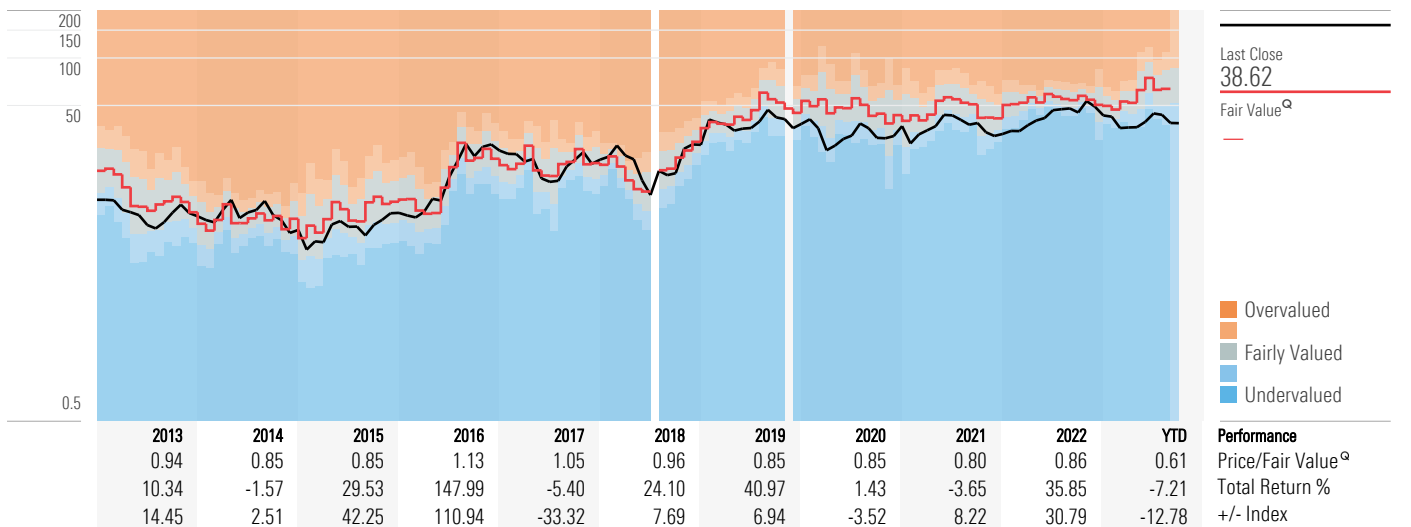


# Centrais Eletricas Brasileiras SA Class B ELET6 ★★★ Q 27 Sep 2023, 22:37 UTC

<b>Economic Moat</b> <sup>Q</sup>	<b>Uncertainty</b> <sup>Q</sup>	<b>Price/Fair Value</b> <sup>Q</sup>	<b>ESG Risk Rating Assessment</b> <sup>1</sup>	<b>Trailing Dividend Yield %</b>	<b>Market Cap</b>	<b>Investment Style</b>	<b>Sector</b>	<b>Industry</b>
None	Very High	0.6	6 Sep 2023 05:00, UTC	3.87	84.4537 Bil	Large Value	Utilities	Utilities - Renewable



As of 27 Sep 2023 | Index: Morningstar Brazil GR BRL. Fair Value data as of 27 Sep 2023, 22:37 UTC.

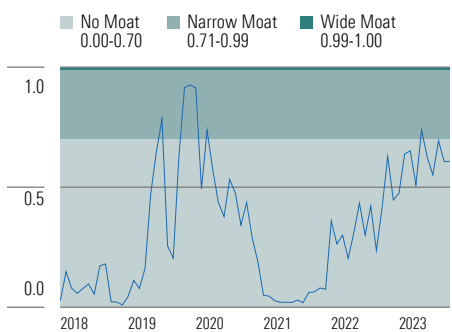
<sup>1</sup>The ESG Risk Rating Assessment is a representation of Sustainalytics' ESG Risk Rating. Lee Davidson, Chief Analytics Officer for Morningstar, Inc, oversees the methodology that supports Quantitative Fair Value Estimates and Quantitative Star Ratings. Mr. Davidson is guided by the Morningstar, Inc. Code of Ethics in carrying out his responsibilities. For information regarding Conflicts of Interests, visit <http://global.morningstar.com/equitydisclosures>.

## Key Metrics as of 26 Sep 2023

Metrics	Value	Percentile in Sector
Earnings Yield (%)	2.7	35.0
Sales Yield (%)	42.9	40.0
Book Value Yield (%)	134.6	82.0
Return on Assets (%)*	1.2	32.0
Revenue(Bil)*	7.2	76.0
Market Value (Bil)	16.8	85.0
Enterprise Value (Bil)	24.9	82.0
EV/MV Ratio	1.5	49.0
Volatility TTM (%)	25.7	58.0
Drawdown TTM (%)	35.7	75.0
Volume (Mil)	11.2	91.0

\*30 Jun 2023

## Economic Moat <sup>Q</sup> History as of 27 Sep 2023



## Business Description

Centrais Eletricas Brasileiras SA, or Eletrobras, is a mixed capital, Brazilian electric utility company of which the majority shareholder is the Government of Brazil. Eletrobras, through its subsidiaries, controls a sizable amount of total installed electricity generation, transmission, and distribution in Brazil. The company operates a portfolio of wind, thermal, hydro, and nuclear power plants located throughout the country. The vast majority of the total energy produced by Eletrobras comes from its hydroelectric facilities. The company primarily generates revenue from the administration segment. About half of Eletrobras' electricity sales are made using free market agreements, while the other half is completed through auctions and contracts.

## Valuation <sup>Q</sup> as of 28 Sep 2023

Morningstar maintains a 3-star quantitative star rating for Centrais Eletricas, derived from the firm's valuation and uncertainty scores. The company's shares last closed at 38.62, below our quantitative fair value estimate of 63.57. These shares have traded between a 42.67% and 5.49% discount to their fair value estimate over the past year. In Morningstar's equity coverage universe for this methodology, the company's valuation rating lands at the 25th percentile; in the utilities sector, the firm's score lies at the 17th percentile (higher percentile indicates more undervalued). Furthermore, Centrais Eletricas maintains a quantitative valuation uncertainty rating of Very High. The company has held this star rating since the previous rating of 5, which was last assigned on 09/22/2023. The uncertainty rating for Centrais Eletricas has remained Very High since the previous rating of High, which was last assigned on 05/10/2023.

The key factors behind these ratings are the com-

pany's EV-MV ratio and drawdown. The enterprise value-to-market value ratio is 1.47, and its maximum trailing 12-month maximum drawdown is 40.90%. The EV-MV ratio falls at the 47th percentile in the utilities sector while the drawdown is at the 72nd percentile. Over the past year, the company's EV-MV ratio has been between 1.18 and 1.54; its drawdown has ranged between 14.38% and 40.90%.

## Economic Moat <sup>Q</sup> as of 27 Sep 2023

With a Morningstar quantitative moat rating of None, the quantitative moat score for Centrais Eletricas falls at the 57th percentile in the utilities sector and at the 64th in the equity coverage universe. The company has maintained its None quantitative moat rating since after 08/28/2023, when it was downgraded from Narrow.


We also assign a Moderate quantitative financial health rating to Centrais Eletricas. The company's raw score on this metric, termed Distance to Default, ranks at the 37th percentile overall and 39th in the utilities sector. Furthermore, this financial health rating has stayed Moderate over the last year.

Supporting these ratings are the company's book value yield and annualized trailing 12-month volatility. The book value yield of 134.62%, ranks at the 81st percentile in the covered equity universe and at the 82nd percentile among its peers. Meanwhile, its annualized trailing 12-month volatility of 25.71%, falls at the 37th percentile in the universe and the 58th percentile in the utilities sector.

## Fundamentals as of 27 Sep 2023

The earnings per share for Centrais Eletricas is 1.49. The company earns a return on invested capital of 5.44%, falling at the 54th percentile in the

## Centrais Eletricas Brasileiras SA Class B ELET6 ★★★ Q 27 Sep 2023, 22:37 UTC

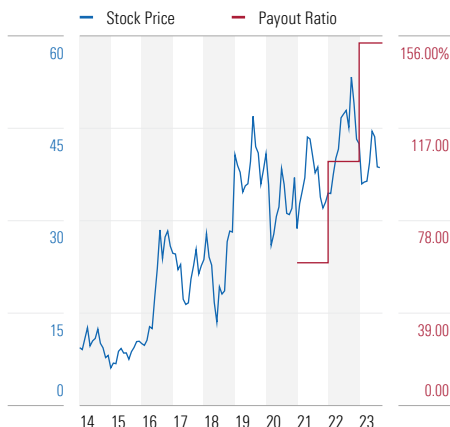
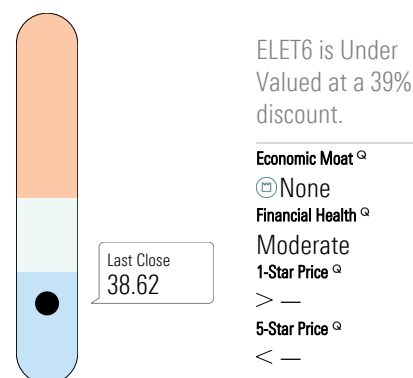
<b>Economic Moat</b> <sup>Q</sup>	<b>Uncertainty</b> <sup>Q</sup>	<b>Price/Fair Value</b> <sup>Q</sup>	<b>ESG Risk Rating Assessment</b> <sup>1</sup>	<b>Trailing Dividend Yield</b> %	<b>Market Cap</b>	<b>Investment Style</b>	<b>Sector</b>	<b>Industry</b>
None	Very High	0.6	 6 Sep 2023 05:00, UTC	3.87	84.4537 Bil	Large Value	Utilities	Utilities - Renewable

**Earnings** as of 26 Sep 2023

Earnings	%	Percentile in Sector
Dividend Yield*	3.9	44.0
Payout Ratio*	153.0	90.0
Price to Earnings	—	—
Price to Cash Flow	—	—
ROIC**	5.4	54.0

\*31 Aug 2023

\*\*30 Jun 2023

**Dividends** as of 27 Sep 2023**Valuation** <sup>Q</sup> as of 27 Sep 2023

utilities sector. The firm maintains a dividend yield of 3.86%. We calculate the above figures over a trailing 12-month period.

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<https://www.eletrabras.com>**Financials** as of 27 Sep 2023 (Fiscal Year End 31 Dec 2023)

2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	YTD	Fiscal
24	30	32	50	29	26	29	25	35	34	18	Revenue (Bil)
-8.05	-9.99	-15.94	24.43	4.43	16.50	8.99	1.95	4.51	4.19	8.36	Operating Income (Bil)
-33.77	-33.15	-49.54	48.48	15.03	62.94	30.96	7.69	13.02	12.29	45.3	Operating Margin (%)
-6.19	-6.23	-11.41	3.43	-1.76	14.47	11.20	6.39	5.71	3.64	2.51	Net Income (Bil)
-4.65	-4.60	-8.43	2.45	-1.30	10.40	6.96	4.00	3.48	1.80	1.09	Diluted Earnings/Share
9,329	5,192	6,515	370	694	4,357	779	5,127	8,226	9,276	3,507	Operating Cash Flow (Mil)
-2.30	-2.92	-4.52	-1.68	-1.24	-1.26	-2.02	-1.06	-1.19	-33.62	-1.35	Capital Spending (Bil)
7.03	2.27	1.99	-1.31	-0.55	3.10	-1.24	4.07	7.04	-24.35	2.15	Free Cash Flow (Bil)
1,353	1,353	1,353	1,369	1,352	1,352	1,289	1,254	1,289	1,686	2,307	Avg Shares Outstand(Mil)

**Valuation** as of 27 Sep 2023

2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Current	Calendar
0.94	0.85	0.85	1.13	1.05	0.96	0.85	0.85	0.80	0.86	0.61	Price/Fair Value <sup>Q</sup>
0.42	0.42	0.41	0.62	0.78	0.97	1.94	1.77	1.45	2.58	2.57	Price/Sales
—	—	—	14.63	—	—	3.97	6.31	7.54	27.75	40.48	Price/Earnings
1.07	2.88	1.78	6.48	32.64	9.10	12.72	—	12.28	9.41	7.54	Price/Cash Flow
0.21	0.19	0.27	0.68	0.66	0.88	0.82	0.77	0.68	0.89	0.82	Price/Book

**Operating Performance** as of 27 Sep 2023 (Fiscal Year End 31 Dec 2023)

2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Q3	Fiscal (%)
-4.05	-4.4	-7.76	2.24	-1.03	7.49	5.96	3.56	3.07	1.59	0.79	Return on Assets
-9.86	-10.94	-23.94	8.32	-4.08	27.1	16.92	8.78	7.55	3.9	1.89	Return on Equity
-6.49	-7.29	-13.36	3.08	-2.59	11.04	8.67	4.58	4.31	4.47	1.23	Rtn on Invested Capital

**Dividends** as of 27 Sep 2023

2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	Current	Calendar (%)
1.63	1.63	0.10	—	1.79	—	1.47	1.79	2.64	1.61	1.49	Dividend Per Share
16.45	20.07	—	—	—	—	—	—	7.99	3.73	3.87	Trailing Dividend Yield
—	—	—	—	—	—	—	—	—	—	—	Buyback Yield

# Appendix

**Economic Moat** <sup>®</sup>History as of 27 Sep 2023 (No Moat: 0.00-0.70, Narrow Moat: 0.70-0.99, Wide Moat: 0.99-1.00)

Year	January	February	March	April	May	June	July	August	September	October	November	December
2023	0.47	0.64	0.65	0.51	0.74	0.63	0.55	0.69	0.61	—	—	—
2022	0.36	0.26	0.30	0.20	0.31	0.43	0.30	0.42	0.24	0.41	0.63	0.45
2021	0.05	0.05	0.03	0.02	0.02	0.02	0.03	0.02	0.06	0.06	0.08	0.07
2020	0.91	0.49	0.74	0.57	0.44	0.38	0.53	0.48	0.34	0.44	0.29	0.19
2019	0.05	0.11	0.08	0.16	0.47	0.65	0.78	0.26	0.20	0.63	0.91	0.93
2018	0.03	0.15	0.08	0.06	0.08	0.10	0.05	0.17	0.18	0.02	0.02	0.01

## Quantitative Equity Reports Overview

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### Quantitative Equity Ratings

Morningstar's quantitative equity ratings consist of: (i) Quantitative Fair Value Estimate, (ii) Quantitative Star Rating, (iii) Quantitative Uncertainty, (iv) Quantitative Economic Moat, and (v) Quantitative Financial Health (collectively the "Quantitative Ratings").

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- i. **Quantitative Fair Value Estimate:** Intended to represent Morningstar's estimate of the per share dollar amount that a company's equity is worth today. Morningstar calculates the Quantitative Fair Value Estimate using a statistical model derived from the Fair Value Estimate Morningstar's equity analysts assign to companies. Please go to <http://global.morningstar.com/equitydisclosures> for information about Fair Value Estimate Morningstar's equity analysts assign to companies.
- ii. **Quantitative Economic Moat:** Intended to describe the strength of a firm's competitive position. It is calculated using an algorithm designed to predict the Economic Moat rating a Morningstar analyst would assign to the stock. The rating is expressed as Narrow, Wide, or None.
  - Narrow** – assigned when the probability of a stock receiving a "Wide Moat" rating by an analyst is greater than 70% but less than 99%.
  - Wide** – assigned when the probability of a stock receiving a "Wide Moat" rating by an analyst is greater than 99%.
  - None** – assigned when the probability of an analyst receiving a "Wide Moat" rating by an analyst is less than 70%.

- iii. **Quantitative Star Rating:** Intended to be the summary rating based on the combination of our Quantitative Fair Value Estimate, current market price, Quantitative Uncertainty Rating, and momentum. The rating is expressed as One-Star, Two-Star, Three-Star, Four-Star, and Five-Star.

★ – the stock is overvalued with a reasonable margin of safety.

*Log (Quant FVE/Price) < -1\*Quantitative Uncertainty*

*Micro-Caps: Log (Quant FVE/Price) < -1.5\*Quantitative Uncertainty*

★★ – the stock is somewhat overvalued.

*Log (Quant FVE/Price) between (-1\*Quantitative Uncertainty, -0.5\*Quantitative Uncertainty)*

*Micro-Caps: Log (Quant FVE/Price) between (-1.5\*Quantitative Uncertainty, -0.75\*Quantitative Uncertainty)*

★★★ – the stock is approximately fairly valued.

*Log (Quant FVE/Price) between (-0.5\*Quantitative Uncertainty, 0.5\*Quantitative Uncertainty)*

*Micro-Caps: Log (Quant FVE/Price) between (-0.75\*Quantitative Uncertainty, 0.75\*Quantitative Uncertainty)*

★★★★ – the stock is somewhat undervalued.

*Log (Quant FVE/Price) between (0.5\*Quantitative Uncertainty, 1\*Quantitative Uncertainty)*

*Micro-Caps: Log (Quant FVE/Price) between (0.75\*Quantitative Uncertainty, 1.5\*Quantitative Uncertainty)*

★★★★★ – the stock is undervalued with a reasonable margin of safety.

*Log (Quant FVE/Price) > 1\*Quantitative Uncertainty*

*Micro-Caps: Log (Quant FVE/Price) > 1.5\*Quantitative Uncertainty*

After the initial calculation for the star rating, there is a final filtering step based on the momentum of the company. We rank the companies based on their 12-1 month momentum, then restrict those below the 30th percentile to a maximum of 3 stars.

- iv. **Quantitative Uncertainty:** Intended to represent Morningstar's level of uncertainty about the accuracy of the Quantitative Fair Value Estimate. Generally, the lower the Quantitative Uncertainty, the narrower the potential range of outcomes for that particular company. The rating is expressed as Low, Medium, High, Very High, and Extreme.

**Low** – the interquartile range for possible fair values is less than 10%

**Medium** – the interquartile range for possible fair values is less than 15% but greater than 10%

**High** – the interquartile range for possible fair values is less than 35% but greater than 15%

**Very High** – the interquartile range for possible fair values is less than 80% but greater than 35%

**Extreme** – the interquartile range for possible fair values is greater than 80%

- v. **Quantitative Financial Health:** Intended to reflect the probability that a firm will face financial distress in the near future. The calculation uses a predictive model designed to anticipate when a company may default on its financial obligations. The rating is expressed as Weak, Moderate, and Strong.

**Weak** – assigned when Quantitative Financial Health < 0.2

**Moderate** – assigned when Quantitative Financial Health is between 0.2 and 0.7

**Strong** – assigned when Quantitative Financial Health > 0.7

### Other Definitions

- i. **Last Close** – Price of the stock as of the close of the market of the last trading day before date of the report.
- ii. **Quantitative Valuation** – Using the below terms, intended to denote the relationship between the security's **Last Price** and Morningstar's quantitative fair value estimate for that security.

**Undervalued – Last Price** is below Morningstar's quantitative fair value estimate.

**Fairly Valued – Last Price** is in line with Morningstar's quantitative fair value estimate.

**Overvalued – Last Price** is above Morningstar's quantitative fair value estimate.

**Overvalued – Last Price** is above Morningstar's quantitative fair value estimate.

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Sustainalytics analyzes over 1,300 data points to assess a company's exposure to and management of ESG risks. In other words, ESG Risk Ratings measures a company's unmanaged ESG Risks represented as a quantitative score. Unmanaged Risk is measured on an open-ended scale starting at zero (no risk) with lower scores representing less unmanaged risk and, for 95% of cases, the unmanaged ESG Risk score is below 50.

Based on their quantitative scores, companies are grouped into one of five Risk

Categories (negligible, low, medium, high, severe). These risk categories are absolute, meaning that a 'high risk' assessment reflects a comparable degree of unmanaged ESG risk across all subindustries covered.

The ESG Risk Rating Assessment is a visual representation of Sustainalytics ESG Risk Categories on a 1 to 5 scale. Companies with Negligible Risk = 5 Globes, Low Risk = 4, Medium Risk = 3 Globes, High Risk = 2 Globes, Severe Risk = 1 Globe. For more information, please visit [sustainalytics.com/esg-ratings/](https://sustainalytics.com/esg-ratings/)

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