

CREDIT OPINION

1 November 2022

Update



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RATINGS

Light S.A.

Domicile	Rio de Janeiro, Rio de Janeiro, Brazil
Long Term Rating	Ba3
Type	LT Corporate Family Ratings
Outlook	Stable

Please see the [ratings section](#) 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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Light S.A.

Update following rating affirmation, outlook changed to stable

Summary

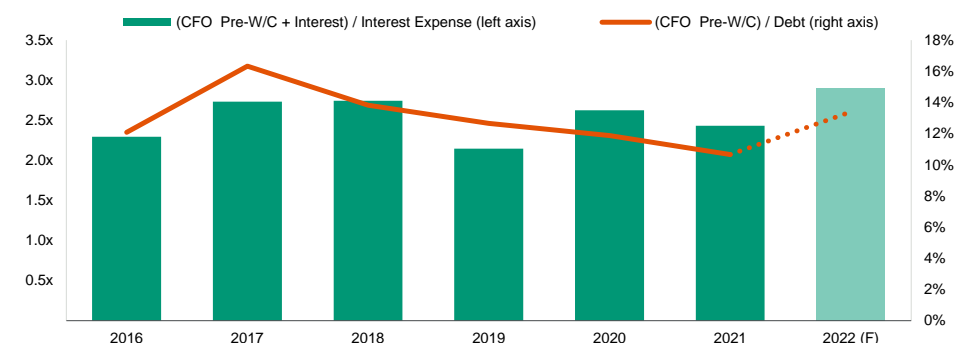
[Light S.A.](#) (Light, Ba3 stable) is a pure holding company with no direct debt. Therefore, its corporate family rating (CFR) is assigned on a consolidated basis and reflects the credit quality of its two main subsidiaries, [Light Servicos De Eletricidade S.A.](#) (Light SESA, Ba3 stable) and [Light Energia S.A.](#) (Light Energia, Ba3 stable).

Light's CFR incorporates the overall adequate regulatory framework that has been providing consistent tariff adjustments for Light SESA, as reflected in the 14.68% adjustment granted by the Brazilian Electricity Regulatory Agency (ANEEL) in March 2022, with some tolerance in consideration of the social and economic specificities of its concession area, subject to prudence requirements and not fully insulated from political pressures. The rating also considers the currently adequate liquidity profile and an expectation of gradual improvement in the company's credit metrics driven by ongoing business turnaround initiatives.

However, the company's credit profile is constrained by the high level of energy losses in its distribution segment, which remains well above the regulatory requirements, limiting the cash flow conversion rate. The pace of leverage reduction also remains limited by the company's capital spending. The renewal of Light SESA's concession contract, ending in June 2026, is also a key consideration for Light's credit profile. We assume the extension a likely scenario, considering the recent amendment to its concession contract allowing the possible renewal of the concession for another 30 years. However, the economic terms and conditions for the renewal remains uncertain at this point.

Exhibit 1

Consolidated credit metrics continue adequate for the rating category, although increasing uncertainties could delay the ongoing improvements



Sources: Moody's Financial Metrics™ and Moody's Investors Service estimates

Credit strengths

- » Overall supportive regulatory framework for electric utilities in Brazil
- » Improving operating performance
- » Adequate liquidity

Credit challenges

- » Light SESA's concession contract expiring in 2026
- » Challenging socioeconomic fundamentals of the concession area, leading to high delinquencies and capex requirements
- » Execution risks in implementing the company's business strategy

Rating outlook

The stable rating outlook incorporates our expectations that Light's consolidated credit metrics and liquidity will remain adequately positioned for its rating category over the next 12-18 months.

Factors that could lead to an upgrade

A rating upgrade could be considered with perceived improvement in regulatory support through compensatory mechanisms for structural losses, higher return on investments and better visibility into the terms and conditions for concession renewal. Quantitatively, the ratings could be upgraded if:

- » Cash Flow from Operations before changes in Working Capital (CFO pre-WC)/debt exceeds 15%, and
- » CFO pre-WC interest coverage reaches 3.5x, on a sustained basis.

Factors that could lead to a downgrade

A rating downgrade could result from Light's failure in improving its operating performance and cash flow generation or in reducing its debt outstanding. Delays to resolve the renewal of its concession ahead of debt maturities in 2026, or the perception of a weakening liquidity buffer to withstand its upcoming debt obligations could also exert negative pressures. Quantitatively, the ratings could be downgraded if:

- » CFO pre-WC/debt falls below 10%, or
- » CFO pre-WC interest coverage remains below 2.5x, for a prolonged period.

Key indicators

Exhibit 2

Light S.A

	LTM Jun-2022	2021	2020	2019	2018	2017
(CFO Pre-W/C + Interest) / Interest	3.0x	2.4x	2.6x	2.1x	2.7x	2.7x
(CFO Pre-W/C) / Debt	16.7%	10.7%	11.9%	12.7%	13.8%	16.3%
(CFO Pre - W/C - Dividends) / Debt	15.4%	9.2%	11.9%	12.2%	13.5%	16.3%
Debt / Capitalization	58.6%	55.4%	53.7%	56.6%	73.7%	68.7%

All ratios are based on adjusted financial data and incorporate our Global Standard Adjustments for Non-Financial Corporations

Source: Moody's Financial Metrics™

This publication does not announce a credit rating action. For any credit ratings referenced in this publication, please see the issuer/deal page on <https://ratings.moody's.com> for the most updated credit rating action information and rating history.

Profile

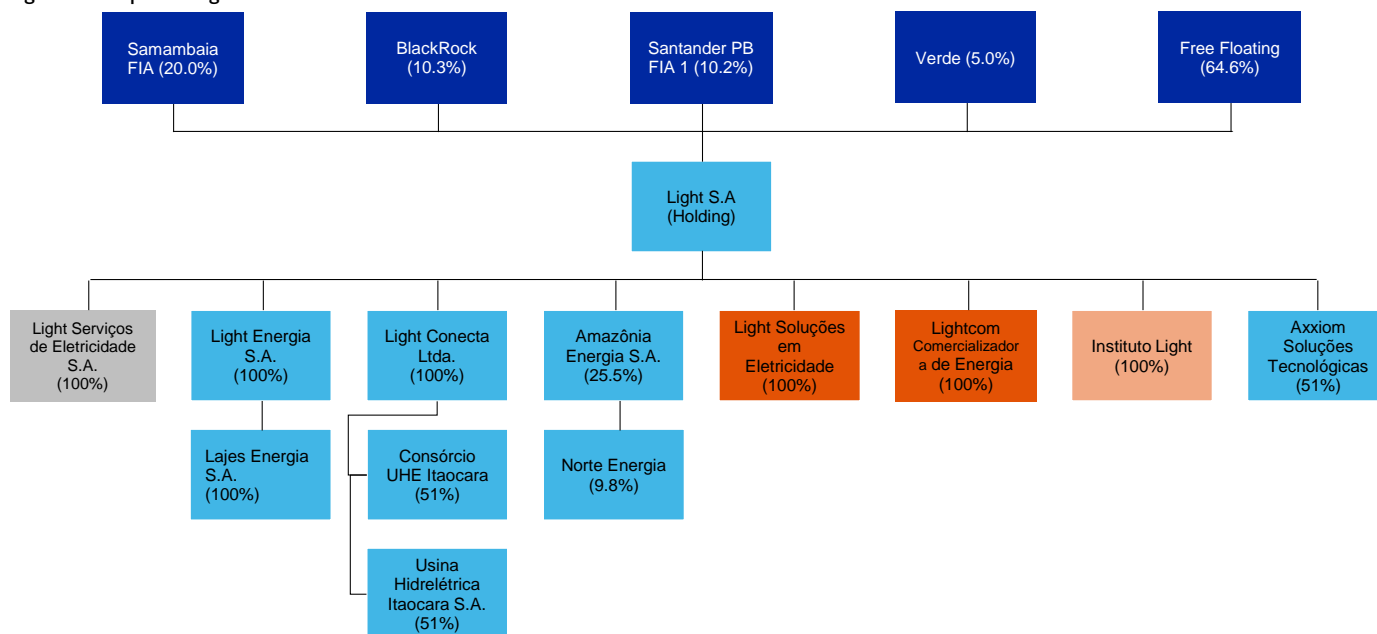
Headquartered in Rio de Janeiro, Light S.A. is a holding company with activities in generation, distribution and commercialization of electricity. Most of the company's capital is distributed among several domestic and international shareholders. The larger shareholders are Samambaia FIA has a 20.0% stake, BlackRock has a 10.3% stake, Santander PB FIA 1 has a 10.2% stake, Verde has a 5.0% stake and the remaining 54.6% is in free-float. For the 12 months that ended June 2022, Light had BRL14.9 billion in consolidated net revenue and BRL2.6 billion in EBITDA, according to our standard adjustments.

Electricity distribution accounted for 70% of its consolidated EBITDA in the 12 months that ended June 2022. The company's distribution business is operated by its wholly owned subsidiary, Light SESA, through a 30-year concession granted by the [Government of Brazil](#) (Ba2 stable) expiring in June 2026. Light SESA is the third-largest distribution company in Brazil in terms of supply revenue and the fifth largest in terms of distributed energy. The company serves about 4.3 million consumers through 31 municipalities in the state of Rio de Janeiro, including the Municipality of Rio de Janeiro.

Light's second-largest segment is hydro generation, which, through its direct subsidiary Light Energia, represented 24% of Light's consolidated EBITDA in the 12 months that ended June 2022. Light Energia comprises five hydro plants (Pereira Passos, Nilo Peçanha, Ilha dos Pombos, Santa Branca and Fontes Nova), with a total installed capacity of 855 megawatts (MW). The concessions mature between March and June 2028. The company also has direct full control of Lajes Energia S.A.. The third business segment involves energy commercialization in the unregulated electricity market through LightCom.

Exhibit 3

Light S.A. simplified organizational chart



As of October 2022

Source: Light

Recent developments

On 24 October 2022, we affirmed Light's Ba3 ratings and changed its outlook to stable from positive. The rating action reflects the overall adequate regulatory framework, the currently adequate liquidity and our expectation of a gradual improvement in the company's credit metrics, against the company's high level of energy losses in its distribution segment and the company's high capital spending. The rating action also took into consideration the increasing uncertainties that could delay the ongoing improvements on Light's consolidated credit metrics and challenge its liability management strategy, including the economic conditions for the renewal of the distribution concession in Rio de Janeiro, the execution risks to implement the company's new business strategy and the

legal uncertainties around the scope of the devolution of certain tax credits to consumers. Social and governance factors were highly relevant to the rating action, incorporating our views on demographic and societal trends and management track record.

We estimate that Light's consolidated (CFO pre-WC)/debt will reach 13% in 2022, up from 11% in 2021, reflecting better hydrology conditions in the country and the tariff increases since April. However, the interest coverage ratio will be about 1.9x, down from 2.4x in 2021, as a result of higher leverage and financial costs. The revised rating scenario incorporates continuity in the company's operating performance leading the (CFO pre-WC)/debt and interest coverage to approach or exceed 19% and 2.4x, respectively, in the next 18 months.

Detailed credit considerations

The renewal of Light SESA's concession contract is key for Light's credit profile

The renewal of Light SESA's concession contract, ending in June 2026, is a key consideration for Light's credit profile. The renewal of the concession is the most likely scenario, considering the recent amendment to its concession contract approved in November 2021 that highlighted provisions allowing the possible renewal of the concession for another 30 years. However, the economic terms and conditions remain uncertain at this point.

Light operates in one of the most complex concession areas in the country. As of June 2022, the regulatory target stipulates total losses of 21.3% over grid load, while in practice the company experiences higher losses around 26%-27%, driven by the social specificities of the concession area. This condition prevents the company from fully extracting the remuneration target on its legal asset base during the current concession period. Therefore, the investments made through this date of approximately BRL8.3 billion will likely require additional years for full recovery. The request for a concession renewal must be filed with the Brazilian Electricity Regulatory Agency (ANEEL) in up to 36 months before maturity, which means no later than June 2023.

The well-designed regulatory framework has a track record of supportive decisions, with some displays of political interferences

On 15 March 2022, ANEEL approved Light SESA's tariff review with an average adjustment of 14.68% that encompasses all classes of consumption (residential, industrial, commercial, rural and others). This review considered a new regulatory model that factors in the challenges of Light's complex service area. The adjustment index is made up of two components: structural, which becomes part of the 13.32% tariff, comprising the unmanageable (Portion A) and manageable (Portion B) costs; and negative financial component, which adds up to 1.34%, applied exclusively to the next 12 months, corresponding to the devolution of BRL1.05 billion in federal tax credits to customers.

Management expects the review to add around BRL770 million to Light's distribution EBITDA per year (around BRL540 million in 2022). The overall gain as a result of the tariff review over its five-year cycle is equivalent to a net present value of BRL2.8 billion, with a Weighted Average Cost of Capital (WACC) of 7.15% (assuming constant currency and constant market). The new tariffs entered into force as of 15 March 2022.

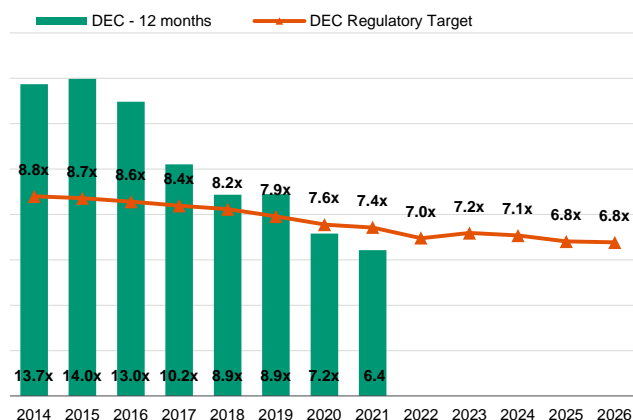
In October 2022, amid customer affordability concerns, ANEEL required a further 5.9% reduction in Light's tariff, which would translate into a reimbursement of an additional BRL800 million of federal tax credits that was not incorporated in the previous ratings' base scenario. This decision is now in a public consultation that will end on November 28. A final decision could be reached starting on ANEEL's next meeting on November 29. If approved, the proposed reduction will further dent Light's cash flow generation over the next 12 months, further delaying its leverage reduction trajectory.

The next periodic tariff review will be in five years in 2027, when the investments made in the network since 2022 may support a revision of the regulatory asset base, which is not yet reflected in our current forecast. Light has improved its quality of service indicators, measured by the frequency and duration of interruptions.

Exhibit 4

Duration of Interruptions Index (DEC)

In hours

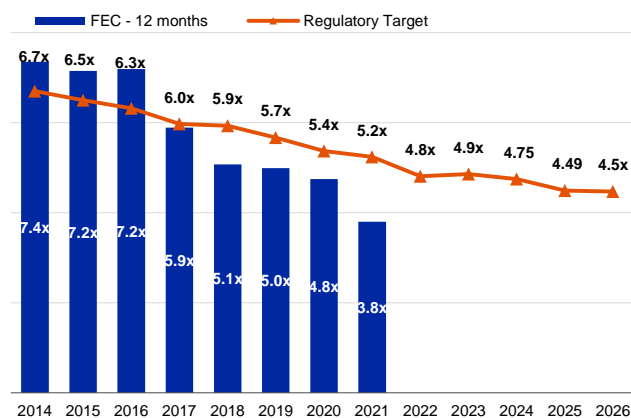


Sources: ANEEL

Exhibit 5

Frequency of Interruptions Index (FEC)

In number of occurrences



Sources: ANEEL

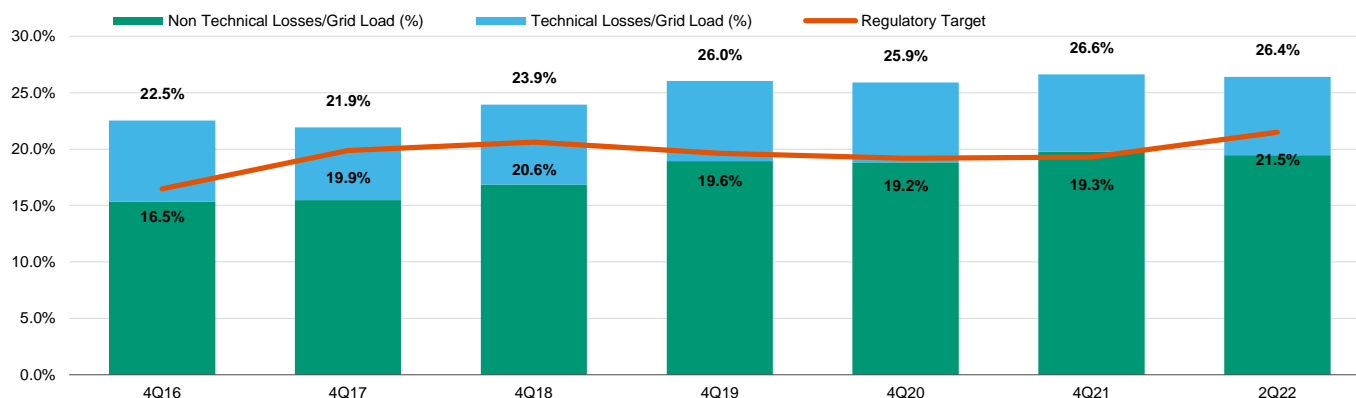
The company's strategy comes along with some execution risks

Light's new CEO was appointed in August and will have the challenge to get the company to streamline its cost structure, with a focus on lower operating, overhead and financial costs. We acknowledge the industry background of the new management, with a track record of improving the performance of similar distribution companies. However, the frequent changes in Light's board of directors and senior executives, seen since the company became a corporation in January 2021, have delayed the execution of its turnaround business strategy.

Weak socioeconomic profile of the concession area constrain improvements

In the 12 months that ended in June 2022, total losses for customers were 26.4% of the grid load, well above the regulatory target of 21.5%, reflecting the resistance to behavioral changes from delinquent consumers. Reducing energy losses remains the company's main operating challenge until the renewal of the concession in 2026. Light has been making significant efforts to reduce the endemically high loss rates in its concession area. We believe that material improvements over the next 18 months will be particularly challenging, given the weak socioeconomic conditions of its service area, with a high unemployment rate and substantial electricity thefts.

Exhibit 6

Total energy losses remain a significant challenge

Source: Company

During the 12 months that ended June 2022, the company was also able to advance in its plan of reducing nontechnical losses in the low-income areas to 3.4 MW (51% of the total nontechnical losses), from 4.2MW (60% of the total) in June 2021. However, total nontechnical losses remained high at 6.7MW. Additionally, delinquency also hurts collection, negatively impacting the company's cash

conversion rate, although we recognize a positive evolution in the last four quarters mainly because of Light's strategy to intensify its collections discipline, focused on administrative and technological actions. In June 2022, the ratio of the expected commercial losses from delinquent payments (Perda esperada para créditos de liquidação duvidosa - PECLD) to gross revenue was 2.6%, down from 3.0% in December 2021, but still above the pre-pandemic historical average of about 2%.

Light Energia's cash flow benefits the group's diversification

Light benefits from the diversification provided by the hydropower generation business, through Light Energia, which represented 24% of the consolidated EBITDA for the 12 months that ended June 2022. We expect the subsidiary to continue to support Light's consolidated cash flow, led by improved hydrologic conditions and the success of its energy commercialization strategy.

Light Energia's revenue is supported by the medium-term bilateral PPAs with unregulated ("free") customers. The company has not adhered to the law #13,203/2015, which established the terms on the renegotiation of the hydrological risks in 2015 and the acquisition of risk insurance policies. To mitigate hydrology risks, the company maintains a portion of uncontracted energy in the range of 20%-30% and executes seasonal trading strategies. Nonetheless, we see potential downward pressure on energy prices, given the current excess capacity and the fact that industry development costs are consistently declining, particularly for renewables.

Light Energia is exposed to some counterparty risks, which are mitigated through the use of financial guarantees and take-or-pay provisions. Early termination options usually entail onerous conditions that deter counterparties from exercising them all the time. Following the easing of social-distancing measures, we do not expect Light's free customers to push for exit contracts or exercise force majeure claims to reduce their own penalties. Negotiated solutions will likely prevail rather than legal disputes, but they will not insulate from eventual delinquencies.

ESG considerations

Light S.A.'s ESG Credit Impact Score is Highly Negative CIS-4

Exhibit 7

ESG Credit Impact Score

CIS-4

Highly Negative

For an issuer scored CIS-4 (Highly Negative), its ESG attributes are overall considered as having a discernible negative impact on the current rating. The negative influence of the overall ESG attributes on the rating is more pronounced compared to an issuer scored CIS-3.

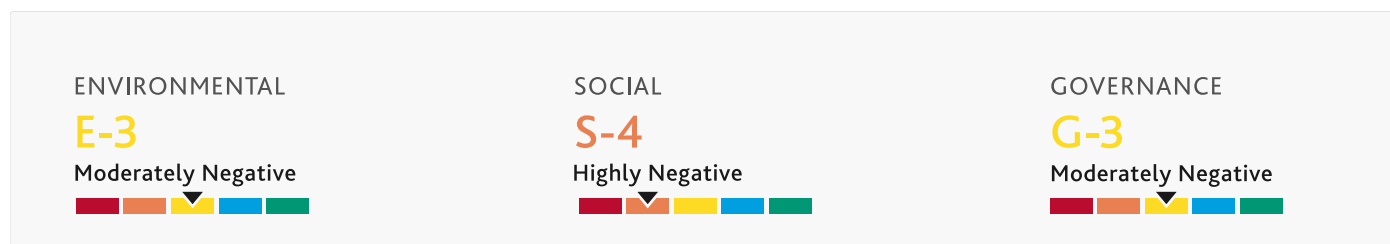


Source: Moody's Investors Service

Light S.A.'s (Light) ESG Credit Impact Score is highly negative (**CIS-4**) which indicates its ESG attributes are considered to have a negative impact on the current rating. The score reflects the combination of highly negative exposure to social risks and moderately negative exposure to environmental and governance risks.

Exhibit 8

ESG Issuer Profile Scores



Source: Moody's Investors Service

Environmental

We assess Light's exposure to environmental risks as moderately negative (**E-3** issuer profile score) mainly driven by its exposure to physical climate risks, mostly in the form of extreme weather patterns. These risks are offset by a positive carbon transition exposure, since the company has minimal fossil fired generation.

Social

The exposure to social risk is highly negative (**S-4** issuer profile score) reflecting the risk that demographic and societal trends that increase public concern over environmental, social, or affordability issues could lead to adverse regulatory political intervention, broadly in line with other utilities in Latin America region. These risks are balanced by neutral to low risks to health and safety, human capital, customer relationships and responsible production.

Governance

Governance risks are moderate (**G-3** issuer profile score) and speaks to the company's management credibility and track record. Over the past few years, the company has experienced above average management turnover, blurring the predictability and stability of its projections and adding execution risk to its strategy. Our governance score also considers a neutral-to-low exposure to financial strategy and risk management, organizational structure, compliance and reporting and board structure policies and procedures.

ESG Issuer Profile Scores and Credit Impact Scores for the rated entity/transaction are available on Moodys.com. In order to view the latest scores, please click [here](#) to go to the landing page for the entity/transaction on MDC and view the ESG Scores section.

Liquidity profile

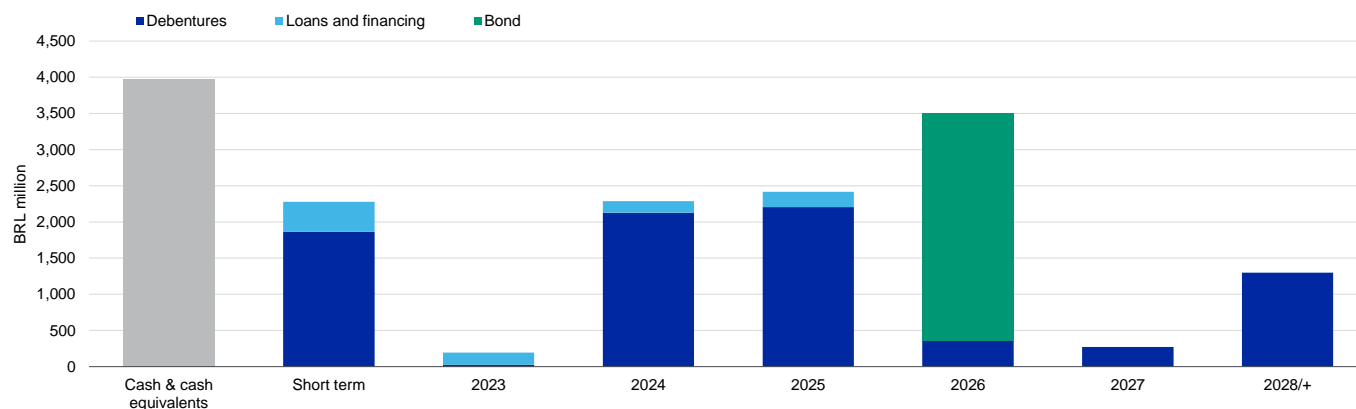
We consider Light's liquidity profile adequate. As of June 2022, Light reported BRL4.0 billion in cash and equivalents, compared with BRL2.3 billion in short-term debt maturities. In June 2021, Light concluded a bond issuance of \$600 million (\$400 million for Light SESA and \$200 million for Light Energia, both guaranteed by Light S.A.). The notes mature in June 2026 and will be entitled to semiannual interest of 4.375% per year. The company contracted a hedge for the entire flow of the operation, in the full swap modality, with an average cost of 144.10% of the interbank lending rate (CDI). The funds were primarily used for the early redemption of all 7.25% notes units with maturity in 2023 issued by Light SESA and Light Energia. Also, in April 2022, Light SESA issued its 24th debenture amounting BRL1.3 billion, maturing in two years, payable in a single installment and accruing interest at CDI + 1.95% per annum. The proceeds from the issuance will be used to strengthen working capital and refinancing.

According to Light's debt indentures, the company is required to maintain total net debt/EBITDA of less than 3.50x on a consolidated basis. As of June 2022, Light reported net debt/EBITDA of 3.23x, below the 3.48x reported in December 2021. Also, in June 2022, Light's average debt nominal cost was 13.5%, and its debt is 35% indexed to consumer price index (IPCA) and 65% to CDI.

Exhibit 9

Light's debt amortization schedule

As of June 2022



Sources: Company and Moody's Investors Service

Structural consideration

Light's Ba3 CFR reflects its consolidated debt structure, which essentially consists of senior unsecured obligations, either debentures or loans with domestic banks. The senior unsecured issuer ratings of Light SESA and Light Energia are at the same level as the ratings of the parent. This reflects the high degree of financial links between Light SESA, Light Energia and other subsidiaries within the Light group because of the cross-default provisions embedded in its debt documents. Additionally, the restrictions on debt represented by debt maintenance financial covenants present at the debt arrangements of each operating subsidiaries are based on Light's consolidated debt, which reinforce our view that the probability of default is broadly equivalent within the Light group.

Methodology and scorecard

The principal methodology used in rating Light is our [Regulated Electric and Gas Utilities](#) rating methodology, published on 23 June 2017. Light's scorecard-indicated outcome is Ba1 in our next 12-18-month forward view. Nonetheless, the company is rated Ba3 to reflect the increasing uncertainties that could delay the ongoing improvements on the company's consolidated credit metrics.

Exhibit 10

Rating factors

Light S.A.

Regulated Electric and Gas Utilities Industry [1][2]			Current LTM 6/30/2022		Moody's 12-18 Month Forward View As of 10/24/2022 [3]	
Factor 1 : Regulatory Framework (25%)	Measure	Score	Measure	Score	Measure	Score
a) Legislative and Judicial Underpinnings of the Regulatory Framework	Ba	Ba	Ba	Ba	Ba	Ba
b) Consistency and Predictability of Regulation	Ba	Ba	Ba	Ba	Ba	Ba
Factor 2 : Ability to Recover Costs and Earn Returns (25%)						
a) Timeliness of Recovery of Operating and Capital Costs	Ba	Ba	Ba	Ba	Ba	Ba
b) Sufficiency of Rates and Returns	Ba	Ba	Ba	Ba	Ba	Ba
Factor 3 : Diversification (10%)						
a) Market Position	Ba	Ba	Ba	Ba	Ba	Ba
b) Generation and Fuel Diversity	Ba	Ba	Ba	Ba	Ba	Ba
Factor 4 : Financial Strength (40%)						
a) CFO pre-WC + Interest / Interest (3 Year Avg)	2.5x	Ba	2.7x - 3.2x	Ba	2.7x - 3.2x	Ba
b) CFO pre-WC / Debt (3 Year Avg)	11.2%	Ba	13% - 17%	Baa	13% - 17%	Baa
c) CFO pre-WC – Dividends / Debt (3 Year Avg)	10.6%	Baa	10% - 14%	Baa	10% - 14%	Baa
d) Debt / Capitalization (3 Year Avg)	57.4%	Ba	47% - 50%	Baa	47% - 50%	Baa
Rating:						
Scorecard-Indicated Outcome Before Notching Adjustment		Ba2				Ba1
HoldCo Structural Subordination Notching						
a) Scorecard-Indicated Outcome		Ba2				Ba1
b) Actual Rating Assigned						Ba3

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

[2] As of 6/30/2022 (L)

[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 Investors Service

Ratings

Exhibit 11

Category	Moody's Rating
LIGHT S.A.	
Outlook	Stable
Corporate Family Rating	Ba3
LIGHT SERVICOS DE ELETRICIDADE S.A.	
Outlook	Stable
Issuer Rating -Dom Curr	Ba3
Bkd Senior Unsecured	Ba3
LIGHT ENERGIA S.A.	
Outlook	Stable
Issuer Rating -Dom Curr	Ba3
Bkd Senior Unsecured	Ba3

Source: Moody's Investors Service

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