



COMPANHIA PARANAENSE DE ENERGIA



APRIL 2023



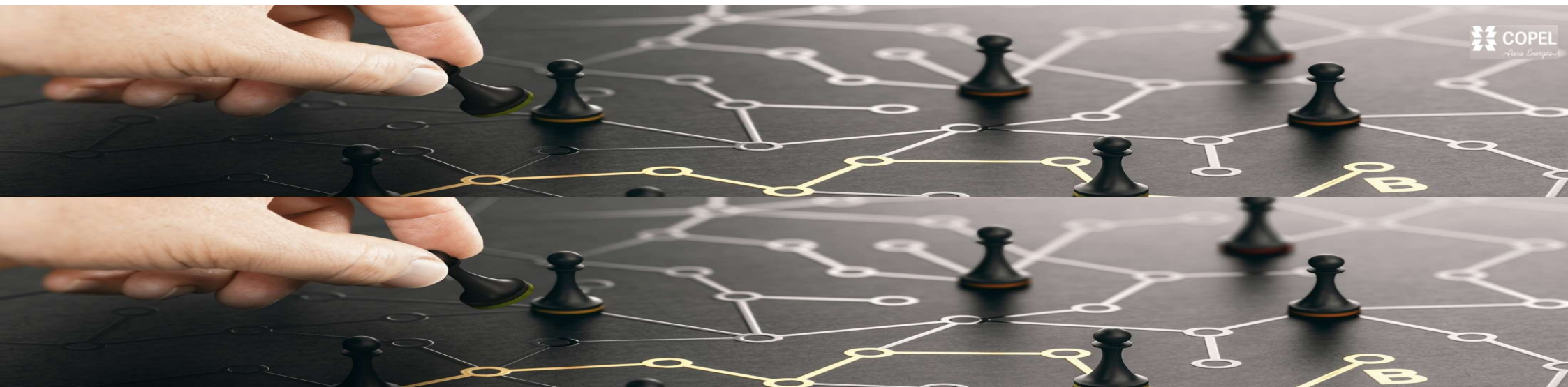
DISCLAIMER

Any statements made during this event involving Copel's business outlook or financial and operating forecasts and targets constitute the beliefs and assumptions of the Company's Management, and the information currently available.

Forward-looking statements are not guarantees of performance and involve risks, uncertainties and assumptions, given that they refer to future events, and thus are dependent on circumstances that may or may not occur.

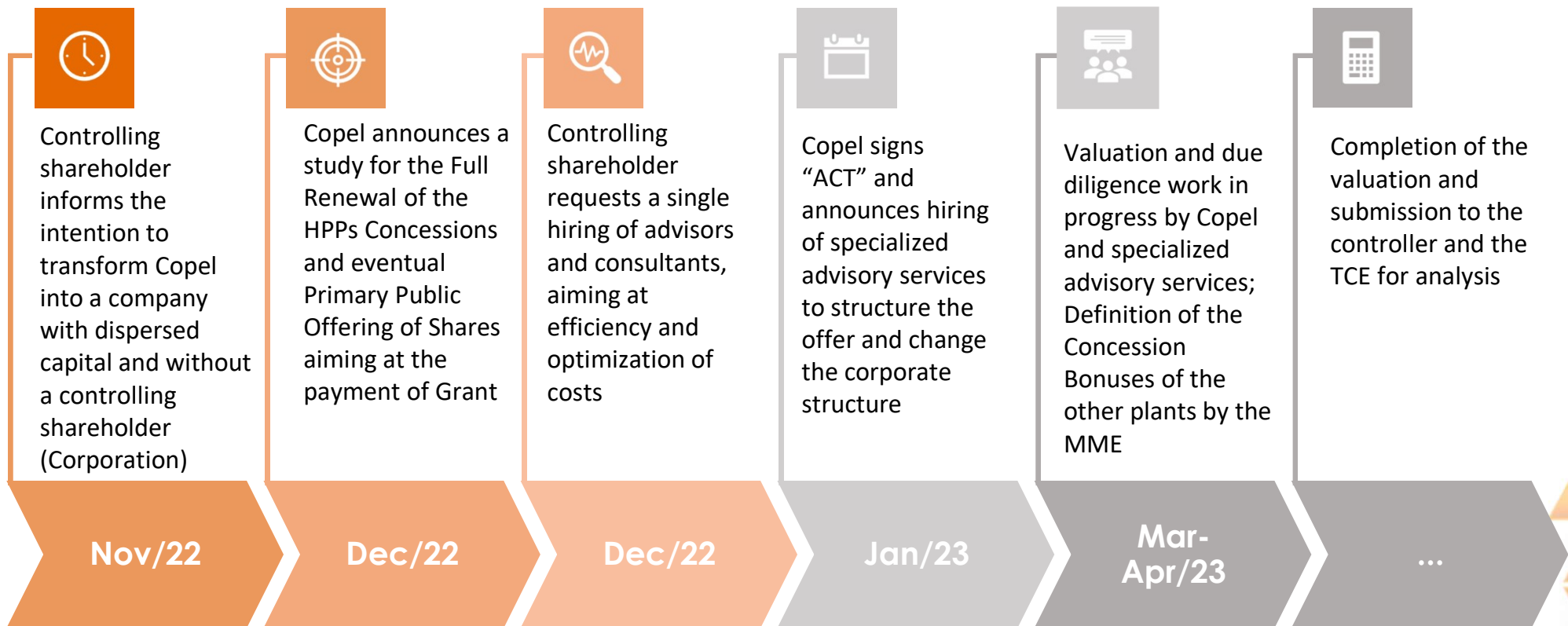
The general economic conditions, industry conditions and other operating factors could come to affect the future performance of Copel and lead to results that are materially different from those expressed in said forward-looking statements.





State owned company with a private mindset

Transformation into Corporation



Consistent Trajectory

- 1 Integrated and relevant company in the 4 business (G, T, D and C)
- 2 Financial Sustainability and Dividend Policy
- 3 Advances in ESG and Innovation Programs
- 4 Core Business Focus and Investment Policy
- 5 Operational Efficiency
- 6 Recognition - Valor 1000 Award and AAA rating on the Fitch scale

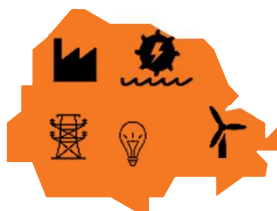
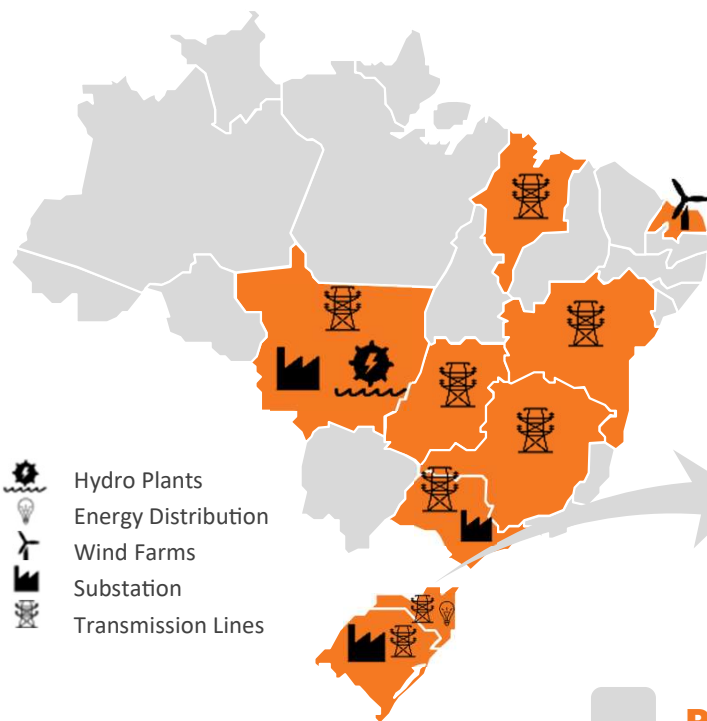


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Integrated Company



Distribution
more than **5.0 mm**
customers



R\$ 42.4k GDP per capita
(vs R\$35.9k Brazilian average)⁽¹⁾

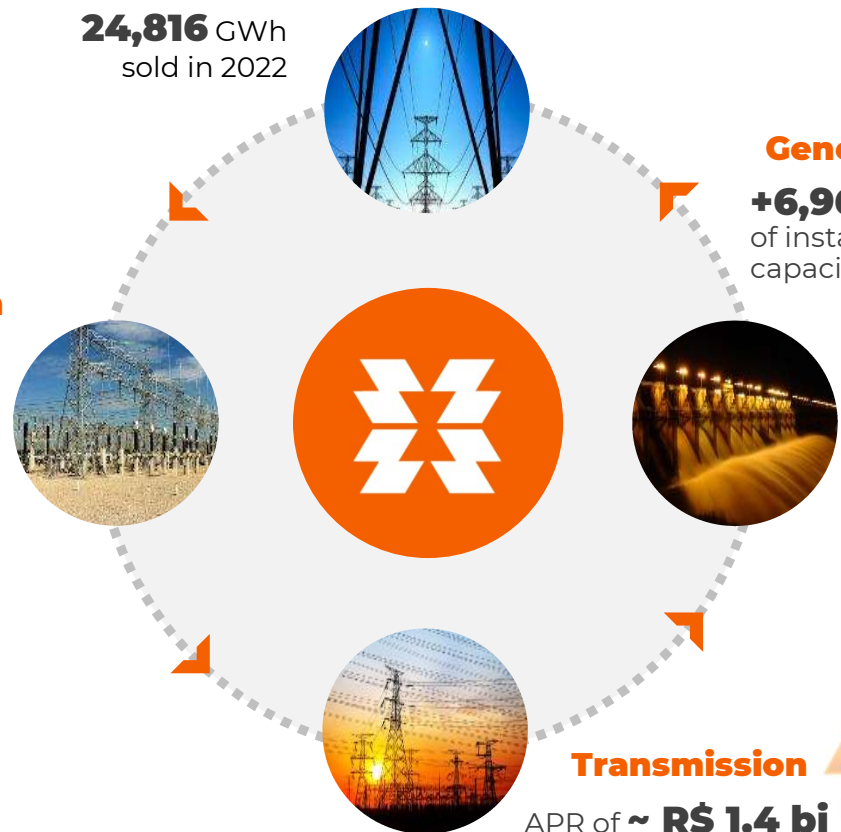
0.749 HDI (vs 0.699 in Brazil)⁽²⁾

5.1% Unemployment rate (vs 7.9% in Brazil)⁽³⁾

Source: IBGE, IPARDES and ONS
Note: (1) 2020 (2) Dec/2010 e (3) 4Q22

Mercado Livre

24,816 GWh
sold in 2022



Generation
+6,967 MW
of installed
capacity

Transmission
APR of ~ **R\$ 1.4 bi**

Note: Installed Capacity and APR proportional to Copel's interest in Generation and Transmission projects



Copel 2030

Vision 2030

COPEL + ENERGY

Among the largest integrated energy companies in Brazil by market value

- **Integrated** and relevant in the 4 business (G, T, D and C)
- **People** as a competitive differentiator
- Value: Focus on the **customer experience**

Fundamentals and Pillars

DECARBONIZATION (ESG)

Decarbonize current portfolio and accelerate positioning in renewables and energy transition avenues

INTEGRATION WITH SCALE

Seek greater integration between the businesses, pragmatically managing regulatory limits and boundaries and competitive advantages to scale projects and technologies

CAPITAL DISCIPLINE

Seek returns compatible with the risks of the Company's projects, portfolios, investments and strategic options

Strategic objectives 2030

Generation plants 100% renewable with + 2GW

Transmission: growth exploring synergy with Distribution and Generation

Among the largest national DISCO - growth of the RRB and opportunities to add new concession areas

Distributed Generation as an opportunity to consolidate the sector

Mercado Livre among the largest and focused on profitability and value creation

Recognized by customers for its offer of innovative and digital services



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Financial Sustainability

1

Focus on cash flow

- Non core divestments
- Operational Efficiency
- Cost Reduction
- Gain of Scale



2

Efficient Capital Allocation

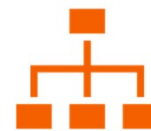
- Investment Policy
- > Governance
- Risk Diversification
- RRB (DIS CAPEX)
- M&A (IRR >2 digits)



3

Balanced Capital Structure

- Investment & Dividends
- Leverage Target
- Debt Funding and Management Plan
- AAA Fitch (target)



4

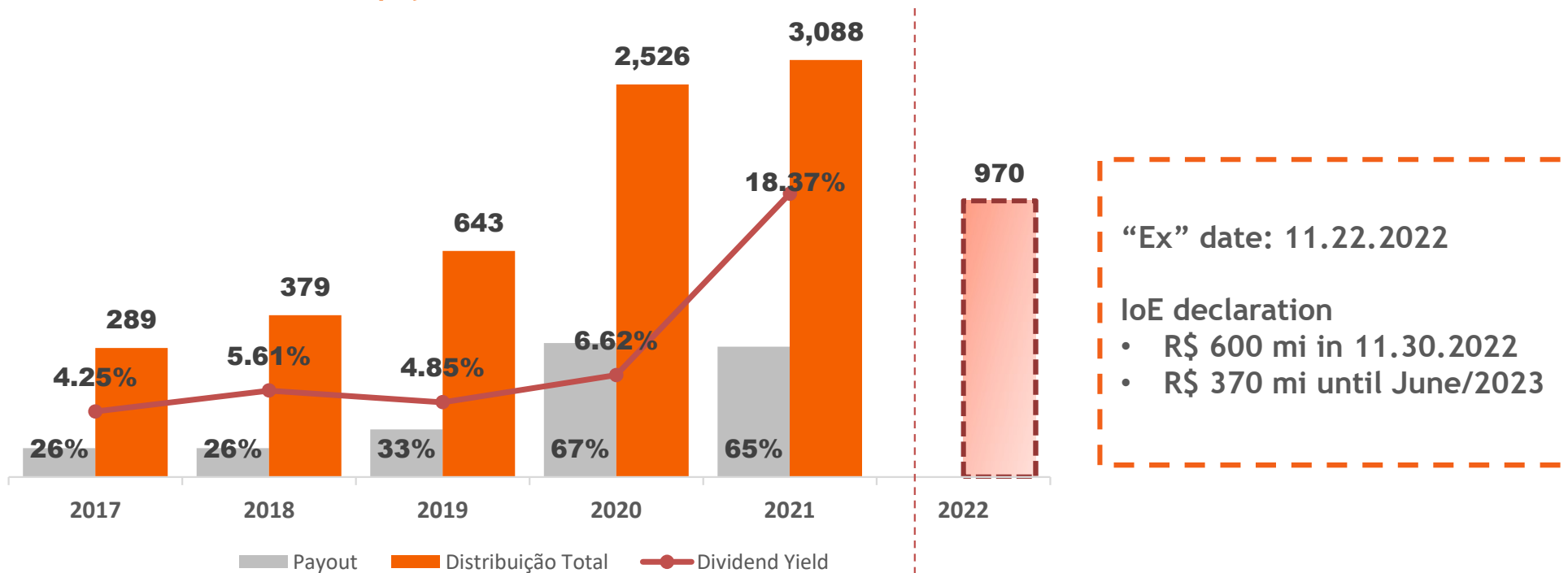
Return on Invested Capital and Value Creation

- Dividend Policy
- *Compatible Dividend Yield*
- > EV (1^o quartile)



Dividend Policy

- Financial Leverage Ratio (Net Debt/EBITDA)
- Available Cash Flow (Cash generated by Operating activities, deducted from net cash used by investing activities)
- Minimum of two annual payment events



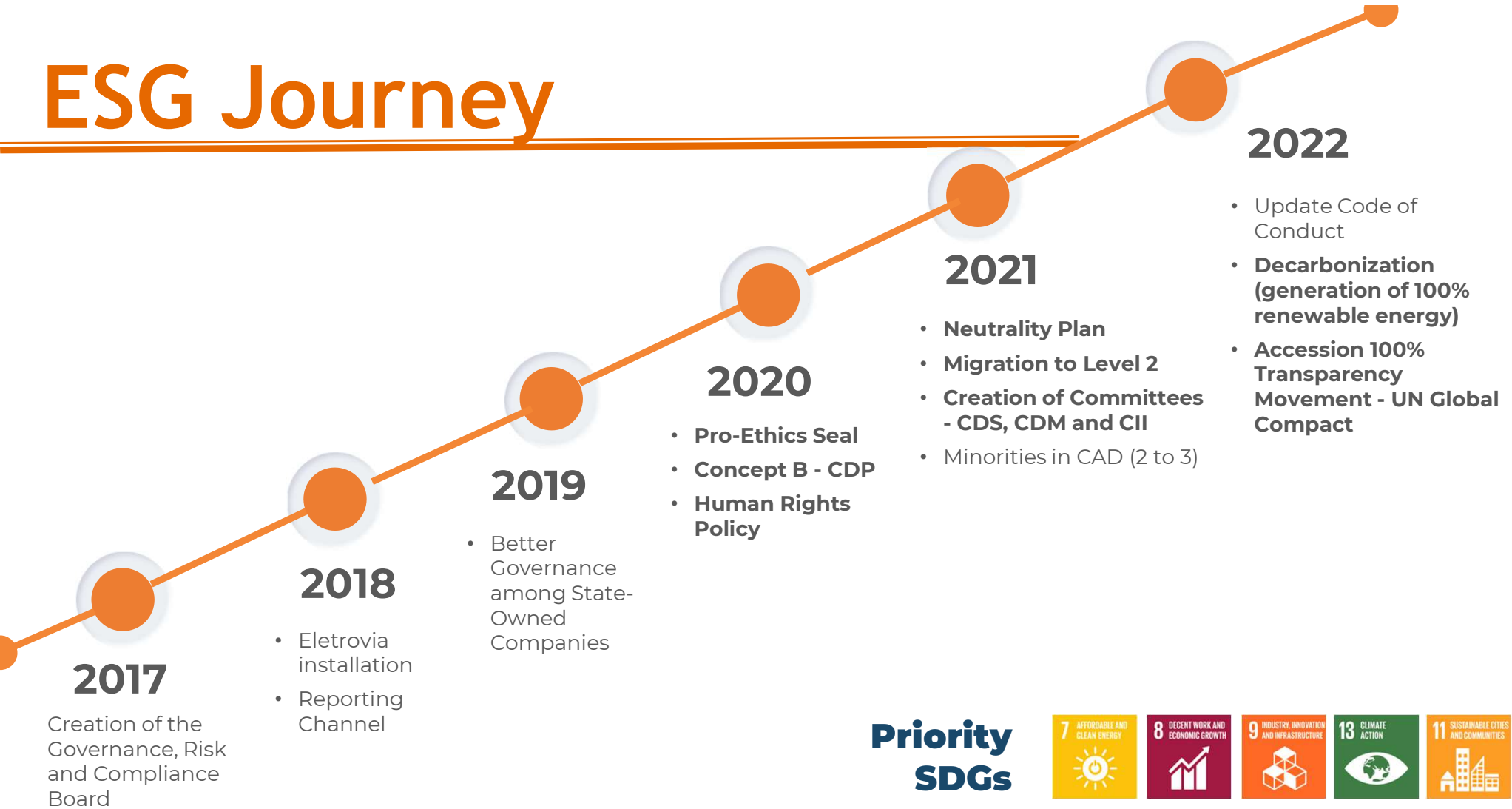
Payout: considers the Net Income for the year
Dividend Yield: obtained by the closing price weighted by the volume of shares for the year
Partial amount referring to 2022: Proceeds approved at the AGE held on 11.21.22

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ESG Journey



ESG - Innovation and Sustainability

Copel Volt Program



We invest in innovation to realize our vision in an Energytechs Platform, focusing on digital solutions, sustainably impacting our customers, reinforcing our role within the energy sector

ESG Commitments



Divestment in thermoelectric plants



Leverage growth:
+ solar / wind power plants



Sustainable operation: fleet electrification



Zero emissions by 2030:
compensation for the residual



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Focus on Core Business

Renewal of Concession

Governador Bento Munhoz da Rocha Netto Power Plant (FDA)

- Perspective of concession renewal for another 30 years
- GSF reconciliation: concession expires on Dec/24
- Deadline for disposal of control: 12 months before the end of the concession
- Definition of Granting Bonus: BRL 1.8 billion
- Wacc: 8.27% and Energy Price: BRL 177.56



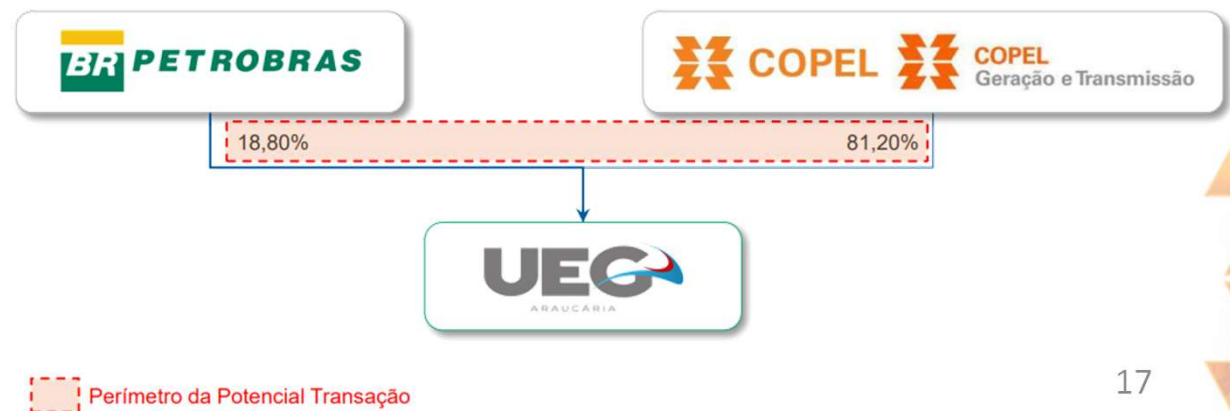
Next concessions to expire:
Segredo 1,260 MW (2032)
Salto Caxias 1,240 MW (2033)



Focus on Core Business

Divestment in UEGA

- UEGA is an Independent Power Producer (“IPP”), with a gas-fired generation plant (combined cycle), fully operational since 2002
- Strategically located in Araucaria (PR), close to the Bolivia-Brazil gas pipeline (GASBOL)
- Total installed capacity of 484 MW, with 2 gas turbines and 1 steam turbine
- Joint Sale Agreement with Petrobras (transaction includes 100% of the Company's shares)



Focus on Core Business

Compagas

Concession Renewal

- The 30-year concession renewal agreement was signed in Dec/2022
- Adoption of the price-cap regulatory model
- WACC of 9.125% p.y.
- Initial Net Regulatory Remuneration Base (RRB) of BRL 647.8 million
- Granting Bonus of BRL 508.0 million*
- Total estimated Capex of R\$ 2.5 billion to be carried out over 30 (thirty) years;
- Tariff adjustment based on the IPCA;
- Concession expires in 2054.

* Payed in 4Q22.



Investment Policy

STRATEGY

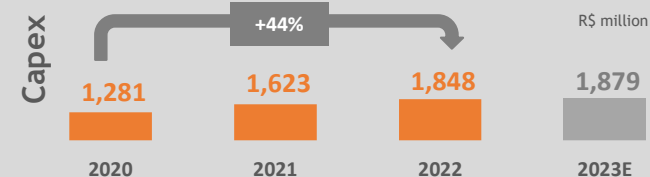
HIGHLIGHTS



Distribution

Increase Investments in Copel Distribuição's Grid

5th Tariff cycle ABR growth (from R\$4.9bn to R\$8.4bn)



Renewable

Investments in brownfield wind and solar power plants

Type	Energy	Location	Size
Brownfield	Projects with PPA	Rio Grande do Norte	< than 150 MW
			> than 150 MW
		Others States	< than 150 MW
			> than 150 MW



Transmission

Upcoming Auction Opportunities

- Prospecting brownfield projects that bring operational synergies
- Own greenfield projects or with partners for execution

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Process Control



SHP Bela Vista

- Completion in 2021: 2 years earlier
- Installed Capacity of 29 MW
- Investments of R\$ 224 million
- Generating enough energy for 100,000 people

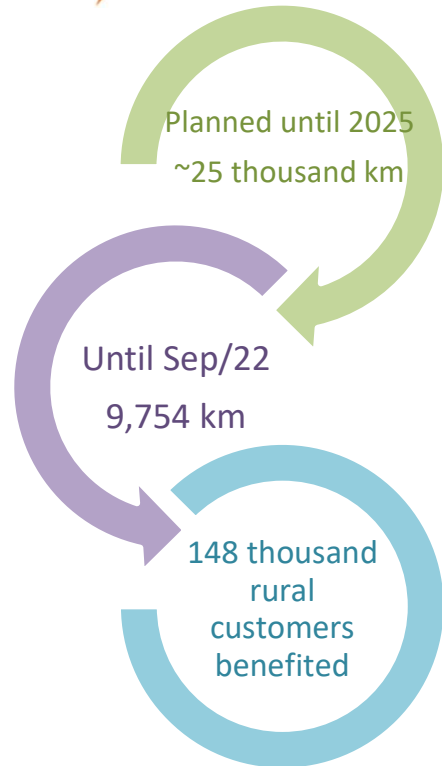


Jandaíra Wind Complex

- Entry into commercial operation in 2022, with significant anticipation
- Energy traded at the 30th LEN, with supply starting in Jan/25
- Installed Capacity of 90.1 MW
- Assured Energy of 46.7 MWm
- Capex of BRL 411 million (Amount foreseen in the business plan)



“Transformação” Program



Reduction of overtime and kilometers driven

Reduction of Non-Technical Losses and PECLD

Reduction of DEC/FEC Reimbursements


Quality Improvement

416 thousand smart meters installed until Sep/22

~R\$ 49 Million/year

Level 1

Level 2

 28 cities + Ilha do Mel

 515 thousand Consumers



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Recognition

Valor 1000 Award

Recognition for performance in its business activities and for its actions to protect the environment, social activities and company management

Evaluated Criteria:

- ✓ Net Revenue
- ✓ EBITDA Margin
- ✓ Equity Return
- ✓ Average Revenue Growth
- ✓ Financial Leverage
- ✓ Interest Coverage
- ✓ ESG Practices



A melhor empresa de energia do Brasil em 2022

Reaffirmation of AAA rating by Fitch

Preservation of the rating of Copel and its Subsidiaries



Highlights:

- ✓ Strong Business Profile
- ✓ Robust Cash Generation
- ✓ Efficiency Gains in Distribution
- ✓ Manageable Hydrological Risk
- ✓ Conservative Financial Leverage

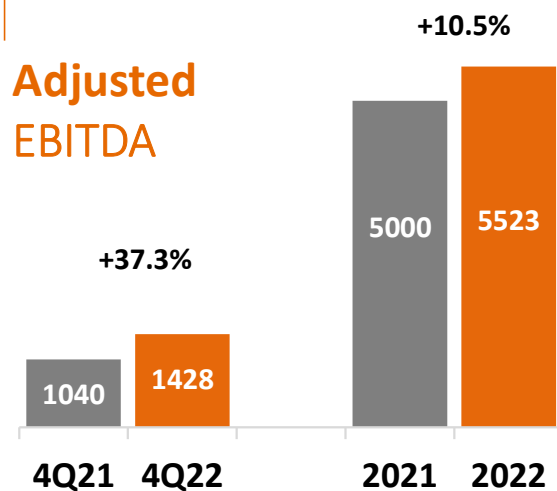


Financial Highlights

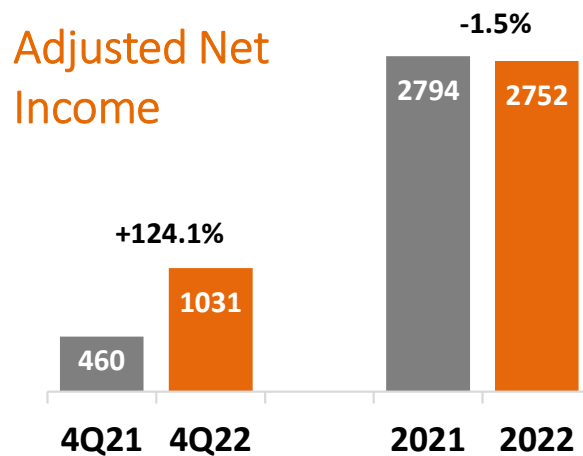
4Q22 RESULTS

FINANCIAL KPIs

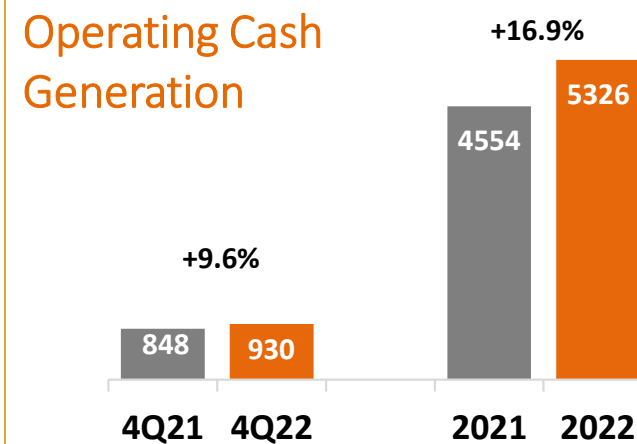
Solid results reflect a decrease in energy purchase and manageable costs



Improvement of the hydro system
< power purchase and PMSO
reduction



Improved EBITDA and JCP ownership
x
increase in financial expenses and
depreciation



Cash generation in the quarter
impacted by reduced energy
consumption at DIS

Note: Does not include Copel Telecom results

Note: Does not include CRC receipt amounts in 2021

ADJUSTED EBITDA non-recurring effects

Main non-recurring effects:

- Impairment UEGA: BRL 144 million
- Arbitration litigation reclassification: BRL 453 million
- Reversal of PIS/COFINS Credits (Law 14,385/22)

	R\$ million					
Adjusted EBITDA	4Q22	4Q21	Δ%	2022	2021	Δ%
EBITDA	902.1	942.9	(4.3)	4,217.2	6,528.6	(35.4)
(-)/+ Provision/Reversal of PDI indemnities	-	125.7	-	(8.9)	139.2	-
(-)/+ Fair value in the purchase and sale of energy	(36.9)	37.1	-	(32.7)	35.8	-
(-)/+ Provision for litigation	452.7	30.0	-	452.7	30.0	-
(-)/+ Impairment of generation assets and gas	109.7	(24.3)	-	151.9	(132.3)	-
(-)/+ Energy Overcontracting	-	(71.8)	-	-	(71.8)	-
(-)/+ GSF Reconciliation	-	-	-	-	(1,501.2)	-
(-)/+ Provision for allocation of PIS/Cofins credits and effects	-	-	-	752.4	-	-
(-)/+ Tariff flag account on MMGD and Adhesion to the REFIS/PR	-	-	-	(10.1)	-	-
'(-)/+ Sale of the Headquarters Building	-	-	-	-	(27.9)	-
Adjusted EBITDA	1,427.6	1,039.6	37.3	5,522.5	5,000.4	10.4
(-) / + Equity in earnings of subsidiaries	(148.5)	(126.2)	17.7	(478.6)	(366.3)	30.6
Adjusted EBITDA without earnings of subsidiaries	1,279.2	913.4	40.0	5,043.9	4,634.1	8.8

Note: Refers to Impairment of generation assets (NE 31.4) and includes Write-off of Parts (NE 31.6) and Services (NE 31.3) incurred in the maintenance of TPP Araucária turbines (Major Inspection).

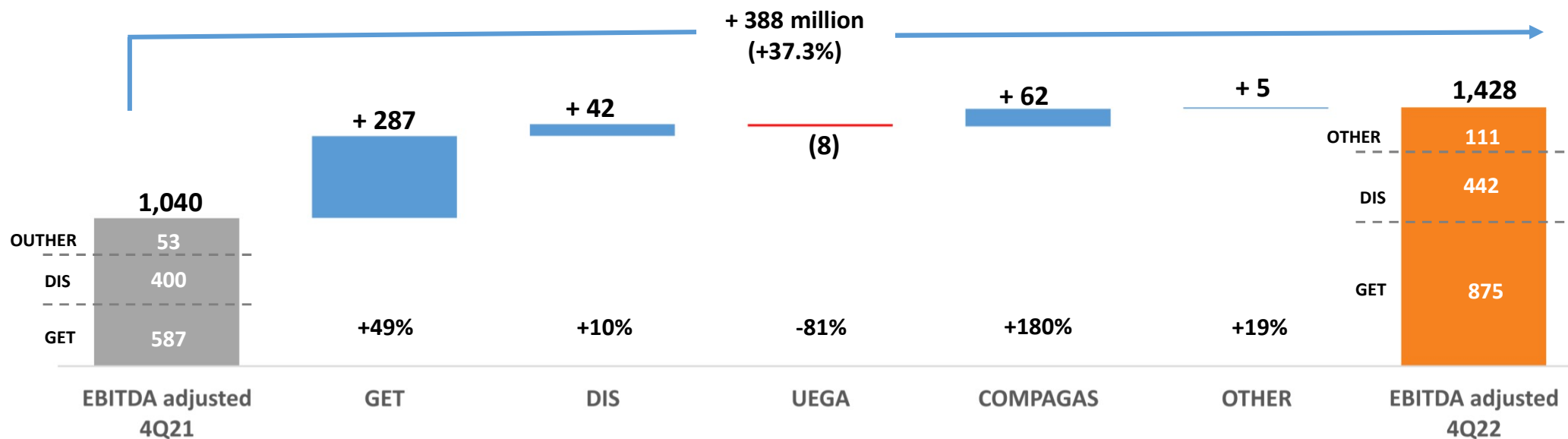
ADJUSTED EBITDA BY COMPANY

GeT Consolidated (+49.0% 4Q22 vs 4Q21)

- ↗ Improvement in the GSF and PLD +355 mi
- ↗ Earnings in Transmission subsidiaries +60 mi
- ↘ Contract asset remuneration -65 mi

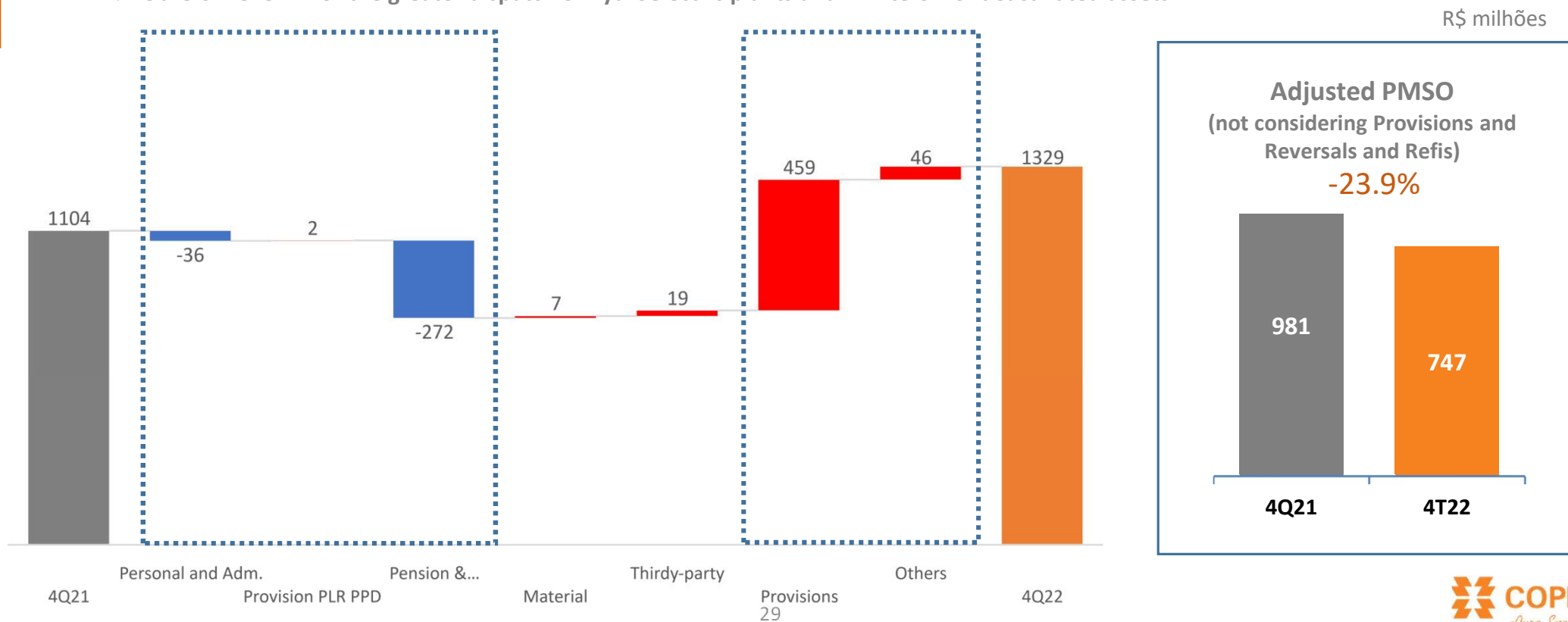
DIS (10.4% 4Q22 vs 4Q21)

- ↗ Provisions PLR/PPD +100 mi
- ↗ Reduction in PMSO +36 mi
- ↘ Parcel B value (market) -103 mi



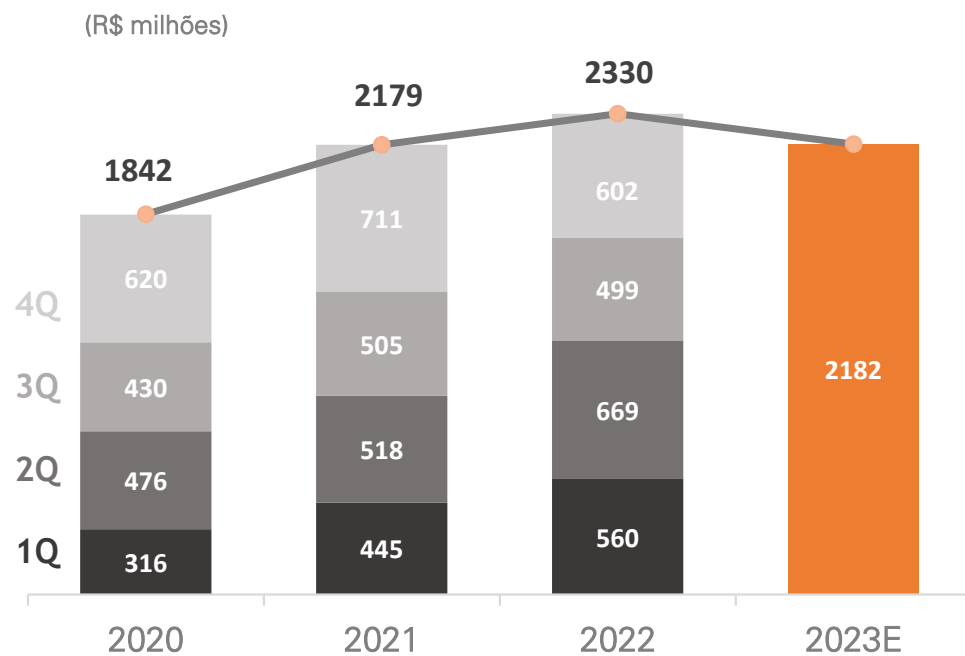
PMSO-MANAGEABLE COSTS

- ↘ Reduction of 508 employees (PDI in Dec/21) and lower provision for PLR, PPD and PDI
- ↗ Higher Material Expenses (electrical system and security)
- ↗ Higher Expenses with Third-Party Services (>Maintenance of the electrical system)
- ↗ Provision for litigation (Reclassification of arbitration litigation: R\$ 453 million)
- ↗ Others: >CFURH for the greater dispatch of hydroelectric plants and >write-off of deactivated assets

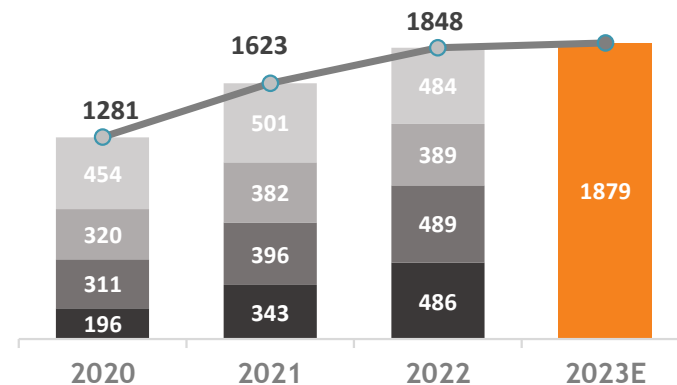


CAPEX

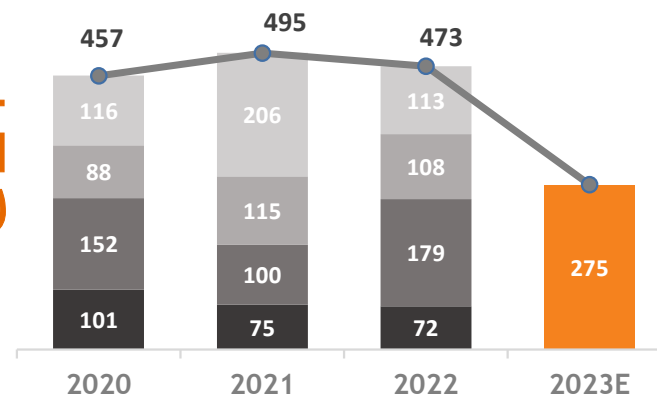
Focus on DISCO's prudent investment plan (Paraná Trifásico, Smart Grid, etc.)



DIS



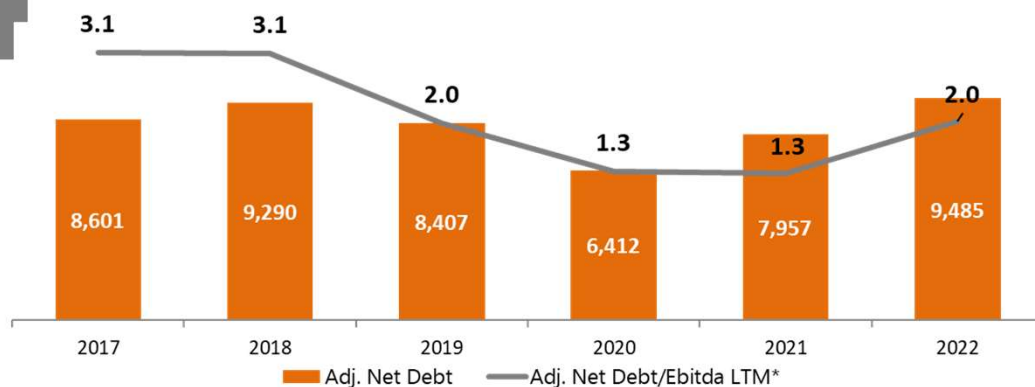
GET



LEVERAGE AND DEBT

ADJUSTED NET DEBT X EBITDA

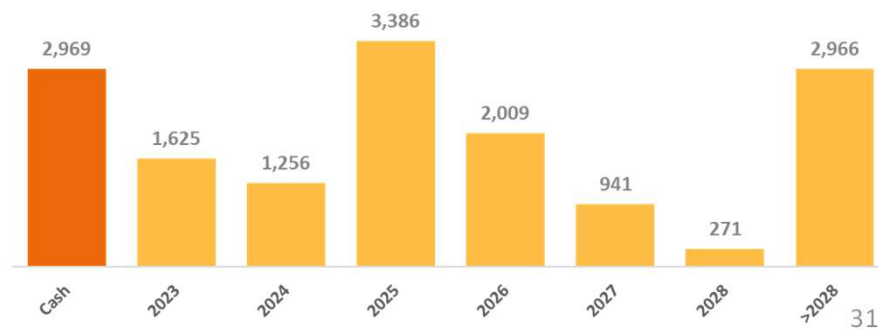
R\$ (million)



* does not consider equity in earnings, considers discontinued operations and excludes impairment effects, GSF renegotiation and effect of PIS/Cofins

AMORTIZATION

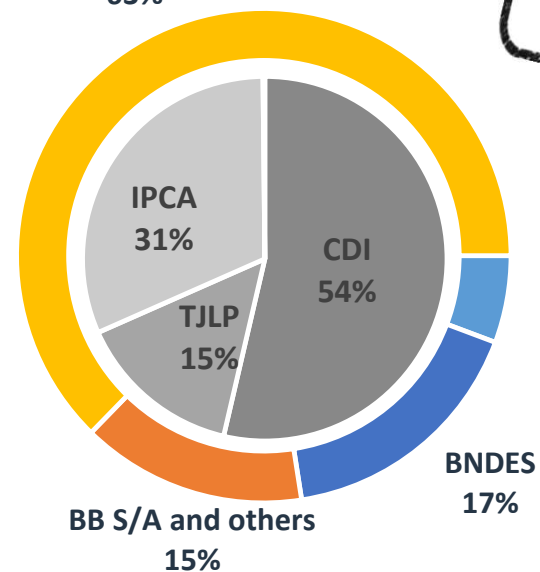
Average term to maturity: 3.9 years



DEBT INDEXES

Average cost: 9.67%

Debentures and PN
63%



No currency
exposure

Banco do
Nordeste
6%

BNDDES
17%



EXHIBITS

Capital Composition

Shareholder Structure

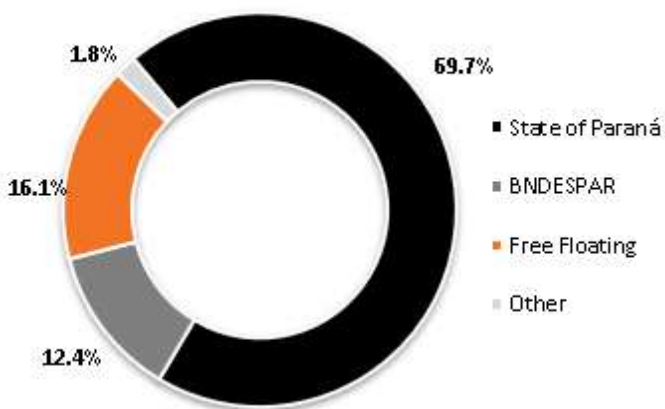


Capital Structure

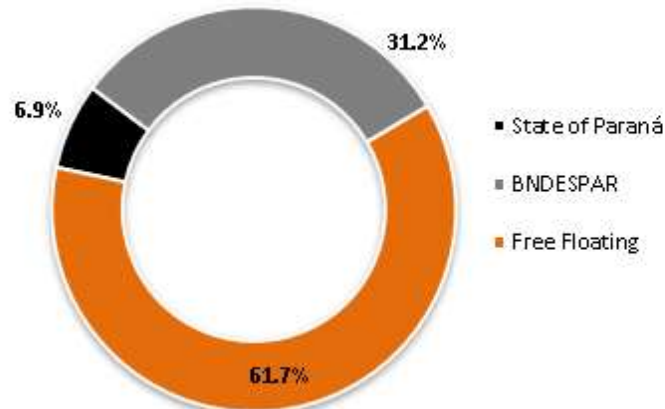
(Dec/22)

Shareholders	Thousand shares								UNIT	%
	Common	%	Preferred "A"	%	Preferred "B"	%	TOTAL	%		
State of Paraná	734,298	69.7%	-	-	115,945	6.9%	850,243	31.1%	28,986	13.1%
BNDESPAR	131,162	12.4%	-	-	524,646	31.2%	655,808	24.0%	131,162	59.4%
Free Floating	170,029	16.1%	675	21.6%	1,037,817	61.8%	1,208,521	44.2%	60,650	27.5%
B3	137,164	13.0%	675	21.6%	905,449	53.9%	1,043,288	38.1%	27,785	12.6%
NYSE	32,643	3.1%	-	-	130,572	7.8%	163,215	6.0%	32,643	14.8%
LATIBEX	222	0.0%	-	-	1,796	0.1%	2,018	0.1%	222	0.1%
Other	18,602	1.8%	2,453	78.4%	927	0.1%	21,982	0.8%	73	-
TOTAL	1,054,090	100%	3,128	100%	1,679,335	100%	2,736,554	100%	220,871	100%

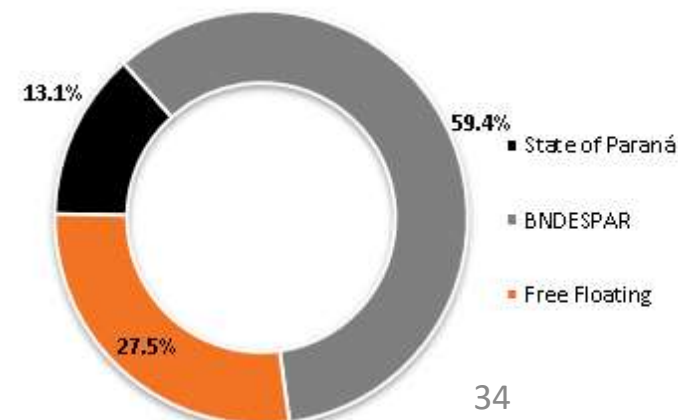
Common



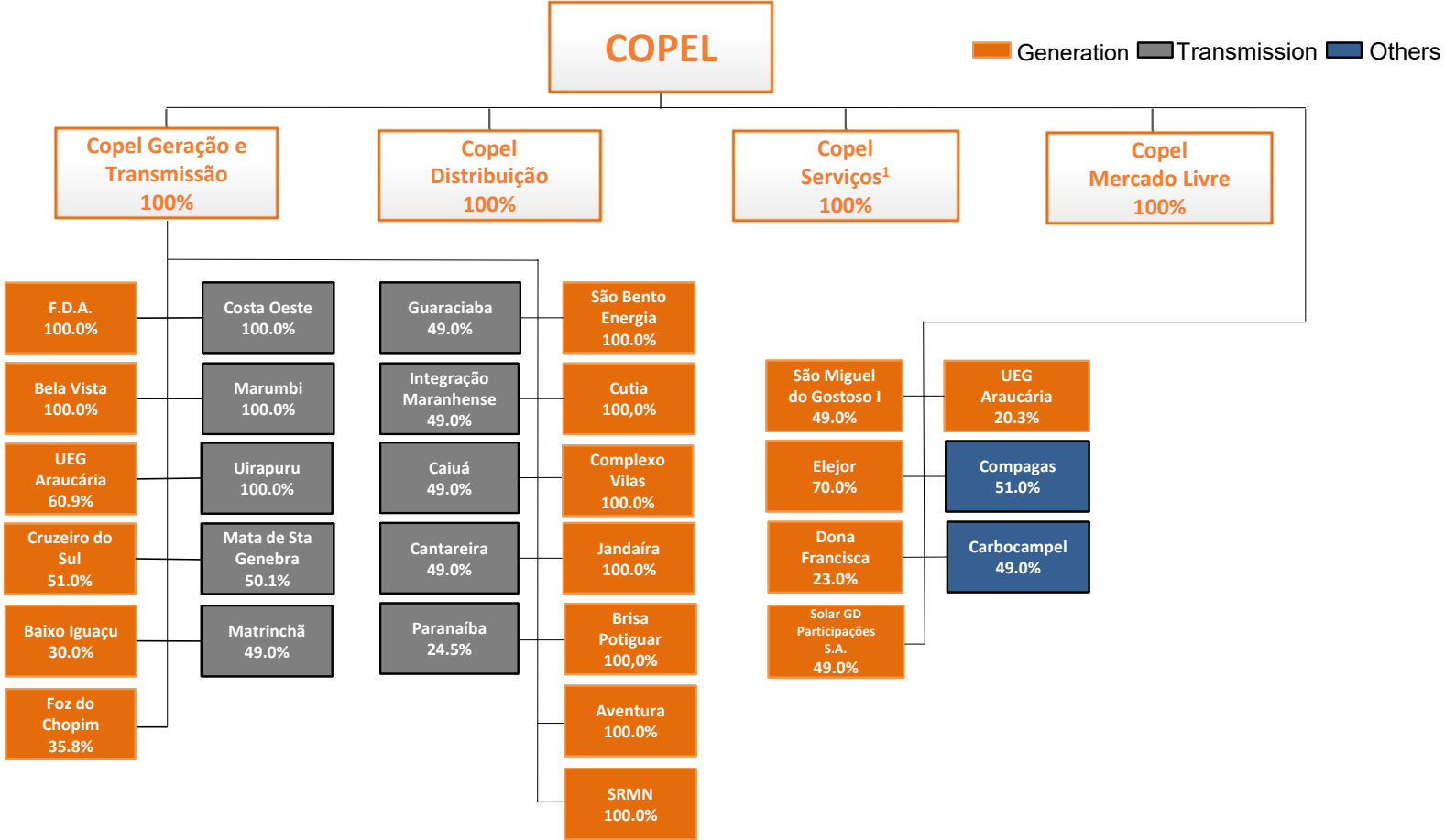
Preferred



UNIT



Organization Chart



Operacional Highlights





Efficient Execution of an Aggressive Plan of **Operacional Improvement and Cost Reduction**



Adjusted regulatory efficiency of **12%** in 2022 (LTM)



Investments made (between 2016 e 2020)
~ R\$ 4.3 billions in the tariff cycle



“Transformação” Program
~R\$ 3.9 billions by 2025



Bad debt coverage
~R\$ 92.8 millions

Tariff Readjustment 2022
Average effect of 4.90%

Concession Area
194,854 km²

Distribution Lines
208 thousand km

Substations
389

Customers
5,011,555

Employees
4,257

Net Remuneration Basis from R\$ 4.95 to
R\$ 8.4 billion

GRID MARKET

January 2023	Growth rate (%)		
	Copel	Brazil	South
Month	-0.8	0.6	-2.4
Year	-0.8 ¹	0.6	-2.4

1. considering the effects of MMGD, decrease by 2.1%.
Source: Resenha Mensal EPE

ANEEL Award 2022
Best ombudsman in Brazil

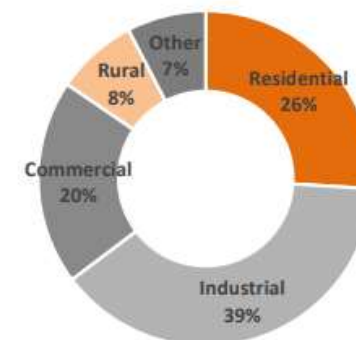


ABRADEE Award 2022
Best in Management and in the South

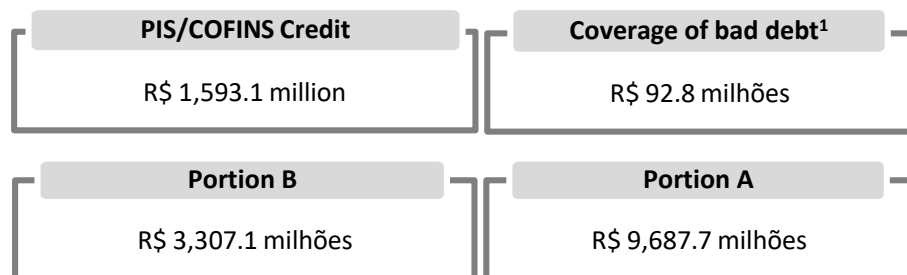


BREAKDOWN BY SEGMENT

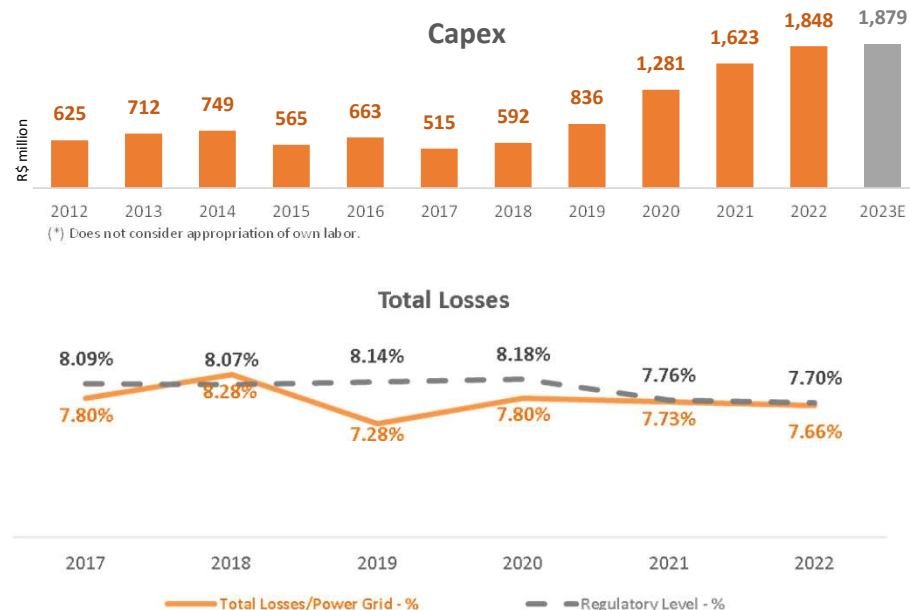
Total Market



Tariff Readjustment 2022 – Copel Distribuição Average effect of 4.90%



¹ It became part of Portion A from the 2017/18 cycle.



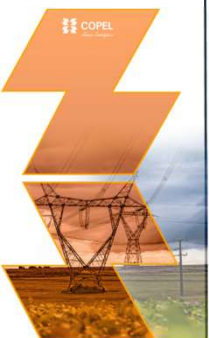
TARGET FOR CONCESSION MAINTENANCE

Quality in the Power Electric Distribution



Economic and Financial Efficiency

$$\frac{\text{Net Debt}}{\text{EBITDA} - \text{RC}} \leq \frac{1}{(1.11 * \text{Selic})}$$



4Q22 RESULTS

	4Q22	4Q21	Δ%
EBITDA	745.9	561.9	32.7
Adjusted EBITDA	855.6	576.8	48.3

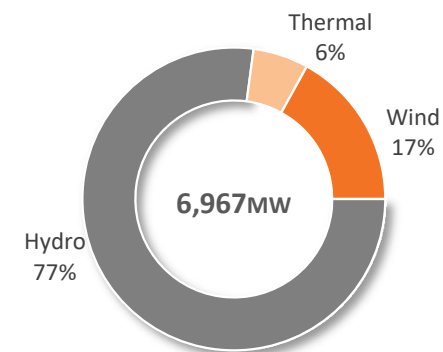
ASSETS IN OPERATION

Main HPPs	Instaled Capacity (MW)	Assured Energy (MW med)	Expiration of Concession
FDA	1,676	575	12/21/2024
Segredo	1,260	558	09/25/2032
Caxias	1,240	575	03/20/2033
Colíder	300	178	01/30/2046
GPS	78	31	01/03/2053
Mauá	184	96	05/27/2047
Baixo Iguaçu	105	52	12/03/2049

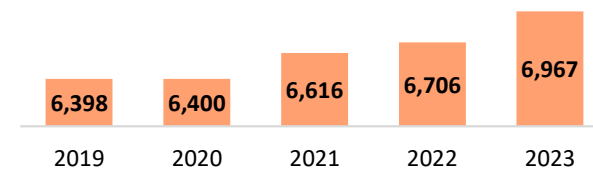
APR 2022/2023
GET R\$ 896.9 million
 (100% Copel)

Employees
1,487
 (Dec/22)

INSTALLED CAPACITY

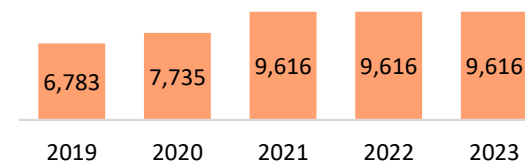


Installed Capacity (MW)*
 +8.9% since 2019



Transmission Lines (Km)*

+41.8% since 2019



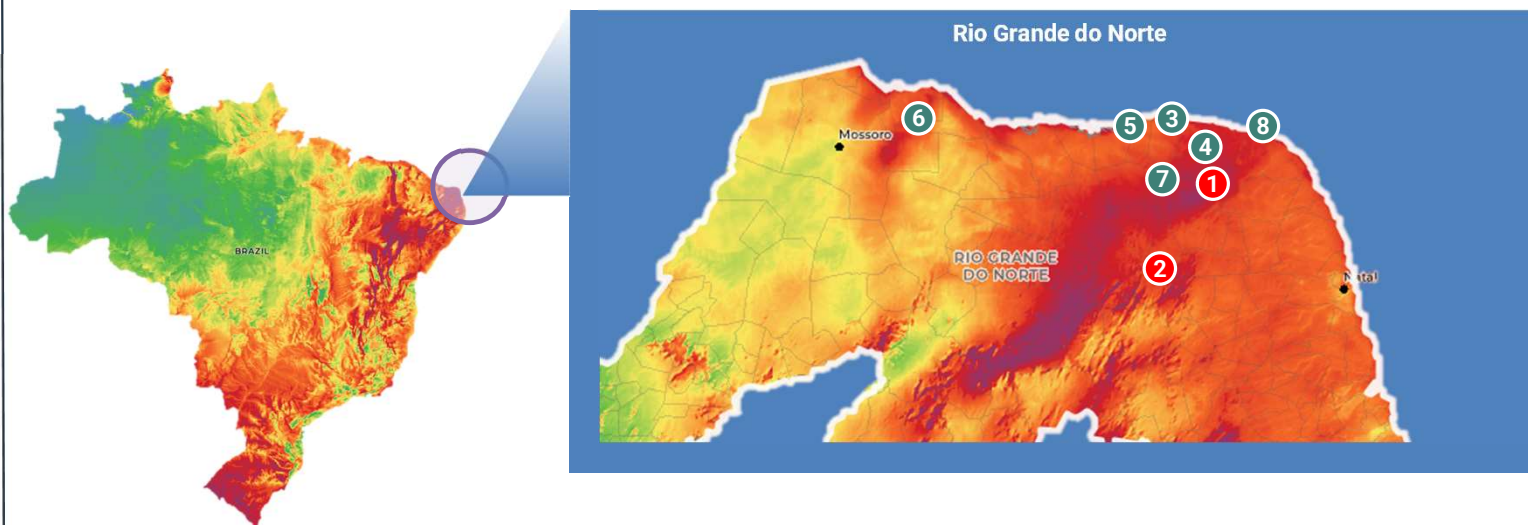
* Proportional to Copel's participation in the project



Aventura e Santa Rosa & Mundo Novo - 260.4 MW

Acquisition announced in **October/2022**

Operational synergy with other Copel wind farms in RN



- 1 Aventura – 105.0 MW
- 2 Santa Rosa Mundo Novo – 155.4 MW
- 3 São Bento Energia – 94.0 MW and Bento Miguel – 132.3 MW
- 4 Brisa Potiguar – 183.6 MW
- 5 Cutia – 180.6 MW
- 6 Vilas – 186.7 MW
- 7 Jandaíra – 90.1 MW
- 8 SMG (49% Copel) – 108.0 MW

9 farms in operation

61% recertified capacity factor

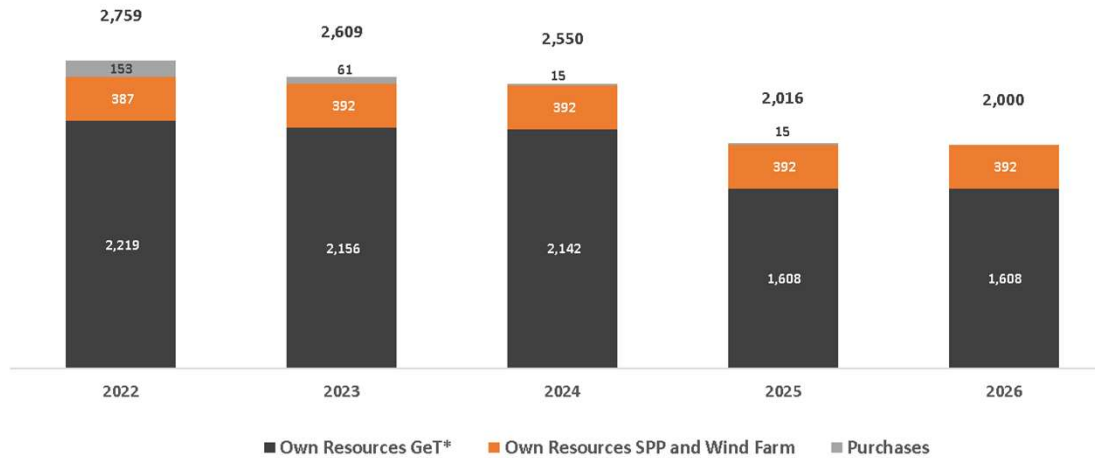
260.4 MW of Installed Capacity

120.7 average MW traded in the ACR

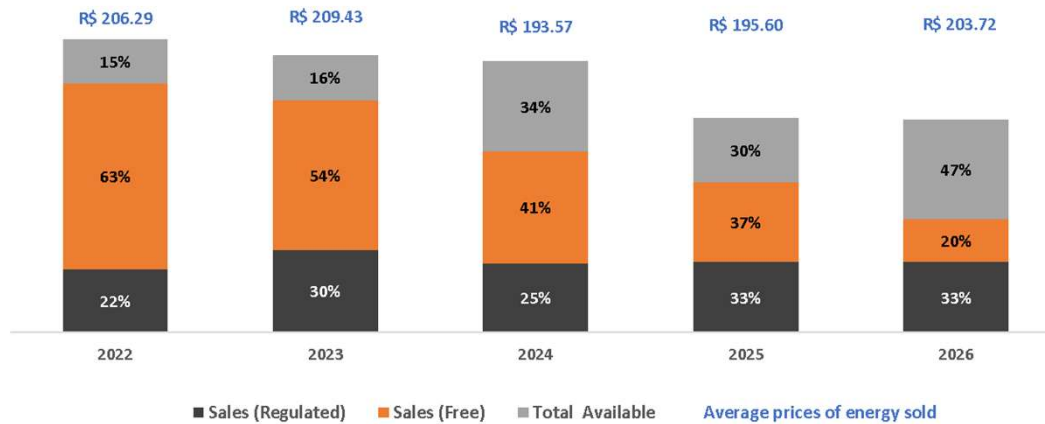


Energy Contracting Balance

RESOURCES (average MW)



SALES (average MW)

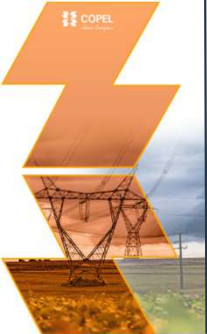


GSF Reconciliation
161 MWm SP89
105 MWm SP100

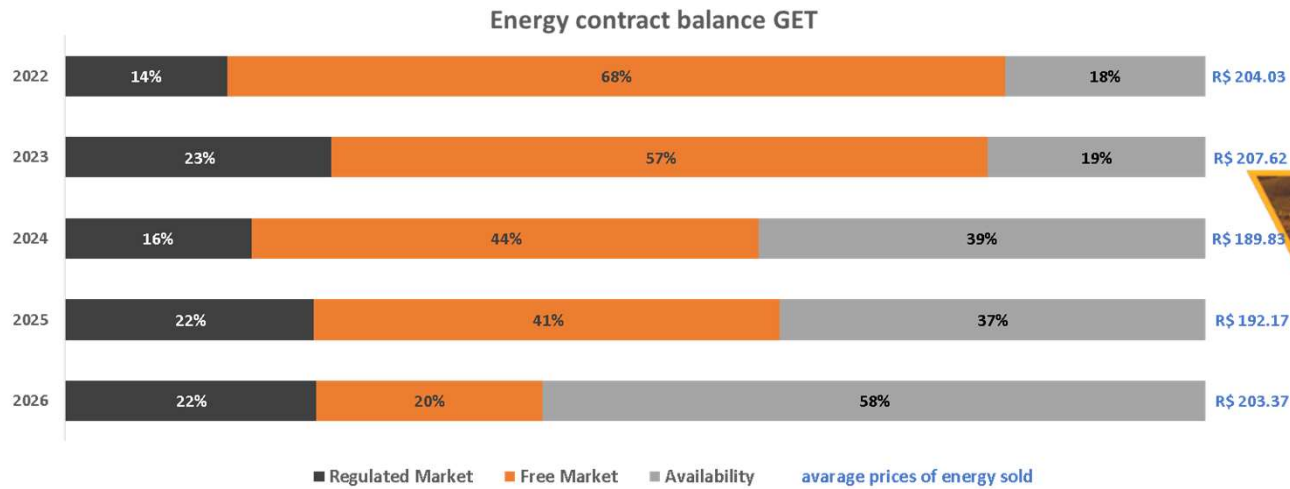
Comments:

- 1- Discounting losses and internal consumption.
 - 2- Considering the GFs of the wind SPEs constant for all periods.
 - 3- Considering constant wind SPE Sales for all periods.
 - 4- Considering energy purchases in each period.
 - 5 - Prices updated according to the contractual readjustment index, from the reference dates until December/2022.
 - 6 - The GPS CCGF RAG is not considered in the calculation of average prices.
 - 7 - As of 2025, the FDA is disregarded.
- Reference Month: December/2022

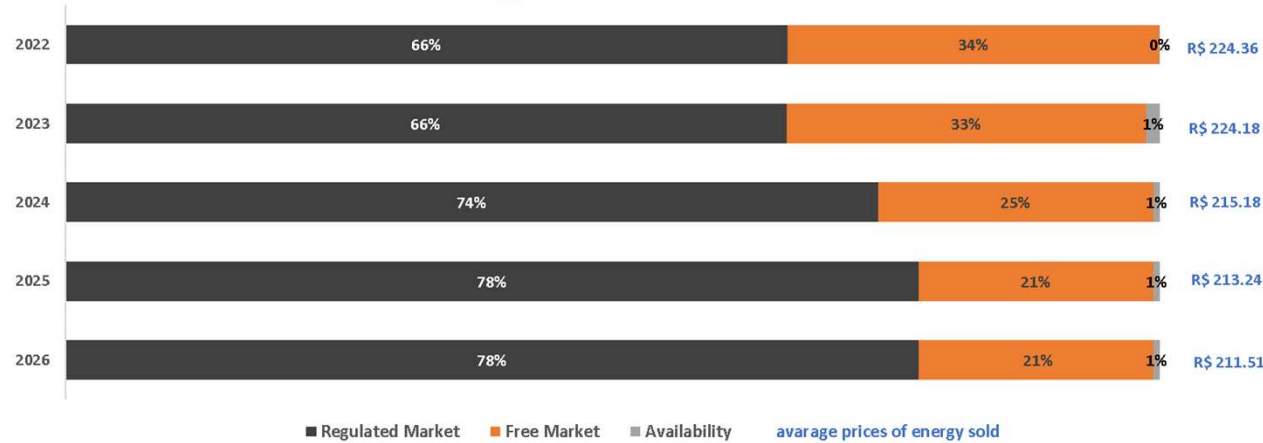




Energy Contracting Balance



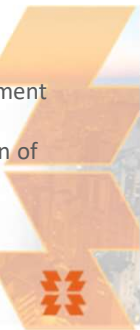
Energy contract balance SPP and Wind Farms



* Includes hydroelectric plants, CCGF (GPS Plant), SPE FDA, SPE Bela Vista, TPP Figueira and Palmas Wind Farm

Comments:

- 1- Discounting losses and internal consumption.
 - 2- Considering the GFs of the wind SPEs constant for all periods.
 - 3- Considering constant wind SPE Sales for all periods.
 - 4- Considering energy purchases in each period.
 - 5 - Prices updated according to the contractual readjustment index, from the reference dates until December/2022.
 - 6 - The GPS CCGF RAG is not considered in the calculation of average prices.
 - 7 – As of 2025, the FDA is disregarded.
- Reference Month: December/2022





Solid results in 2021 and 2022

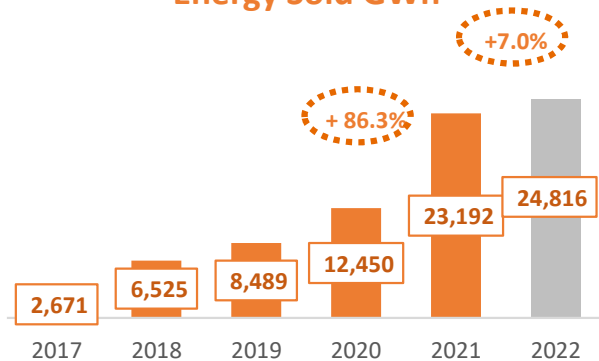


8.9% increase in net operating revenue (2022 vs. 2021)



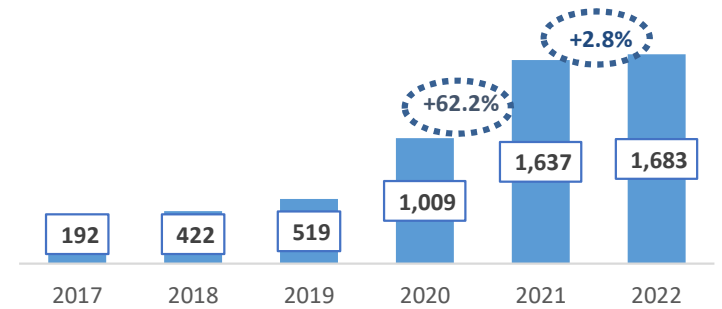
7.0% increase in energy sold (2022 vs. 2021)

Energy Sold GWh



AMONG THE LARGEST IN BRAZIL IN ENERGY SOLD

Customers/Contracts



Growth in the customer/contract base



Renewable and incentivized energy auctions



Acquisition of **162** average MW (for the period between 2023 and 2036)

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