CEMIG DAY 29TH INVESTOR MEETING

% Relative to the energy sector

#### **BRL MILLION**

### **SHARE APPRECIATION**

CMIG4 (PN): +394% CMIG3 (ON): +457 %

## BRL 10.6 BILLON MARKET VALUE AUGUST 2018

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# BRL 35.3 BILLION MARKET VALUE – AUGUST 16<sup>TH</sup>, 2024

### **BRL 12.7 BILLION**

IN DIVIDENDS PAID SINCE 2019, INCLUDING ADDITIONAL DIVIDENDS TO BE PAID ON 08/30/24

Source: Economática – Share price from August 2018 to 2024

## We are enthusiastic and confident about Cemig's future!

**Discipline in Capital Allocation:** execution of the largest CAPEX plan in history **Operational efficiency:** discipline for costs reduction and improving the quality of spending Modernization of governance: simplificity and agility **Focus on the Client:** improvements in the quality-of-service Leadership in the free and retail market Leading role in the energy transition, with innovation and investment attraction

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# 2024 01 Leonardo George de Magalhães CFO

RESULTS

CEMIG

#### Disclaimer



Certain statements and estimates in this material may represent expectations about future events or results which are subject to risks and uncertainties that may be known or unknown. There is no guarantee that events or results will occur as referred to in these expectations.

These expectations are based on the present assumptions and analyses from the point of view of our management, in accordance with their experience and other factors such as the macroeconomic environment, market conditions in the electricity sector, and expected future results, many of which are not under our control.

Important factors that could lead to significant differences between actual results and the projections about future events or results include: Cemig's business strategy, Brazilian and international economic conditions, technology, our financial strategy, changes in the electricity sector, hydrological conditions, conditions in the financial and energy markets, uncertainty on our results from future operations, plans and objectives, and other factors. Due to these and other factors, our results may differ significantly from those indicated in or implied by such statements. The information and opinions herein should not be understood as a recommendation to potential investors, and no investment decision should be based on the veracity, currentness or completeness of this information or these opinions. None of our staff nor any party related to any of them, or their representatives shall have any responsibility for any losses that may arise as a result of use of the content of this presentation.

To evaluate the risks and uncertainties as they relate to Cemig, and to obtain additional information about factors that could give rise to different results from those estimated by Cemig, please consult the section on *Risk Factors* included in the *Reference Form* filed with the Brazilian Securities Commission (CVM) – and in the *20-F Form* filed with the U.S. Securities and Exchange Commission (SEC).

In this material, financial amounts are in **R\$ million (R\$ mn)** unless otherwise stated. Financial data reflect the adoption of **IFRS**.



#### **Highlights 2Q24**





#### Consistent results offer attractive shareholder returns

o IoC declared in the amount of R\$430 million in June 2024

#### **R\$1.9 billion** in Operational cash generation of in 2Q24

Recourring Ebitda increases 2.0% (2Q24/2Q23)



#### Tax provisions reversal amounted to **R\$584** million

• Favorable court decision related to social security contributions on the profit sharing



#### Cemig T – Investements fully recognized in the Tariff Review

Reconciled Rap approved for the 2024-2025 adjustment cycle at R\$1.2 billion





#### **Investment program** – execution

#### Realized investments in 1H24 totaled **R\$2,446 million**



Distribution

Generation

Gas

4.829

2023

Transmission

Distributed generation

+43.1%

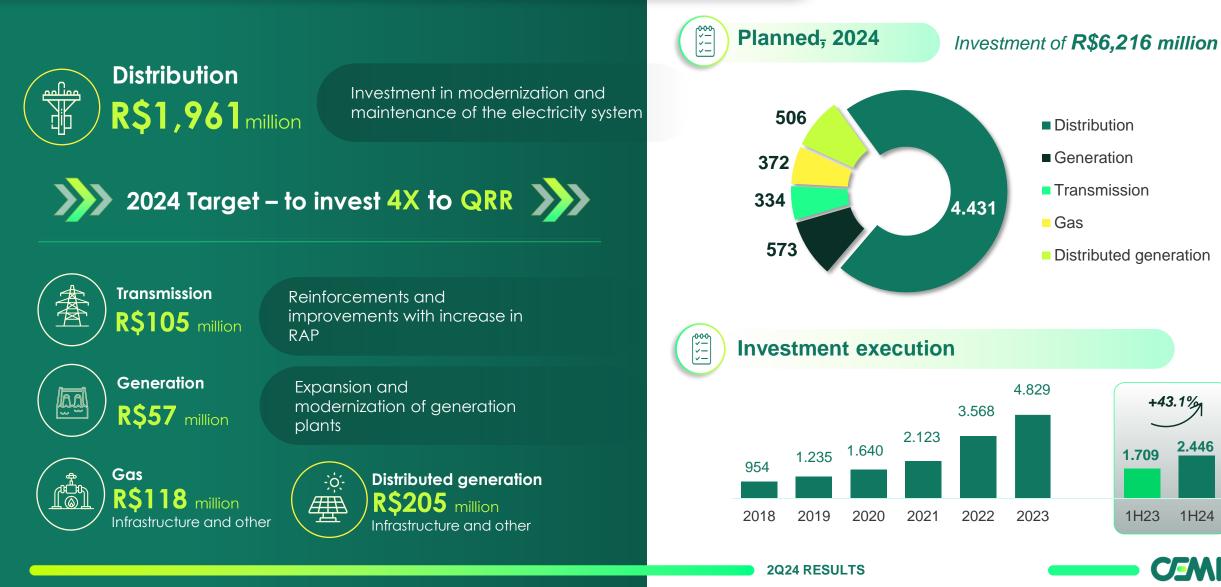
1.709

1H23

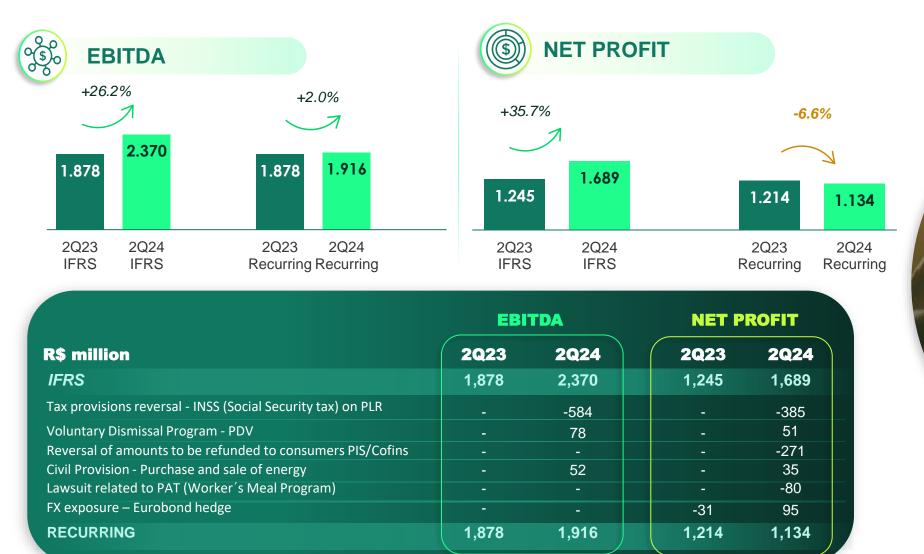
2.446

1H24

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#### **Consolidated 2Q24 results**





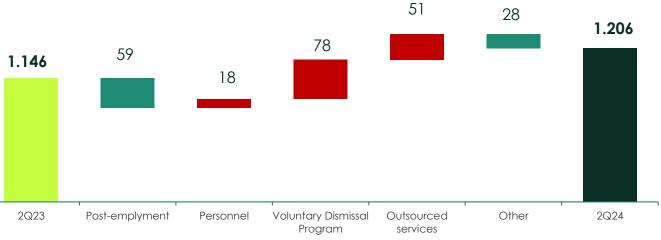
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2Q24 RESULTS



#### 2Q24: Consolidated operational costs and expenses

PMSO costs evolution, excluding the 1.7%1.14effects of Voluntary Dismissal Program-PDV (5.6% without PDV exclusion)



- The Voluntary Dismissal Program PDV added 357 employees at a cost of R\$78 million
- Higher expenses related to **third parties** for maintenance & conservation of electrical equipment
- Other expenses Mainly due to R\$38 million lower regulatory compensations paid to clients -REN-1000 (Aneel Resolution 1,000)



#### **Consolidated Cash Flow – 1H24**

#### R\$ million

Cash generation allows execution of the investment plan and debt management







#### **Consolidated Debt profile**

Current leverage level enables the execution of the investment program and attractive investment policy

#### Maturities timetable

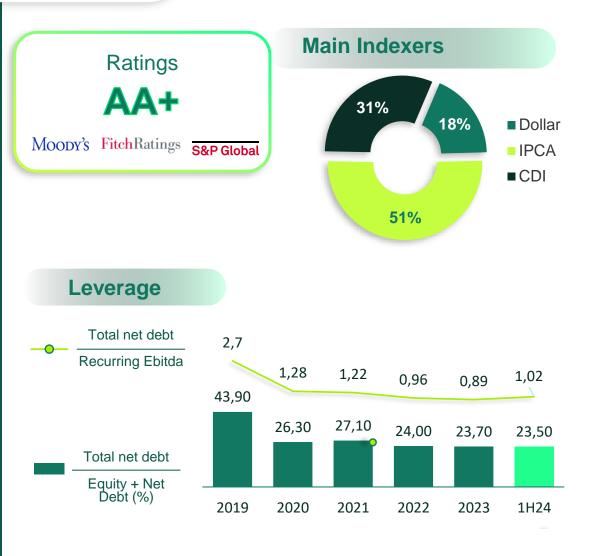
Average tenure **3.4 years** 

Net debt (Debt – Cash and securities): R\$8.6 billion Total Net debt (Net debt – Hedge): R\$8.0 billion



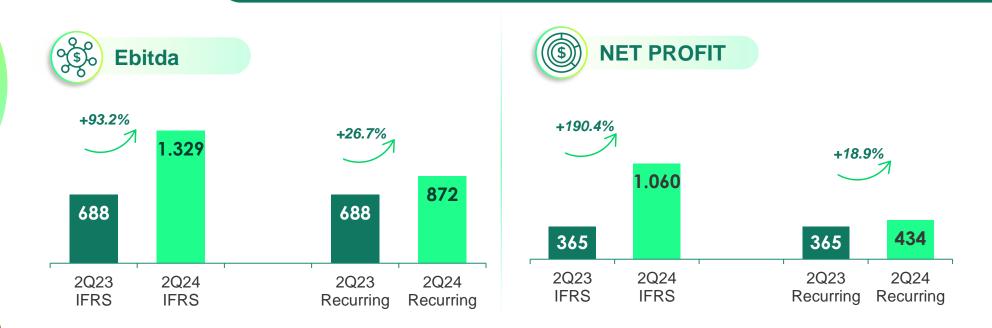
Debt in USD is protected by hedge converting FX variation within a band to % of Brazilian CDI rate







#### Cemig D – 2Q24 RESULTS



EBITDA		NET PROFIT	
2Q23	2Q24	2Q23	2Q24
688	1.329	365	1.060
-	-513	-	-339
-	56	-	37
	-	-	-271
-	-	-	-53
688	872	365	434
	<b>2Q23</b> 688 - - - -	2Q23       2Q24         688       1.329         -       -513         -       56         -       -         -       -         -       -	2Q23       2Q24       2Q23         688       1.329       365         -       -513       -         -       556       -         -       -       -         -       -       -         -       -       -

### Tariff adjustment

May 28th, 2024

Effects of the tariff adjustment already impacted 2Q24

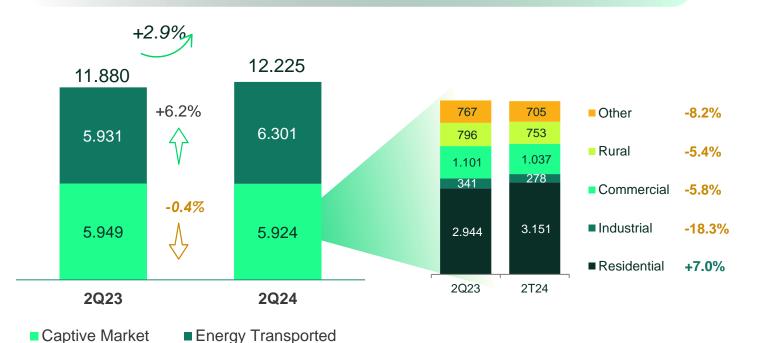
2Q24 RESULTS



#### **Energy market – Cemig D**

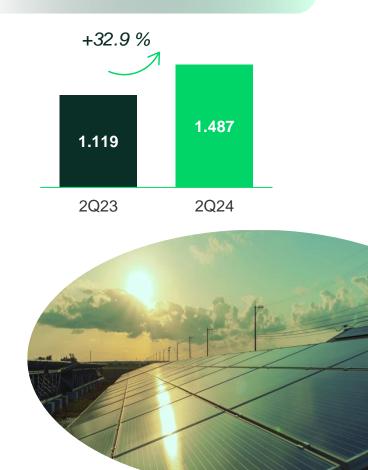
#### Strong market growth in 2Q24

#### **Cemig D: Billed market + transmission for clients (GWh)**



5.5% Total market growth, excluding mini and micro effects on distributed generation

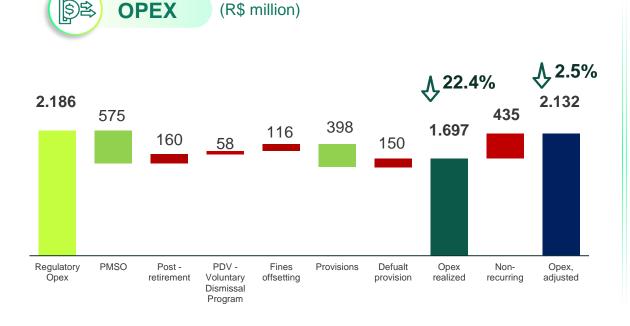
#### **Distributed Generation -GWh injected**

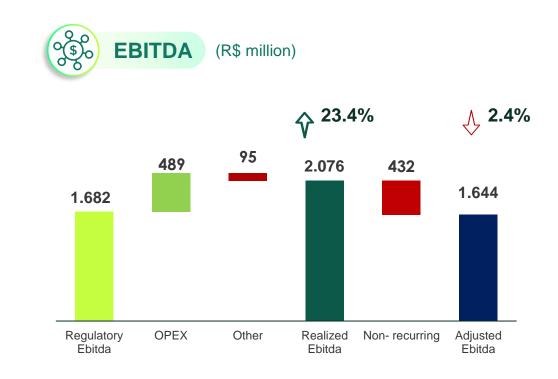




#### **Operational efficiency – Cemig D**

#### We remain within the regulatory Opex after excluding non-recurring effects







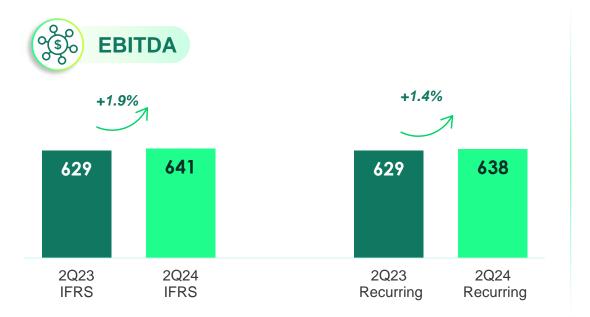
Implementation of initiatives to ensure that indicators remain within the limit established by the regulator

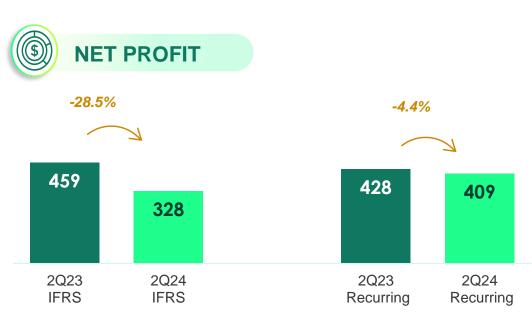




#### **Cemig GT –2Q24 results**



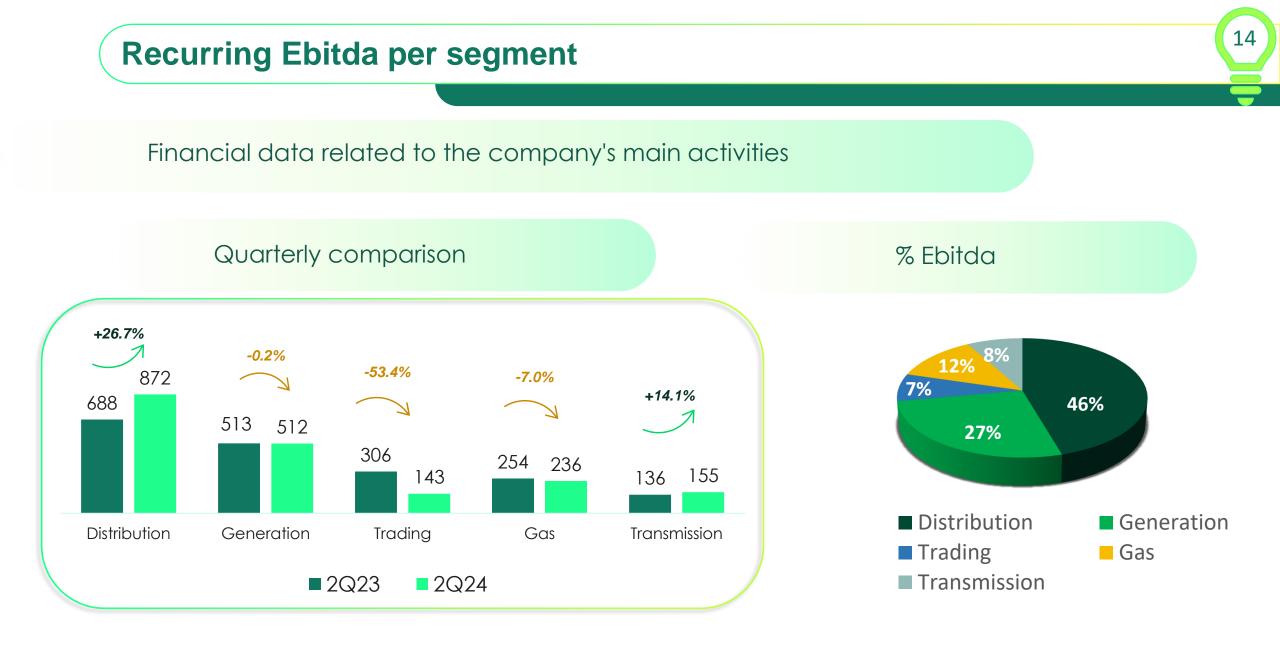




	EBITDA		NET PROFIT	
R\$ million	2Q23	2Q24	2Q23	2Q24
IFRS	629	641	459	328
Tax provisions reversal - INSS (Social Security tax) on PLR	-	-71	-	-47
Voluntary Dismissal Program - PDV	-	15	-	10
Civil Provision - Purchase and sale of energy	-	53	-	35
Lawsuit related to PAT (Worker's Meal Program)	-	-	-	-13
FX exposure – Eurobond hedge	-	-	-31	96
RECURRING	629	638	428	409



2Q24 RESULTS

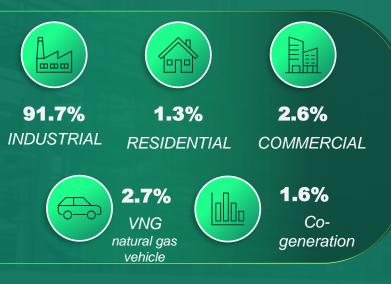


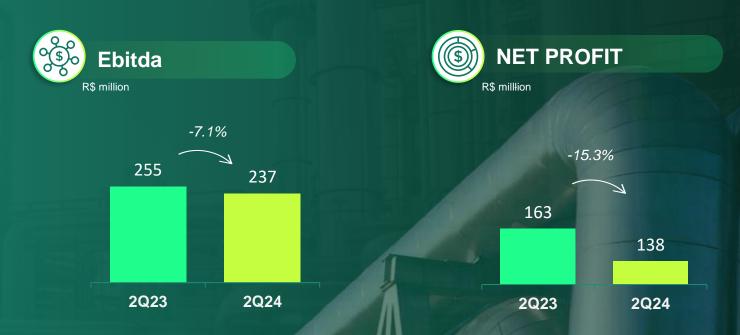


#### GASMIG 2Q24 RESULTS

15

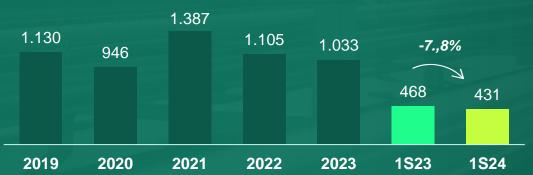






Natural gas volume - sold

million m<sup>3</sup>



#### Results were affected by

- ✓ Lower industrial volume consumed

✓ 2Q23 was positively impacted by the tariff compensation component (R\$24 million)



#### **Delivering on assumed commitments**

#### Achieved

2

Strengthening Cemig D's investment program

Divestment of holdings with complexities

Management of bonds' liability

Maintaining Opex within regulatory limit

#### In progress

< 1 N

Implementing initiatives to comply with non-technical losses within regulatory level

Divestment of minority holdings

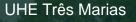
Digital transformation and investment in technology

Focus on being leaders in energy retail trading

To comply with DEC Outage indicator per set

#### Future challenges and opportunities Renewals of generation concessions

Technologies for energy transition









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Marney Tadeu Antunes VP – Distribution



# O ] CEMIG D (DISTRIBUTION) IN NUMBERS







#### **Minas Gerais**

Brazil's 3rd-largest GDP (after SP and RJ)

Brazil's 2<sup>nd</sup> most populous state (10% of Brazil's population)

- 4th-largest State
  - (bigger than France / Spain)

**Cemig's concession area** Other distributors

#### **1st in Electricity distribution**

Cemig's lines and networks, together, would go round the world 14 times



History: 72 years Founded 1952 by Pres. Kubitschek

#### More than 9 million consumers Largest in Brazil



Serves 774 municipalities

Present in 96% of the State



Concession area: 567,400 km<sup>2</sup>

**Bigger than the size of France** 

Source: ED/ AO panel (Gestão de Ativos).



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# 02 Strategy

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Optimize revenue management





 $\checkmark$ 

Increase operational efficiency, applying innovative and technological solutions

Induce expansion of the market

- with increase in investments



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#### Largest investment plan in Cemig's history...

### Investments in MINAS GERAIS: R\$ 23.0 billion

\$

Period 2024–2028

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### Cemig D's physical numbers – 2018 to 2028

	2018	2028
SUBSTATIONS	404 substations	615 substations
HIGH VOLTAGE LINES	19,156 km of lines	<b>21,950</b> km of lines
	Network: <b>551,086</b> km	Network: <b>577,582</b> km
TRANSFORMER CAPACITY	<b>10,586</b> MVA	<b>16,000</b> MVA
THREE-PHASE NETWORK	Network: <b>130,815</b> km	Network: <b>165,048</b> km
MUNICIPALITIES WITH	667 municipalities	774 municipalities
SMART METERS	0 units	<b>1,785,445</b> units
	MINI- DGMICRO- DG152 units10,745 units	MINI- DG         MICRO- DG           its         2,878 units         377,787 units
		8



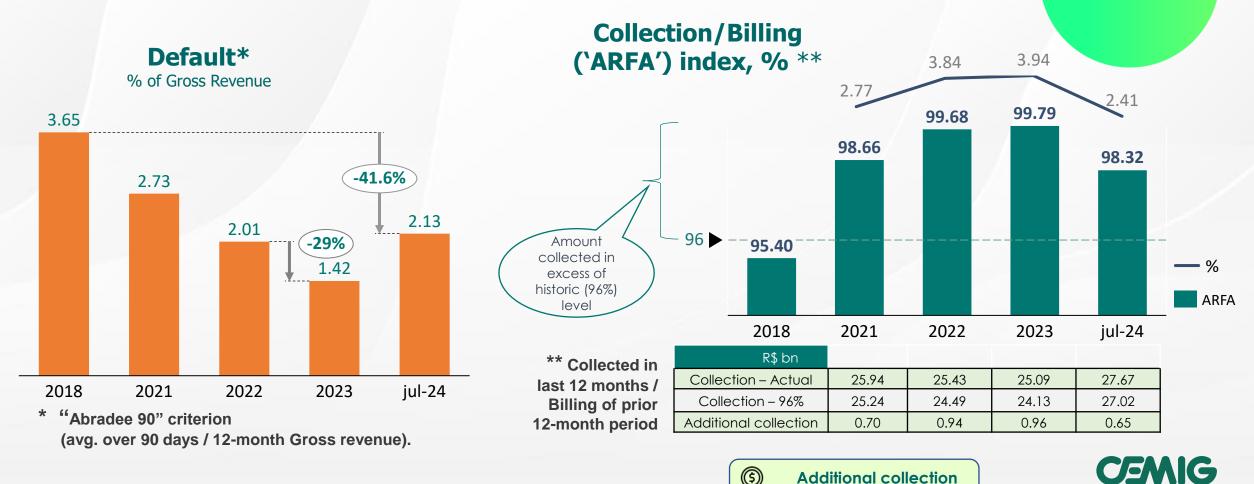
# 03 Operational efficiency



#### Results

#### **Commercial management: Collection, default**

Additional R\$ 3.24 bn collected over 2021–24 – compared to the historic collection level (96%)





## Results

#### **Commercial Management: Energy losses**

Total energy losses in distribution within regulatory limits

Gain of R\$ 1.17 billion since 2021



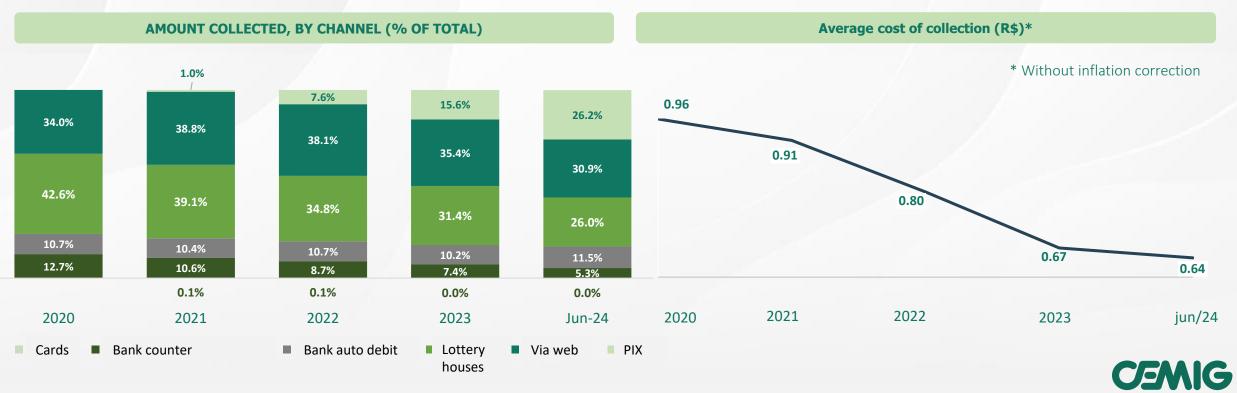


## Results

#### **Commercial management: Collection channels**

Use of **PIX** now exceeds use of **lottery agents.** 

69% of collection is now through digital channels – saving R\$25 million since 2021

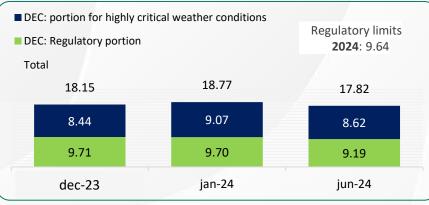


## Results

#### **Outage indicators (DEC, PCADEC, TMI)**

**100% inspection program** > proportionately **higher preventive maintenance costs** > improving the company's **quality indicators** 

#### **GLOBAL OUTAGE TIMES**



**DEC** = Average Outage Duration per Consumer



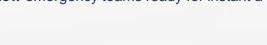
**PREVENTIVE MAINTENANCE** 

**Budget strengthened** 



READINESS



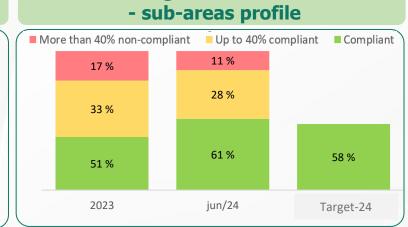




**CLEANING OF POWER LINE PATHWAYS** 

42,700 km of pathways cleaned (21% more than in 2023)

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**Outage breakdowns** 

**PCADEC** = % of concession sub-areas compliant with regulatory DEC.

#### **RECLOSERS INSTALLED** 1,240 single-phase reclosers

2,053 three-phase reclosers

5.300 VHF Radios

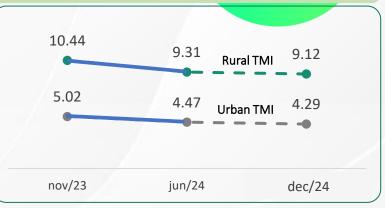




POWER SYSTEM IMPROVEMENT WORKS ~R\$ 1.2 bn – medium-voltage works 800 km of new high-voltage lines

38 new substations Satellite communication: 1.000 BGAN (Broadband Global Area Network) terminals

#### **Cemig: average outage time** (AOT = TMI)



TMI = Average outage time (Tempo Médio de Interrupção.)



#### **URBAN TREE PRUNING**

581,000 prunings executed (6% more than in 2023)



#### **RURAL WORKFORCE PERFORMANCE**

More than 9,000 staff working on buildup



#### **NETWORK INSPECTIONS**

Urban and rural networks: 141,000 km





## **Distributed generation**

Cemig has connected approximately 270,000 D.G. units – a total of 3.69 GW POTENTIAL FOR >7GW BY 2027 (1.5X PRESENT RESIDENTIAL DEMAND)

10% of BRAZIL's MICRO-Distributed Generation



29.59 GW Installed capacity

2.6 million

Units

37% higher than second-placed entity Source: Aneel – SISGD. June 28, 2024.



Minas Gerais: DG: 12% of Brazil's installed capacity, and number of units

## CEMIG INVESTMENT SINCE 2018: >R\$ 2.4 BN

**RGE** Sul

2.057 GW

Installed capacity

227,000

Units

3rd

2.692 GW

Installed capacity

207,000

Units

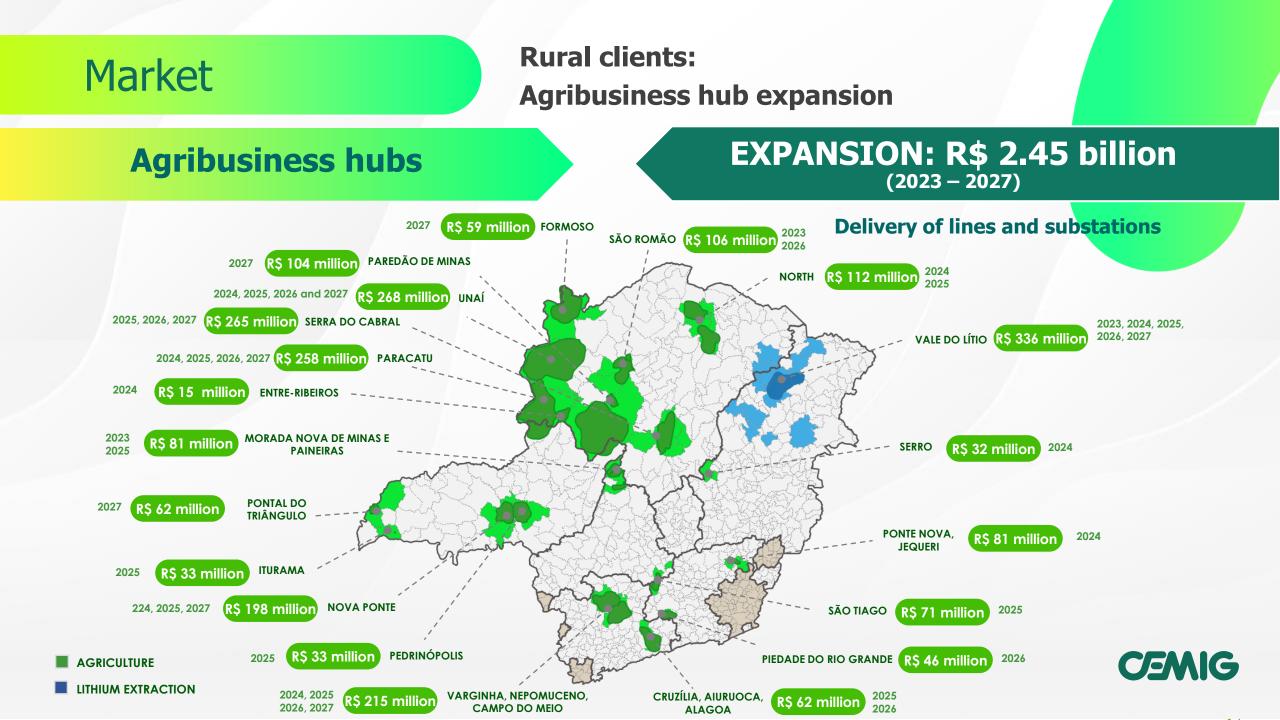
2nd



3.691 GW Installed capacity

> 271,000 Units

1st CEMIC



### Rural Clients | Three-phase program

#### **OBJECTIVES**

- Agriculture and irrigation: more energy and development
- Networks: better operational flexibility and reliability

#### **TARGET PUBLIC**

- Rural clients and municipal districts previously served by single-phase networks
- 6,014 km built by June 2024

#### MAIN NUMBERS (Forecast)

30,000km: Conversion / construction of the<br/>rural 3-phase network in 2022–27R\$ 2.98billion: investment691Municipal city halls already served by dual-<br/>voltage supply





#### The Mais Energia program: Load, Quality, Reliability

#### **OBJECTIVES**

- More quality and reliability of supply
- Develop the economy: Serve the suppressed market and future loads

#### TARGET PUBLIC

- All regions covered in the Mais Energia program
- Substation locations in accordance with integrated planning of the electricity system

▼ SUBSTATIONS IN 2018 (415)

▼ SUBSTATIONS DELIVERED, JUN. 2019 –JUN. 2024 (+100)

▼ SUBSTATIONS UNDER CONSTRUCTION (>100)

#### MAIN NUMBERS (Forecast)



## Mais Energia program

**June 4** 

#### **BH SERRANO SUBSTATION**



#### **Delivery of high voltage equipment**

Up to 2023 94 works

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2024

**30** Works +8 (Challenge to beat expectations) 2025

26 Works +3 (Challenge to beat expectations) 2026

27 Works +3 (Challenge to beat expectations) 2027 23 Works

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Prof. Dr. Afonso H. M. Santos Member of the Board of Directors



## The Energy Transition



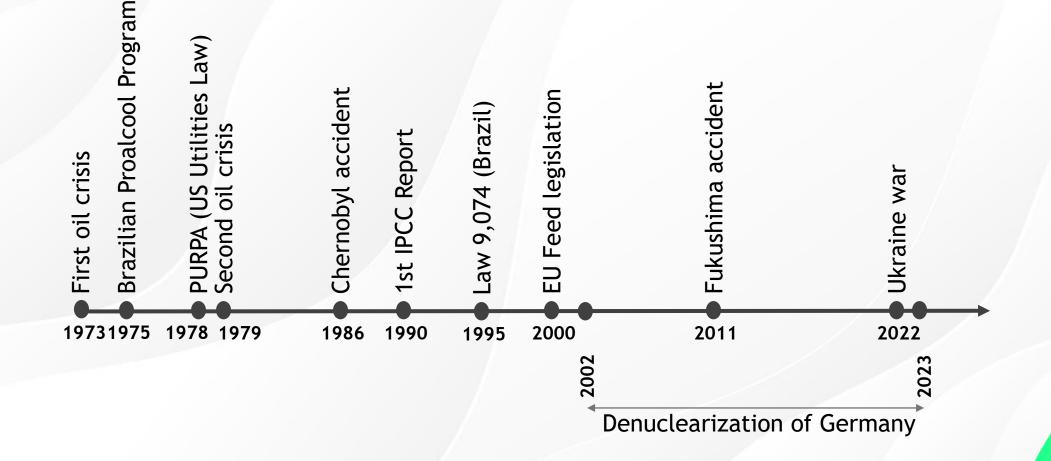
## **Cemig's Energy Transition and Innovation Committee**

Created August 2023

Has welcomed invited guests from senior management of:



## **Evolution of the "Energy Transition"**



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## **Challenges of the energy transition**

	Production	Transport	Final use
Fuel	High	Average	High
Electricity	Low	High	High
Hydrogen	Low	High	High

Hydrogen is the link between fuel and electricity.

## Challenges to electrical networks for the transition – IAE 2023 World Energy Outlook

#### ► Threats

- At least 3,000 gigawatts (GW) of renewable energy projects, of which 1,500 GW are at an advanced stage, are waiting for connection to a network the equivalent of five times the amount of wind and solar capacity that was added in 2022.
- Any delays in investing, and in the needed updating of networks, would substantially increase global CO<sub>2</sub> emissions, slowing the energy transition process and putting the 1.5°C target out of reach.
- At a time of uncertainty about supply, and concerns on security of the supply of natural gas, absence of construction of new energy distribution networks increases countries' dependence on natural gas.

## Challenges to electrical networks for the transition – IAE 2023 World Energy Outlook

#### Actions necessary:

- Regulations need to be revisited and updated, to support not only the building of new networks, but also optimum use of assets.
- Planning of new transmission and distribution networks needs to be aligned and integrated with governments' long-term macro planning.
- To meet climate targets, investment in networks needs to almost double by 2030, to more than US\$600 billion of investment per year after more than a decade of global stagnation, with an emphasis on digitization and modernization of distribution networks.
- Building distribution networks requires secure supply chains and a qualified workforce.

## **Opportunities for the Brazilian power sector**

The energy transition  $\rightarrow$  Decarbonization  $\rightarrow$  Electrification

- Production: Renewable energy
- Transport: Change of criteria
  - Digitalization
  - Integralization
  - Decentralization

► Use:

- Change of processes
- Efficiency Vs. effectiveness

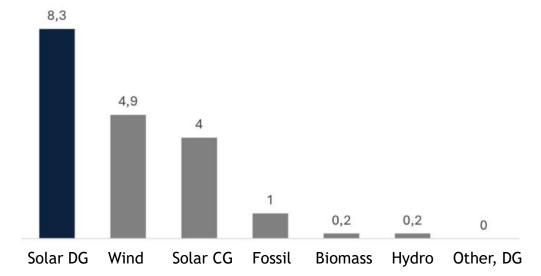
- Storage:
- This is the big challenge.

The distributors in the context of the energy transition

Reactive position
Opportunistic position
Participant position
Proactive position

## Reactive position – the case of Distributed Generation

Increase in supply of generation in 2023 (GW) - Entering operation in the year:



Source of data: Aneel - Interactive RALIE (panel at April 2024), and MMGD Base (accessed March 20, 2024)

Source of data: EPE - Micro and Mini Distributed Generation Data Panel.

Studies from the 10-year (2034) Brazilian Energy Expansion Plan: Micro and Mini Distributed Generation & Batteries Behind the Meter.

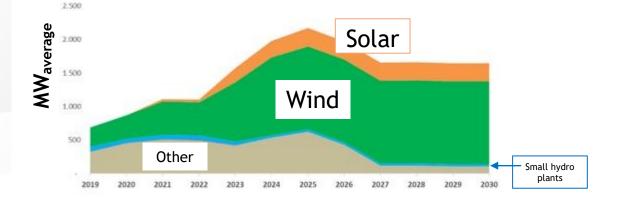


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GOVERNO FEDERA

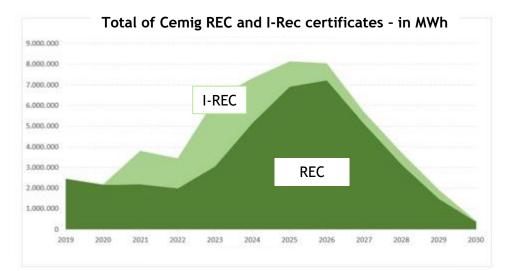
## Opportunistic position – the case of incentive-bearing generation

#### Cemig Trading: Purchase contracts for incentive-bearing supply



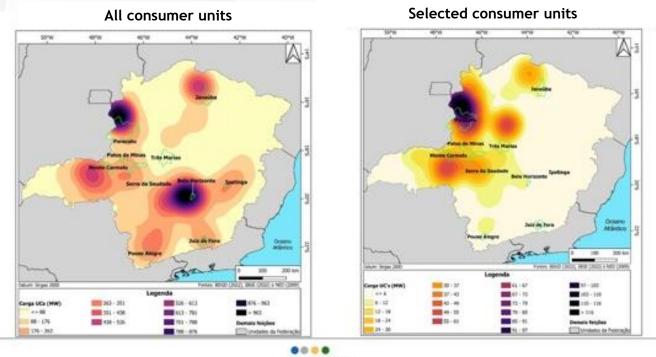
#### Sale of Renewable Energy Certificates

12



## Participant position – the case of irrigation

Changing from use of diesel to electricity for irrigation, in Brazil, reduces atmospheric carbon emissions by 10 to 15 times. 13



NEIRU

NÚCLEO ESTRATÉGICO INTERDISCIPLINAR EM RESILIÊNCIA URBANA

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## Proactive position: Hydrogen – storage – final users

- CH2V green hydrogen project at UNIFEI University
- PDI ANEEL R&D Innovation program
- Focus on the transition of large clients in Minas
- ► GASMIG
- Serra da Saudade Project

# 

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## 01 Dimas Costa VP for Trading



## STRATEGY

### Ambition



Consolidate Cemig's leadership in trading of power supply to final clients,
 reaching sales volume of 3.7 GW<sub>average</sub> in the Free Market as from 2027.

#### **Strategic options**



Search for growth in **the most profitable segments**, offering **superior experience** than the competitors

Trade power at competitive prices; close positions at moments of appropriate margin Adopt **best practices** of the sector for monitoring and **managing all material risks**, giving transparency to the organization.

Develop digital channels and adapt operating model Optimize supply of energy products and other commodities

3

## SOURCES AND USES OF SUPPLY – BRAZILIAN NATIONAL

Scenario of excess supply leads to lower prices in the spot market

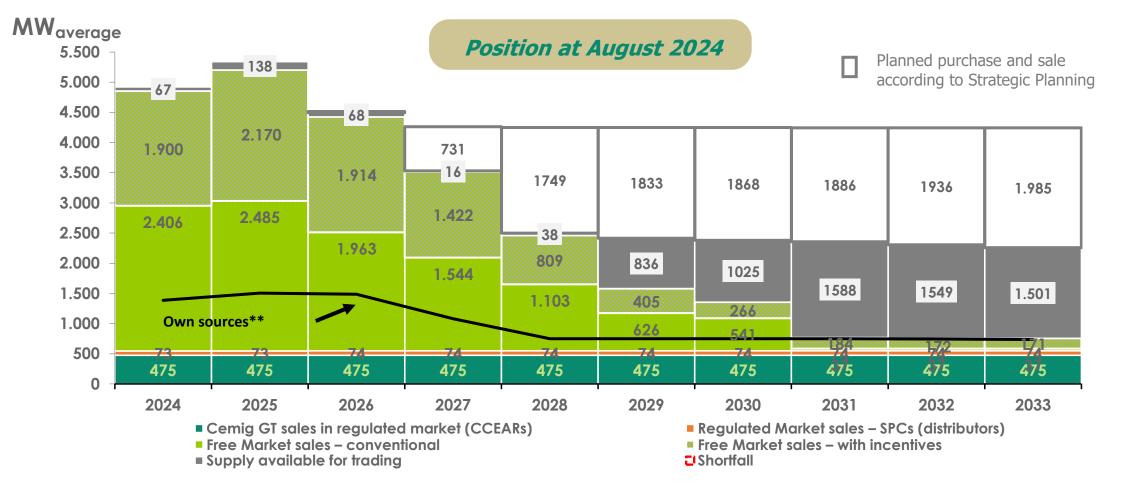
120.000

GRID



Source: August 2024 monthly operational survey (PMO).

## **CEMIG GROUP\*: SUPPLY AND DEMAND**



- (\*) Includes supply availability of Cemig Group companies: (i) *Hydroelectric:* Cemig GT, Cemig H, Cemig Trading, Sá Carvalho, Horizons, Cemig PCH, Rosal, Cemig Geração Itutinga, Cemig Geração Camargos, Cemig Geração Leste, Cemig Geração Oeste, and Cemig Geração Sul; (ii) *Solar:* Boa Esperança, Jusante; and (iii) the energy traded in intermediations by ESCEE and Cemig Trading.
- (\*\*) In 2024: Balance for *Own sources* includes effect of expected GSF for the year (0.875).

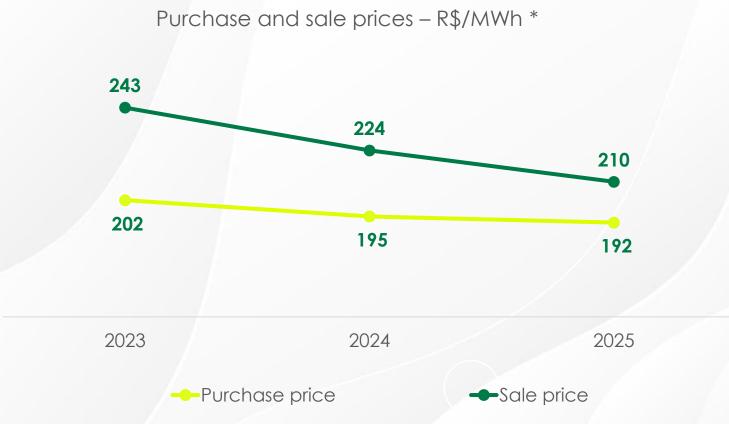
#### CEMIG DAY 29<sup>TH</sup> INVESTOR MEETING

Classificação: Direcionado

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## **TRADING – STRATEGY**

Appropriate **power trading strategy** leads to **good results** in terms of **purchase** and **sale** prices, and **margins**.



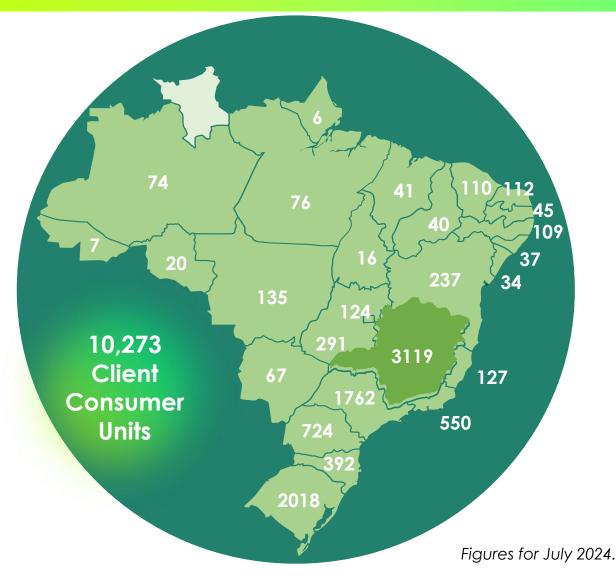
Base: Jan. 2024 (\*) Purchase prices shown include purchases of conventional and incentive-bearing supply from outside parties and transfer pricing of own generation.

## **TRADING – STRATEGY**

### **ONLINE SALES OF FREE ENERGY : CEMIG IS THE PIONEER**

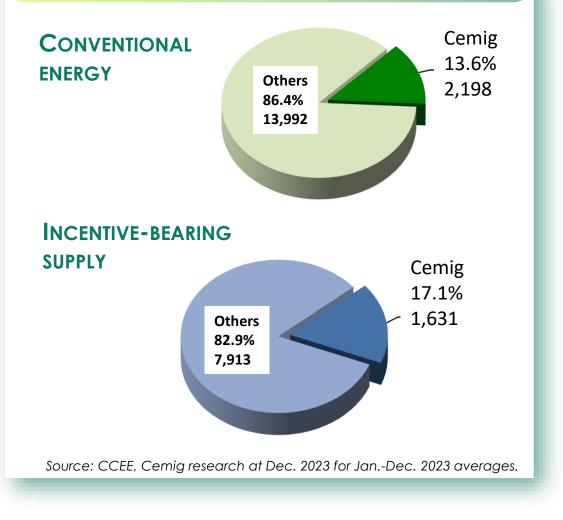


## **CEMIG'S POSITION IN THE BRAZILIAN FREE MARKET**



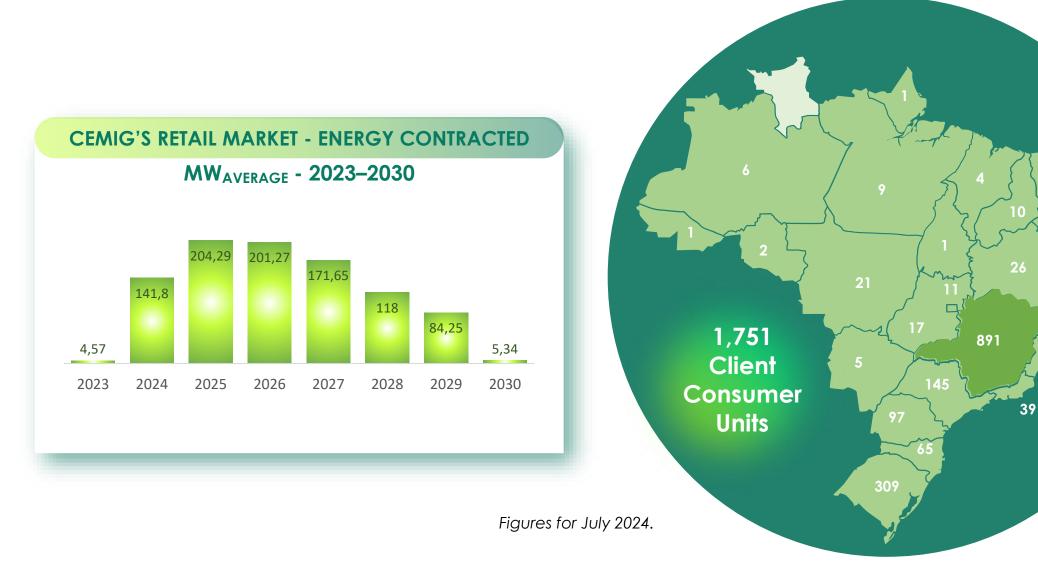
**CEMIG DAY** 29<sup>TH</sup> INVESTOR MEETING

#### **Cemig in Brazil's Free Market**



Classificação: Direcionado

## FREE MARKET: 'RETAIL' SEGMENT

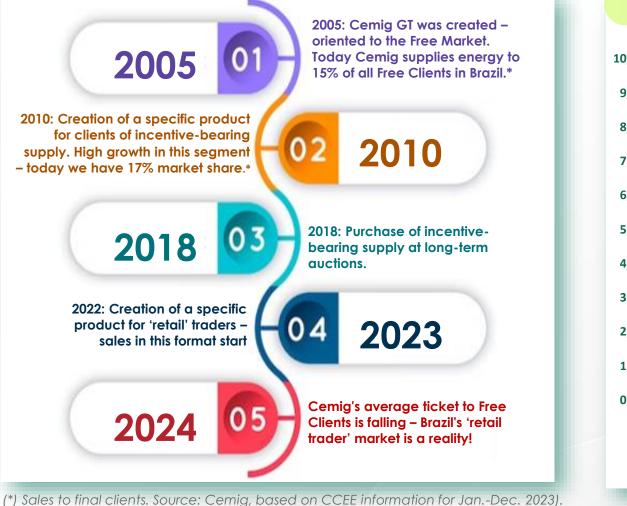


#### **CEMIG DAY** 29<sup>TH</sup> INVESTOR MEETING

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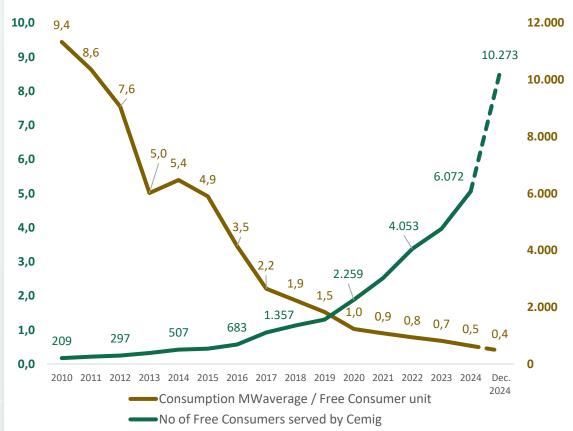
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## **LONG-HELD LEADERSHIP POSITION**



#### CEMIG'S TRENDS IN THE FREE MARKET

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