# MOODY'S INVESTORS SERVICE

# **CREDIT OPINION**

8 May 2018

## Update

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#### RATINGS

EDP -	Energias	do	Brasil	S.A.
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Domicile	Sao Paulo, Sao Paulo, Brazil
Long Term Rating	Ba2
Туре	LT Corporate Family Ratings - Dom Curr
Outlook	Stable

Please see the <u>ratings section</u> at the end of this report for more information. The ratings and outlook shown reflect information as of the publication date.

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# EDP - Energias do Brasil S.A.

Update Following Outlook Change to Stable

## **Summary Rating Rationale**

EDP- Energias do Brasil (EDB)'s Ba2/Aa2.br corporate family ratings reflect the company's consolidated credit profile and its adequate liquidity position, supported by a diversified business portfolio with activities in generation, distribution and commercialization of electricity. The rating also incorporates the company's long track record of operations in Brazil, its experienced management team and the implicit parental support provided by EDP - Energias de Portugal (EDP; Baa3 stable).

Constraining EDB's credit rating are: (i) the sizeable capital expenditures planned for 2018-2022 to upgrade the distribution network and diversification into transmission business, (ii) relatively high leverage metrics and large off-balance sheet debt related to unconsolidated generation projects. The global scale rating remains somewhat constrained by <u>Brazil's Government rating</u> (Ba2, stable), given the intrinsic links between the company and the credit quality of sovereign due to its regional customer base.

#### Exhibit 1 Adequate Credit Metrics to Continue



Source: Moody's Financial Metrics, Moody's estimates

## **Credit Strengths**

- » Diversified business mix helps moderate earnings volatility
- » Implicit support from stronger shareholders
- » Good track record in accessing local bank financing and the domestic capital markets

## Credit Challenges

» Large capital expenditures

» Evolving capital structure and high leverage

#### **Rating Outlook**

The stable outlook for EDB reflects the stable outlook on Brazil's sovereign bond rating. It also considers Moody's expectation that EDB's credit metrics will remain well positioned for the rating category.

## Factors that Could Lead to an Upgrade

A rating upgrade would be considered if Brazil's government bond rating is upgraded. A rating upgrade would also depend on material improvement in the business environment under which EDB operates, along with sustainably strong credit metrics and adequate the liquidity profile. Quantitatively, the ratings could be upgraded if we see a continued improvement in the company's credit metrics, so that:

- » The CFO pre-WC-to-Debt stays sustainably above 40%, and
- » The interest coverage remains above 4.5x on a sustainable basis.

#### Factors that Could Lead to a Downgrade

Downward rating pressure could come with a deterioration in EDB's credit metrics, resulting from weaker than anticipated growth of its electricity business or if there is a perception of reduced support from to regulatory framework to electricity companies. Difficulties to secure long term funding for ongoing investment requirements or reduced liquidity cushion to face upcoming debt maturities would also trigger a negative rating action for them company. Quantitatively, the ratings could be downgraded if:

- » The CFO pre-WC-to-Debt falls below 20%, or
- » The interest coverage stays below 3.0x for a prolonged period.

## **Key Indicators**

#### Exhibit 3 EDP - Energias do Brasil S.A.

	12/31/2017	12/31/2016	12/31/2015	12/31/2014	12/31/2013
CFO pre-WC + Interest / Interest	3.5x	2.4x	3.3x	3.9x	4.5x
CFO pre-WC / Debt	26.7%	19.4%	22.7%	44.9%	33.3%
CFO pre-WC – Dividends / Debt	20.6%	10.1%	17.9%	32.3%	18.6%
Debt / Capitalization	42.5%	39.3%	45.8%	32.3%	37.0%

[1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. Source: Moody's Financial Metrics Source: Moody's Financial Metrics

#### **Corporate Profile**

Headquartered in São Paulo, Brazil, EDB is a holding company controlled by EDP - Energias de Portugal with activities in generation, distribution and commercialization of electricity. In 2017, EDB's power distribution business represented 37% of the consolidated EBITDA and the power generation business represented 60%, while the commercialization of energy and other operating and management services represented the remaining 3%. In 2017, EDB reported consolidated net revenues of BRL11.7 billion, excluding BRL606 million of construction revenues, and a net profit of BRL612 million.

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the ratings tab on the issuer/entity page on www.moodys.com for the most updated credit rating action information and rating history.

## **Detailed Rating Considerations**

## DIVERSIFIED BUSINESS MIX HELPS MODERATE EARNINGS VOLATILITY

EDB has a solid market position in Brazil and its diversified asset portfolio helps moderate aggregate earnings volatility. The company is currently the 5th largest generation company in the country with footprint in seven states and 2.8 GW of installed capacity. In 2017, the generation business represented 26% of the consolidated net revenues and 60% of the EBITDA, comprising both hydro and thermal generation sources.

EDB is also the 6th largest distribution company with footprint in two states, through <u>EDP - Sao Paulo Distribuição de Energia S.A.</u> (EDP - Sao Paulo; Ba2/Aa1.br stable) and <u>EDP - Espirito Santo Distribuição de Energia S.A.</u> (EDP - Espirito Santo; Ba2/Aa1.br stable), serving a total of 3.3 million customers. In 2017, the distribution business represent 54% of the consolidated net revenues and 37% of the consolidated EBITDA

EDB also engages in opportunistic trading activities through EDB Comercializadora, primarily within the group, which helps smooth earnings volatility in periods of unfavorable hydrological conditions. Management has indicated that electricity trading contributed to a positive impact on consolidated results of BRL459 million in 2017.

EDB is further committed to improve its business diversification through investments in transmission lines. In May 2017, the company won four lots of power transmission licenses auctioned by Brazil's National Electric Energy Agency, comprising 1,184 kilometers of new transmission lines involving BRL3.7 billion (\$1.2 billion) of regulatory investments through 2022. In 2016 the company has also won the auction for a 113 kilometer project in the State of Espirito Santo, which will require BRL116 million of investments through 2018.

## HYDROLOGICAL RISK ISSUE MITIGATED IN THE GENERATION BUSINESS

Brazilian hydro generation companies have been experiencing a challenging operating environment over the past years as a combined result of prolonged drought seasons and ineffective government policies toward operation and expansion of the energy matrix. With this scenario, hydro power generators experienced significant volatility in energy costs related to eventual purchases on the spot market to make up for generation shortfalls.

In 2017, the Generation Scaling Factor (GSF), which basically indicates the level of stored energy of hydropower reservoirs in Brazil fell to an average 81%, as compared to 87% in 2016. Meanwhile, the average spot prices increased to BRL318 per MWh from BRL122 per MWh in 2016. We currently expect a GSF to improve to 88% in 2018 and 92% in 2019, reflecting a combination of a more favorable rainy season, additional installed power capacity coming on stream and still gradual recovery in electricity consumption.

To mitigate the exposure to hydrologic risks on the regulated markets, EDB adhered to the law #13,203, which which allows the transfer of part of the hydrological risk to final regulated consumers in exchange for a premium payment that varies according to the level of protection chosen. Among the different levels of protection available on the regulated market, EDB has opted to the SP94 and SP92 products for its hydro power plants, that limit its exposure up to 6% and 8%, respectively, of its assured energy on the regulated market in cases where the system Generating Scaling Factor (GSF) falls below 94% or 92%, respectively.

To mitigate the exposure to hydrologic risk on the unregulated markets, EDB has increased the percentage of its uncontracted physical energy to approximately 18% in 2017, up from 7% in 2016, which works as a buffer to reduce its exposure to the spot market in a scenario in which the total generation of hydropower is considerably lower than the allocated physical energy. Going forward, we expect the company to maintain 10% to 15% of its physical energy uncontracted for hedging purposes.

#### SOLID RESULTS IN DISTRIBUTION, DESPITE ECONOMIC VOLATILITY AND EVOLVING REGULATORY ENVIRONMENT

In 2017, the company's consolidated distribution energy volumes increased 1.1%, which was in line with the country's GDP growth. Electricity demand recovered after two consecutive years of economic downturn in 2015 and 2016, particularly in the state of Sao Paulo. On the other hand, service in the state of Espirito Santo remains challenging due to lower demand from captive industrial consumers. Going forward, we expect that electricity consumption in EDB's service areas will grow in the 2%-3% range in the next 12 to 18 months, supported by a gradual industrial production recovery and decline in unemployment rate.

Results in the distribution segment also benefited from favorable regulatory decisions aimed to mitigate the impact of high energy costs and the economic recession. For example, in February 2017, ANEEL revised its methodology related to periodic tariff adjustments and to the tariff flag mechanism to allow distribution companies to raise tariffs sooner based on a projection of their future energy

costs. More recently, ANEEL indicated no change on the WACC used to calculate tariff adjustments in the upcoming review cycle. Maintaining this rate at 8.09% will contribute to lower volatility to the company's future cash flows. Nevertheless, EDB still needs to complete large capital expenditures over the next two years to upgrade the distribution grids and comply with regulatory targets before the end of the review cycles in 2019.

The principal factors that could temper our view are low water reservoir levels, which could prompt energy-saving campaigns that limit demand growth for distribution companies; a slowdown in industrial output leading to an increase in unemployment; and the possibility that political uncertainty around the 2018 elections will put a damper on the economic recovery.

#### STABLE CREDIT METRICS AND ADEQUATE LIQUIDITY

The company's credit metrics improved over the last two years, as indicated by cash from operations before changes in working capital (CFO pre-WC) to total debt ratio of 26.7% and an interest coverage ratio of 3.5x in 2017; up from 19.4% and 2.4x, respectively, in 2016. On the other hand, EDB posted lower operating cash generation in 2017, as measured by Moody's adjusted Cash Flow from Operations of BRL802 million vs. BRL1.7 million in 2016, mostly driven by higher working capital needs due to payment of regulatory liabilities on the distribution segment and unpaid receivables from CCEE (Brazil's energy clearing house) regarding energy sales on the spot market.

We forecast CFO pre-W/C to Debt to remain around 25%-30% and interest coverage to reach up to 4.2x in the next 12-18 months, due to a combination of gradual economic recovery, favorable regulatory tariff adjustments and manageable exposure to hydrological risks. Credit metrics will likely deteriorate in 2020-2021, due to additional leverage incurred to support the company's new investments in the transmission sector. Nevertheless we expect metrics to remain appropriately positioned for the Ba rating category.

#### **EVOLVING CAPITAL STRUCTURE & INVESTMENT STRATEGY**

The company participates in the equity capital of certain hydro power generation projects comprising BRL3.3 billion debt, mainly long term BNDES loans, that are not fully consolidated in its balance sheet. Those investments include three operating hydro power plant (Santo Antonio Jari - 373.4 MW, Cachoeira Caldeirao - 219 MW and Sao Manoel 700 MW). Considering these investments in the proportion of EDB's ownership stake, Moody's calculated debt to capitalization ratio would be 51% for the fiscal year end 2017, up from the actual 42.5%.

In May 2017, EDB won four of 35 lots of power transmission licenses auctioned by Brazil's National Electric Energy Agency as part of a national development program aimed at boosting growth through private infrastructure. EDB's lots comprise 1,184 kilometers of new transmission lines involving BRL3.7 billion (\$1.2 billion) of regulatory investments through 2022, including one that will be developed with <u>Centrais Eletricas de Santa Catarina S.A</u> (CELESC, Ba3/A1.br positive), in which CELESC has 10% and EDB 90%. The four contracts involve the construction, operation and maintenance of transmission lines and substations in five different Brazilian states that aim to improve the national interconnected system's reliability. These new concessions are credit positive for EDB because they provide the company with greater and more stable cash flow generation owing to the regulated contracts' 30-year terms. Nevertheless, those greenfield investments encompass execution risks and prospectively higher leverage for the company.

On May 02 2018, EDB concluded the acquisition of 19.62% of CELESC's total equity capital comprising a total acquisition price of approximately BRL297 million. Last December, EDP has annouced its intention to exercise the rights inherent to the acquired shareholding stake, including the nomination of members to CELESC's Board of Directors. EDB's partnership with mature companies, such as CELESC, consolidates its strong footprint as a relevant player in the Brazilian electricity market. At the same time, the close involvement of EDB group in strategic decisions will further support CELESC's on-going efforts to improve operating efficiency and enhance its corporate governance.

#### LEVEL OF SUPPORT FROM EDP PORTUGAL

The ratings assigned for the EDB group factor the ownership of EDP - Energias de Portugal. The Brazilian operation represents around 18% of the EDP Portugal group's consolidated EBITDA. As a result, we believe that the Brazilian operations will continue to play an important role in the EDP group's growth strategy, reflecting in continued transfer of industry knowledge and expertise. On the other hand, EDP does not guarantee EDB's debt and the Portuguese parent expects that its subsidiaries will remain financially self-sustainable, as stated in its published policies.

## **Liquidity Analysis**

The liquidity position of EDB is adequate. The company reported BRL1.6 billion in consolidated cash and cash equivalent as of December 31, 2017, which compares favorably with BRL1.3 billion in debt maturities through December 31, 2018.

Like other Brazilian companies, EDB does not have committed banking facilities to face any unexpected cash disbursements, however we deem the company's liquidity as adequate given the company's good historical access to both banking and capital markets.

Liquidity standing of the parent holding company EDB is also adequate, given BRL827 million cash and cash equivalent position as of December 31, 2017 vis-à-vis BRL350 million of short-term debt due through December 31, 2018. EDB's large capital expenditure program will likely lead to larger refinancing needs in 2019 and 2020. We expect the company to finance new investments with a combination of internal and external sources of capital.

EDB's senior unsecured debentures have a maintenance financial covenant of net debt to EBITDA below 3.5x embedded in the indentures, which was at 2.0x in December 31, 2017. We expect the company to remain in compliance with this covenant over the next 12 to 18 months.



#### Exhibit 5 EDB's cash availabity and Debt Maturity Schedule As of December 31, 2017.

Source: Moody's Investor Service

## **Structural Considerations**

EDB's senior unsecured ratings of Ba3/A1.br are one notch lower than the corporate family rating on the global scale and two notches on the Brazilian national scale, to reflect the structural subordination of debt at the holding company level to that of the operating companies. Lenders to operating subsidiaries generally have claims on cash flow that are superior to those of the holding company creditors, which restricts the financial flexibility of the holding company.

## **Corporate Governance**

EDB has corporate governance practices that are above the average of Latin American issuers. EDB is a publicly listed company with shares traded on the Novo Mercado of BM&FBovespa. While its shares are only traded on the Sao Paulo stock exchange, the company undertook several steps beyond what is legally required to adapt the US Sarbanes-Oxley Act as part of its commitment of practicing superior standards of corporate governance.

EDB's Board of Directors is made up of eight members, of which four are considered independent. The board relies on four support committees: Audit, Sustainability, Corporate Governance and Related Parties, and Compensation. The Audit, Sustainability and Corporate Governance and Related Parties Committees are permanent in nature and are comprised of three members where at least one is independent. There is also a Fiscal Council composed of three members and three alternates elected for a maximum term of one year; however, this council is non-permanent and is convened only when requested by shareholders.

## **Rating Methodology and Scorecard Factors**

The grid implied rating from Moody's 12-18 month forward view of the Regulated Electric and Gas Utilities Industry methodology is Baa3, which is two notches above EDB's current rating.

Exhibit 6	
EDP - Energias do Brasil S.A.	

Regulated Electric and Gas Utilities Industry Grid [1][2]	Current FY 12/31/2017		Moody's 12-18 Month Forward View As of 5/3/2018 [3]	
Factor 1 : Regulatory Framework (25%)	Measure	Score	Measure	Score
a) Legislative and Judicial Underpinnings of the Regulatory Framework	Ba	Ва	Ва	Ва
b) Consistency and Predictability of Regulation	Ba	Ва	Ва	Ва
Factor 2 : Ability to Recover Costs and Earn Returns (25%)				
a) Timeliness of Recovery of Operating and Capital Costs	Ba	Ва	Ва	Ва
b) Sufficiency of Rates and Returns	Ba	Ва	Ва	Ва
Factor 3 : Diversification (10%)		-		
a) Market Position	Baa	Baa	Baa	Baa
b) Generation and Fuel Diversity	Baa	Baa	Baa	Baa
Factor 4 : Financial Strength (40%)				
a) CFO pre-WC + Interest / Interest (3 Year Avg)	3.0x	Baa	3.5x - 4.2x	Baa
b) CFO pre-WC / Debt (3 Year Avg)	23%	А	25% - 30%	А
c) CFO pre-WC – Dividends / Debt (3 Year Avg)	16%	Baa	10% - 20%	Baa
d) Debt / Capitalization (3 Year Avg)	42%	А	40% - 42%	А
Rating:				
Grid-Indicated Rating Before Notching Adjustment		Baa3		Baa3
HoldCo Structural Subordination Notching				
a) Indicated Rating from Grid		Baa3		Baa3
b) Actual Rating Assigned				Ba2

[1] All ratios are based on 'Adjusted' financial data and incorporate Moody's Global Standard Adjustments for Non-Financial Corporations. [2] As of 12/31/2017; [3] This represents Moody's forward view; not the view of the issuer; and unless noted in the text, does not incorporate significant acquisitions and divestitures. *Source: Moody's Financial Metrics* 

# Ratings

Exhibit 7	
Category	Moody's Rating
EDP - ENERGIAS DO BRASIL S.A.	
Outlook	Stable
Corporate Family Rating -Dom Curr	Ba2
NSR Corporate Family Rating	Aa2.br
Senior Unsecured -Dom Curr	Ba3
NSR Senior Unsecured	A1.br
PARENT: EDP - ENERGIAS DE PORTUGAL, S.A.	
Outlook	Stable
Issuer Rating	Baa3
Bkd Sr Unsec MTN -Dom Curr	(P)Baa3
Jr Subordinate -Dom Curr	Ba2
Commercial Paper -Dom Curr	P-3
LAJEADO ENERGIA S.A.	
Outlook	Stable
Issuer Rating -Dom Curr	Ba2
NSR Issuer Rating	Aa2.br
Senior Unsecured -Dom Curr	Ba2
NSR Senior Unsecured	Aa2.br
EDP ESPIRITO SANTO DISTRIBUICAO DE ENERGIA	
SA	
Outlook	Stable
Corporate Family Rating	Ba2
NSR Corporate Family Rating	Aa1.br
Senior Unsecured -Dom Curr	Ba2
NSR Senior Unsecured	Aa1.br
EDP SAO PAULO DISTRIBUICAO DE ENERGIA S.A.	
Outlook	Stable
Corporate Family Rating	Ba2
NSR Corporate Family Rating	Aa1.br
Senior Unsecured -Dom Curr	Ba2
NSR Senior Unsecured	Aa1.br
Source: Moody's Investors Service	

Source: Moody's Investors Service

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