

# EDP Energias do Brasil S.A.

October 31, 2022

## Credit Highlights

### Overview

#### Key strengths

An integrated electricity group that benefits from 2.7 gigawatts (GW) of installed capacity in the generation segment, distributes energy to roughly 3.7 million clients, and has over 2,200 kilometers (km) of transmission lines that are operational.

The generation's segment limited exposure to hydrology risk, given insurance and that roughly 15% of its assured capacity related to the free market is uncontracted. In addition, EDP is investing in the nonconventional renewable segment, which will lower its exposure to hydrology risk and improve cash flow diversification.

Brazil's favorable regulatory framework.

#### Key risks

High interest rates in Brazil hurt EDP's cash flows because 75% of its debt is indexed to the benchmark interest rates.

Energy losses at the group's distributors are still above regulatory targets. In addition, EDP's client base is skewed toward industrial clients, which are more susceptible to economic cycles.

Droughts weigh on its distributors because higher energy costs aren't immediately incorporated into rates, despite the offsetting compensation from the tariff flags mechanism.

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**Focus on portfolio rotation and energy transition in the next two years.** EDP Energias do Brasil S.A. (EDP Brasil or the group) has been selling some assets since 2021 and recently announced it intends to sell two additional hydro plants (Santo Antônio do Jari and Cachoeira Caldeirão – in aggregate 612 megawatts [MW]) to fund its growth strategy focused on nonconventional generation and transmission. In December 2021, it sold three transmission lines (Lots 7, 11, and 24) for an enterprise value of approximately R\$1.3 billion in December 2021. Most recently, it concluded the sale of Energest S.A. (Energest), which holds the controlling stake in the hydro plant UHE Mascarenhas (198 MW of installed capacity and roughly R\$165 million in EBITDA in the last 12 months ended June 30, 2022), for R\$1.2 billion. It will cash R\$800 million in the closing of the transaction, expected by the end of 2022, while EDP Brasil will receive the remaining R\$400 million in the renewal process of the hydro plant, expected in July 2025. In February 2022, it concluded the acquisition of EDP Goiás (former CELG Transmissão S.A.; CELG-T) for R\$2.1 billion. Following this acquisition, we expect the transmission segment to represent 5%-10% of the group's EBITDA with about R\$833 million in permitted annual revenues (RAP) in 2022.

EDP Brasil's investment plan in 2022-2026 totals about R\$10.8 billion, of which 10% is in the transmission segment and 30% in solar generation, which we view as in line with its strategy toward renewable energy transition. Currently, EDP Brasil is investing in two solar energy projects in partnership with its sister company EDP Renováveis S.A. (EDPR, not rated), which total 530 MWac of installed

capacity, and according to the company's plan it should reach roughly 1 GWac of solar capacity by 2025. The remaining 60% of the investment plan will focus on the distribution segment to improve and expand its networks.

At this point, we don't incorporate the sale of the additional hydro plants into our base case because it is still uncertain if it will materialize, but we see this strategy as a positive factor that will help diversify EDP Brasil's cash flows and lower its dependence on hydrology conditions. Following the sale of Energest, the acquisition of EDP Goiás, and the start-up of new transmission lines in 2022, we expect a higher proportion of cash flow from the distribution and transmission segments, which should represent 45%-50% and 10% of the consolidated EBITDA in 2022, and between 50%-55% and 10%-15%, respectively, in 2023 and 2024. We forecast the generation segment to represent roughly 40% of consolidated EBITDA in 2022, and to drop to about 35% in the next two years as the solar projects ramp up in 2024 and 2025.

**We expect more pressured funds from operations (FFO) to debt but better debt to EBITDA in 2022, and for both metrics to improve in 2023.** Higher cash flows from the transmission segment, proceeds from the sale of Energest, and the improved hydrology conditions this year--which contributed to lower energy costs and working capital needs at the distributors' (discos') level--were positive for the group's overall credit metrics. Nevertheless, the acquisition of EDP Goiás, which increased the group's debt to finance the acquisition amount, and still unfavorable economic conditions offset these positive impacts. In particular, the high benchmark interest rate of 13.75% negatively affects roughly 75% of EDP Brasil's debt that is indexed to the Interbank Certificate of Deposit (CDI). As a result, we expect EDP Brasil to post weaker FFO to debt in 2022 of 15%-18% (versus 19.7% in 2021), while net debt to EBITDA should improve this year to about 3.0x (versus 3.4x in 2021). However, we think that from 2023 on, EDP Brasil will post stronger credit metrics, with FFO to debt between 20%-23% and net debt to EBITDA at about 2.5x-- although still in line with the significant financial risk profile--following increasing cash flow from the ramp-up of its transmission assets that started operating in 2022, our assumptions of still favorable hydrology in 2023, and gradually decreasing interest rates.

**We assume the renewal of distributor EDP Espírito Santo's concession contract in our base case.** We expect that EDP Brasil will be able to renew EDP Espírito Santo Distribuição de Energia S.A.'s (EDP Espírito Santo) distribution concession contract, which expires in July 2025, in line with recent cases including Cemig Distribuição S.A. and some of the distribution companies of CPFL Energia S.A. and Energisa S.A., which renewed contracts between 2015 and 2017. EDP Espírito Santo's service quality metrics, measured by duration and frequency of service interruptions (DEC and FEC), have been within the regulatory limits with comfortable cushion in the past few years. We believe that compliance with quality indicators, along with the concession's financial balance, is a key aspect analyzed by the regulator, the National Agency of Electric Energy (ANEEL), when granting the renewal to concessionaires. In addition, we consider EDP Brasil's expertise in operating the concession area in the state of Espírito Santo, as well as the investments made by the company in the past years as incentives that might contribute to the renewal.

## Outlook

The stable outlook on distributors EDP Espírito Santo and EDP São Paulo Distribuição de Energia S.A. (EDP São Paulo) reflects our expectation that the group will sustain debt to EBITDA of about 3.0x and FFO to debt around 15%-18% in 2022 and improve these metrics to about 2.5x and 20%-23% in 2023, respectively, while maintaining sources over uses of liquidity solidly above 1.2x. The outlook also reflects that on Brazil (BB-/Stable/B), and incorporates our view that the group, as a regulated utility, could be subject to government intervention in a hypothetical sovereign default scenario.

## Downside scenario

We don't currently forecast a scenario in the next 12 months that could lead to a downgrade of the distributors stemming from their stand-alone credit profiles (SACPs). However, a downgrade could occur if we think that the ultimate parent has less incentive to provide support to its Brazilian operations and/or if EDP Brasil's credit metrics deteriorate such that FFO to debt drops below 12% and debt to EBITDA is above 5.0x, consistently. This could result from consistently higher energy costs because of persistent weak hydrology throughout 2023, or due to much higher-than-expected investments or a large debt-financed acquisition. If we were to downgrade Brazil in the following 12 months, we expect a similar rating action on both companies.

## Upside scenario

An upgrade of EDP Espírito Santo on the global scale in the next 12 months would depend on a positive rating action on Brazil, all else remaining unchanged. In addition, if the parent, EDP - Energias de Portugal (EDP Portugal; BBB/Stable/A-2), provides explicit support to its Brazilian operations, we could also upgrade EDP Espírito Santo on the global scale. The national scale ratings on EDP Espírito Santo and EDP Sao Paulo are already at the top of the Brazil national scale.

## Our Base-Case Scenario

### Assumptions

- Brazil's GDP to grow 2.5% in 2022, 0.6% in 2023, and 2.0% in 2024, in line with our latest macroeconomic assumptions published on Sept. 26, 2022, "**Economic Outlook Latin America Q4 2022: A Period Of Below-Trend Growth Ahead.**" We expect EDP São Paulo and EDP Espírito Santo's energy consumption to increase in line with GDP in the next couple of years.
- Brazil's average exchange rate of R\$5.13 per \$1 in 2022, R\$5.18 per \$1 in 2023, and R\$5.23 per \$1 in 2024. Energy cost acquired from Itaipu is linked to the U.S. dollar and represents about 16% of EDP Brasil's total energy purchases.
- In 2022, we incorporate the tariff adjustments of 11.05% and 8.05% for EDP Espírito Santo and EDP São Paulo, respectively, as approved by Brazil's National Agency of Electric Energy (ANEEL, the regulator). In 2022 and 2023, we forecast tariffs increasing in line with our expectations for inflation of the previous year, of 9.6% and 5.1%, respectively.
- Average cost of energy between R\$270 per megawatt hour (MWh) and R\$310/MWh in 2022, a drop of about 20%-30% compared to 2021 because of favorable hydrology.
- A Global Scaling Factor (GSF), which determines the company's level of energy delivery, of roughly 87% in 2022 and 85% from 2023 onward.
- Ramp-up of EDP Brasil's transmission lines throughout 2022 and full operations during 2023. We forecast RAP after taxes of R\$530 million in 2022, R\$810 million in 2023, and R\$850 million in 2024.
- Basic interest rate at the end of the year of 13.75% in 2022, 10.75% in 2023, and 7.5% in 2024 on, affecting the group's interest expenses.
- Capex of about R\$2.4 billion in 2022, R\$2.0 billion in 2023, and R\$2.7 billion in 2024.
- Acquisition of EDP Goiás for R\$2.1 billion, completed in February 2022.
- Sale of Energest for R\$800 million, as announced on Aug. 30, 2022.
- Dividend payment of R\$1.35 billion in 2022, as announced by the company, and a dividend payout from 2023 on of 50% of previous year's net income, in line with EDP Brasil's dividend policy.

## Key metrics

### EDP Brasil--Key Metrics\*

Mil. R\$	2020a	2021a	2022e	2023f	2024f
Revenue	13,164.7	15,740.8	14,200-14,700	15,200-16,000	16,200-16,700
EBITDA	3,174.5	3,095.1	4,300-4,600	5,200-5,500	6,000-6,300
Capital expenditure	1,443.9	2,067.8	2,300-2,400	1,900-2,000	2,600-2,700
Free operating cash flow (FOCF)	335.0	(1,451.4)	(600)-(500)	800-900	900-1,000

Debt to EBITDA (x)	2.8	3.4	~3.0	~2.5	2.0-2.5
FFO to debt (%)	27.5	19.4	15-18	20-23	27-30
FOCF to debt (%)	3.8	(13.7)	(6)-(2)	5-8	6-9

\*All figures adjusted by S&P Global Ratings. a--Actual. e--Estimate. f--Forecast.

## Company Description

EDP São Paulo and EDP Espírito Santo are two distribution companies controlled by the integrated electric power group EDP Brasil (not rated) that distribute, generate, transmit, and trade electricity. EDP São Paulo has monopoly rights to serve the captive market of 28 cities in the state of São Paulo until October 2028. In the rolling 12 months ended on Sept. 30, 2022, EDP São Paulo distributed approximately 16,000 gigawatt hours (GWh) to its almost 2.1 million clients. EDP Espírito Santo has the monopoly rights to provide electricity to the captive market of 70 cities in the state of Espírito Santo until July 2025, and distributed 10,359 GWh of electricity to its 1.7 million clients in the same period.

Following the sale of UHE Mascarenhas (198 MW of installed capacity), EDP Brasil's generation segment now has 2.12 GW (1.43 GW of assured energy), of which 720 MW are from thermal generation and the rest is hydro. The group also has noncontrolling stakes in three operating hydro plants: Cachoeira Caldeirão (219 MW), Jari (393 MW), and São Manoel (735.8 MW).

In addition, EDP Brasil entered the transmission segment in 2016, when it started to participate in concession bids to build and operate transmission lines. So far this year, the group has completed the construction of the majority of the projects, reaching roughly 2,200 km of transmission lines in operations, including the recently acquired EDP Goiás.

Transmission line	Location	Length (km)	Status	Current RAP <sup>1</sup>	Total RAP <sup>2</sup> in the 2022-2023 cycle
Lot 18	São Paulo e Minas Gerais	740	Operational	232.4	239.1
Lot 21	Santa Catarina	434.4	Operational	277.6	277.6
Lot Q	Santa Catarina e Rio Grande do Sul	156.6	Operational	57.5	60.8
Lot MGTE	Maranhão	112.4	Operational	10.1	10.1
Lot 1	Acre e Rondônia	326.9	Under construction	--	45.1
EDP Goiás	Goiás and Mato Grosso do Sul	755.5	Operational	254.7	289.0

<sup>1</sup>Current RAP--Refers to current operational RAP.

<sup>2</sup>Total RAP--The difference between current and total RAP relates to lines under construction to reinforce the current operations, which are already approved by the regulator ANEEL.

EDP Brasil is controlled by the Portuguese power group EDP Portugal, which has 56.04% of shares. The remaining shares are free floating.

## Peer Comparison

We chose peers that also operate in the Brazilian electricity sector, such as CPFL Energia S.A., Neoenergia S.A., and Companhia Energetica de Minas Gerais - CEMIG, which operate in the distribution, generation, and transmission segments. When comparing the groups, we view EDP Brasil as the most exposed to the generation segment, which could be riskier if the group hadn't already contracted hydrology insurance. Nevertheless, we expect EDP Brasil's cash contribution from the regulated and nonconventional

## EDP Energias do Brasil S.A.

renewables to increase in the next years, becoming more in line with its peers, which like EDP Brasil are also pursuing both acquisitive and organic growth. We expect EDP Brasil's credit metrics to remain in line with CPFL's.

### EDP Energias do Brasil S.A.--Peer Comparisons

	EDP Energias do Brasil S.A.	CPFL Energia S.A.	Neoenergia S.A.	Companhia Energética de Minas Gerais – CEMIG
Foreign currency issuer credit rating	--	--	BB-/Stable/--	BB-/Stable/--
Local currency issuer credit rating	--	--	BB-/Stable/--	BB-/Stable/--
National scale rating	--	brAAA/Stable/--	brAAA/Stable/--	brAA+/Stable/--
Period	Annual	Annual	Annual	Annual
Period ending	2021-12-31	2021-12-31	2021-12-31	2021-12-31
Mil.	R\$	R\$	R\$	R\$
Revenue	15,740.8	34,795.7	33,756.0	29,600.0
EBITDA	3,095.1	7,951.7	7,047.0	5,110.5
Funds from operations (FFO)	2,054.0	5,795.4	5,208.0	3,016.9
Interest	1,091.7	1,435.7	2,627.0	1,269.4
Cash interest paid	633.4	691.0	1,265.0	1,593.2
Operating cash flow (OCF)	725.3	3,822.6	132.0	3,683.4
Capital expenditure	2,067.8	3,564.2	7,635.0	2,031.7
Free operating cash flow (FOCF)	(1,342.5)	258.4	(7,503.0)	1,651.7
Discretionary cash flow (DCF)	(2,524.3)	(4,040.1)	(8,211.0)	235.4
Cash and short-term investments	2,711.2	2,785.8	5,617.0	2,549.3
Gross available cash	10,574.6	24,356.1	31,925.0	19,584.0
Debt	12,294.0	16,805.9	24,238.0	19,461.8
Equity	15,740.8	34,795.7	33,756.0	29,600.0
EBITDA margin (%)	19.7	22.9	20.9	17.3
Return on capital (%)	13.3	19.8	9.9	13.1
EBITDA interest coverage (x)	2.8	5.5	2.7	4.0
FFO cash interest coverage (x)	4.2	9.4	5.1	2.9
Debt/EBITDA (x)	3.4	3.1	4.5	3.8
FFO/debt (%)	19.4	23.8	16.3	15.4
OCF/debt (%)	6.9	15.7	0.4	18.8
FOCF/debt (%)	(12.7)	1.1	(23.5)	8.4
DCF/debt (%)	(23.9)	(16.6)	(25.7)	1.2

## Business Risk

We view the regulatory framework in Brazil as credit supportive. ANEEL is responsible for setting the rates for distribution and transmission companies. Rates are set in order to remunerate the investments made in the concession area. Rate setting for

transmission lines is simpler than for discos because these companies receive revenues according to their availability to the system. The regulator resets tariffs for distributors every three to five years (depending on the concession contract) by revising the regulatory weighted average cost of capital (WACC), remunerating the companies' regulatory asset base, and incorporating efficiency factors. The distributors pass through energy costs to end-users annually. In the case of EDP Espírito Santo and EDP São Paulo, the tariff review processes occur every three and four years, respectively.

In turn, power generators tend to mitigate cash flow volatility through long-term power sale contracts to distribution companies and free consumers. EDP Brasil's generation segment has a diversified asset base with hydro and thermal power plants, combining short- and long-term power purchase agreements (PPAs) signed in the free and regulated market, respectively. Since 2016, EDP Brasil has adhered to a law to protect its generation from hydrology risks whenever the GSF falls below 92%, which helps make cash flows more predictable. For the free market, it maintains about 15% of its assured energy uncontracted, underscoring its conservative energy hedge strategy.

The customer base of EDP Brasil's distributors mainly consists of industrial clients, which represent about 48% and 40% of energy distributed by EDP São Paulo and EDP Espírito Santo, respectively. Industrial clients, like commercial clients (16% of total energy delivered for both discos) are more susceptible to economic downturns than residential clients (25%). Energy demand rebounded in EDP Brasil's concession areas--especially driven by free clients in the industrial and commercial segments--about 5.4% in 2021, after a drop of 3.7% in 2020 due to the pandemic. We expect energy demand to increase between 2.0%-2.5% in 2022, in line with our expectation of GDP growth for the year.

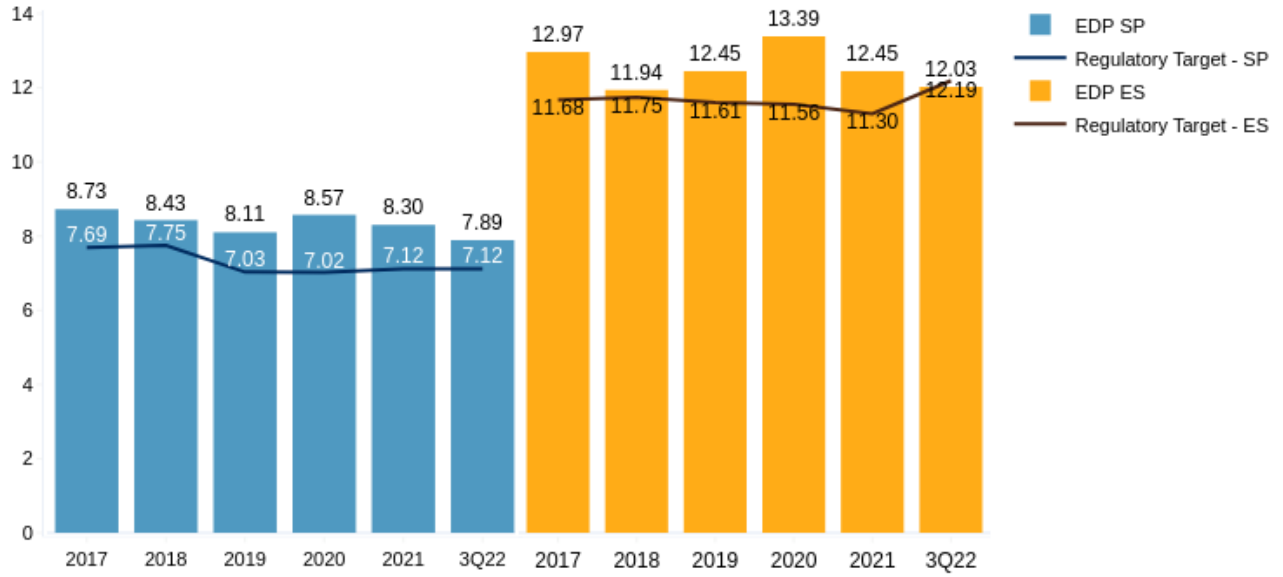
In addition, following the investments in the past few years, EDP Brasil's distributors have been posting quality metrics better than the regulatory requirements in their concession areas. However, energy losses at EDP São Paulo are still larger than the regulatory limit for the concession area, so the gap between regulatory and effective losses isn't passed on to the rates. In the past quarters, losses above regulatory targets reflected not only bad weather conditions, but also poor macroeconomic conditions considering Brazil's high inflation and unemployment rates, which foster the increase in energy theft. Nevertheless, although gradual, energy losses have been falling in the past quarters as a result of EDP Brasil's discos' plan to combat energy losses, which includes more on-site inspections, replacing old meters, network shielding, and remote metering.

## **Chart 1**

EDP São Paulo's And EDP Espírito Santo's Total Losses

Total losses

%

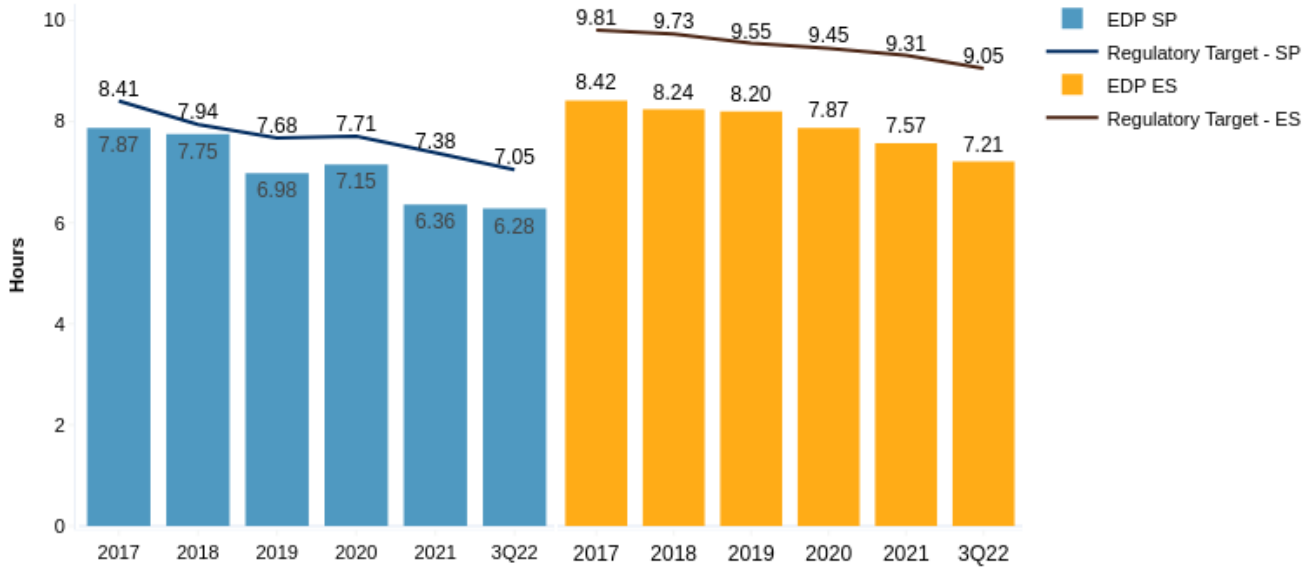


Source: S&P Global Ratings.  
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Chart 2

EDP São Paulo's And EDP Espírito Santo's Equivalent Duration Of Interruptions (DEC)

DEC

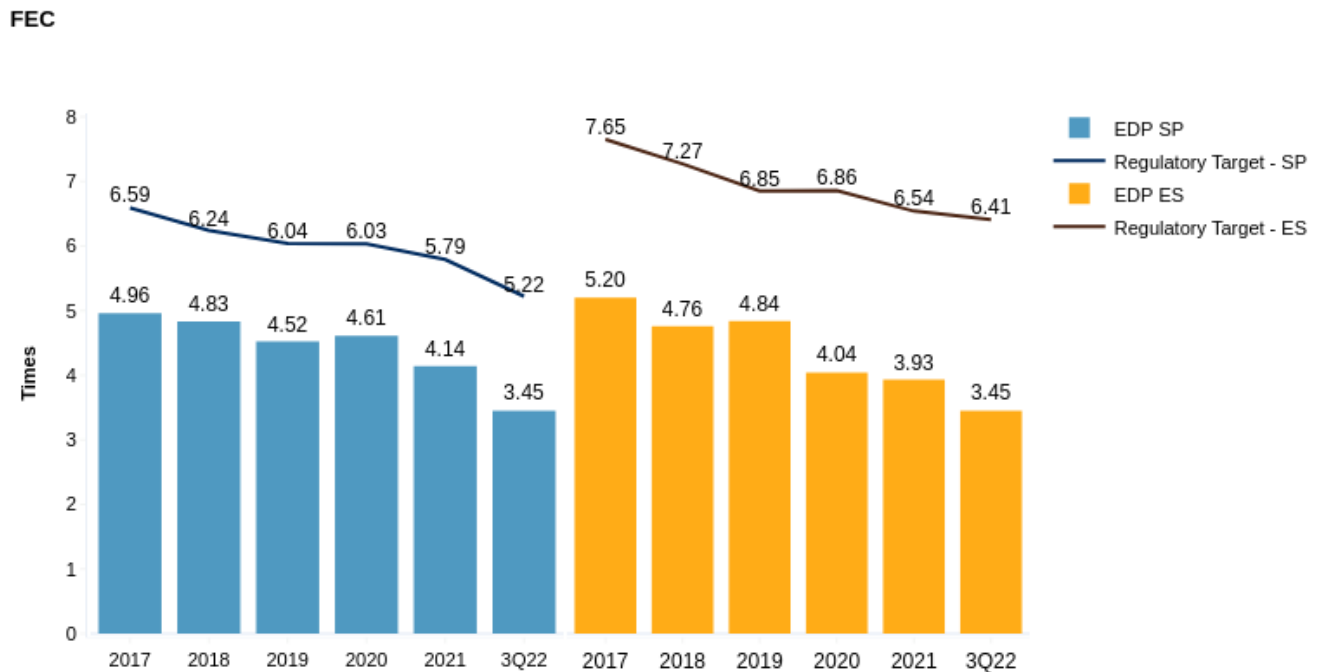


Source: S&P Global Ratings.  
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Chart 3

EDP São Paulo's And EDP Espírito Santo's Equivalent Frequency Of Interruptions (FEC)



Source: S&P Global Ratings.  
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## Financial Risk

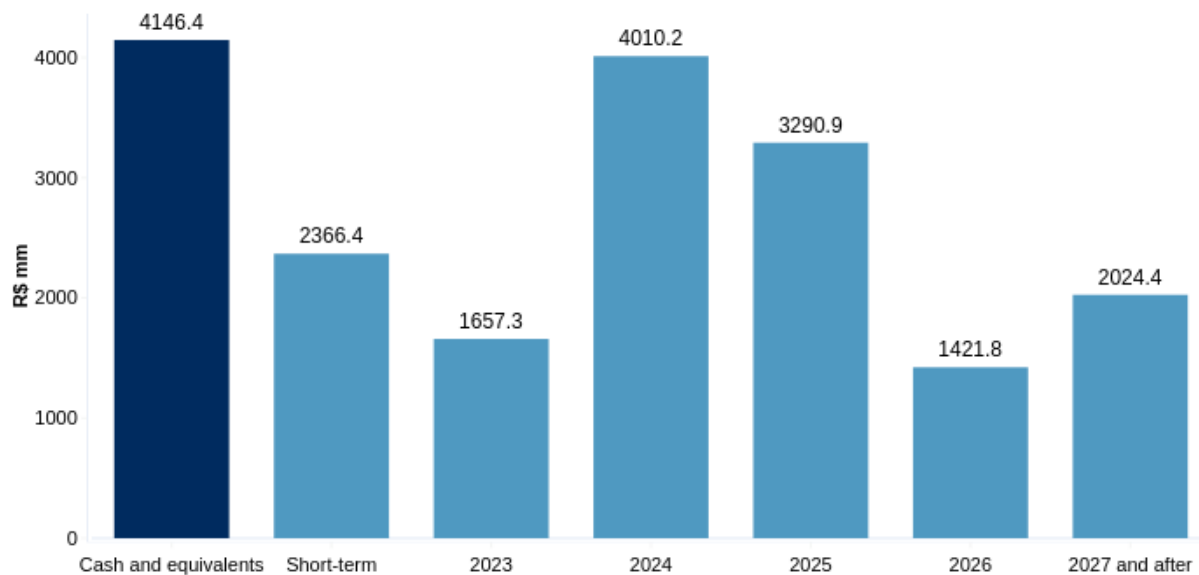
We incorporate in our financial analysis of EDP Brasil its sizable capex plan of R\$10.8 billion in the next five years and a dividend payout of 50% that's in line with the group's policy. We also consider still high interest rates, lower energy costs due to better hydrology conditions, and the group's recently announced acquisition and asset sales. As a result, we expect EDP Brasil to post net debt to EBITDA of about 3.0x and FFO to debt of 15%-18% in 2022, improving to about 2.5x and between 20%-23%, respectively, in 2023. This would follow a full year of cash generation from EDP Brasil's transmission lines that started operating in 2022, favorable hydrology conditions, and gradually decreasing interest rates.

## Debt maturities

Chart 4

**Debt Amortization Profile**

As of September 30, 2022



Source: S&P Global Ratings.  
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**EDP Energias do Brasil S.A.--Financial Summary**

Period ending	Dec-31-2016	Dec-31-2017	Dec-31-2018	Dec-31-2019	Dec-31-2020	Dec-31-2021
Reporting period	2016a	2017a	2018a	2019a	2020a	2021a
Display currency (mil.)	R\$	R\$	R\$	R\$	R\$	R\$
Revenues	8,690	11,707	12,732	13,198	13,165	15,741
EBITDA	1,912	2,309	2,391	3,702	3,174	3,095
Funds from operations (FFO)	742	1,474	1,654	2,835	2,406	2,054
Interest expense	789	714	675	786	780	1,092
Cash interest paid	708	636	452	489	372	633
Operating cash flow (OCF)	1,623	741	1,307	2,049	1,779	725
Capital expenditure	607	758	1,084	2,189	1,444	2,068
Free operating cash flow (FOCF)	1,016	(17)	223	(139)	335	(1,343)
Discretionary cash flow (DCF)	454	(442)	(300)	(715)	(89)	(2,524)
Cash and short-term investments	2,018	1,716	2,378	2,774	2,890	2,711
Gross available cash	2,018	1,716	2,378	2,774	2,890	2,711
Debt	5,804	6,985	7,388	7,687	8,762	10,575

## EDP Energias do Brasil S.A.--Financial Summary

Common equity	8,985	9,038	9,675	10,332	11,256	12,294
<b>Adjusted ratios</b>						
EBITDA margin (%)	22.0	19.7	18.8	28.1	24.1	19.7
Return on capital (%)	12.2	12.3	13.8	19.0	16.2	13.3
EBITDA interest coverage (x)	2.4	3.2	3.5	4.7	4.1	2.8
FFO cash interest coverage (x)	2.0	3.3	4.7	6.8	7.5	4.2
Debt/EBITDA (x)	3.0	3.0	3.1	2.1	2.8	3.4
FFO/debt (%)	12.8	21.1	22.4	36.9	27.5	19.4
OCF/debt (%)	28.0	10.6	17.7	26.7	20.3	6.9
FOCF/debt (%)	17.5	(0.2)	3.0	(1.8)	3.8	(12.7)
DCF/debt (%)	7.8	(6.3)	(4.1)	(9.3)	(1.0)	(23.9)

## Reconciliation Of EDP Energias do Brasil S.A. Reported Amounts With S&amp;P Global Adjusted Amounts (Mil. R\$)

Financial year	Dec-31-2021	Debt	Shareholder Equity	Revenue	EBITDA	Operating income	Interest expense	S&PGR adjusted EBITDA	Operating cash flow	Dividends	Capital expenditure
Company reported amounts		10,598	11,151	18,874	4,390	3,817	1,026	3,095	1,304	755	2,068
Cash taxes paid		-	-	-	-	-	-	(408)	-	-	-
Cash interest paid		-	-	-	-	-	-	(633)	-	-	-
Accessible cash and liquid investments		(2,711)	-	-	-	-	-	-	-	-	-
Income (expense) of unconsolid. cos.		-	-	-	(242)	-	-	-	-	-	-
Nonoperating income (expense)		-	-	-	-	92	-	-	-	-	-
Reclassification of interest and dividend cash flows		-	-	-	-	-	-	-	(579)	-	-
Noncontrolling/minority interest		-	1,143	-	-	-	-	-	-	-	-
Debt: Guarantees		1,259	-	-	-	-	-	-	-	-	-
Debt: Workers comp/self insurance		1,095	-	-	-	-	-	-	-	-	-

## Reconciliation Of EDP Energias do Brasil S.A. Reported Amounts With S&amp;P Global Adjusted Amounts (Mil. R\$)

	Shareholder Debt	Shareholder Equity	Revenue	EBITDA	Operating income	Interest expense	S&PGR adjusted EBITDA	Operating cash flow	Dividends	Capital expenditure
Debt: Tax liabilities	334	-	-	-	-	-	-	-	-	-
Revenue: other	-	-	(3,133)	(3,133)	(3,133)	-	-	-	-	-
COGS: other nonoperating nonrecurring items	-	-	-	2,151	2,151	-	-	-	-	-
EBITDA - Gain/(loss) on disposals of PP&E	-	-	-	(247)	(247)	-	-	-	-	-
EBITDA: other	-	-	-	177	177	-	-	-	-	-
Interest expense: other	-	-	-	-	-	66	-	-	-	-
Working capital: Taxes	-	-	-	-	-	-	-	408	-	-
Working capital: other	-	-	-	-	-	-	-	142	-	-
OCF: Taxes	-	-	-	-	-	-	-	(408)	-	-
OCF: other	-	-	-	-	-	-	-	(142)	-	-
Total adjustments	(23)	1,143	(3,133)	(1,295)	(961)	66	(1,041)	(579)	-	-
<b>S&amp;P Global Ratings adjusted</b>	<b>Debt</b>	<b>Equity</b>	<b>Revenue</b>	<b>EBITDA</b>	<b>EBIT</b>	<b>Interest expense</b>	<b>Funds from Operations</b>	<b>Operating cash flow</b>	<b>Dividends</b>	<b>Capital expenditure</b>
	10,575	12,294	15,741	3,095	2,856	1,092	2,054	725	755	2,068

## Liquidity

We assess EDP Brasil's liquidity as adequate. We expect the group's sources of liquidity to surpass its uses by 20% in the next 12 months. In addition, we expect the difference between sources and uses of cash to remain positive even if the expected EBITDA is 15% lower than in our base-case scenario. We expect EDP Brasil's cash position combined with its cash generation to be more than enough to cover its short-term debt maturities. Also, the group has well-established relationships with banks and wide access to debt markets, as illustrated by the new loans and issuances it has taken in 2022, totaling about R\$4.5 billion--including the commercial notes for R\$1.5 billion, issued on Sept. 23, 2022, at its subsidiary Porto do Pecém Geração de Energia S.A. (Pecém I, not rated) to prepay existing debt and to finance the group's investment plan in nonconventional renewables. In addition, we think the group has the appropriate mechanisms in place to face high-impact, low-probability events with limited need for refinancing. For instance, we believe EDP Brasil has flexibility to lower dividends distribution, like it did during the pandemic when it lowered the dividend payout to 27.81% of net income in 2020 from 47.59% in 2019, and it could also divest additional hydro plants besides Mascarenhas.

### Principal liquidity sources

- R\$4.14 billion in cash and equivalents as of Sept. 30, 2022;
- R\$2.7 billion in cash FFO in the next 12 months; and
- Net proceeds from the sale of Energest S.A. for R\$800 million.

### Principal liquidity uses

- R\$2.36 billion in debt maturities in the next 12 months, as of June 30, 2022;
- Prepayment of R\$470 million in BNDES debt at Pecém, 75% of which is long term;
- About R\$800 million in maintenance capex; and
- Payouts of 50% of the previous year’s net income, following the group’s dividend policy.

## Covenant Analysis

### Requirements

EDP Brasil, EDP Espírito Santo, and EDP São Paulo have financial covenants on some of their bank debt and debentures that limit net debt to adjusted EBITDA to 3.5x at the consolidated and subsidiary levels, measured semiannually with interim financial statements.

### Compliance expectations

We expect all the entities to remain in compliance with their financial covenants in the next couple of years with a cushion of at least 15%. The covenant’s calculation methodology is different from the credit metrics we consider because financial metrics related to the debentures exclude the impact of provisions on the company’s EBITDA and include financial assets related to the distribution concessions. Therefore, the credit metrics we mention in this report don’t relate to our expectation of the companies’ covenant compliance.

## Environmental, Social, And Governance

### ESG Credit Indicators

E-1	E-2	<b>E-3</b>	E-4	E-5	S-1	<b>S-2</b>	S-3	S-4	S-5	G-1	<b>G-2</b>	G-3	G-4	G-5
- Climate transition risks					- N/A					- N/A				

N/A—Not applicable. ESG credit indicators provide additional disclosure and transparency at the entity level and reflect S&P Global Ratings’ opinion of the influence that environmental, social, and governance factors have on our credit rating analysis. They are not a sustainability rating or an S&P Global Ratings ESG Evaluation. The extent of the influence of these factors is reflected on an alphanumeric 1-5 scale where 1 = positive, 2 = neutral, 3 = moderately negative, 4 = negative, and 5 = very negative. For more information, see our commentary “ESG Credit Indicator Definitions And Applications,” published Oct. 13, 2021.

Environmental factors are a moderately negative consideration in our credit rating analysis of EDP Brasil and its subsidiaries, EDP Espírito Santo and EDP São Paulo, because 34% of its generation capacity is from a coal-based plant, Pecém I. Despite the carbon emissions, we take into account that the coal plant mitigates hydrology risks, considering that Brazil’s energy matrix is around 60% hydro based. In addition, EDP Brasil is investing roughly R\$3 billion (30% of the group’s total capex in the next five years) to build 1 GW of photovoltaic generation capacity by 2025, which is favorable to the group’s energy transition.

## Group Influence

Both EDP São Paulo and EDP Espírito Santo are core subsidiaries of EDP Brasil because they’re fully owned, and the distribution segment represents 45%-50% of the group’s EBITDA. In turn, we assess EDP Brasil as strategically important to the parent EDP Portugal. In our view, the Brazilian operations are aligned with the parent’s strategy of expanding its regulated activities (electricity

## EDP Energias do Brasil S.A.

distribution and transmission) and nonconventional renewables in high-growth markets, which is illustrated in the partnership it recently established with its sister company EDPR to develop new photovoltaic solar plants. Nonetheless, EDP Brasil accounts for only about 15% of EDP Portugal's consolidated EBITDA and operates as a stand-alone entity, not relying on its parent's direct financial support.

## Rating Component Scores

### EDP Espírito Santo Distribuição de Energia S.A.

<b>Foreign currency issuer credit rating</b>	<b>BB-/Stable/--</b>
<b>National scale issuer credit rating</b>	<b>brAAA/Stable/--</b>
<b>Business risk</b>	<b>Satisfactory</b>
Country risk	Moderately High
Industry risk	Intermediate
Competitive position	Satisfactory
<b>Financial risk</b>	<b>Significant</b>
Cash flow/leverage	Significant
<b>Anchor</b>	<b>bb+</b>
<b>Modifiers</b>	
Diversification/portfolio effect	Neutral
Capital structure	Neutral
Financial policy	Neutral
Liquidity	Adequate
Management and governance	Satisfactory
Comparable rating analysis	Neutral
<b>Stand-alone credit profile</b>	<b>bb+</b>
Group status to EDP Brasil	Core

## EDP Energias do Brasil S.A.

### EDP Sao Paulo Distribuição de Energia S.A.

<b>National scale issuer credit rating</b>	<b>brAAA/Stable/--</b>
<b>Business risk</b>	<b>Satisfactory</b>
Country risk	Moderately High
Industry risk	Intermediate
Competitive position	Satisfactory
<b>Financial risk</b>	<b>Significant</b>
Cash flow/leverage	Significant
<b>Modifiers</b>	
Diversification/portfolio effect	Neutral
Capital structure	Neutral
Financial policy	Neutral
Liquidity	Adequate
Management and governance	Satisfactory
Comparable rating analysis	Neutral
Group status to EDP Brasil	<b>Core</b>

## Related Criteria

- General Criteria: Group Rating Methodology, July 1, 2019
- Criteria | Corporates | General: Corporate Methodology: Ratios And Adjustments, April 1, 2019
- General Criteria: Methodology For National And Regional Scale Credit Ratings, June 25, 2018
- Criteria | Corporates | General: Reflecting Subordination Risk In Corporate Issue Ratings, March 28, 2018
- Criteria | Corporates | General: Recovery Rating Criteria For Speculative-Grade Corporate Issuers, Dec. 7, 2016
- General Criteria: Guarantee Criteria, Oct. 21, 2016
- General Criteria: Rating Government-Related Entities: Methodology And Assumptions, March 25, 2015
- Criteria | Corporates | General: Methodology And Assumptions: Liquidity Descriptors For Global Corporate Issuers, Dec. 16, 2014
- Criteria | Corporates | Industrials: Key Credit Factors For The Unregulated Power And Gas Industry, March 28, 2014
- Criteria | Corporates | General: Corporate Methodology, Nov. 19, 2013
- General Criteria: Methodology: Industry Risk, Nov. 19, 2013
- General Criteria: Country Risk Assessment Methodology And Assumptions, Nov. 19, 2013
- Criteria | Corporates | Utilities: Key Credit Factors For The Regulated Utilities Industry, Nov. 19, 2013
- General Criteria: Ratings Above The Sovereign--Corporate And Government Ratings: Methodology And Assumptions, Nov. 19, 2013
- General Criteria: Methodology: Management And Governance Credit Factors For Corporate Entities, Nov. 13, 2012
- General Criteria: Stand-Alone Credit Profiles: One Component Of A Rating, Oct. 1, 2010
- General Criteria: Use Of CreditWatch And Outlooks, Sept. 14, 2009

## Ratings Detail (as of October 31, 2022)\*

### Related Entities

EDP Espirito Santo Distribuicao de Energia S.A.

**EDP Energias do Brasil S.A.**

**Ratings Detail (as of October 31, 2022)\***

Issuer Credit Rating

BB-/Stable/--

*Brazil National Scale*

brAAA/Stable/--

**EDP Sao Paulo Distribuicao de Energia S.A.**

Issuer Credit Rating

brAAA/Stable/--

*Brazil National Scale*

\*Unless otherwise noted, all ratings in this report are global scale ratings. S&P Global Ratings credit ratings on the global scale are comparable across countries. S&P Global Ratings credit ratings on a national scale are relative to obligors or obligations within that specific country. Issue and debt ratings could include debt guaranteed by another entity, and rated debt that an entity guarantees.



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