





#### [GRI 102-14]

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2019 was emblematic for Light's history. We started to have a widespread shareholding control and a completely professional management – Board of Executive Officers and Board of Directors –, committed to generating sustainable results for the company.

In our Annual Report, we describe our business model, strategies and actions that reaffirm Light's commitment to sustainable development, the principles of the Global Compact and the UN Sustainable Development Goals (SDGs).

We follow the guidelines of the Global Reporting Initiative (GRI), in the Standards version, and the International Integrated Reporting Council (IIRC), promoting integration between the several accountability documents of the company.

In July, we concluded an offer of shares through which we raised R\$ 1.8 billion, entirely intended for the distribution activity, and in which Cemig sold about 35% of the shares it held in the company, reducing its stake to 22.6%. With the spread of the shareholding control, Light became a true corporation.

With a new shareholding structure and management aligned with the interests of the entirety of the shareholders, we have structured a turnaround plan that outlines the strategy for delivering results based on four pillars:

- **1.** Fight to energy loss
- 2. Liability management
- 3. Reduction of PMSO and CAPEX priority
- **4.** Reduction of legal contingencies

RESULT

But, to deliver results, the main pillar is the company's culture, focused on results, with the alignment of interests between the Management, employees and shareholders in pursuit of the objectives set. Thus, in July, a stock option plan was approved at the General Shareholders' Meeting for the Statutory Board and selected superintendents. In addition, all employees receive bonuses or profit sharing linked to objective goals, in line with the turnaround plan. We reinforced with our employees our "Jeito de SER" ("Way of BEING") – focused on safety, ethics and generation of sustainable results –, and we are working, day after day, in the construction of a corporate culture of a private company, oriented towards management excellence and generation of value.

From the operational point of view, one of Light's biggest challenges is the reduction of energy loss, due to the complexity of its concession area. In order to face this historic problem, we have carried out a complete restructuring of the way we operate. We made significant changes in the staff, taking advantage of internal talents and attracting market professionals, giving priority to field teams, investing in training and aligning the compensation policy, including that of service providers. In addition, we created regional managements, with specific action plans according to the characteristics and complexity of each of the regions in which we operate. We also invested in tax measurement and adopted tools for targeting and real-time monitoring of possible fraud inspection targets, optimizing the investments already made in our Measurement Control Center and in the more than one million electronic meters already installed and remotely measured (about 25% of the amount of customers), among other actions.

We remain focused on the "possible" areas, where we are able to operate normally, but we started to prioritize actions that promote the effective incorporation of energy and permanence in the formality of regularized customers. We consider that only then will it be possible to reduce energy loss in a permanent and sustainable manner.

Also in the fight against loss, we have acted in shielding the aerial network in regions whose customers have a behavior of repeated theft of energy and in those where measurement has already been improved. We also intensified the regularization of clandestine connections in condominiums and unregistered buildings. These actions are being important vectors for the incorporation of energy and the consequent recovery of the market.

As a result of the implementation of these measures, we were successful in interrupting the loss growth trajectory. In the first half of the year, the loss advanced more than 10%, whereas in the second half it remained stable. In 2020, with the continuity and improvement of the actions developed, even more positive results are expected.

At the end of 2019, we carried out a comprehensive revaluation of the Accounts Receivable of the company, in view of the expectation of future receipt of outstanding balances. This initiative is in line with the new plan to fight loss, after the diagnosis concluded in the middle of the last quarter. As a result, we recognize a non-recurring and extraordinary impact on income of approximately R\$ 525 million. Disregarding this impact, the provision related to customer payments remained in line with Light's historical levels.

In order to ensure the quality of supply to our customers, we invested more than R\$ 395 million in the distribution network in 2019, which represented an increase of 10% compared to last year. And, as a result of the good management practices and investment effectiveness already consolidated in our engineering team, we obtained excellent results in the quality indicators (DEC and FEC), which ended the year at 7.77 hours and 4.31 times, respectively, both within the limits provided by Aneel. We highlight that, year after year, we have registered improvement in these indicators and today we are among the best distributors in the country, with more than one million customers.

In the area of customer relations, we implemented important changes and improvements to facilitate, provide agility and increase efficiency in solving problems. Accordingly, we are working on the review of internal procedures and investing in the digital relationship. We can highlight the improvement in training and management of the call center and Ombudsman and the modernization of the Virtual Branch (web relationship platform).

The improvement in customer service and in the management of the commercial area is closely linked to the reduction of the company's legal contingencies, one of the pillars of the turnaround plan. Nevertheless, in order to complement these efforts, we carry out initiatives within the scope of our legal area, such as the promotion of greater synergy with the





commercial area, the development of a new model for contracting, controlling and inspecting law firms, in addition to improving the grants that serve as the basis for the company's defenses.

Despite the recent changes, we have already obtained positive results, especially in the Special Civil Court (JEC), where more than 45% of the company's contingencies lie. At the end of 2019, we observed a 20% reduction in new lawsuits. In 2020, with the continuity and improvement of our actions, a reduction in the filing of demands against the company is expected.

An important milestone recorded in the second stakes half was the reduction of the distributor's PMSO, as a result of the improvement of internal procedures, the more effective control of agreements with third parties and the insourcing strategy. We observed a consecutive decrease in 3Q19 and 4Q19, compared to the same periods last year, of 8.3% and 7.3%, respectively.

In the scope of liability management, with the proceeds from the stock offer concluded in July, it was possible to rebalance the company's capital structure, anticipating the payment of more onerous debts and, also, taking advantage of opportunities in the local debt market, raising funds with lower cost and longer term.

We ended the year with a net debt of R\$ 6.7 billion, R\$ 1.2 billion less than in 2018, and with a robust cash position of R\$ 1.7 billion. As a result, the Net Debt/Ebitda indicator in 2019 was 2.98 times, below the limits provided for in debt agreements. It is also worth mentioning that the healthier capital structure resulted in the upgrading of the local rating by Moody's, which became A2.br.

In addition to the execution of the turnaround and in order to allow total focus on the distribution activity, we started the plan to divest non-core assets with the sale of the interests and credits of Light in Renova. This transaction removed the possible risks to Light with the challenging and uncertain future of Renova.

RESULT

Also within the scope of divestments, we intend to proceed with the sale of shareholding in investments in which we do not have control.

We also highlight, in the income for the year, the final decision of the lawsuit in which the exclusion of ICMS from the PIS/Cofins base was recognized. As a result, we recognized recoverable credits of R\$ 6.2 billion, which, according to our legal advisors, we consider to be part of Light and the other of our customers. Currently, the amount and method of transfer of part of the credits of Light to consumers are under analysis by Aneel and we have been actively collaborating in the necessary clarifications to ensure the company's right.

We will continue with our policy of prudent investments, always attentive to the basic formation of regulatory assets, giving priority to those aimed at modernizing our distribution network and fighting loss. In relation to the generation segment, in 2020, we will start the maintenance works of the spillway of Ilha dos Pombos and we will complete the necessary studies for environmental licensing and the construction of the by-pass tunnel in Lajes Complex, which will interconnect the reservoirs of Vigário and Ponte Coberta. We expect the tunnel to be operational by 2023.

In 2019, we made great progress and built the pillars of our turnaround. And the operating results for the second half confirm that we are on the right track. We believe in our energy and we will take Light to the level of excellence it deserves.

Enjoy your reading!

**David Zylbersztajn** Chairman of the Board of Directors

#### Ana Marta Horta Veloso

CEO and Investors Relation Officer

PRIVATE COMPANY CULTURE FOCUS ON RESULTS

Taking into account the advance of Covid-19 pandemic and the essential nature of the service provided by Light, we have adopted some measures to guarantee the continuity of our service to society and, at the same time, to ensure the well-being and health of our employees and customers.

On March 12, we implemented a crisis committee composed of representatives from different areas of the company to monitor the progress of the pandemic and assist senior management in making decisions that ensure the provision of a quality service and safeguard the physical integrity of employees and customers.

Among the main initiatives, we can mention the implementation of teleworking for all administrative teams, the withdrawal of risk groups and medical follow-up, the availability of gel alcohol in all buildings and vehicles, distribution of protective masks, the measurement of employees' temperature and general public entering the company's facilities and the anticipation of the H1N1 vaccination campaign.

In addition to these measures, we have prioritized the fulfillment of requests for hospitals, either for a new power connection or for an increase in load/demand. We are anticipating the needs of these customers and making procedures more flexible due to the brevity required in this type of request.

The recommendation for containment, as determined by the City and State of Rio de Janeiro at the end of March to reduce contagion with the new Coronavirus, led to a lower demand for energy in the concession area of Light, concentrated in the commercial retail and power-intensive industry activities.

On March 24, Aneel approved measures to guarantee the provision of the power distribution service, such as prohibiting the suspension of supply due to default by urban and rural residential consumers (including low income), in addition to essential services and activities (for example, hospitals). This measure does not prevent collections of overdue debts, including the inclusion of defaulters in the list of credit registrations bodies.

Aneel also allowed the temporary suspension of face-to-face service to the public. In this sense, Light interrupted the service in its commercial agencies, starting to direct and serve customers in digital channels, such as Virtual Agency, WhatsApp, Facebook and Twitter.

Also in the regulatory scope, on April 8, Provisional Measure (MP) No. 950 was approved, which provides for the allocation of resources from the National Treasury to an industry fund to subsidize low income consumers with a consumption of a maximum of 220 kWh by the end of June. This MP also provides for the discussion of measures that will ensure the economic and financial balance for distributors, which is currently being dealt with by Aneel and the Ministries of Mines and Energy and Economy.

Also in April, in order to reinforce the distributors' cash, Aneel released more than R\$ 1.5 billion in industry funds, having Light receiving an amount of approximately R\$ 105 million.

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Additionally, in April, we also perform actions to reinforce cash. Light SESA issued R\$ 400 million in debentures, and we obtained approval from Aneel to make a loan from Light Energia to Light SESA of up to R\$ 500 million.

# **SOCIAL RESPONSIBILITY ACTIONS**

In view of the impacts of the Covid-19 pandemic and in attention to the demands of society, Light has been performed several actions aimed at the population health and needs.

We also highlight a donation of R\$ 1.5 million Reais to Fiocruz's emergency fund to support the production and acquisition of Covid-19 rapid diagnostic test kits – an initiative in conjunction with other companies in the electricity sector, and the free supply of energy to the field hospital set up in Leblon neighborhood, Rio de Janeiro, which will have a total capacity of 200 beds.

We also donated 300 thousand hygiene items to communities in which we operate.

In addition, we intensified communication actions through advertising, social networks and the press in order to get even closer to society, informing about the crucial role of the company, and the initiatives in the current context.

And, with the suspension of the activities at Centro Cultural Light, we redirected the educational programming to digital channels, bringing information and entertainment to children and families during times of confinement.



- **b** 100% Integrated
  - 27,658 GWh billed Market distribution
  - **1.2 GW** asset generation
  - 669 MWm trading

# **Net BRR**

2<sup>nd</sup> largest of Brazil Approximately **R\$10 billion** 



# **GDP**

2<sup>nd</sup> largest of Brazil

Concession area concentrated in the State of RJ

# **( )** Concentrated concession area

- 6<sup>th</sup> largest of Brazil
- **4.4 million** customers
- +11 mm people served

# **Workforce**

**12,603** employees

# **Light SESA**

- **2**<sup>nd</sup> **more complex** concession of Brazil
- **4**<sup>th</sup> largest cross linked underground system of the world
- **3**<sup>rd</sup> in supply revenue
- **5<sup>th</sup> in power** consumption
- **78,765 km** grid
  - 72,964 km area
  - 5,801 km underground





Profil

#### [GRI 102-1, GRI 102-2, GRI 102-4, GRI 102-5, GRI 102-7, GRI 102-10, GRI 102-45]

Light is an integrated company in the Brazilian electricity sector, active in the segments of generation, transmission, distribution and trading of energy.

The State of Rio de Janeiro has an area of 43,750 km and a population of approximately 17.2 million people<sup>1</sup>. Light's concession area covers 26% of this total (11.307 km<sup>2</sup>), where 11 million people live, that is, 64% of the total population of the State. From the 92 municipalities in the state, with a total of seven million consumers, the company operates in 31 of them.

Light SESA distributes energy to 4.4 million consumers through a 78,765 km long network, including the entire Metropolitan Region of Rio de Janeiro, the state with the second largest GDP in the country. In total, there are 37 service branches spread across different locations.

With regard to energy generation, considering the Light Energia plants and the stakes in Paracambi, Belo Monte and Guanhães, the company has a total of 1,188 MW of installed capacity.

In the energy trading segment, LightCom operates in the intermediation of purchase and sale operations, serving the free consumer market.

Ebitda, according to the Brazilian Securities and Exchange Commission (CVM), is the net profit or loss before the net financial 2 result, income tax and social contribution, depreciation and amortization, minority interests and equity in earnings. The adjusted Ebitda represents the CVM Ebitda minus equity in earnings and other operating income/expenses.

Light's workforce is comprised of

5,186 own employees 186 disabled employees

7,417 outsourced employees

55 trainees.

Our net revenue, in 2019, totaled

# **R\$ 12.7 billion**

and we reached an adjusted Ebitda<sup>2</sup> of

**R\$ 1,962 million** 

RESULT



IBGE data for year 2018.

INTRODUCTION



TURNAROUND PLAN

As of December 31, 2019, the shareholding structure of Light S.A. was composed as follows: Cemig with 22.6%, BNDESPAR with 6.3% and other shareholders with 71.1%. Light S.A. has over 35 thousand shareholders, being approximately 34 thousand individuals who hold approximately 5% of the company's shares.

FIA Samaml	baia Demais	Shareholders		
10.17%		67.25%		
ght S.A. (Ho	lding)			
5%	100%	100%	100%	51%
nia	Light Com	Light Soluções em		Axxiom Solu

ABOUT THE REPORT

COMMITMENTS

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Profile

# HOLDING

## Light S.A.

Light S.A. is listed on B3's Novo Mercado (Brasil Bolsa Balcão), under the acronym LIGT<sup>3</sup>, and on the American OTC market (Over-the-Counter) under the acronym LGSXY. Its shares in B3 ended the year quoted at R\$ 23.76 and its market value at R\$ 7.2 billion, an increase of 112% over the end of 2018.

# **DIRECT SUBSIDIARIES**

# Light Serviços de Eletricidade S.A. (Light SESA)

Light SESA is the third largest energy distributor in Brazil in terms of supply revenue and the fifth largest in amount of energy distributed, according to 2019 data from the Decision Support System of the National Electric Energy Agency (Aneel). It has the second most complex concession in Brazil and the fourth largest cross linked underground system in the world. In 2019, it was responsible for billing 27,658 GWh, related to the consumption of captive customers, and for the use of the grid by free customers and other distribution companies.

# Light Energia S.A.

The generation park of Light Energia comprises five hydroelectric plants and a small hydroelectric plant, which together total 873 MW of installed capacity. They are:

- Fontes Nova, Nilo Peçanha, Pereira Passos and PCH Lajes, which compose Lajes Complex, in Piraí/RJ;
- Ilha dos Pombos, in Carmo/RJ;
- Santa Branca, in the municipality of Santa Branca/SP.

Lajes Complex also includes two lift plants: Santa Cecília and Vigário.



RESULT

In 2019, Light Energia generated 4,253.50 GWh and acquired 1,121.58 GWh on the Free Market, which represented, respectively, an increase of 1.4% and a reduction of 4.15% in comparison to same period of the previous year. In 2018, 231,019.05 MWh of energy were sold in the spot market; and, in 2019, 250,175.87 MWh. Even though the acquisition of energy in the Free Market in 2018 was greater than in 2019, this increase in sales in the spot market was mainly due to the largest Generation Scaling Factor (GSF) in 2019. For 2020, the assured energy from Light Energia is 621 average MW, from which 435 average MW are currently contracted.

Light Energia is the parent company of Lajes Energia S.A., responsible for the implementation, operation, maintenance and commercial operation of PCH Lajes, with 17.5 MW rated power.

## LightCom Comercializadora de Energia S.A.

It develops energy commercialization businesses – buying and selling – in the short and long term, in the Free Market, as well as provides consultancy services to customers in the several sectors of the economy. In 2019, 669 MWm were sold at an average price of R\$ 187.6/MWh. This volume was 15.6% lower than in 2018, mainly due to the expiration of some long-term agreements for final consumers and the reduction of short-term operations with traders.

#### Light Conecta Ltda.

Its corporate purpose is to carry out the design, construction, installation, operation and use of power generation plants. The company has a 51% stake, through Light Energia, in Consortium Usina Hidrelétrica (UHE) Itaocara and 51% in UHE Itaocara S.A., jointly controlled with CEMIG GT, implemented to build UHE Itaocara and whose purpose is the concession of the use of public assets for the exploration of UHE Itaocara I.

In 2019, UHE Itaocara S.A. terminated all of its energy sale agreements (CCEARs) and is seeking a balanced solution with ANEEL for the return of the concession.

**<sup>3</sup>** Term in English to represent the hydrological risk.

Light Conecta is also responsible for developing businesses related to the company's core business, with the purpose of deepening knowledge and relationships with customers of Light SESA, providing solutions that add value to the services already provided.

# Light Soluções em Eletricidade Ltda.

Its purpose is the provision of installation, renovation and maintenance services for premises in general for customers in the low voltage segment.

# Instituto Light para o Desenvolvimento Urbano e Social

Its corporate purpose includes participation in social and cultural projects for the economic and social development of the cities.

# **ASSOCIATES<sup>4</sup>**

# Guanhães Energia S.A.

Guanhães is responsible for the implementation and operation of the PCHs Dores de Guanhães (14 MW), Senhora do Porto (12 MW), Fortuna II (9 MW) and Jacaré (9 MW), totaling 44 MW of installed power and a physical guarantee of 23.3 average MW. The PCHs are located on the Guanhães and Corrente Grande rivers, in the state of Minas Gerais.

On August 21, 2015, the PCHs were the winners in Auction A-3, in which the energy was contracted for sale for a period of 30 years, at the price of R\$ 205.50 MWh. Since May 2019, the four PCHs are in commercial operation.



### Lightger S.A.

Lightger was created with the purpose of implementing, operating, maintaining and carrying out commercial exploitation of PCH Paracambi, with an installed capacity corresponding to 25.7 MW and two generating units, which went into operation in 2012.

## Amazônia Energia Participações S.A.

Amazônia Energia acts as shareholding, with 9.8% of the capital stock of Norte Energia S.A. (Nesa), with significant influence on the management, but without joint control. Nesa is the company holding the concession for the use of public assets for the exploration of the UHE Belo Monte. Located on Xingu River, in the State of Pará, UHE Belo Monte is the largest 100% Brazilian power plant. It has an installed capacity of 11,233 MW and a physical guarantee of 4,571 average MW, enough energy to supply approximately 18 million homes.

In operation since April 2016, the plant currently has all generating units released for commercial generation. There are 18 in the Main Power House (Belo Monte site), with an installed capacity of 11,000 MW, and six in the Complementary Power House (Pimental site), with 233,1 M.

## Axxiom Soluções Tecnológicas S.A.

It is a company responsible for offering technology solutions and systems for operational management.

Profile

# CURRENT GENERATION COMPLEX [GRI EU1]

		Beginning	<b>Concession/Authorization</b>	
Installed capacity (MW)*	Tangible Guarantee (MWm)*	of the Operation	Maturity Year	% of Light Participation
132	99	1940	2026	100%
380	334	1953	2026	100%
100	49	1962	2026	100%
187	109	1924	2026	100%
56	30	1999	2026	100%
-	- 101			
18	17	2018	2026	100%
13	10	2012	2031	51%
280	114	2016	2045	2.49%
22	12	2018	2047	51%
1,188	672	-	-	-
	380 100 187 56 - 18 18 13 280 22	132       99         380       334         100       49         187       109         56       30         - 101       11         18       17         13       10         280       114         22       12	Installed capacity (MW)*         Tangible Guarantee (MWm)*         of the Operation           132         99         1940           380         334         1953           100         49         1962           187         109         1924           187         109         1924           187         109         1924           187         101         2018           18         17         2018           133         10         2012           134         114         2016           135         114         2018	Installed capacity (MW)*         Tangible Guarantee (MWm)*         of the Operation         Maturity Year           132         99         1940         2026           380         334         1953         2026           100         49         1962         2026           101         1962         2026         2026           102         1993         2026         2026           103         109         1924         2026           104         1999         2026         2026           105         30         1999         2026           106         -101         100         2026           107         2018         2026         2026           108         -1011         100         2026           109         2018         2026         2031           101         2012         2031         2031           101         2016         2045         2045           101         2016         2045         2047

\*Proportional stake of Light.

On October 13, 2019, Light Energia entered into an agreement to sell all of its shares in Renova, equivalent to 17.17% of the capital stock, for R\$ 1.00, to CG I Fundo de Investimento. Also within the scope of this transaction, LightCom assigned all the credits it had with Renova to the fund that acquired the company.



After notifying the other controlling shareholders, Cemig GT and BNDESPAR, about their tag along<sup>5</sup> rights and primacy, the transaction was completed with an effective transfer of shares on October 15, 2019.

	🔂 Human	PUBLICS	IMPACTS	MEANS TO GENERATE VALUE	INDEXES
Profile	Competences, knowledge, and individual abilities that compose the collection of experiences and organizational culture. Actions to align the workforce to the organizational culture and to our strategies, including training, internal communication, engagement and promotion of integration among the areas.	Work force, suppliers, and companies of the sector.	<ul> <li>Job Creation;</li> <li>Qualification of workforce;</li> <li>Workplace safety and Public Safety</li> <li>Fees and sanctions related to service provision;</li> <li>Accidents at work</li> <li>Accidents with the population</li> </ul>	Correct performance of patterns stablished in the strategic planning, aligned to the goals and requirements of the interested parties.	<ul> <li>Training hours;</li> <li>Accidents Frequency Rate;</li> <li>Fee and sanctions due non-conformity with laws and regulations;</li> </ul>
	Intellectual				
	Tacit knowledge, rules and organizational proceedings, corporate systems, patents, licenses, technologies, P&D projects, among others. It also involves the processes of knowledge management.	Academy, business partners and work-force.	<ul> <li>Investment in P&amp;D and innovation;</li> <li>Partnership with universities and research centers;</li> <li>Dissemination of knowledge;</li> <li>Risk of no improvement on innovation chain.</li> </ul>	New technologies, more efficient processes, revenues arising from pa-tents, knowledge with-holding.	<ul> <li>Investments in P&amp;D</li> <li>Patents.</li> </ul>
Light	Natural				
Capitals [GRI 102-15] For the development of	Resources and environmental processes that support the organization in the provision of services and products, including water, land, forests, and biodiversity.	Regulatory Bodies, academy, and population	<ul> <li>Use of renewable resources;</li> <li>Environmental investments;</li> <li>Access to water;</li> <li>Consumption of nonrenewable resources;</li> <li>Emission of GEE;</li> <li>Waste generation</li> </ul>	Investments in licensing, maintenance and environmental security, environmental projects, educational actions, rainforest, and maintenance of the System of Environment Management.	<ul> <li>Environmental Investments;</li> <li>Greenhouse Gas Emission (GEE);</li> <li>Certification.</li> </ul>
our activities, we count	Manufactured				
on resources, structures, and people denominated capitals. These capitals, acting together, allow the	Infrastructure, own facilities, materials, and equipment required for the operation of our activities.	surrounding. Government, suppliers, Telephone and Cable TV	<ul> <li>Infrastructure for production and distribution of power;</li> <li>Energy security, availability and stability for provision.</li> <li>Quality in provision;</li> <li>Interference in the environment and urban landscape;</li> <li>Interruption in the provision.</li> </ul>	Investment in the betterment of infrastructure and possibility of sharing assets linked to concessions.	<ul> <li>Installed capacity at Plants;</li> <li>Distributions Networks;</li> <li>Frequency of power supply interruptions (FEC)</li> <li>Average Duration of power supply interruptions (DEC)</li> </ul>
generation of value to all parties involved and the	Social and Relationship				
achievement of better results. According to the International Structure for Integrated Report, these	Relationship with interested parties and/or participation on networks, sharing information and improving the individual and collective well-being. Intangible partnerships, common values related to the brand and reputation.	companies, regulatory body. Government, Aneel, clients, community, suppliers, shareholders, class associations and	<ul> <li>Quality of service provided;</li> <li>Social Environment Liabilities actions;</li> <li>Efficient use of power;</li> <li>Customers dissatisfaction regarding the service provided;</li> <li>Increase of nontechnical losses.</li> </ul>	Investments to stablish a new manner of relation-ship with the communities. Management of our brand and image.	<ul> <li>Customer satisfaction;</li> <li>Social investments;</li> <li>Power loss;</li> <li>Collection</li> </ul>
Manufactured, Natural, Human, Intellectual, Social and Relationship and, at last, Financial.	Resources available for the provision of services and investments, including return of investments made, shares, acquired debts and received subsidies.	academy. Shareholders, investors, financial institutions, market analysts, Aneel, Federal Government and class association.	<ul> <li>Sustainability of the company;</li> <li>Payment of taxes;</li> <li>Strength of power and financial markets;</li> <li>Default;</li> <li>Inefficiency risk in the use of resources</li> </ul>	Impact all remaining capitals because it provides resources for works, trainings, studies, and betterment. It also defines a manner in which the resources shall be applied. And, in the same way, it is impacted by the results generated by other capitals.	<ul> <li>Net Revenue;</li> <li>Ebtida;</li> <li>Ebtida Margin;</li> <li>Net Profit (loss);</li> <li>Net indebtedness;</li> <li>Investments.</li> </ul>

# Light **Capitals**

RESULT

COMMITMENTS

Aware that our performance directly affects society and the environment in which we operate, we seek to develop a corporate strategy that generates value not only for our shareholders, but also for all our stakeholders. In this way, we positively impact the entire value chain of the company.

From May 2019, with a restructured management, Light started a new stage in its history and, in a few months, achieved important results. One of the most relevant results was the follow-on of the company, with the offer of shares in the market and the consequent change in its shareholding structure. With that, the company was capitalized in more than R\$ 1.8 billion with the sale of shares and became a true corporation, name given to the companies that have their control spread.



On January 27, 2020, shareholding composition in Light S.A. was as follows: Cemig 22.58%, FIA SAMAMBAIA 10.17% and minor shareholders, 67.25%.

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Since then, we have become a company with several national and international shareholders, with governance and shareholding structure that allow us to pave the way for us to become one of the best energy companies in the country, despite the complexity of our concession area.

We are now a capitalized company, led by professional and aligned management, with variable compensation, composed of bonuses linked to aggressive goals and stock options (Stock Option Plan). In this plan, approved in July 2019, Light offers its managers the opportunity to acquire the company's shares at a fixed price, with the purpose of encouraging the delivery of results, aligning its performance with the long-term vision of its shareholders and investors.

Another important result obtained by the new management was the reshaping of the debt, which, with the prepayment of some more expensive ones and the acquisition of new ones at a lower cost, made it possible to reduce the related average financial cost. We remain attentive to market opportunities with the reduction of the basic interest rate and the liquidity of the private debt market to evaluate possible new funding.

All of our actions, throughout 2019, had as main objective to substantially change the company's performance and recover its performance. From an operational point of view, we started our turnaround.

However, this turn will come only with the commitment of our employees. So, to support turnaround, we repositioned the Jeito de SER Light with elements better suited to disruption processes, essential for organizational alignment. The new Jeito de SER Light values and encourages synergy and integration between areas for a collective result (#umasólight), forming a single team, with a single purpose: to be the best energy company in Brazil.

The new Jeito de SER Light pursues a culture of results, security and meritocracy; fosters an environment of engagement, development and high performance to overcome challenges; and creates value for stakeholders through a sustainable and profitable company.

Our plan is focused on the distribution activity and its main drivers are fighting loss, managing financial liabilities, reducing contingencies, reducing PMSO and prioritizing CAPEX.



# **Fight to energy loss**

We carried out a complete restructuring of the Commercial area, improving management, promoting engagement actions by our own and outsourced teams and placing more emphasis on fighting non-technical loss.

We created regional managements, with action plans prioritized and defined according to the opportunity and the level of complexity of each offender. For a better control of field services, a Service Management Center was created in each region, which monitors teams online.

We have invested in technological solutions to improve the work of reducing non-technical loss, such as, for example, the use of a mobile platform for real-time recording of field services, allowing the reduction of non-conformities of services still in the field and the updating of our main intelligence software for generating inspection targets<sup>6</sup>.

# **Liability management**

Light is committed to restructuring its debt and, thus, improving and strengthening its capital structure. We are reshaping the company's debt to obtain longer terms at a lower cost. For this purpose, we are accessing new sources in the capital market, taking advantage of opportunities in the domestic or international market and, thus, improving Light's perception of risk.

# **Reduction of judicial contingencies**

This pillar of our turnaround has the challenge of facing judicialization and reversing the trend for contingencies to grow, arising, on the one hand, from the difficulties inherent in our concession area and, on the other hand, from internal procedures that are already being improved. Our goal is to mitigate the emergence of new demands and promote better agreements for the parties involved, thus reducing the stock of existing lawsuits.

**<sup>6</sup>** Targets are drivers of field activities detected autonomously by the Light's artificial intelligence system, for example, a significant reduction in historical consumption, regular consumption for a long time, complaints of irregularities and comments from meter readers.

# **Reduction of PMSO and CAPEX priority**

Light seeks more and more efficiency in the allocation of its funds. To this end, it has been renegotiating contracts with suppliers and using tools that help control costs and optimize investments. In addition, the initiative to prioritize key activities has proved to be successful, with increased productivity, quality of services and reduced expenses.

We believe that the Commercial and Engineering areas should work synergistically, and that the good performance of the HR, IT, Supplies and Legal areas is fundamental for Light achieve better operating results and, at the same time, reduce expenses with personnel, materials, third-party services and other (PMSO).

In this turnaround pillar, we also seek to reduce our exposure to non-strategic assets and/ or holdings in which we do not have control, focusing efforts on creating value, especially in the distribution segment, and prioritizing investments that bring an effective return to the company and can be incorporated into our compensation base.

The commitment to generating shared value – for the company and its stakeholders – is reflected in the alignment of material issues with the strategy defined by the company's senior management.



# **Strategy and sustainability**

Our strategic pillars are divided into action plans and strategic and operational performance indicators. The goals established for these indicators are agreed upon in management commitments. [GRI 103; 3]

For the execution of our strategy, we have a structured and agile governance model, reflecting the current dispersed shareholder structure. The participation of stakeholders, including shareholders, government and regulatory bodies, in the execution of the company's strategy is presented throughout the report. [EU19]

In 2019, we reviewed our Materiality Matrix considering the turnaround plan, the demands of our stakeholders and the Sustainable Development Goals (SDGs).

The commitment to generating shared value – for the company and its stakeholders – is reflected in the alignment of material issues with the strategy defined by the company's senior management.

Relation among the strategic guiding of 2019, the material topics, the ODS and the indexes used to evaluate the performance of the company regarding the theme.

Strategy	Material Theme	ODS	Index
Fighting power losses	Loss and Default	<b>7</b> AFFORDABLE AND CLEAN ENERGY	Non-technical Loss / Low Voltage Market
Reducing judicial contingencies	Relationship with Customer and Society		Contingencies
	Quality of the Service		Collection Fee
		11 SUSTAINABLE CITIES AND COMMUNITIES	Customer Satisfaction
	Development of Concession Area		DEC/FEC
			Investments in Communities
Liability management	Financial Strength and Capital Markets		Net Indebtedness
		Net Revenue	Net Revenue
Reducing PMSO and prioritizing CAPEX	Operational Efficiency	9 INDUSTRY, INNOVATION AND INFRASTRUCTURE	PMS
			Investments
Private company culture focus in results	Governance, Ethical Conduct	<b>3</b> GOOD HEALTH AND WELL-BEING	Complaints of misconduct
	and Compliance		Training Hours
	People Management		Accidents Frequency Rate
	Suppliers Management	8 DECENT WORK AND ECONOMIC GROWTH	
	Health and Safety		
		16 PEACE. JUSTICE AND STRONG INSTITUTIONS	



Performance strategy

# **Sectorial scenario**

The overall energy framework did not improve in comparison to 2018, with inflows and reduced reservoir levels. In this context, hydrological risk and thermal generation continued to show high values, putting pressure on the company's cash. In 2019, we performed a good management of the contracted energy portfolio, avoiding that, unlike most concessionaires, Light was "over-contracted" in 2019, despite the continuity of the migration of customers to the Free Contracting Environment (ACL).

For 2020, we do not see significant changes in the energy framework, with the permanence of the expenses with hydrological risk and thermal generation at high levels. The migration to ACL may continue, but it shall not create any problems to keep the level of contracting within the regulatory limits.

The main challenge related to energy purchase is to reduce our Average Energy Purchase Price, Pmix, which, in 2019, ended at R\$ 213.57 MWh. The main action to reduce it is the efficient management of contracts, through the strategy of participating in auctions and the regulatory mechanisms for the purchase and return of energy. Light achieved good results in the 2019 auctions, which will contribute to reduce the Pmix as from 2020. It is worth mentioning the early replacement, through Auction A-6, of 62% of the contract with the plant Norte Fluminense, at a price of R\$ 176/MWh, 18% below the Pmix of 2019.

Keeping the strategy started in 2019, Light will continue to seek the reduction of Pmix, using a gradual replacement of the contract with plant Norte through energy auctions made by the Ministry of Mines and Energy scheduled until 2024.

This reduction will not only reduce the company's costs, but will also decrease the value of the overall loss, since Pmix is used to value the difference between the regulatory loss and the verified loss.

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# **Intangible assets**

Intangible assets are identifiable non-monetary assets without physical content. At Light, human, intellectual and social and relationship capital are considered intangible assets. Its development takes place through training, technical training, communication campaigns, technological and process innovations, among other actions.

Software purchased on the market, investments in research for the development of proprietary software and infrastructure assets linked to the concession are also considered intangible assets recorded in Light's income statement.

We recognize an intangible asset arising from a concession agreement when we have the right to charge for the use or operation of the concession's infrastructure. This asset is part of our manufactured capital.

Expenses with research activities to get scientific or technological knowledge and understanding are recognized in the company's income only if they can be measured reliably, if the product or process is technically and commercially viable, if the future economic benefits are likely and if we have the intention and sufficient resources to complete the development and use or sell the asset. Capitalized expenses include the cost of materials, direct labor, manufacturing, among others.

The management of our capital, including intangible assets, and the assessment of the performance of each one of them allows value to be created for the company and our stakeholders. This value is identified by means of indicators presented in the table below, which measure internal impacts – use of resources, training hours, financial results – and external impacts, such as atmospheric emissions, quality of energy supply and customer satisfaction.

**Main Indicators** 

# **Manufactured capital**

Installed capacity of the plants (MW)

Distribution system installed capacity (MVA)

Distribution networks (km)

Frequency of power supply interruptions – FEC (number of interruptions)

Average duration of power supply interruptions – DEC (hours)



# **Natural capital**

Environmental investments (R\$ million) Direct GEE emissions - Scope 1 (ton. de  $CO_2eq$ .) Indirect GEE emissions - Scope 2 (ton of  $CO_2eq$ .) Number of ISO 14.000 certifications (Light SESA)



# Human capital

Training hours per employee/year

Accident frequency rate

Fines and penalties (R\$ million)



2017	2018	2019
1,023	1,119	1,188
10,522	10,522	10,525
77,684	77,904	78,765
5.3	4.4	4.3
9.1	7.8	7.8

2017	2018	2019
30.2	12.5	25.8
12,177	18,476	13,929
225,104	172,363	210,728
304	304	304

 2017	2018	2019
42.7	44.7	36.7
1.95	1.96	3.27
33.2	31.2	64.7



# Intellectual capital

Investments in P&D (R\$ million)



# Social and relationship capital

Aneel Consumer Satisfaction Index (IASC) (%)

Customer Satisfaction Index with the Execution of Services (ISES) (%)

Perceived Quality Satisfaction Index (ISQP) (%)

Investments in communities – Energy Efficiency Program (PEE) (R\$ million)

Non-technical loss/Low voltage market (LV) (%)

Collection rate (%)



# **Financial capital**

Net revenue (R\$ million)

Adjusted EBITDA (R\$ million)

EBITDA Margin (%)

Net income (loss) (R\$ million)

Net indebtedness (R\$ million)

Investments including contributions (R\$ million)



TURNAROUND PLAN	RESULT	ABOUT THE REPORT	COMMITMENTS

2017	2018	2019
6.7	23.9	29.0

 2017	2018	2019
55.1	58.2	56.4
90.4	87.5	87.9
67.7	67.5	58.6
5.3	7.3	4.8
39.0	45.2	52.1
96.6	98.5	97.6

2019	2018	2017	
12,663	11,310	10,707	
1,962	1,684	1,976	
15.5	14.9	18.5	
1,328	166	124	
6,750	8,017	7,206	
939	890	895	

# <u>communations with</u>



## [GRI 102-12]

Environmental, social and governance (ESG) issues are increasingly valued by our stakeholders, which ends up promoting a continuous search by Light, of the best practices.

Our commitment to sustainability began in 2005, when Light joined B3's Novo Mercado (Brasil Bolsa Balcão), and was ratified in 2007, with the accession to the United Nations Global Compact. The first one established a highly differentiated standard of corporate governance within the company, whereas the second encouraged the company to adopt social responsibility and sustainability policies in areas such as human rights, labor, environment and fight against corruption.

In addition to these measures, other sustainable actions stand out:

- Accession to the Carbon Disclosure Project (CDP);
- Annual Report in accordance with the Global Reporting Initiative (GRI) guidelines and the Integrated Reporting Framework (IIRC);
- Formal accession to Call to Action: Anti-Corruption and the Global Development Agenda;
- Participation in the Working Group of Pioneering Companies in the Sustainability Report, which is part of the Brazilian Commission for Integrated Reporting.

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It is worth mentioning that, in 2019, for the 13th consecutive year, we joined ISE B3, which aims to identify companies with the best corporate sustainability practices. And we were finalists for the Abrasca Annual Report Award, ranked 4th among publicly traded companies.

From an internal point of view, together with the Collective Labor Agreement and the Profit and Results Sharing Program, we are committed to the Social Responsibility Agreement, to the Protection and Defense of Human Rights of the United Nations, to the fundamental conventions of the International Labor Organization (ILO) and the principles that govern the labor legislation.

We value diversity and guarantee equal professional opportunities between men and women, ensuring that there is no discrimination in access to positions of responsibility and in the levels of compensation for equivalent jobs.

# Governance

For further details on the practices adopted by the company, we suggest consulting the <u>Corporate Governance Manual</u>. In it, all the mechanisms that the company uses to guarantee the alignment of the business with the objectives of creating value for shareholders, stakeholders and for Light itself are formalized.

The composition and duties of the Board of Directors, the Committees and the Board of Executive Officers can be found on the Investor Relations website, under Management. The details and expertise of the directors, in addition to their participation in other boards, committees, commissions and working groups, are available in the Reference Form sent to the Brazilian Securities and Exchange Commission (CVM) and available on the Investor Relations website, under <u>Reference Form</u>. [GRI 102-16] Light's Governance Structure [GRI 102-18, GRI 102-22]

Governance

**Shareholders** Courthouses

**Responsible for consolidating** the alignment of decisions within the controlling group.

#### GENERAL MEETING

Maximum decision-making entity of the company, also serving as a forum for decisions between the several shareholders

Interface Courthouses

It organizes the interfaces between directors, managers and officers, formalizing the fundamental aspects of governance.

#### **BOARD OF DIRECTORS**

Responsible for approving and monitoring the execution of the company's Strategic Plan and approving the Annual Audit Plan, defined in the risk management process, which includes economic and socioenvironmental aspects. In its composition, there are independent directors and employee representatives. [GRI 102-29, GRI 102-30]

# Executive Board

As a collegiate body, the Board of Executive Directors, in compliance with restrictions of the current legislation, is responsible for performing all necessary acts to ensure the regular operation of the company.

# **CHIEF EXECUTIVE OFFICER AND CHIEF INVESTOR RELATIONS OFFICER**

Elected by the Board of Directors, it is responsible for the active and passive representation of the company, coordinating the institutional relationship activities with the regulatory bodies and Public Ministries, ombudsman and regulation

# **CONSUMER COUNCIL**

It promotes the debate in defense of the collective interests of consumers and the dialogue between representatives of the most diverse tariff classes of customers with Light, in search of friendly solutions to issues related to supply, tariffs and the adequacy of services provided to the end consumer.

#### **OFFICERS**

They carry out their functions in accordance with Company's corporate purpose and in such a way as to ensure the regular conduct of its business and operations in strict compliance with the provisions of Light's Bylaws and the resolutions of the General Shareholders' and Board of Directors' Meetings.



#### **SHAREHOLDERS COURTHOUSE**

#### **FISCAL COUNCIL**

It oversees the management activities, reviews the financial statements and reports the conclusions to shareholders.

#### **BOARD COMMITTEE**

It provides efficiency and agility to the Board of Directors in carrying out its duties by deepening the topics under its responsibility, enriching the quality of the decision-making process and facilitating interaction with the Board of Executive Officers. The committees do not have executive or resolution functions.

- Statutory Audit Committee (CAUDIT
- Operations and Finance Committee (COFIN)
- People, Governance and Sustainability Committee (CPGS)

- Finance and Participation Board
- Commercial Board
- Engineering Board
- Energy and Trade Board
- Business Management Board

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Governance

Ouring the period of the term, evaluation on the performance of the Board of Directors, CEO, committees, directors and governance Secretary;

Board of Directors with internal regulation that standardize its liabilities, attributions and operating rules;

Monitoring programs and procedures and release of performance and impacts of our activities in the society and in the environment;

Board of Directors Meetings with exclusive session for the directors;

# Light follows the good practices of the Brazilian Code of Corporate Governance

IN 2019, IN ACCORDANCE WITH CVM INSTRUCTION NO. 586, LIGHT REPORTED TO THE BRAZILIAN SECURITIES AND EXCHANGE COMMISSION (CVM) ITS PRACTICES OF CORPORATE GOVERNANCE, AMONG WHICH WE HIGHLIGHT

Risk management policy approved by the Board of Directors;

Board of Directors responsible to ensure that the Board has mechanisms and internal controls to learn, evaluate and control the risks; Evaluation made by the Board regarding the efficiency of policies and risk management systems and internal controls, as well as the program of integrity/compliance;

Sylaws that define which transactions with the related parties shall be approved by the Board of Directors;



Incentive structure, prohibiting that on single person controls the decision-making process and its; respective inspection;

Area of Internal Audit linked to the Board of Directors;

Securities trading policy, in order to keep track of trading carried out and determine and punish the responsible people in the event of non-compliance;

Policies of voluntary contributions, in which contributions or donations to political parties or people related to them are prohibited.

# Analysis of socio-environmental issues [GRI 102-31]

According to the Corporate Governance Manual, the duties related to sustainability are assigned to the People, Governance and Sustainability Committee. [GRI: 102; 19]

In addition to the Committee, the duties of the executive officers, described in the Bylaws, also include responsibilities related to economic, environmental and social issues. [GRI: 102; 20]

The most relevant economic and socio-environmental issues are referred to the respective Light's committees and, subsequently, monitored and assessed by the Board of Directors. [GRI: 102; 33]

At the Board of Directors' meetings, in 2019, 15 critical issues were raised regarding economic issues; 15 on social issues; and two, on environmental issues, including mechanisms to mitigate existing risks. In these meetings, the time dedicated to socio-environmental issues represented 20% of the total. When necessary, stakeholders are consulted through different manners of engagement<sup>7</sup>. [GRI 102-21, GRI 102-34]

Situations involving conflicts of interest and transactions with related parties follow what specific laws determine.

# Improvement and performance assessment [GRI 102-28]

During the term of office, the Corporate Governance Secretary assists in coordinating and organizing a performance assessment directed at the Board of Directors, directors, support committees and the CEO. It is a self-analysis approved by Light's Management, whose purpose is to verify the operation and performance of these bodies with respect to:

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- Flow of information between the Board of Executive Officers and the Board of Directors;
- Method of conduction and subject-matter of the meetings;
- Agility and quality of the resolutions;
- Level of responsibility;
- Internal harmony between officers;
- Personal behavior of each member.

The manner how the Board of Directors and the Board of Executive Officers incorporate socioenvironmental considerations in the definition of the company's business and operations is also verified.

The CEO is assessed under the following aspects: vision, strategic planning, leadership, company's results, external relationship and relationship with the Board of Directors, development of managers and creation of opportunities for Light.

The feedback from the assessments is presented at the first meeting of the Board of Directors after the results, and the most important suggestions are accepted by the body.

# Compensation policy [GRI 102-35]

Light's compensation policy is established in accordance with market practices, with a view to attracting and retaining competent and qualified professionals. The compensation model adopted by the company includes fixed and variable remuneration. On July 2019, the Stock Option Plan was approved, whose participants are the company's statutory officers and executives. Variable remuneration plays an important role, as it stimulates the culture of results and keeps the interests of shareholders, executives and employees aligned. Light's compensation policy is detailed in the Business Model and also in the Reference Form, on the Investor Relations website.



See more details about Light's governance structure and mechanisms on the Investor **Relations website, on Business Model** 

More information on chapter About the Report 7

#### [GRI 102-16, GRI 102-17, GRI 103-2]

Light cultivates ethical, true and transparent relationships with governments, society, customers, shareholders, managers, employees, service providers, suppliers, unions, class associations and all other stakeholders. Light's Code of Ethics and Business Conduct, revised in 2019, is the expression of our beliefs, values, principles and commitments.

Our Code of Conduct formalizes an ethical culture forged, in the daily life of the company, by Jeito de SER Light, by the Compliance Program, the Ethics Committee and the channels that deal with deviations in conduct.

In 2019, we also dedicated ourselves to improving the way we deal with complaints of ethical deviation and corruption at Light. For this, we restructured the Business Intelligence area and created a Forensic Audit area, for which qualified professionals with large experience in the industry were contracted.

Subsequently, we opted to merge the Compliance and Forensic Audit areas, creating the Compliance and Forensic Audit Department. Thus, we unified the actions of the Integrity Program with the complaints dealt with.

In order for Light's employees to be always engaged with the Code of Ethics and Business Conduct, throughout 2019 we promote the following activities: [GRI 205-2, GRI 412-2]

- Review of the Code of Ethics and Business Conduct, which will be effective in 2020;
- Dissemination of commitment to ethics through communications;
- Introduction of the company's ethical guidelines in setting events for newly contracted professionals;
- Online courses with the participation of 10,950 employees so far: Our Ethics, Booklet Jeito de SER Ético, Minutes of Ethics and Anti-Corruption.

## **ETHICS GUIDING PRINCIPLES AT LIGHT**

#### **CODE OF ETHICS AND BUSINESS CONDUCT**

- Aligned to Light's mission, vision, values and organizational principles
- Incorporates aspects of the Anti-Corruption Law
- Deals with issues related to conflicts of interest

#### **ETHICS COMMITTEE**

- Evaluates the timeliness and relevance of the Code of Ethics and Business Conduct.
- Deals with issues related to violation of ethical matters and proposes disciplinary measures or corrections of conduct.



Whistleblower Channels<sup>8</sup>

Ethics

# HANDLING OF COMPLAINTS AT LIGHT [GRI 205-3, GRI 406-1]

All signs of misconduct are investigated by Light. The findings of this investigation is categorized as founded, partially founded or unfounded, per origin and per type, for mapping the areas and materials most exposed to a greater risk of irregularities. For all cases in 2019, the appropriate measures were applied.

Among the complaints received, there was no act of corruption or discrimination identified as founded. In addition, in 2019 we received 81 complaints of misconduct from customers, 18 of which classified as founded (22%) and 27 are still under investigation (33%).





They are safe, confidential and private, in addition to the option of anonymity. For each report, a protocol number is generated - except for P.O. Box -, which allows to follow the development of the handling given to the complaint. All complaints are handled through analyzes and verifications coordinated by the Compliance and Forensic Audit Management, from receipt to closure. Specific cases may be referred to the Ethics Committee. The channels are managed by an external company with a strong international presence.

# Measures taken in case of violation of the Code of Ethics

#### **Own employees**

- The complaint is received by the area where the employee works, and forwarded to the Ethics Committee;
- The Committee analyzes the complaint and gives an opinion;
- Depending on the result of this opinion, the employee is subject to disciplinary measures, such as warning, suspension or termination, which may or may not be for cause.

#### **Contractors**

• The handling of complaints regarding outsourced employees is similar to the measures taken with own employees, differing only as to the ending of the proceeding. In this case, the result of the Ethics Committee's analysis is shared with the contractor. Among the measures to be adopted, one of them may be to exclude the professional involved in the complaint from the team that provides services to Light.

#### [GRI 102-11]

After restructuring of the Audit, Risks and Compliance Superintendence in 2019 we created the Risk and Internal Controls Management, whose main objective is to strengthen the company's culture of risk management and internal controls. This new area is responsible for identifying and analyzing existing risks and for creating a robust and effective environment for internal controls, thereby increasing our ability to mitigate potential events that may negatively impact Light's strategic objectives.

In addition, we highlight the following documents have been reviewed:

- Risk Management Policy;
- Anticorruption Policy;
- Code of Ethics and Business Conduct;
- Strategic Risk Matrix.

The Strategic Risk Matrix was adapted into a new model with improvements to the stages of identification, assessment, treatment, monitoring and communication of risks to which the company is exposed. As a result, we will be capable of performing more objective measurement, classification and prioritization of activities.

Throughout 2019, together with Light executives and managers we updated, validated and prioritized risks. After the stages of assessment and prioritization, we initiated the risk treatment and monitoring activities, which consist of a detailed mapping of potential events that could lead to their materialization, the design of actions and initiatives for risk mitigation and their monitoring by means of Key Risk Indicators (KRIs).



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- Legal contingences;
- Non-compliance with regulations and legislation;
- Shortage of water;
- Supplier management;

- Billing and default;
- Typical accidents;
- Information Technology;
- Cash and indebtedness;
- Failures in dams, structures and dikes

The first stage consists of identifying the risk factors based on the Reference Form, covering risks considered to be more comprehensive. Then, interviews are made to obtain the perception of the company's officers regarding the risks previously identified, and the possibility of new ones appeared.

The list of strategic risks is updated based on the information collected, and is subsequently presented to the Executive Board and the Board of Directors. After approval, the strategic risks are broken down into corporate risks, being more detailed and directly associated with Light's operations and business processes.



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In the corporate risk measurement stage, possible legal and regulatory sanctions, and financial and operational aspects are evaluated, as well as possible damage to reputation and image. As for probability measure, the degree of susceptibility to fraud, complexity and level of automation of processes are assessed. The risk classification is obtained with the results of crossing such data.

# **Risks are classified into**



Related to unforeseen events that affect liquidity and/or cause deterioration of the company's capital structure.

## **Operating risks**

Unexpected processes and events, such as human error, failure of equipment and systems, and the action of external agents, which can cause substantial losses in the economic value and image of the company, affecting customers and longterm performance.

## **Compliance risks**

Legal and regulatory issues, as well as changes in the political environment, that may impact the power sector scenario.

At a more specific level, changes in legislation may imply an increase in legal contingencies for the company. Light's Integrated Risk Management model is based on methodology and activities recommended by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). In 2020, this model will be improved according to the 2017 updated version of COSO Enterprise Risk Management (ERM) and ISO 31000: 2018 Risk Management.

The objective is to align risk management and internal controls with strategy and operational efficiency.

Light's Compliance Program has also developed the important task of evaluating and classifying the risks of 383 suppliers considered strategic for the company as low, medium and high. This activity, it is worth mentioning, was conducted together with the Supplier Management area. We also emphasize that the cases classified as medium or high risk were handled by Light.

In September 2019, we implemented a new routine to identify suppliers listed in the Register of Unlawful or Suspended Companies (CEIS) and in the National Register of Punished Companies (CNEP). This measure helps to identify possible occurrences of harmful acts by third parties.

Seeking to improve the process involving the company's whistleblowing channel, we created a Forensic Audit structure for handling and investigating complaints related to the program. Concurrently, Light's Code of Ethics and Conduct was reviewed in order to simplify the language and making it easier for all audiences to understand.

In 2020, we will improve Light's Compliance Program so that we may map and monitor the company's relationship with public officials, as well as improve the methodology to assess the integrity of our suppliers. The creation of indicators to evaluate the program's performance and evolution is also planned.

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# **Environment**

Through its environmental policy and its commitments to the environment and climate, available <u>in this link</u>, Light is committed to the preservation and conservation of the environment, the efficient use of natural resources and the reduction of greenhouse gas emissions.

In 2019, R\$ 25.8 million were invested in maintenance and safety actions; environmental training and projects; licensing and compliance with legislation; implementation and maintenance of the Environmental Management System; reforestation and containment of slopes; removal of aquatic plants; and research and development (R&D).

# **Management systems**

Light Energia has an Integrated Management System (SGI), which includes ISO 9001/2015, ISO 14001/2015 and OHSAS 18001/2007 standards, and covers all power plants and related structures for the power generating complex. In turn, Light SESA has an Environmental Management System (SGA), which evaluates and monitors the aspects and impacts of the activities of its operational park, maintaining approximately 88% of units certified under ISO 14001/2015. [GRI 416-1]

# Waste management

12 RESPONSIBLE CONSUMPTION AND PRODUCTION **CONSUMPTION 13** CLIMATE ACTION Waste management is carried out through the Waste Management Plan, registered in a specific environmental procedure and reviewed in 2019 to adapt our processes to changes in environmental legislation.

13 ACTION 15 LIFE ON LAND C

One of our great challenges throughout the year was the pruning of trees that damage the electric network, as we made this activity a priority, and we still had to give training to improve the quality of service.

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# DEVELOPMENT AND IMPLEMENTATION OF MACROPHYTES MANAGEMENT SYSTEM

In 2019, we completed an R&D project that generated an unprecedented methodology for managing macrophyte communities in hydroelectric reservoirs. This methodology differs greatly from others used by companies so far, in the strategy of dealing with colonization of aquatic macrophytes in reservoirs, in which the process employed consists of controlling plants, on a general or localized basis, by mechanical, biological or chemical control. Chemical control is currently not regulated in Brazil and, therefore, is not part of the strategies employed by Light. Mechanical control, although very expensive and has operational and environmental restrictions, is the viable alternative currently used.

In the methodology developed by the project, there are not only acts for mechanical control of plants, but also the integration of this method with sustainable management based on encouraging the development of populations that can compete with the problematic macrophytes and allow ecological or hydrosere succession.

# R\$ 25.8 million

were invested in maintenance and safety actions In addition to reducing the number of mechanical interventions and the amount of biomass removed, it avoids carrying difficult-to-remove plants to the power plant grids, reduces costs and increases efficiency in power plant operation, with environmental safety. Another important result was the sustainable disposition of the macrophyte biomass removed from the reservoir through the production of organic compound.

# Efficient use of natural resources [GRI 302-3]

Light is always measuring and monitoring the resources consumption in its facilities, as well as promoting acts to make employees, third parties and customers aware of how important it is for everyone to do their part to improve the efficiency of processes, and use efficiently the natural resources at our disposal.

In 2019, Light's total power consumption was 138.8 GWh, representing a power intensity of 0.00694 kWh/R\$, when compared to the company's gross revenue, and a 6.6% reduction when compared to the previous year. Such reduction is related to a better management of our spaces.

With regard to water consumption at Light's facilities, there was an increase of 7.1% in relation to the previous year to 376 m3/day due to the greater use of the company's facilities due to the preferential process.

# CLIMATE CHANGE [GRI 201-2, GRI 305-1, GRI 305-2, GRI 305-3, GRI 305-4, GRI 305-5]

Due to Light's business model, annual results may be negatively affected by unfavorable hydrological conditions, risk of electricity shortages, and possible rationing in Brazil.

Climate change is a factor that is always taken into account, as it affects both Light Energia, which has 100% of its generation supported by hydroelectricity, and Light SESA, which needs to deal with the impacts of rising temperatures and sudden climatic variations. The more the heat, the higher the energy consumption. In this scenario, we may experience overloads in the distribution system, an increase in non-technical losses, and an increase in default.

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The identification of risks and opportunities related to climate change is detailed in the CDP questionnaire, available on the Investor Relations website, at the <u>link Reports</u>.

## **Emission of greenhouse gases: our numbers**

In Light's Greenhouse Gas Inventory, conducted annually, we account for under Scope 1 and Scope 2 a total of 224,657 tCO2eq of emissions by Light SESA and Light Energia, representing an increase of 17.7% compared to 2018.

The intensity of greenhouse gas emissions, a relative index that considers the companies' gross revenue, was 0.0117 tCO2eq/R\$ thousand for Light SESA, and 0.0058 tCO2eq/R\$ thousand for Light Energia. The intensity refers to Scope 1 + 2.

In Scope 1, we highlight the impact of SF6 gas (sulfur hexafluoride) - fugitive emission - as the main source of emission, due to the high potential for global warming (GWP).

In Scope 2, we highlight the impact of electricity consumption and energy loss on Light's transmission and distribution process. In carrying out this calculation, we applied the emission factor of the National Interconnected System (SIN), which considers all power plants - hydroelectric, thermal and wind - that are generating power in the country.

In 2020, our goal is to reduce Scope 1 emissions by 6%.

## **Carbon Footprint**

In 2019, the carbon footprint results of Light SESA and Light Energia were, respectively, 75.7871 kg of CO2eq/MWh and 2.1637 kg of CO2eq/MWh.The greatest impact of emissions associated with the carbon footprint is related to the waste generated. At Light SESA, the increase in footprint is directly related to pruning residues due to the primacy of the activity,

and in Light Energia to aquatic or macrophyte plants. It is noteworthy that Light continues to invest in projects to improve the processes related to macrophytes.

Learn more about our <u>environmental projects</u>.

# **Light's Practices aimed at society**

#### [GRI 203-2, GRI 413-1]

Light promotes programs and projects that stimulate sustainable development, improve the quality of life of the population in the concession area, and strengthen the company's relationship with very needy and difficult-to-reach places. These projects are carried out through Instituto Light and the Programa de Eficiência Energética (Light Institute and the Energy Efficiency Program) (PEE).

# **INSTITUTO LIGHT (LIGH INSTITUTE)**

Instituto Light links social responsibility to the company's profitability. Issues such as conscious consumption of electricity, safety with the power grid, and losses caused by theft of energy are treated in a creative, differentiated, playful and didactic manner. In this way, we are able to transmit content and concepts of crucial importance to the company, while visitors establish a positive experience with the Light brand.



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Main projects carried out in 2019 by Instituto Light:

- **Example 1** Lamartine Babo Theater: resumed its artistic activities with musicals, theater and film shows, reactivating the furtherance of the city's cultural development;
- **Interactive Showcases:** show the company's cultural programming and institutional information in an attractive way for those who travel daily on the sidewalk of Centro Cultural Light (Light Cultural Center);
- **Décadas e Descobertas (Decades and Discoveries):** permanent exhibition opened at Centro Cultural Light, which themes address the connection between the main events of the last 100 years and the evolution of electricity;
- **• Rio Energia em Movimento (Energy in Movement) Exhibition:** temporary exhibition at the Great Gallery of Centro Cultural Light, composed of images from Light's historical collection; • Light nas Escolas (Light at Schools): held since 2010, it promotes the training of public and private educational institutions for the efficient use of electric energy, including "Light nas Escolas Award", which, in 2019, was remodeled and expanded;
- > Praça das Energias (Square of Energy): an integral part of the visitation circuit to Centro Cultural Light, where visitors, through interactive and funny experiences, learn that power changes all the time and presents itself in many different ways.

# **Sponsorships at Light**

The projects sponsored by Light foster and democratize access to culture, contribute to the economic development of the municipalities in the concession area, and help raise the self-esteem of the State of Rio de Janeiro.

It is worth mentioning that State Law 8,266/2018 was a great incentive to corporate sponsorship, since it established 100% of the ICMS tax deduction payable to the State of Rio de Janeiro for investments in cultural and sports projects. This measure allows Light to study a new strategic sponsorship guideline, providing for better deliveries to society, with adherence to the brand and low or no financial impact.

Accordingly, in 2019 we allocated R\$ 37.1 million to incentive projects compared to R\$ 7.1 million in the previous year. Of this total, R\$ 552 thousand were Light's own resources, compared to R\$ 1.3 million in 2018.

# A new way to communicate

At the end of 2019, Light began to communicate more lightly with the public, comprising all external actions in an integrated, airy, optimistic format, with emphasis on the economic development of Rio de Janeiro, and the rescue of the self-esteem of the population that lives in the concession area.

The launch of this new communication concept took place through the sponsorship of *Árvore do Rio Light*, and a supportive advertising campaign entitled *"Vamos fazer o Natal mais iluminado de todos!"* (Let's make Christmas brighter than ever), with the #BrilhaRio movement. The highest point of the campaign was the phrase: *"Se é para o Rio brilhar, pode contar com a energia da Light"* (If Rio is to shine, you can count on the Light power), used in the speech of the CEO of Light and in several communications.

The Project *Árvore do Rio Light 2019* included the assembly of the large floating Christmas tree at Rodrigo de Freitas Lagoon, in Rio de Janeiro, as well as a cultural and educational program at Cantagalo Park, which received more than 21,000 visitors. The project also included the following activities:

- Presentations of the theater show Quanta Energia, which addresses, in a playful and interactive way, the importance of awareness about the safe and responsible use of electricity and water;
- Luzes do Rio (Lights of Rio) monument, in which the public lit a large Christmas lamp with power generated by the movement of four bicycles pedaled by visitors;
- Light Recicla collection, which collected 2.8 tons of waste for recycling, and generated R\$ 1,296.93 in discounts on customers' power bills, which was directed to the social institutions Casa Ronald McDonald, Lar de Frei Luiz and Gastromotiva.

2019



Light Recicla collection, which collected



of waste for recycling

# **MAIN PROJECTS SPONSORED IN 2019**

Samba Carioca - Cultural Heritage of Brazil.– Carnival 2019: the funds were used to purchase inputs and hire labor for the parades at Marquês de Sapucaí. This project fosters the carnival industry, which annually generates approximately

# R\$ 3.07 billion

in revenues for the economy of the city of Rio de Janeiro, and employs almost

# **25 thousand people.**

# São João Marcos Archaeological and

**Environmental:** investment in maintenance and preservation of the entire outdoor area, where are the ruins of the city of São João Marcos and native vegetation, in addition to educational activities and social and cultural events related to preservation heritage, the strengthening of regional history and traditions, and the conservation of the environment.

Vale do Café Festival 2019 (Vale do Paraíba) and 180. Piraí Fest Paladar (Piraí): events of economic impact that generate income and benefits for tourism in Vale do Paraíba

Árvore do Rio Light 2019 was set up from December 14, 2019 to January 12, 2020, having received around 1.35 million visitors and generating more than 3.5 thousand jobs, with a direct impact on the economy of the State of Rio de Janeiro of more than R\$ 200 million.

With the sponsorships, Light intends to balance the brand, which until then was excessively linked to more difficult issues, such as default and power theft. The good results may be confirmed with the brand recall of 89% correctness among the 50% of the interviewees, who said they knew who was the sponsor of each mentioned project.

In addition to the *Árvore Rio Light 2019* project, we also highlight *Projeta Rio*, which received R\$ 650 thousand to train young people from low-income communities in mapped digital projection techniques, with Cristo Redentor as a background for such training.

Finally, it is worth mentioning that, in December 2019, Light signed a cooperation agreement with the State Department of Education providing for the use of resources of the social sub-credit of CAPEX Financing Agreement 2015-2016 in acts to improve infrastructure of three school units in the state school system. The project is expected to be completed in June 2020.



Learn more about the projects carried out by Instituto Light at <u>this link</u>.

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RESULT

# **Instituto Light in numbers**

*Museu da Energia* (Museum of Energy):

**28 thousand** visitors

São João Marcos Archaeological and Environmental Park:

**16 thousand** visitors and 2,199 students served by the Cultural Educational Program

# *Light nas Escolas* Program:

**311** trained teachers and

**32,908** people impacted by the project



# ENERGY EFFICIENCY PROGRAM [GRI 302-4, GRI 302-5, GRI EU7]

In 2019, a total of R\$ 44.7 million was invested in Energy Efficiency projects, with R\$ 40.1 million related to resources from the Energy Efficiency Program (PEE), R\$ 1.8 million to third parties, and R\$ 2.8 million in investments from customers as a counterpart in the power energy efficiency projects of Light's PEE.

Considering the projects completed in 2019, we achieved, as a result, power savings of 5,965.12 MWh/year and a reduction in demand at the peak of 933.64 kW.

The projects carried out follow criteria established by Aneel, but Light also seeks projects that adhere to corporate strategies, and which prioritize customers with actual investment needs, thus improving the relationship with the company.

In 2019, three Public Project Calls (CPPs) were carried out. The first covered all types, prioritizing Light's two largest markets: residential and commercial; the second included public lighting projects for the municipalities in Light's concession area; and the third was for school projects. The latter will make available at least R\$ 60 million for energy efficiency projects with incentive sources in state, municipal or philanthropic schools and daycare centers.

In the public lighting projects contemplated by CPPs, we apply new technologies, such as integrated LED luminaires compatible with remote management, that is, those managed and controlled according to the concepts of smart city <sup>9</sup>.



Smart City is an urban area that uses technology to manage its resources in an automated and more sustainable way.

2019

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RESULT

Our major challenge in 2019 was to optimize the CPPs regulatory resources, so that both actions in municipalities, hospitals, daycare centers and other philanthropic entities, and initiatives aimed at consumers that generate jobs and income, such as commerce, services and small and medium-sized industry benefited.

Learn more about CPPs in this link.

Energy efficiency projects completed in 2019:

- Energy efficiency in lighting and environmental conditioning: Empresa de Pesquisa Energética (Power Research Company - EPE); Polícia Militar do Estado do Rio de Janeiro (Military Police of the State of Rio de Janeiro - PMERJ);
- Energy efficiency in lighting: Central Bank of Brazil; Municipal CIEPs; State University of Rio de Janeiro (UERJ-HUPE);
- Energy efficiency in lighting and incentive sources (photovoltaic generation): Centro de Operações Rio (Rio Operations Center - COR);
- Energy efficiency in lighting, environmental conditioning and incentive sources (photovoltaic generation): Hospital Federal da Lagoa (Lagoa Federal Hospital);
- Energy efficiency in public lighting: municipality of Pinheiral;
- Energy efficiency in lighting and hospital equipment: Hospital Municipal São João Batista (São João Batista Municipal Hospital - Volta Redonda)
$\mathbf{O}$ 

## $\mathbf{Q}$ EEnergy efficiency in public lighting:

municipalities of Comendador Levy Gasparian, Paty do Alferes, Piraí, Paracambi and Três Rios;

## **Energy efficiency in lighting and incentive sources** (photovoltaic generation):

Associação Barramansense de Ensino (Barramansense Teaching Association - SOBEU); Hospital Geral do Andaraí (General Andaraí Hospital); Public Buildings in the municipality of Rio Claro; Department of Education of the municipality of Queimados;

# Projects in progress

Energy efficiency in lighting, driving systems, water heating and others (washing machine appliances): State University of Rio de Janeiro (UERJ II);

**Energy efficiency in environment conditioning:** Biomanguinhos (FIOCRUZ);

Educational projects: Energy Museum IV; São João Marcos Park 2018/2019;

**Environmental Investment** 

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#### COMMITMENTS

## Energy efficiency in lighting, environmental conditioning and incentive sources (photovoltaic generation):

Secretaria do Estado da Fazenda (State Treasury - SEFAZ); Superintendência Regional da Polícia Federal (Regional Superintendence of the Federal Police); Associação dos Aposentados de Volta Redonda (Association of Volta Redonda Retirees); Centro Administrativo São Sebastião (São Sebastião Administrative Center) (City Hall of Rio de Janeiro);

## **Energy efficiency in lighting:**

Hospital da Força Aérea do Galeão (Air Force Hospital of Galeão - HFAG); Escola de Guerra Naval (Navy War School); Navy – CIAA (Navy) Hospital do Carmo (Carmo Hospital);

**Energy efficiency in lighting, driving systems and water heating:** Instituto Nacional do Câncer (Cancer National Institute - INCA);

## **Energy efficiency in lighting and environmental conditioning:** Public Prosecutors' Office of Rio de Janeiro; Hospital Federal dos

Servidores do Estado do Rio de Janeiro (Federal Hospital of Employees of the State of Rio de Janeiro); Naval School; 1st Naval District Cabinet; Navy Arsenal; Nossa Senhora da Conceição Hospital; Navy – CIAGA;

## **Low income projects:**

Light Recicla III and IV; Community Eficiente (Efficient Community) IX and X.

## Light relationship with low-income communities [GRI 203-1]

Within the scope of the Energy Efficiency Program (PEE) regulated by Aneel, Light carries out two projects aimed specifically at low-income communities: *Community Eficiente* and Light Recicla. In 2019, we managed to invest a total of more than R\$ 4.8 million in both projects.

Light's performance continues to be greatly affected by public insecurity in Rio de Janeiro communities. In 2019, the performance of the company's professionals was limited due to the lack of access to these territories, controlled by drug dealers, militias and violence. The weakening of the public policy, which created the Pacifying Police Units in 2008, has contributed significantly to the inaccessibility to areas previously contemplated by Light due to such risks.

Light's strategy to reach these customers, ensuring the safety of its staff, was the relationship with public schools, health units and Social Assistance Reference Centers (CRAS). Through the intensification of dialogues with these agents, the Community Relations area was able to raise awareness and disseminate information on conscious energy consumption, losses caused by theft, and the Social Electricity Tariff. Another strategy that achieved good results was the dialogues with leaders of associations of residents, students and teachers, family health clinics and NGOs that already work with social and cultural projects in these communities.

The needs of the communities where we operate are identified through researches conducted by a company hired by Light. The interviews are conducted with residents, formal and informal leaders, teachers and school principals, and health professionals who work in these locations. The results of such social and economic mapping help Light to define its operating strategies.

With all these actions put in place, Light has been able to operate regularly in the communities it can access, providing not only emergency services, but also maintenance in the energy distribution and recovery grid.



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#### **Community Eficiente**

In 2019, *Community Eficiente* IX and X projects received investments of around R\$ 530.5 thousand and R\$ 2.7 million, respectively. Such funds were used to replace 674 refrigerators and 21,773 bulbs with more efficient ones, benefiting 1,338 customers by reducing consumption in their energy bills.

In the educational sphere, we delivered 58 lectures in schools, community centers and CRAS, and promoted 11 joint efforts to register families in CADÚnico<sup>10</sup> and, consequently, in the Social Tariff.

With these actions, Light was able to reach almost four thousand low-income customers in Rio de Janeiro communities. They contributed significantly to change the behavior of families with regard to energy consumption, with no theft and no waste.

Community EFICIENTE RESULTS	2017	2018	2019
Consumers benefited by the project	19,929	9,593	4,779
Customers who participated in lectures and events in the communities	6,860	9,767	3,441
Customers benefited with efficient bulbs	17,101	8,409	664
Number of incandescent bulbs replaced and disposed of	-	13,300	21,773
Number of florescent bulbs replaced and disposed of	-	52,625	6,417
Customers receiving donated efficient energy refrigerators	638	1,663	674
Customers receiving showers with heat recovery technology (*)	2,182	362	-

(\*) The shower replacement action was discontinued in 2019.

**<sup>10</sup>** An instrument for collecting data and information aiming at identifying low income families for inclusion in the Federal Government's social assistance and transfer of revenue programs, such as Social Tariff.

## **Commitments of Community Eficiente for 2020**

Our main commitment is to intensify educational activities in communities, schools and CRAS, aiming at disseminating important information on conscious consumption, losses caused by theft of energy, and enhancement of registration of families in the Social Tariff. Light's objective is to stimulate the behavior of families contemplated by the project regarding the use of electricity with no waste, allowing that, through new habits, there is a reduction in consumption and, consequently, a decrease in the value of bill for adjustment to the family budget.

At the same time, we are going to encourage community engagement in projects carried out in the communities where we operate, and enhance the benefit of the Social Tariff, increasing the number of joint efforts to register low-income families.

In 2020, the replacement of refrigerators and bulbs will also be intensified, so that we are able to reduce energy consumption by the families.

The social and economic mapping, started in 2019, will be maintained in 2020, because through it we have the opportunity to know the economic and consumption profile of our low-income customers more closely. Such knowledge makes it possible to define more assertive strategies.

Light credited R\$ 389 thousand as discounts on the energy bills of customers and social institutions registered with Light Recicla, an increase of approximately 44% in relation to 2018.

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## **Light Recicla**

In 2019, the project results exceeded expectations, and were achieved through innovative strategies, developed to increase the amount of waste collected. It is worth noting the new partnerships made with hotel chains, public and private schools, museums and the markets, and the commitment of Light's operational and administrative units to direct their waste to Light Recicla.

We implemented two new ecopoints: the Makro supermarket, in Rio de Janeiro, and the municipality of Miguel Pereira, which now has two collection points. And we closed the ecopoint at Cruzada São Sebastião, directing customers to another collection point.

The result of such initiatives may be evidenced in numbers: Light credited R\$ 389 thousand as discounts on the energy bills of customers and social institutions registered with Light Recicla, an increase of approximately 44% in relation to 2018

Regarding the waste generated by Light itself,

# 间 39 tons

were directed to recycling, which generated a discount of

# R\$ 11.7 thousand

in the energy bills of registered social institutions

**Social Environmental Investment** 

## LIGHT RECICLA RESULT

2017

Waste	Total collected (ton)	MWh saved	Total collected (ton)	MWh save	Total collected (ton)	<b>MWh saved</b>
Paper	567.82	2,498.74	543.90	2,480.17	878.06	4,003.94
Plastic	521.54	2,764.21	354.75	1,880.16	278.83	1,477.79
Glass	107.71	68.94	550.46	352.30	420.29	268.98
Metal	132.02	714.69	308.85	974.23	194.14	814.07
Oil	9.63	36.10	16.77	62.89	20.80	78.01
Tetrapak	6.50	32.03	5.90	30.11	6.26	31.92
Total	1,345.22	6,114.71	1,780.63	5,779.86	1,798.37	6,674.71

## **QUANTITY IN TONS BY TYPE OF WASTE GENERATED BY LIGHT ITSELF IN 2019**

Types of waste	Waste collected (kg)	Bonus (R\$)
Pet bottle	4.20	122.00
Aluminum can	48.80	720.00
White paper	9,493.15	3,560.08
Mixed paper	27,165.76	4,925.55
Cardboard	2,520.68	2,385.77
Hard plastic	0.10	4.50
Total general	39,232.68	11,717.90

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2019	2018



### **Commitments of Light Recicla for 2020**

In 2020, partnerships with major waste generators, such as hotels, markets, industries, shopping centers and schools, will remain active, so that we can raise the bonus value for customers and social institutions registered in the project, and contribute to preservation of the environment.

Another commitment is to maintain educational actions on the proper disposal of waste and environmental preservation in public and private schools that have ecopoints. And in relation to ecopoints, they will continue to expand throughout 2020.

## LIGHT POLICIES GOVERNING PROCESSES ON SOCIAL AND ENVIRONMENTAL ISSUES: [GRI 103-2]

- ✓ Corporate Social Responsibility Policy;
- Servironmental Policy;
- Or Commitments to the Environment and the Climate;
- Anti-corruption Policy;
- Occupational Safety and Medicine Policy;
- Sponsorship Policy;
- Social Responsibility Agreement\*;
- ✓ Code of Ethics and Business Conduct\*;

\* Integral part of the agreements and contracts signed with employees and suppliers.







#### [GRI 102-16]

Light's turnaround plan is structured around four strategic pillars

- Fighting energy loss;
- Reduction of legal contingencies;
- Liability management;
- PMSO reduction and CAPEX prioritization

However, to deliver results, the main pillar is the company's culture focused on results, with the alignment of interests between management, employees and shareholders in pursuing the objectives established. Fostering a culture of results that promotes organizational development and generates value for shareholders, through the excellence of people and management processes, is an important lever to ensure the high performance of the company's growth.

Accordingly, Light repositioned the *Jeito de SER Light* with elements better suited to disruption processes, essential for wide and mass organizational alignment. The new *Jeito de SER Light* starts from the synergy and integration between the areas for the result of everyone: #umasóLight initiative, a unique team and with a single purpose of being the best energy company in Brazil.

From a cultural point of view, in 2019, the new *Jeito de SER Light* was adopted by all of Light's leadership. And, to engage the workforce, consisted of 12,000 own and outsourced professionals, we performed a series of actions to inform and raise awareness about the new guidance we were giving to the company.

## **WORKFACE PROFILE**









55 interns

**186** with disabilities

**918** hired in the year

## **PRINCIPLES OF THE NEW JEITO DE SER LIGHT**

- **Example 2 Even accident:** we do not negotiate with life;
- **Ethics:** we do not tolerate circumventions;
- Ownership within the company: we own and assume results personally;
- **• High performance:** overcoming is our DNA;
- Execution with excellence: our premise is quality and focus on customer.



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Provide qualified and sustainable energy and services, contributing to the well-being and development of society

# missionvisionvalues

## Valorization of life

We always put life first in the highest safety standards.

**Ethics** 

We always act with a focus on the truth, and reject any form of corruption. We have a respectful behavior in our relationship with internal and external audiences.

## Sense of ownership

We take Light's challenges as our own, and never give up individual responsibility. We are genuinely engaged with the business, proposing improvements and taking.



To be the best company in the electricity industry, recognized for its profitability, efficiency in management and quality of services

## Simplicity

We work with clarity, transparency, objectivity and simplicity to facilitate everyday life. We are productive, efficient and straightforward.

## Meritocracy

We value and recognize those who deliver results. Differentiation is essential to maintain a fair and sustainable management.

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Health

8 DECENT WORK AN ECONOMIC GROW

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## Management of knowledge [GRI EU14]

In management of knowledge, we have the challenge of keeping our employees updated and aligned with the technical specificities of the industry and with the company's safety guidelines. In addition to traditional online and in person training, we maintain two fronts to retain technical knowledge at Light:

- **(b)** Internalization of training: we currently have an internal structure dedicated to preparing and updating procedures, instructions and teaching materials to disseminate the normative and operational knowledge to all Light employees.
- **Educadores Light Program:** formed by technical professionals who update and prepare operational procedures, as well as support Academia Light in operational training
- **Educadores Light Program:** formed by technical professionals who update and prepare operational procedures, as well as support Academia Light in operational training.

In 2019, 180,943 hours of training were given, representing 36.7 hours of training per employee. The main training sessions are classified as:

- **Regulatory:** mandatory courses related to regulatory standards (NRs);
- **Operational:** mandatory courses for functional training of employees for the performance of their activities;
- **Specific:** courses for development of professionals.

For outsourced professionals, on-line training was offered at Portal do Conhecimento, and in-person training on business and safety processes. 58,251 hours of training were given, with 2,296 participants.

[GRI EU21]

In addition to Programa Vida (Life Program), which since 2012 strengthens the culture of safety and a behavior of prevention, in 2019, the following initiatives in training and processes stood out:

**(b)** Incentive campaign: we monitor and celebrate with the 23 teams of our own employees and third parties, in field activities, the achievement of the 365-day milestone without typical accidents with leave of absence;

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In addition to investing resources in the improvement of processes and procedures, Light continues to invest in training and awareness of its entire workforce, aiming at completely changing the culture of safety, reducing accidents, and ensuring a better quality of life for the company's employees.

**b** Light Recognition Campaign: we award 75 employees who achieved ten safety inspections without failure of compliance

**Diálogo Administrativo do Vida (DAV - Vida Administrative Dialogue):** held every two weeks in all areas, with employees in administrative positions, aiming at minimizing possible accidents in the work environment and during transfers to and from work

**Safety briefing:** we dedicate the initial five minutes of the meetings to disclosure the Health, Safety and Life Quality results and actions to Light employees;

**Example 2** Restructuring of the Safety Dialogue: we improved the existing methodology, training multipliers and giving approach tips to facilitators;

**•** Visual communication in the facilities: we educate the entire workforce with images and messages aimed at work safety;

**•** Training of investigation agents: training of 526 investigation agents to improve the perception and critical analysis of any deviations found during investigations;

**•** Training of multipliers: with the creation of the Vida Administrative Dialogue (DAV) and the restructuring of the Daily Safety Dialogue (DDS), we trained 282 multipliers;

**(b)** Emergency simulation, review of the investigation process, analysis of occupational accidents, and restructuring of management of partner companies performance: these three measures were adopted to guarantee a real result of safety indicators, as well as to influence other occupational health and safety initiatives in partner companies

## **Results achieved**

In December 2019, the company ended the year without any fatal accidents involving its workforce during activities in the field and in the offices, reflecting the preventive actions implemented and the commitment to changes in behavior and attitudes across the entire workforce.

In September 2019, we implemented the 100% Safe method - Light Safety Index (ISL), which aims to signal the degree of safety of operations, in a preventive action. At the end of 2019, we achieved the result of 98%, within the margin classified as "Safe". The frequency and severity indicators for 2019 had an increase when compared to the last two years, with the majority of accidents having low potential occurrence gravity, such as bruises, sprains and excoriations. In order to reduce these occurrences, preventive actions were intensified.

As for the absenteeism rate, in 2019, it was 2.29, above the established target of 1.44, certainly impacted by the preference given by various segments.

In order to reduce this rate, we performed outpatient care at our medical unit, and reinforced in-person medical assessment, in cases of absence of more than three days and recurrence of absence for related reasons. [GRI 403-3]

In addition, in a joint action with managers of the areas, we were closer to remote employees, so that they could adapt their return to work with medical treatment.





## **Population safety**

Our concern for the population safety justifies many ongoing initiatives. In 2019, there were 18 occurrences, six less than in 2018, a decrease of 25%.

To reduce this number, throughout the year we inspect and monitor activities in the field, always observing possible risk situations. When identified, they are informed to the area involved so that the immediate population is promptly informed of the risks.

This work extends to the entire concession area of Light, such as in communities and schools, for example, where we raise awareness about the dangers of the electricity grid, and reinforce the importance of adopting personal safety measures

INTRODUCTION

The Quality of Life Program encompasses several actions that encourage the adoption of healthy behavior, and offer social and psychpedagogical assistance to our employees. Get to know the activities carried out in 2019:

**Electricians' Rodeo and Children's Day:** a joint action that added safety values at work. In addition to attractions to children, the participation of families in Electricians' Rodeio was a pioneering initiative at Light, which made it possible to disseminate the concept of safety also to family members.

**Paternidade Responsável (Responsible Paternity):** reinforcing Light's role as a citizen company, the company joined the 20-day paternity leave and organized, for future dads, meetings to guide, inform and raise awareness about the father's role in building a healthy relationship with children and wives. With *Licença Maternidade Cidadã* (Citizen Maternity Leave), Bebê Saúde (the Baby Health) program (guidance during pregnancy and the first years of life), the *Sala de Apoio à Amamentação* (Breastfeeding Support Room) and *Licença Maternidade Cidadã*, we created an important support network for the families of Light employees.

**Setembro Amarelo (Yellow September):** for the second consecutive year, we carried out a suicide prevention campaign, seeking to raise awareness among employees about risk factors for psychiatric and emotional diseases. Therefore, we promote lectures and distribute informative material. The continuity of this initiative, associated with the national campaign of the Ministry of Health, has contributed for many employees to overcome prejudices and seek assistance in the social service of Light, requesting support for themselves and their families.



**Novos Ares (New Atmosphere):** with the support of a multifunction team specialized in the subject, we started a new group of Smoking Stopping, which assists employees and offers medical, psychological and medication support.

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COMMITMENTS

*Light Corrida* (Light Running) Team: composed of 50 employees participants who train weekly with the support of a physical educator.

*Vida Ativa, Espaço Vida Ativa and Ginástica Laboral* (Active Live, Active Life Space and Labor Gymnastics), *Bem Querer* (prevention and treatment of alcohol and other drug use problems) and *Benefício Auxílio-Psicopedagógico* (Psycpedagogical Assistance Benefit) programs also remained active in 2019.

The commemorative dates also did not go blank, with emphasis on International Women's Day, Heart Week, Pink October, Blue November and Kindness Day.



#### **ILUMINAR PROGRAM**

Iluminar Program offers internship opportunities for young people with intellectual disabilities. In 2019, four interns successfully completed their internship period. Nominated for a selection process, one of the interns was approved and started working in another program for inclusion of young people with intellectual disabilities in Rio de Janeiro. In December 2019, Colégio Eduardo Guimarães, an educational institution associated with Light, nominated candidates for the selection process for open positions.



INTRODUCTION

We have worked on several fronts in the PMSO control: better management of materials and agreements with third parties, launch of a Voluntary Dismissal Program, greater synergy between the areas, increased productivity of field teams, prioritizing teams with the purpose of raising the control and productivity, among others.

As part of this process, we adopted a new cost reduction strategy and efficient investment allocation, both in generation and distribution.

With respect to interests in which we have shared control, the company aims to reduce its exposure to these non-strategic assets, focusing efforts on creating value, especially in the distribution segment. In addition, it seeks to avoid the need to make capital contributions to these assets.

# **Operational costs**

2019 was marked by the ongoing search for efficiency and intelligence in the use of our resources and better management of our processes.

We highlight the process of prioritizing some activities, including reading/delivery of bills, inspections against fraud, and tree pruning, ensuring better management, greater assertiveness in actions and increased productivity.

Although the hiring-back increased the cost of personnel by 6.6%, the PMSO as a whole decreased by 2.9%. This decrease is related to the best management and control practices implemented by the new management and, also to the greater capitalization of own labor, to the increase in operational efficiency and to the reduction of discretionary expenses.

Costs were also positively impacted by charges of agreements with suppliers caused by non-compliances, and credits received from fines for late payment of bills by our customers.

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## Investments

The company's main investments in recent years have been aimed at expanding and maintaining the distribution grid, and improving the quality of the power supply, combating non-technical loss and generation projects.

In 2019, R\$ 884.6 million were invested, 10.8% above the previous year. In the same period, R\$ 503.9 million were invested in the development of networks and expansion of distribution, with the aim of increasing the strength of the grid, improving the quality of supply, and reducing the level of loading of high voltage circuits.

Within this amount, R\$ 232.1 million are earmarked for specific investments in the Results Plan (DEC), and for modernization of the underground network, agreed with the Regulator in the last periodic tariff review. In addition, R\$ 229.1 million was spent on the project to combat energy loss - greater number of teams in the field to intensify inspections and normalization of low voltage customers, and upgrade existing electronic meters to more advanced technology - and the continuity of investment in energy balance in the Smart Grid network.

In turn, investment in generation was R\$ 69.5 million, an increase of 26% compared to 2018, mainly due to projects to modernize the pumping systems of the generation complex, and to replace assets.

Considering the investments in interests, the company's total investment is R\$ 938.7 million in 2019, 5.5% higher than last year

Following the objective of reducing its exposure to non-strategic assets and interests in which it does not have control, in October 2019, Light Energia signed an agreement to sell to CG I Fundo de Investimento all of its shares in Renova, equivalent to 17.17% of the capital stock of this company, and for the amount of R\$ 1. Also within the scope of this transaction, LightCom assigned all credits held against Renova to CG.

In 2020, we intend to proceed with the sale of interest in investments in which we do not have control. We will continue with our policy of prudent investments, always pay attention to the basic construction of regulatory assets, giving priority to those aimed at modernizing our distribution network and combating loss. In relation to the generation segment, we will start the maintenance works on Ilha dos Pombos spillway, and conclude the necessary studies for environmental licensing and construction of the bypass tunnel in Lajes Complex, which will interconnect Vigário reservoirs and Ponte Coberta.

## Generation

Considering that water is our main natural capital, raw material in the generation of electric energy, we have developed an environmental management program to protect ecosystems, and maintain the quality of water used in Lajes Complex, which consists mainly of hydroelectric power plants UHE Nilo Peçanha, UHE Fontes Nova and UHE Pereira Passos, which concessions belong to Light Energia, [GRI 304-2]

In 2019, natural water flows in Rio Paraíba do Sul basin were below the historical average, but without compromising the operation of Light's power plants, which met all the regulatory commitments for water transposition into Rio Guandu basin, defined in ANA/DAEE/IGAM/ INEA Joint Resolution No. 1,382, of December 7, 2015.

Among the challenges in the generation area, we highlight the conclusion of the technical analysis of proposals for the execution of the works in the North Channel Spillway of UHE Ilha dos Pombos, which should start-up in the first half of 2020, after the issuance of the environmental license by IBAMA.

Also in 2020, we will complete the necessary studies for environmental licensing, and the construction of the bypass tunnel in Lajes Complex, which will interconnect Vigário and Ponte Coberta reservoirs. We expect the tunnel to be operational by 2023.



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In addition, it is worth mentioning the actions performed by the Dam Safety Plan (PSB)<sup>11</sup>, listed below [GRI EU21]:

- **(b)** Update and submission to Aneel of the Dam Safety Form, in which the regulatory classification of the dams is defined;
- Carrying out of regular safety inspections, as provided for by the *Política* Nacional de Segurança de Barragens (National Dam Safety Policy - PNSB);
- Development of the periodic safety review of Santa Branca and Pereira Passos dams;
- Completion of the reinforcement work on Santana dam, as recommended by the latest periodic safety review report on Santana dam;
- (b) Installation of supplementary instruments in Vigário and Ilha dos Pombos dams;
- Update of emergency action plans;
- Monitoring of in-person inspections by the regulator in all dams of the Light Energia generator complex;
- Acquisition of dam management software.

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**TURNAROUND PLAN** 

RESULT

In addition, we completed the commissioning of the dam warning system in the self-rescue zone of UHE Ilha dos Pombos, and participated in the first emergency evacuation drill in the community, conducted by the Civil Defense of the municipality of Carmo/RJ.

In 2019, among other investments, we highlight the beginning of modernization of Vigário and Santa Cecília lifting power plants, Lajes dam and the valve house, as well as refurbishment of one of the generation units of UHE Fontes Nova, and a pumping unit of Vigário lifting power plant. At Vigário lifting power plant, we also modernized one of the "grid cleaner" machines, eliminating the risk of power plant shutdown in the event of equipment failure. In Santa Cecília, we revitalized the metallic structures of the power plant's dam.

It is worth mentioning that we concluded the replacement of the 138 kV transmission line equipment in substations of Fontes Nova and Nilo Peçanha power plants, in compliance with the Plano de Outorgas de Transmissão de Energia Elétrica (Electricity Transmission Concession Plan) (POTEE 2019).

It is important to highlight in this report that all challenges in the area of Power Generation are being overcome with the contribution and great synergy of the areas of Engineering, Maintenance, Operation, Environmental Management and Asset Management. In order for Light's activities to meet the criteria of quality and operational safety, we are sure that decision-making must be done collectively.

For information on what we do to ensure safe work at Light's power plants, see chapter Health and Safety.

<sup>11</sup> The Dam Safety Plan (PSB) is an instrument of the National Dam Safety Policy (PNSB), provided for in art. 6, item II, of Law No. 12,334/2010, to be mandatorily implemented by any entrepreneur, which objective is to assist them in the management of the dam's structural and operational safety. The PSB must present the main technical data of the structure, construction, operation, maintenance, classification, control measures, monitoring, safety inspection reports, etc., and should mainly serve as a tool for planning and managing dam safety.

## **Distribution** [GRI 203-1, GRI EU6, GRI EU23]

As in other areas of the company, Distribution has also been benefiting the good results of the turnaround started in mid-2019, based on the ongoing development of people, improvement of processes, safety culture and meritocracy.

In 2019, CAPEX in power distribution was R\$ 395.6 million, and Technical OPEX was R\$ 96.7 million. In the aggregate, there are approximately 78,765 km of power distributing network for Light's customers, 72,964 km overhead network, and 5,801 km underground network, representing the fourth largest reticulated underground system in the world.

In the expansion of the system, we invested R\$ 83.8 million in several works, among which the progress in self-healing projects with the increase in the capacity of circuits, redistribution of feeder loads, and consequent relief in the loading of transformers and duplication services of the output cables of distribution circuits.

Throughout 2019, we invested in preventive and corrective maintenance of overhead and underground networks, installation of protective equipment, and renewal of medium and low voltage circuits. We also purchased a new equipment, which identifies the conditions of the underground cables, and installed a new model of anti-theft cover, which makes it difficult to move.

The overhead distribution networks in places with difficult access were inspected by new low cost drones, with thermo-vision technology, which makes easy the identification of hot spots in the network and in substations. In addition, we started pruning the trees with a wood chipper, an equipment that reduces waste collection and storage costs.



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RESULT

COMMITMENTS



## **Overhead network improvements**

In 2019, we carried out 1,279 inspections of the overhead distribution network, which generated 183,734 tree pruning and 28,761 network services, of which 17,193 dead line services, 10,356 live line services, 1,106 network cleanings and 106 light line services.

With regard to investments in quality improvement, we highlight the renewal of 34 km of overhead distribution networks, and the adaptation of 369 protective equipment (reconnectors, sectionalizers, fuse switches).

## **Underground network improvements**

In the aggregate, 23,695 inspections in transformer chambers, 36,606 inspections in underground inspection boxes, and 2,160 transformer oil analyzes were conducted. Test/diagnoses were also carried out to check the integrity of cables, making it possible to ascertain trends and reduce the incidence of unexpected failures.

Based on these diagnoses, 246 oil switches were replaced by gas switches, 555 distribution transformers and 42 network protectors. 116 distribution transformers and 1,350 network protectors were also subject to maintenance.

With regard to investments in quality improvement, we conducted the renewal of 22.8 km in medium voltage network, and 42.5 km in low voltage, and 21 km in replacement of stolen cables. The structural reform of 40 transformer chambers and the installation of 480 hollow covers in inspection boxes were also carried out.



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## Suppliers [GRI 102-9]

The Supply area contributes in several ways to the turnaround process that Light is going through. Among them, Supply provides support in combating loss, improving the management of the company's materials and hindering their improper use, supports the hiring of power recovery teams (REN) seeking companies with higher technical qualification for the activity, and develops models of business with collection companies that encourage the reduction of default by Light's customers.

In 2019, we carried out several initiatives to improve the management of our suppliers, and engage them in the sustainability agenda. They were:

> We consolidated the supplier qualification process, which objective is to minimize the risks related to the financial insolvency of suppliers of strategic materials and services;

• We have perfected our relationship with suppliers through periodic meetings aim to strategically align the guidelines of both Light and its suppliers. The agenda for one of the meetings, held in November 2019, addressed issues related to our Code of Ethics and Business Conduct;

**(b)** We defined Supplier Management area as a corporate channel for supplier communication. This contact is made in person or by email gestaodeSupplierslight@light.com.br. Such channel does not preclude others existing in the company;

• We expanded the Billing Equivalence Index methodology for agreements in the Sales area. This indicator aims to monitor the financial balance of agreements, allowing, through management routines with mathematical basis, to reevaluate the quantities and unit prices, without changing the prices of the operational teams;

**(b)** We disseminate the Jeito de SER Parceiro to our service providers. In 2019, we visited around ten partners, where we carried out actions such as Caravana do Vida and RoadShow # umasóLight, in order to connect our employees from all segments and reinforce the concept of safety, ethics and results.

In 2019, a total of 159 companies provided services to Light, of which 133 at Light SESA and 31 at Light Energia. They operate in activities related to the operation (cutting, reconnecting, maintenance, works, etc.), customer service, facilities, safety and IT, among others. It is worth mentioning that Light SESA and Light Energia have five common suppliers.

### Labor, social security and tax audit

All companies that provide services and have employees at our service are subject to an audit in the Labor, Social Security and Tax areas at least once a year. In 2019, we had 96 audited companies, totaling 209 audits.

Audits are divided into in site and remote. The in site audit is carried out at the company's office to evaluate suppliers with a large number of registered providers and connected to the most critical activities, such as, for example, network and power recovery. Subcontractors of companies hired by Light are also subject to visits for audit purposes.

At the end of each audit, companies are informed through reports on the non-compliances found, which can also be consulted in Sistema de Gestão de Terceiros (Third Party Management System - SGT), subsidized by Light. If the scores of the audited companies are lower than the average 7, suppliers must present an action plan to correct the problems, which will be further examined in the next audit cycle.

### **Occupational Safety Audit**

Also in order to protect the people who work at Light, we carried out specific audits on Occupational Safety. In 2019, nine companies were audited, considering the severity of the activities carried out, the safety rate and the number of employees.

The following analyses are performed:

- Specification of personal and collective protective equipment;
- Results from inspections to the contractor's facilities;
- Previously listed documents, in order to verify the contractor's actions regarding operational management and workplace health and safety.

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## **Information Technology**

We are working to modernize the information technology (IT) systems used by the company, a continued challenge due to the speed of technological evolution that we are currently experiencing. Our goal is to ensure better internal controls and improve customer experience.

In 2019, we carried out an analysis of Light's main processes and of the technological pillars of the market, and also mapped the main IT risks considering those that impact the company's business directly. The most critical ones gave rise to an emergency action plan to ensure the operational support for the main systems: GDIS, HEMERA, and SAP.

As a result, we have identified the structuring initiatives for the next four years, which will result in improvements to loss recovery and charging activities, as well as customer service and network operation. Still in 2019, we began implementing systems capable of increasing the productivity of these activities.

In addition, we made adjustments to the IT/Telecom infrastructure by replacing obsolete equipment and improving security processes against possible external attacks. Added to this is an investment proposal for the next three years, which consists of continuing to replace obsolete equipment and to update the systems' architecture.

The challenges in the area relate to the implementation of innovation projects that use smart grid/meter technologies, as well as mobility, data mining, analytics (credit recovery and field services) and digital transformation, and for maintaining technical update levels for the SAP platform, according to the manufacturer's road map. Additionally, to deploying a new ADMS (Advanced Distribution Manager System).

# Pesquisa e Desenvolvimento (P&D) [GRI EU8]

Investments in R&D allow the development of more efficient technologies and processes and innovative solutions that can reduce costs and/or generate revenues for the company. In 2019, the total investment in the program regulated by Aneel was R\$ 29 million, of which R\$ 26 million were related to projects developed at Light SESA and R\$ 3 million at Light Energia. Accordingly, we comply with our regulatory obligations.

Light's operating strategy in this area in 2019 remained the same as in recent years, having been guided by facing the company's major challenges, including improving quality indicators and reducing non-technical loss.

For example, in 2019, of the 45 projects in progress, 12 proposed solutions to combat non-technical loss, and 11 were aimed at improving quality indicators. In the execution of these projects, technological partners with different characteristics, such as universities, industries and startups, have contributed.

The main projects under development and their respective investments in 2019 are:

- Forecasting of probabilities of failures and estimate of claims in structures, equipment and circuits of the underground distribution networks - R\$ 1.5 million;
- System for planning and monitoring the maintenance of electricity distribution networks
   R\$ 348.2 thousand;
- ldentification of uncovered fraud by overlaying of image layers R\$ 877 thousand;
- Naintenance in electrical substations assisted by augmented reality R\$ 232.8 thousand;
- On-site monitoring of resistance and impedance of electrical unground cables of powered high voltage substations - R\$ 798.4 thousand.



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**TURNAROUND PLAN** 

Below, we highlight some projects that have contributed to process optimization, reduction of non-technical loss, and increase in revenue:

- (b) Meter with violation identification: low cost device that can be easily incorporated into the internal environment of the electronic meter, and inform the violation to the reader professional, mitigating fraud in meters and promoting revenue increase. We concluded the trial development phase with a positive evaluation by the responsible technical area. In 2020, the project is expected to progress to the main head of Aneel innovation chain;
- Corrosion detection system for powered line cables pioneer batch: inspection robot that allows the detection of corrosion more efficiently, safely and economically. Improvements were made to the original prototype, which is in the final stage of assembly;
- Intelligent system for handling fraud complaints: integrated system to capture, enhance, filter and value fraud reports made by any citizen in Light's concession area. The system is able to register reports, cross-check reports with other signs of fraud, filter unfounded complaints, estimate the power generated in each report, and prioritize field inspections. The project, in the trial development phase, is concluded. Light's internal employees can access via Android and IOS. In case of approval by the technical team, the project will advance to the stage of the innovation chain, when it will enter the market and made available to the public in general;
- Development of nanotechnological materials to capture gases in the system distribution underground chambers: catalysts for degradation of accumulated explosive gases found in underground distribution chambers. R&D area has developed a prototype, consisting of a unit for storing gases, a unit for depositing the catalyst, and a photo-radiation unit for the photodegradation process, which can be installed in underground chambers for application in the field.

Additionally, in 2019, three projects were completed, two at Light Energia and one at Light SESA:

- Development and implementation of an aquatic macrophyte management system with high environmental, social and economic sustainability: the project generated an unprecedented methodology for managing macrophyte communities for hydroelectric reservoirs. See more in chapter Social and Environmental Investments;
- Serial head of an innovative cleaning system for hydro-generator heat exchangers: the product is functional and in operation at Fontes Nova power plant, producing noticeable gains in the efficiency of heat exchangers. The system includes the following features:
  - **1. Abrasive ball injector/receiver system:** automated heat exchanger cleaning device capable of replacing, with technical advantages (without the need to disassemble the heat exchangers) and economic benefits (without the need to interrupt generation), the conventional method cleaning;
  - **2. Online measurement system:** continuously and remotely monitors the thermal and hydrodynamic conditions of operation of the water-to-air heat exchangers, used to cool hydro generators. It automatically corrects the results of temperature, pressure and flow measurements.
- Derivation identifier at the input lines of underground powered BT, using a non-invasive method: in 2019, five prototypes were delivered. After field tests, the improvements were incorporated into the final version of the product.

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## **External call for projects**

Also in 2019, Light's Innovation area carried out an external call for projects, having then received 226 proposals for 21 issues.

We also started a technological prospecting program to reduce non-technical losses in areas at risk, which objective is to coordinate R&D projects capable of bringing innovative solutions to mitigate the effects of energy theft in these locations, due to the difficulties of Light's teams to access to these territories.

We participated in the Strategic R&D Project Call for Developing Efficient Electric Mobility Solutions, carried out by Aneel. The project Development of solutions for shared electric mobility: infrastructures and supply systems for e-carsharing and micro-mobility of Light was pre-approved. It aims to develop a model of car sharing in a location yet to be defined, in addition to studying business models that may arise during the project.

In 2020, R\$ 30 million will be allocated to research and development projects at Light SESA and R\$ 4.2 million at Light Energia. To make this investment feasible, we will seek strategic projects in technological prospecting to act in non-technical loss in risk areas and in Energy Future<sup>12</sup>.

**<sup>12</sup>** More calls of projects in the Brazilian power industry, Energy Future, a virtual innovation hub for the power industry, connects projects to major concessionaries in the country.

## Market of operation [GRI 102-6]

In 2019, the total billed market was 27,658 GWh, a result 1.3% lower when compared to the same period in 2018. The captive market, which reached 17,986 GWh, suffered a decrease of 2.5%. The free market, which transferred 7,257 GWh, increased 5%, and concessionaires, which totaled 2,415 GWh, showed a decrease of 9.4%.

The captive market, which represented 65% of the total market in 2019, had a negative performance mainly due to the volume of energy recovery (- 496 GWh) - 70% lower compared to the same period in 2018 - and the migration of customers to ACL, a fact that contributed to the reduction (-377 GWh) of customers in this market. Excluding these two factors, growth would have been 2.3%.

The free market, which had a share of 26.2% of the total market, showed an increase of 344 GWh due to the migration of customers mentioned above, which offset the reduction in consumption in the industrial class, due to the reduction in consumption in the steel industry.

We highlight the positive performance of the transport, telecommunication and supermarket industries, which contributed to the 1.3% increase in commercial class.

Excluding the effect of REN, the total market would grow by 0.4% over the previous year. And, disregarding REN and the concessionaires, the total market would have increased by 1.5% in comparison to the previous year, in line with the 1.4% increase in the wire load.

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	Accun	nulated in			
	the ye	ear (GWh)	2019 / 2018		
	2019	2018	Change (%)	Share (%)	
Captive	17,986	18,455	-2.5%	100.0%	
Residential	8,414	8,600	-2.2%	46.8%	
Industrial	569	697	-18.4%	3.2%	
Commercial	5,496	5,598	-1.8%	30.6%	
Others	3,508	3,560	-1.5%	19.5%	
Free	7,257	6,913	5.0%	100.0%	
Industrial	4,408	4,472	-1.4%	60.7%	
Commercial	2,378	2,177	9.24%	32.8%	
Others	471	264	78.4%	6.5%	
Captive + Free	25,243	25,368	-0.5%	100.0%	
Residential	8,414	8,600	-2.2%	30.4%	
Industrial	4,977	5,169	-3.7%	18.0%	
Commercial	7,874	7,775	1.3%	28.5%	
Others	3,979	3,824	4.0%	14.4%	
Concessionaires	2,415	2,666	-9.4%	8.7%	
Total + Cone.	27,658	28,034	-1.3%		



Learn more about Light's market in our <u>Release of Results</u>.

#### [GRI EU12]

Reducing energy loss is one of the company's biggest challenges. Therefore, with a focus on improving management, we underwent a process of restructuring our commercial area in the second half of 2019, changing about 80% of leadership positions.

In addition, we renegotiated the agreements with service providers companies to fight loss, aligning the compensation of outsourced teams with the actual generation of results for the company. Previously, these agreements had their remuneration associated with the number of inspections carried out, as documented in terms of occurrence (TOI). In order to improve the quality of recovered energy (REN), the agreements are now remunerated based on a success fee, that is, in addition to a fixed amount (to cover fixed costs), providers have a payment linked to the incorporation of energy (IEN).

We also realized the need to carry out more regionalized work, according to the specificities of each area. For this reason, in mid-November, we updated our loss-fighting strategy by identifying in each regional management the main offenders - cut customers, billed at minimum and/or per estimate, illegal connections, inactive and targets<sup>13</sup>, starting to have work and action associated with defined metrics.

For a better control of field services, a Service Management Center was created in each region, which conducts real-time monitoring of field inspection teams, ensuring greater agility and assertiveness in decision making.

The new strategic plan to fight loss takes into account, in addition to conventional field actions, the following initiatives:

- i. reduction of the cut stock and market recovery;
- ii. shielding the network of medium-income customers with a high recurrence of energy theft in possible areas;

iii. use of individual and collective measurement technologies in commercial and residential customers with higher consumption;

iv. reduction in the percentage of customers billed at a minimum or per average;

- v. regularization of illegal condominiums; and
- vi. replacement of old meters.

Another initiative aimed at improving the management of processes/resources and increasing productivity is the hiring-back of labor. Our goal is to replace approximately 30% of outsourced teams in the conventional inspection program, of a total of approximately 1,000 professionals focused on fighting theft of energy in the low voltage market.

In December, about 100 employees were given priority, and the remainder will be given priority in the first quarter of 2020. Hiring-back aims to guarantee the execution of activities to fight loss, prioritizing the quality of REN, in order to avoid the occurrence of contingencies and future terminations, as well as to ensure a good collection rate and increase the power incorporation.

Regarding technology, we maintained our investments in technological solutions that can increasingly improve the work of reducing non-technical losses, such as, for example, the use of a mobile platform for real-time recording of field services, allowing the reduction of non-compliance of services still in the field, and the updating of our main intelligence software for generation of inspection targets.

It is worth noting that Light maintains a partnership with the Civil Police, through the Delegacy for the Defense of Delegated Services (DDSD), which often provides support for fraud inspections, notably for large customers, by registering occurrences and making arrests. In 2019, 159 occurrence records were opened and 47 arrests were made. Such conduct has the main purpose of moralizing the population and disseminating the culture that theft of energy is a crime.

As a result of the implementation of these measures, we were successful in interrupting the loss growth trend. In the first half of the year, losses increased 10%, while in the second half it remained stable.

**<sup>13</sup>** Targets are drivers of field activities identified in an autonomous basis by the artificial intelligence system at Light (ex: material reduction of historical consumption, regular consumption for a long period of time, and also reports of irregularities and comments from reading professionals).

OSS Fight to energy

## **EVOLUTION OF TOTAL LOSS**

12 months

9,055	9,164	9,336	9,397	9,532
				0.027
8,004	8,189	8,392	8,529	8,827
24.80%	25.42%	25.56%	25.51%	25.86%
21.020/	22.72%	22.98%		
21.92%			23.15%	23.95%
19.89%	20.62%	20.62%	20.62%	20.62%
dec/17	mar/18	jun/18	sep/18	dec/18
Loss (GWł	n)	REN	──→ Loss/Load in a ro	w (%)

In this regard, we can already see a stabilization in the total loss at the end of 2019 (12-month view), which was 9,736 GWh. The total loss indicator on the wire load in December 2019 ended at 26.04%. The total loss ex-REN (12 months) ended the year at 26.60%.

With this result, we are 6.42 p.p. above the percentage of regulatory transfer in the tariff, from 19.62%<sup>14</sup>, according to parameters defined by Aneel in the Tariff Review (RTP) for March 2017, already adjusted according to the reference market for the next 12 months, as approved by Aneel at the time of the tariff adjustment (IRT) of March 2019.

In turn, the non-technical loss/BT market ended the year at 52.05%. The non-technical loss (12 months) of the risk areas represented 56%, or 3,999 GWh. The measurement in these



areas will be improved with the conclusion of the installation of border meters, currently under process. In the possible areas, the non-technical loss ended the year at 3,087 GWh (44%). The indicator of total loss/wire load (12 months) in these areas decreased slightly, from 16.8% (3Q19) to 16.6% in 4Q19. This decrease is the result of initiatives implemented since August 2019.

We highlight that in 2H19 the total loss ex-REN (12 months) indicator was 0.1 p.p. lower, when compared to 1H19, slowing the growth tendency verified in 1H19, which was 0.8 p.p. higher, in comparison to 2H18. This trend was even more substantial when we see the non-technical loss indicator/BT market. The indicator for 2H19 was 0.9 p.p. lower, in comparison to 1H19, while in 1H19 it was 2.3 p.p. higher in comparison to 2H18, as shown in the graph below.

Calculated based on the limits of transfer of loss established by Aneel in the 4th Periodical Tariff Review (4th RTP), approved on March 15, 2017 for the period 2017-2022, that is: 6.34% for technical 14 loss on wire load, and 36.06% for non-technical loss on the low voltage market. Such percentage may vary over the cycle due to performance of the low voltage and wire load markets.

**Fight to energy loss** 

## **EVOLUTION OF NON-TECHNICAL LOSS<sup>15</sup>/BT MARKET** 12 months

6,702	6,749	6,838	6,832	6,917
5,651	5,773	5,895	5,965	6,212
49.89%	52.14%	52.31%	52.05%	53.02%
39.01%	41.47%			45.18%
59.01%		42.06%	42.62%	45.1070
36.06%	36.06%	36.06%	36.06%	36.06%
dec/17	mar/18	jun/18	sep/18	dec/18
REN	Non-techn	ical loss (GWh)	Regulatory level	N

## **NON TECHNICAL LOSS**

12 months (GWh)



15 Changes to the 2019 technical loss amount resulting from improvements to power distribution in the MV/LV loss calculations were implemented for the 4th quarter.



Non-technical loss /BT market (%)

**Non-technical loss /BT market (ex-REN)** 

#### **WIRE LOAD**



Areas of risk

OSS **Fight to energy** 

## **POSSIBLE AREAS**

Total loss/wire load (12 months)

15.0%	16.0	0% 16	5.0% 16	5.1%	15.9%	15.9%	17.1%	16.8%	16.6%
•				•					

Dec-17 Mar-18 Jun-18 Sep-18 Dec-18 Mar-19 Jun-19 Sep-19 Dec-19

## **AREAS OF RISK**

Total loss/wire load (12 months)



Light's premise was to work on the issue by showing that the theft of energy harms the quality of supply, and emphasizing the consequences and main impacts for society, noting that making an "illegal power connection", is a crime punished with up to eight years in jail.

In order to make the issue "non-technical loss" evident, we sought for unusual facts, with developments different from the standard, in which values that attracted attention were discovered, and unusual deviations were found, which aroused the interest of the press. We mention as examples a fraud identified in a bar in Ipanema, and the arrest of the owner of an ice factory in Piedade. The cases were reported by high-profile media, such as Bandnews and CBN radio stations.

We use the strategy of disclosing, as of the second semester, what we call "gatos gordos" (fat gats), which are power frauds in high consumption properties, located in the regions where the company is able to operate with operational security, that is, outside the Risk areas. We publicized, in the mainstream media, the flagrant arrest of those responsible for commercial establishments that were able to pay the energy bill normally, demystifying a little the idea that only the less favored persons make illegal connection.

In addition to the issue of the non-technical loss, we worked hard on the quality of energy supply, exploring the daily work of field professionals, especially on social networks. We show the power grid operation and maintenance, the investment in new technologies, and the preventive and corrective maintenance plan of Light. Also on the quality of the energy supply, we made an intense and systematic dissemination of the work of modernization and replacement of transformers of the underground electrical network.

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## **Performance of the press**

2019 was a year of great challenges for Light. Putting an important goal in evidence, the theft of energy is not something simple, since the company needs to look for a new or attractive fact, so that the media can find the topic relevant and interesting to its public to carry on disclosing it.

#### [GRI 419-1]

In 2019, we faced a high level of legal actions, affecting the Light's stock of lawsuits, contingencies cash. In order to reverse this unfavorable scenario, the Legal, Commercial and Engineering areas developed a joint effort, seeking to prevent and reduce the number of new lawsuits.

Light's Legal Department has promoted a major revision in processes, flows and strategies, both in its area and in the Commercial and Engineering areas, with the aim of satisfying customers and preventing them from going to court. However, in cases where consumers inevitably appeal to the Judiciary Branch, there is also a joint effort to ensure that the evidence produced by the company is of quality, and the resolutions of any actions are favorable to the company.

We are working hard to safely and effectively reassess and reduce contingencies, and to reverse the processes that represent significant savings for the company. In addition, the legal fees cost is being reduced through a review of agreements with service providers, execution of settlement, and reduction in compensation amounts.

In 2019, the main matters that were the subject of lawsuits were based on irregularities, bills, supply interruption, and opening of an agreement.

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To reduce contingency, the following actions were taken:

- Conducting public hearings;
- ▶ Intensification of measures to reach agreements at lower average values;
- Negotiation between the parties in cases tried to reduce the judgment amount;
- Review of the provision of the most significant cases.

In the Labor area, the biggest challenges faced in 2019 were the reversal of provision and reduction of liabilities. We managed to overcome them with a strong performance of the internal team in the search for information, documents and witnesses, in order to raise the possible maximum evidence that could contribute with favorable results for the company.

We worked hard during the year making settlements to reduce the amount of convictions, focusing efforts inclusive in processes with more significant amounts and convictions unfavorable to Light, generating savings for the company of about 45% of the amount provisioned for these cases.

Concurrently, we routinely analyze court decisions and legal theses to better guide all the different areas of the company, and provide consultancy to them.

We constantly advise outsourced law firms to adopt the best strategy for the defense of the company, and supervise them intensively to ensure efficient monitoring of labor proceedings.

The main matters subject to the labor lawsuits were: overtime, meal breaks, accumulation of positions, subsidiary liability, additional payment for dangerous works, and moral damages.

In the last quarter of 2019, we saw a 33.5% reduction in the filing of new lawsuits at the Civil Small Case Court (JEC), reflecting the improvement in the company's internal processes, especially those related to the application of TOIs, change of ownership and interruption of the energy supply. We ended the year with a stock of 21.3 thousand actions, a volume 1.4% lower than the stock at the end of 2018. It is worth mentioning that the average closing time of JEC proceedings is four months.

We also emphasize that, as an initial consequence of the actions taken, we identified a significant reduction in the number of complaints at the call center and branches, the Ombudsman and Aneel. Such reduction is an important indicator prior to the filling of lawsuits, and gives us confidence regarding the initiatives and execution of improvements in the commercial and legal areas.



## **OBJECTIVES OF REDUCTION**

#### **OBJECTIVES**

- $\bigcirc$  Reduction in the filling of new lawsuits;
- ⊘ Reduction in the stock of lawsuits (increase in closings);
- ⊘ Higher number of actions submitted to settlements (agreements);
- ⊘ Reduction in provisions, PMSO and contingencies.





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#### **INICIATIVAS**

- Greater synergy and collaborative environment with the commercial area;
- ⊘ Training for court experts (partnership between Light and TJRJ);
- ⊘ New model of contracting, and improvement in the control and inspection of law firms.
- ⊘ Improved subsidies for company defense.

**Contingencies reduction** 

## **Performance of the Commercial area**

The joint action led to the creation of a Litigation management in the Chief Commercial Office, which aims to analyze the causes of proceedings, and connect the Commercial, Engineering and Legal areas mobilizing them and supporting them in the review of proceedings and procedures.

This management operates on three fronts:

- Litigation management, which is responsible for delivering quantitative and qualitative analyzes, generating opportunities for procedure improvements;
- Subsidies and obligations: responsible for preparing defenses and complying with legal proceedings thresholds;
- Standards and procedures: responsible for supporting changes and elaboration of operational procedures.

In 2019, some actions led to a 21% reduction in the filing of legal proceedings in the last quarter, compared to the same period in 2018. They were:

- Review of the ownership change procedure;
- Credit in the energy bill with the purpose of reducing the disbursement of amounts in cash, in addition to reducing the main form of remuneration for the plaintiffs' attorneys;
- Improvement in the TOI drafting process;
- **(b)** Mobilization of regional work fronts, through the Caravana Judicial (Itinerant Legal Resolutions)<sup>16</sup>;
- Creation of the Nota Judicial (Judicial Note)<sup>17</sup>.

Specific service order for legal obligations, allowing greater flexibility in complying with them and avoiding the payment of fines and new processes. 17

## **Customer service quality**

Light's mission is to provide quality energy and services. Therefore, it also takes very seriously the challenge of providing the best possible service to its customers, meaning not only keeping the DEC and FEC indicators below the targets, but also continuously improving the way it relates to them and the channels it makes available. The company classifies customers into two groups: Retail Customers and Large Customers.

## **Retail Customers**

Light has sought to simplify procedures to reduce customers' efforts to solve problems. The goal is to be even more agile and efficient in responding to demands.

Throughout 2019, we put in place a number of initiatives to promote a digital transformation at Light. There are several solutions seeking to meet both the customer's needs, adding value to the experience and causing a positive perception in relation to Light, and the company, in order to reduce costs with stores, call center and emails, the most expensive channels for the company.

As main technologies, we are investing on services via Chabot, automatic document recognition through OCR, and automation of Light's main services.

In addition to initiatives focused on technology, we are also working on reviewing procedures to increase our operational efficiency.

Event that disseminates information about processes entered, amounts paid and main offenders. 16

Projects started in 2019 with completion scheduled for 2020:

**Digital service at branches:** digital solution integrated with tablets available at Light's service branches. The procedures for opening new agreements and requests for new power connections started to be digitized, including the digital signature of customers and digitization of documents. This solution minimizes the impacts with legal actions, as it guarantees more reliability and traceability to the processes;

**Light digital:** comprises the modernization of the Virtual Agency, the Light application and self-service terminals, seeking to improve the customer experience with more modern and intuitive layouts, and expand the number of automatic services performed by cutting edge technology;

**Detailed invoice:** graphical redesign of the invoice so that the data is more visual and intuitive, allowing customers themselves to be able to analyze the information contained therein. This measure aims to minimize the occurrence of complaints about consumption and/ or invoice amount;

**Letter project:** issue of all email communications through the SAP system, with confirmation of reading, delivery and priority of sending. This measure has been generating operational efficiency, unified control of data and documents, and reduction of regulatory risk and costs;

**Cliente Light tem mais (Light customers have more):** rewarding points to non-defaulting customers so they can purchase products and services from Light's partners. This project generates consumer satisfaction, ensuring timely payment, and providing a positive perception of the Light brand. The proposal for 2020 is to extend the project to customers who have digital invoice and automatic payment;

**QRT Project:** increases the duration of some calls to give the service clerk more time to argue with customer about consumer complaints, thus avoiding the registration of unfounded information and unclear doubts;

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Approximation project: service performed at Light's branches by an electro-technician, who clarifies customer doubts about Terms of Occurrence of Inspection (TOI) and appeal letter, contributing to reduce legal actions;

**Hidden customer:** research that evaluated customer service in all channels made available by Light;

**Improvement of Onsite Billing:** decentralization of meter reading and bill delivery.

In addition to the new technologies employed, it is also worth noting a few more initiatives, which, although simple, make all the difference in the quality of service and in the perception that the customer has about Light:

- Involvement of leaders with customer service channels, so that they can be in direct contact with customers' needs;
- Update of Light's intranet with all information and proper procedures for commercial service, so that the teams always have updated content to consult. As an example, the monthly volume of accesses is around one million;
- Training of all employees who provide services to Light's customers, to ensure accuracy of information and knowledge about all the company's processes and procedures, from the beginning to the end of the service;
- Review of messages of reading/billing errors on the electricity bill, as a way of making customer aware of the reasons that led Light to bill the electricity according to the average consumption. In addition, we disclose information on sending a SMS to communicate a power outage, safety and savings tips, the importance of terminating an agreement to avoid undue charges, incentive to Light Recicla to get a discount on the electricity bill, information on registering a vital device, among others;

Face-to-face interaction with customers through the following projects: Diálogo com o cliente; Café por trás das câmeras, Café 100% forte e Donas de casa.

It is worth mentioning that, in 2019, we managed to increase the share of virtual and automatic channels by 2.2 p.p., in comparison to the same period in the last year. At the end of 2019, we had a share of 88.2% in automatic channels.

## **Large Customers**

In 2019, we consolidated the new model for management of Large Customer relationship and collection processes, divided between Private and Public, which represent 40% of our revenue.

The Private segment, with 4.6 thousand customers and 18 thousand connections, accounted for 25% of the company's total revenue of the year, reaching approximately R\$ 4.32 billion. Through this integrated management model between relationship and collection, the collection rate for Private segment reached 100.13%, almost the 100.14% target projected for the year.

The Public Authorities and Services segment, responsible for 337 customers and approximately 31 thousand connections, accounted for 15% of total revenues, about R\$ 2.78 billion. The collection rate of this segment also reached a record in the comparison to the last three years, reaching R\$ 2.83 billion, meaning a final rate of 101.69% in relation to the invoiced amount.

The actions planned to prevent default, the provision of new services subject to the settlement of overdue debts, the relational and strategic negotiation with defaulting customers, minimizing costs with cuts and registration in credit restriction bodies, and the review and monitoring of injunctions by Light's Legal area have contributed to excess the collection targets. RESULT

#### **COLLECTION RATE PER SEGMENT – 12 MONTHS**

(Considering overdue amounts of REN)



However, the total collection rate for 2019 reached 97.6%, 0.9 p.p. below 2018, due to an agreement signed in November and December 2019 with the State Government of Rio de Janeiro, in the amount of R\$ 110 million, in which the offset with amounts of ICMS payable was defined.

Throughout the year, we implemented controls to track and monitor the service to Large Customers through the email channel. This improvement was in line with the strategic planning, which also includes restructuring the Customer Service area, and reviewing the support procedures according to the new management model.

Regarding the call center, it is divided into two segments. Emergency calls are answered through a specific 0800 number, and managed together with the numbers for the Retail segment. Commercial service, performed by account executives and support agents, is done through a commercial PABX.

It is worth mentioning the modernization made at Large Customers Area, a face-to-face and exclusive service channel for this group, located at Light's headquarters. Face-to-face and scheduled appointments represented 2% of the share of channels, with approximately two thousand records.

In addition, we visited several customers, such as Sinduscon, Sindinstal, Sebrae, pharmaceutical companies, Firjan RJ and Firjan Centro Sul, in order to align procedures and improve satisfaction with Light. We promote lectures on issues, such as invoice management, summer plan and forum for sharing infrastructure.

In a joint effort, we made visits to the Judiciary Branch to deal with the municipal debt history. In addition, Large Clients is an integral part of the Operational Committee for Prevention of Legal Actions, a forum for discussions about offenders to the company's results. Finally, it is important to mention the creation of a customer service channel on weekends for emergencies, such as power outages, deteriorated poles, broken wire, electric shock, voltage variation and interruption, foreign objects in the network, fires, leakage of transformer oil, among others.

In 2020, our challenges continue to be to guarantee and further increase the collection from this segment, and to improve Light's satisfaction and image with large customers and the opinion makers. For that purpose, we will consolidate the strategic plan to expand and improve the relationship channels.

## Customer satisfaction [GRI 102-43, GRI 102-44]

Annually, we conduct satisfaction surveys to measure and monitor the evolution of customer satisfaction index with Light.

SATISFACTION SURVEY (%)	2017	2018	2019
ISQP - Retail Customers (Abradee Survey)	67.7	67.5	58.6
Customer Satisfaction Index with the Execution of Services (ISES)	90.6	87.5	87.9
Index of the National Electric Energy Agency (Aneel) for Consumer Satisfaction (IASC)	55.1	58.2	56.4
ISQP - Large Private and Public Customers	69.3	71.1	70.1

**Contingencies reduction** 

The ISQP national result was the lowest in the last ten years. According to an analysis made by the research institute, it was affected by several negative changes, and it is not possible to point out a single reason for this number. Each distributor is believed to have been affected by the particularities of its respective concession area. Factors such as uncommonly high volume of rain, political aspects, and an increase in urban violence are examples of variables that impact the result.

It is worth mentioning Jornada Light de Qualidade, promoted in partnership with the consultancy Buhamra & Romero, which carried out a diagnosis on the satisfaction surveys, interviewed the company's leadership, and mobilized the front line in workshops to disseminate the customer-oriented culture. This diagnosis also contributed to strategic marketing planning, market research (IASC and ISQP) and the training of employees.

In addition, a mapping of the service triad - company leadership, frontline personnel, and customers - was made to identify gaps, both in processes and communication. In this stage, all areas of the company were involved. After this diagnosis, each area developed an action plan for each of the highlighted points.

See more about the ISQP results in the <u>Results Plan</u>

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## **Quality of Service**

Offering a quality service is a fundamental condition, not only for customer satisfaction and good relationships, but also to reduce payment of financial compensation, positively affecting Light's remuneration through Factor X in its tariff.

In the power industry, service quality is basically measured by two indicators: DEC and FEC<sup>18</sup>. Light, supported by a strategy that seeks efficiency in service management and quality, managed, in 2019, to obtain sustainable results for these two indicators using less resources than those estimated.

Despite the positive scenario for these indicators, it is worth mentioning that, throughout the year, we faced severe climatic conditions, with winds at speeds above 100 km/h and flooding points, which caused trees, metal structures and roofs to fall, among other occurrences, damaging the electrical network, obstructing access routes, and making it difficult for emergency personnel to move.

Unfortunately, DEC and FEC indicators were affected, but not to the point of compromising the results. So much so that, at the end of 2019, we obtained a DEC of 7.77 hours and a FEC of 4.31 times, rates below the targets established by Aneel in the 5th Amendment to our Concession Contract, 8.23 and 5.73, respectively. These results may be due to the operational improvements, more assertive direction of maintenance actions, and investments in the modernization of the distribution network carried out over the last periods. FEC is the lowest registered by Light since 1999. [GRI EU28, GRI EU29]

**Contingencies reduction** 

## DEC





## FEC

12 months (times)



#### Factors contributing for these results:

% <b>8.02% 7.84</b> %	Hiring-back of emergency, live line, tree trimming and load measurement teams;
•••••	Installation of aerial network protective equipment;
	Advancing the self healing project (automatic reconfiguring);
) 2021 2022 DEC)	Replacement of oil-based switch for gas in the underground network;
-	New integrated management tools.

6	5.15%	
	••••••••	4.86%
		•••

Light is ranked sixth place in DEC and third in FEC for 2019 among distributors with over one million customers.

2021 2022

In July, we completed the company's follow-on, with a primary and secondary tranche. The transaction had the participation of national and international shareholders, and raised more than R\$ 1.8 billion, which was fully contributed to Light SESA. These resources allowed reinforcing cash and re-profiling the debt with prepayment initiatives and new fund raising.

This performance, known as liability management, aims to optimize the debt profile, reduce financial costs, and thus provide value for our shareholders.

Among the main achievements we mention:

- Total early redemption of the 14th issue of debentures by Light SESA, at Banco do Brasil, in the amount of R\$ 328 million. The transaction had a cost of CDI + 3.50% p.a., and maturity in March 2021;
- Termination of swap transactions related to the 9th issue of the 1st series of debentures of Light SESA, for the total amount of R\$ 101 million, the notional value of which was R\$ 500 million, with a cost of IPCA + 7.82% p.a. and maturity in May 2021;
- Prepayment of USD 90 million, of a total of USD 180 million, of Light SESA's financing with Citibank, which cost was CDI + 2.2% p.a., and the remaining balance being re-profiled at CDI + 1.5% p.a., and maturity in August 2021;
- Fund raising by Light Energia with Citibank of USD 80 million, at the cost of CDI + 1.30% p.a. and a two-year bullet maturity;
- Early redemption of 35% of bonds in an amount equivalent to USD 210 million, of which USD 140 million for Light SESA and USD 70 million for Light Energia. The remaining balance of bonds, in the amount of USD 390 million, remains with the original maturity of May 2023, with a redemption option as of May 2021;
- Settlement of the 17th issue of debentures by Light SESA in the total amount of R\$ 700 million, through three series;
- Early repayment of the entire outstanding balance of the 2015/2016 Capex financing

**TURNAROUND PLAN** 

RESULT

agreement of Light SESA with BNDES, in the amount of R\$ 292.6 million. The original maturity of this agreement would occur in March 2023, and had sub-credits at the cost of SELIC + 4.08% p.a. and TJLP + 3.74% p.a.; and

 Settlement of the 5th issue of promissory notes by Light SESA, in the total amount of R\$ 300 million.

The company ended the year with a net debt of R\$ 6,750 million, and a leverage of 2.98x (Net Debt/Ebitda), significantly below that reported in 2018, of 3.63x, and most of the covenants provided for in its debt agreements (3.75x). With the sequence of liability management activities, it is expected to further reduce this ratio in the coming periods.

Regarding Ebitda/Interest ratio, the company ended the year at 3.38x, above the minimum contractual limit for most of the agreement of 2.0x.

As a result of the company's healthier debt profile, we also highlight the positive impact on the rating. In September 2019, Moody's upgraded the national scale rating to A2.br from A3.br, and affirmed the Ba3 rating on the international scale, keeping both with a stable outlook. In the same month, S&P Global assigned the national AA + rating to Light SESA's 17th issue of debentures.

Ratings	Scale		Release Date	
	National	International		
Fitch	A+	BB-	16/07/2019	
Standard & Poors	AA+	-	15/07/2019	
Moody's	A2.br	Ba3	04/09/2019	

Fund raising helps us to maintain a high cash position in this strategy of paying the most expensive debts, and to start the year 2020 with a robust cash position of around R\$ 1.7 billion, which allows us to face the challenges of the next cycle.

Currently, we also have a more diversified debt, thanks to the issues made such as bonds, credit right investment fund, infrastructure debentures and institutional debentures to market.

Notwithstanding the initiatives already taken, we will continue to monitor the local and international capital markets in order to benefit from market opportunities that allow new funding and, thus, further reduce the average cost and extend the debt repayment period.

#### **AMORTIZATION OF LOANS, FINANCINGS AND DEBENTURES**



(R\$MM) – Average Term: 2.7 years

2019



INTRODUCTION

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- ▶ In the year, adjusted Ebitda was R\$ 1,962 million, 16.5% above the R\$ 1,684 million in 2018, with a 15.5% margin, an increase of 0.6 p.p. compared to the previous year.
- ▶ This increase may be due by the res judicata of the judicial action that gave Light SESA the right to exclude ICMS from the PIS/COFINS tax basis, with retroactive effect to January 2002. As a result, Light constituted PIS/COFINS credits to be recovered in the third quarter of 2019 of R\$ 6,169 million. Based on the opinions of legal advisors and the current legislation, the company believes that part of the credits to be received must be refunded to its consumers (R\$ 3,573 million), considering a refund period of the last 10 years (September 2009 to August 2019).
- Currently, the amount and form of transferring part of Light's credits to consumers is being assessed by Aneel, and we have been actively collaborating in the necessary clarifications to ensure the company's right.
- The consolidated result for 2019 was a net profit of R\$ 1,328 million, R\$ 1,077 million higher than the result of the previous year. The improvement may be mainly due by the distributor's Financial Revenue due to the update of the PIS/COFINS credit (R\$ 1,461 million).
- Net operating revenue, excluding construction revenue, totaled R\$ 12,663 million in 2019, 12.0% above that recorded in 2018. Light SESA contributed positively to the affect the Tariff Readjustment approved in March 2019, and with the effect of favorable decision regarding the judicial action that recognized the right to exclude ICMS from the PIS/ COFINS tax basis.
- Consolidated operating costs and expenses, less construction costs, ended the year 2019 at R\$ 11,289 million, 11.0% higher than in 2018. This variation is mainly due to the increase in provisions/contingencies. This increase may be due by the higher volume of lawsuits in the Civil and Small Civil Court areas, mainly related to commercial lawsuits, the provision related to the Voluntary Dismissal Program, two regulatory fines.

RESULT

- PMSO ended 2019 at R\$ 951 million, 2.9% below the figure recorded in the previous year, due to a higher capitalization of own labor, increased operational efficiency, and reduced discretionary expenses.
- In 2019, there was an increase in Estimated Provisions for Loan Losses (PECLD), which ended the year at R\$ 1,127 million compared to R\$ 435 million in 2018. This increase was mainly due to extraordinary PECLD in the fourth quarter, in the amount of R\$ 525 million. We carried out a comprehensive revaluation of the company's Accounts Receivable, in view of the expectation of future receipt of outstanding balances. This initiative is in line with the new plan to fight loss.
- ♦ However, the total collection rate for 2019 reached 97.6%, 0.9 p.p. below 2018, due to an agreement signed in November and December 2019 with the State Government of Rio de Janeiro in the amount of R\$ 110 million, in which the compensation with amounts for ICMS payable was defined. The other sectors continue to perform well.
- Gross debt on December 31, 2019 was R\$ 8,428 million, a reduction of 13.1%, compared to the position on December 31, 2018. Net debt totaled R\$ 6,750 million, a decrease of 15,8% compared to 2018.

The details of the results for the year 2019 can be found in the Management Report, published together with the Financial Statements, and in the Results Releases, published quarterly. <u>Access the documents</u>.

Result

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Selected Financial Information (R\$ MM)	2019	2018	<b>Var.</b> %
Gross Operating Revenue	20,341	19,376	5.0%
Deductions	(7,677)	(8,066)	-4.8%
Net Operating Revenue	12,663	11,310	12.0%
Operating Expenses	(11,289)	(10,171)	11.0%
PMSO	(951)	(979)	-2.9%
Personnel	(430)	(403)	6.6%
Material	(23)	(41)	-44.8%
Outsourced services	(541)	(547)	-1.1%
Others	43	12	270.0%
Purchased Power	(8,211)	(7,972)	3.0%
Depreciation	(587)	(545)	7.8%
Provisions	(392)	(239)	63.8%
Provisions -PDV	(21)	-	-
PECLD	(324)	(435)	-25.4%
PECLD – Extraordinary	(525)	-	-
PECLD – Renova	(278)	-	-
Adjusted EBITDA	1,962	1,684	16.5%
Financial Result	745	(651)	-
Other operating revenuesexpenses	(49)	(91)	-46.5%
Results before taxes and equity method	2,027	397	410.9%
IRCS	(96)	(82)	18.0%
Deferred IRCS	(565)	(64)	781.3%
Equity Method	(38)	(85)	-55.1%
Net Profit	1,328	166	700.9%



TURNAROUND PLAN	RESULT	ABOUT THE REPORT	COMMITMENTS

Adjusted Ebtida per segment (R\$ MM)	2019	2018	<b>Var.</b> %
Distribution	1,578	1,187	32.9%
Generation	542	383	41.5%
Sales	(126)	127	-
Others and eliminations	(33)	(18)	81.8%
Total	1,962	1,684	16.5%
Ebtida Margin (%)	15.5%	14.9%	0.60 p.p.

Net profit/loss per segment (R\$ MM)	2019	2018	<b>Var.</b> %
Distribution	1,154	77	1,399.3%
Generation	327	36	815.9%
Sales	(64)	93	-
Others and eliminations	(68)	(40)	120.4%
Total	1,328	166	700.9%
Ebtida Margin (%)	10.5%	1.5%	9.02 p.p.

Result

## **Results Plan**

In August 2019, Light ended the 2nd Cycle of the Results Plan, presenting satisfactory results to the regulator on some issues, among them, the actions of the Management Plan for Quality Improvement Management, the works of the Distribution Development Plan, and the actions of the Structural Maintenance Plan, Modernization and Renewal of the Underground Distribution Network.

It should be noted that the Structural Maintenance Plan, Modernization and Renewal of the Underground Distribution Network ended in December 2019, positively meeting the commitment made with the regulator.

In the commercial aspect of the results plan, we noted a 3.09% decrease in the result of the 2019 Aneel Consumer Satisfaction Index (IASC), when compared to the performance of 2018.

It is worth mentioning the 4.47% growth in the Quality indicator, which is related to the sub-items of information, access to the company and reliability in the services provided. We also evolved in the Fidelity indicator by 2.24%, when compared to the previous year.

Under the Value and Trust indicators, we fell 6.28% and 0.66%, respectively, these being the attributes most associated with factors not manageable by the distributor, such as: tariff, tax charges and other elements of the energy bill composition. In addition, the decline reflected the intensification of Light's actions to fight energy theft and default due to the complexity of its concession area.

Additionally, it is important to note that Light did not achieve the expected result for the Total Complaints Quantity (QRT) indicator, due to problems caused by the implementation of two structuring projects in the company: the upgrade of its commercial system version, and the implementation of the process reading and simultaneous delivery of invoices (OSB), which degraded the evolution of the indicator throughout the 2nd Cycle of Aneel's Results

Plan. It is worth mentioning that, as of October 2019, a new cycle of the results plan began with a new methodology for calculating the QRT indicator and, in this sense, Light has been performing within the goal agreed with Aneel, having already achieved the expected result for September 2020 in November 2019.

Regarding the economic and financial aspects, the ratio Net Debt/EBITDA UDM - QRR covenants was beyond the optimum level predicted by Aneel. However, Light made a capital increase in July 2019, through the primary issue of shares in the total amount of R\$ 1.8 billion, to reestablish the limit established by the regulator.

In October 2019, the 3rd Cycle of the Results Plan began, lasting 12 months, in a new format, focusing on two issues: continuity of supply and billing of electricity.

In this new plan, Light is committed to Aneel to operate in 100 of its 107 electrical assemblies. Among them, there are 25 assemblies committed to reducing DEC and FEC indicators; 31 assemblies for maintaining the indicators (reference: March 2019); and another 44 assemblies to guarantee the regulatory limit. At the end of 2019, the outlook is 75 assemblies meeting the commitment made in the Results Plan.

Regarding the "billing" issue, Light presented a diagnosis of the challenges intrinsic to its concession area, with the objective of proposing the feasible commitments to be signed with Aneel, with objective actions, aiming at improving the billing indicators.

Result

# **Tariff Adjustment**

On March 12, 2019, Aneel approved a tariff adjustment rate, with an average effect of +11.12%. The new tariffs came into effect on March 15, 2019.

Regarding the different classes of consumption and voltage levels, it should be noted that residential consumers saw an increase of 11.45%, as detailed in the following table, which also has an effect to be perceived by the other classes and voltage levels.

#### **AVERAGE PERCEPTION FOR THE CONSUMER PER CLASS AND LEVEL OF VOLTAGE**

	FREE + CAPTIVES	AVERAGE EFFECT		
A	A2 (88 a 138kV)	7.23%		
GRUPO	A4 (2.3 a 25 kV)	11.61%		
GR	AS (underground)	12.33%		
	B1 (residential)	11.45%		
BT	B2 (rural)	21.09%		
	B3 (commercial)	11.60%		
	B4 (street lighting)	11.53%		
	Group A	10.20%		
	ВТ	11.52%		
	Group A+BT	11.12%		

The annual tariff readjustment process consists of passing on to consumers the non-manageable costs of the concession (Parcel A - energy purchase, industrial charges and transmission charges), and updating the manageable costs (Parcel B - distribution) according to the IPCA variation, as adjusted by components of Factor X, which passes on to consumers the annual productivity gains of the concessionaire, and the adjustments in operating costs defined in the last Tariff Review,



RESULT

in addition to incorporating the incentive mechanisms to improve quality. Additionally, as of the 2017 Tariff Adjustment, irrecoverable revenues became part of a specific tariff item, updated annually according to the variation in regulatory revenue.

The graph below summarizes the share of each cost item in the average effect perceived by consumer.



#### **AVERAGE PERCEPTION FOR THE CONSUMER**

#### **Special Tariff Review**

On March 26, 2019, ANEEL approved a special tariff review with an average effect of -2.30%. The new tariffs came into effect on April 1, 2019.

The calculation of the special tariff review only took into account the incorporation of a negative financial item to reflect the early settlement of repayment of credit transactions contracted by the Electric Energy Trading Chamber - CCEE in the management of the Account in the Regulated Contracting Environment - CONTA-ACR, under the terms of Normative Resolution No. 612/2014.

This report covers the period from January 1 to December 31, 2019. Published annually, Light's Annual Report is addressed to all the company's stakeholders. We present therein the management, initiatives and results of Light S.A. and its wholly-owned subsidiaries, referred to as simply as Light in this document. [GRI 102-50, GRI 102-52]

The publication is elaborated by a multifunction team, evaluated by the People, Governance and Sustainability Committee and approved by the Fiscal Council and the Board of Directors. [GRI 102-32]

The contents are in line with the best reporting practices with regard to sustainability, including:

I Global Reporting Initiative (GRI) guidelines, in the GRI Standards version, and Comprehensive membership option, including all specific indicators of the power industry, as applicable to the company; [GRI 102-54]

I International Framework for Integrated Reporting;

l Requirements of the Annual Social and Environmental and Economic and Financial Responsibility Report of the National Electric Energy Agency (Aneel).

We emphasize that the report is integrated with two other relevant annual documents, as reported by the company: Reference Form, required and regulated by the Brazilian Securities and Exchange Commission (CVM), and Notes to the Financial Statements, as provided for in Law 6,404/1976 (Brazilian Corporate Law).

The Financial Statements19 adhere to the International Accounting Standard (IFRS), and are audited by an independent company, Ernst & Young. Social and environmental indicators have not been audited. [GRI 102-56]



#### **Engagement and materiality**

Since 2009, we have periodically carried out a process of evaluating material issues for Light, both from the point of view of the company and our stakeholders. Our Materiality Matrix was revised in 2019, and the new material issues are covered in this Report. The methodology is detailed in this link. [GRI 102-46]

We emphasize that the indicators presented throughout this report are related not only to material aspects, but also to management and performance of the company's capital. [GRI 103-1, GRI 103-2]

In the table below, we list the material issues for Light with the GRI material issues, the stakeholders and the companies most affected in each case. [GRI 102-44]

**<sup>19</sup>** The Financial Statements consolidate the information related to the Light Group companies **[GRI 102-45]** 

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## MAIN THEMES REPORTED IN THIS REPORT [GRI 102-44, GRI 102-46, GRI 102-47]

Material Themes	Description	Related capital	GRI material Topics	Stakeholders impacted	<b>Companies impacted</b>
Loss and default	Strategies of fighting of power loss, including projects low income communities.	Social and Relation-ship	<ul><li>System Efficiency</li><li>Local communities</li></ul>	<ul><li>Customers</li><li>Community</li><li>Regulator</li></ul>	Light SESA
Relationship with Customer and Society	Challenges to approximate to the final consumer and the impacts of clients' behavior in the business.	Social and Relationship	<ul> <li>Social-economic compliance</li> <li>Suppliers' social evaluation</li> <li>Prevention and preparation for emergencies and disasters</li> <li>Marketing and labelling</li> <li>Customers privacy</li> <li>Access</li> </ul>	<ul> <li>Customers</li> <li>Community</li> <li>Suppliers</li> <li>Regulator</li> <li>Government</li> </ul>	Light SESA
Financial Strength and Capital Markets	Result, commitment with shareholders and creditors and access to financial market.	Financial	Economic Performance	<ul><li>Investor</li><li>Shareholders</li></ul>	All
Quality Service	Quality of energy supply for the final consumer.	Manufactured	<ul><li>Availability and Reliability</li><li>Access</li></ul>	<ul> <li>Customers</li> <li>Community</li> <li>Regulator</li> <li>Investor</li> </ul>	Light SESA
<b>Operational Efficiency</b>	Efficiency in the operation and management of resources.	Manufactures social and Financial Relationship	<ul> <li>System Efficiency</li> <li>Availability and Reliability</li> <li>Economic Performance</li> <li>Indirect Economic Impacts</li> </ul>	<ul> <li>Customers</li> <li>Community</li> <li>Regulator</li> <li>Investor</li> </ul>	All
Development of Concession Area	Investments in concession area and projects that encourage the socio-cultural performance.	Social and Relationship	<ul> <li>Local Communities</li> <li>Indirect Economic Impacts</li> </ul>	<ul><li>Customers</li><li>Community</li><li>Investor</li></ul>	All
Environment and Climate Changes	Environmental impacts and climate changes ad-aptation.	Natural	<ul> <li>Economic Performance</li> <li>Emissions</li> <li>Environmental Compliance</li> </ul>	<ul><li>Community</li><li>Regulator</li></ul>	All



#### MAIN THEMES REPORTED IN THIS REPORT [GRI 102-44, GRI 102-46, GRI 102-47]

Material Themes	Description	Related capital	GRI material Topics	Stakeholders impacted	<b>Companies impacted</b>
People Management	People management, labor practices and decent work.	Human Intellectual	<ul> <li>Employment</li> <li>Labor Relations</li> <li>Training and education</li> <li>Diversity and equality of opportunities</li> </ul>	Internal public	All
Suppliers Management	Suppliers management related to the socio-environmental practices.	Social and Relationship	<ul> <li>Suppliers' environmental evaluation</li> <li>Suppliers' social evaluation</li> <li>Purchase practices</li> </ul>	Suppliers	All
Health and Safety	Health and workforce and population safety.	Social and Human Relationship	<ul> <li>Heath and safety at work</li> <li>Health and customers safety</li> </ul>	<ul><li>Internal public</li><li>Customers</li></ul>	All
Ethics conduct and Compliance	Integrity of administrative, commercial and operating practices.	Social and Relationship	Anticorruption	● AII	All
Governance and Management Model	Governance practices and good management practices.	Social and Relationship	Sovernance	● AII	All

To learn about the GRI indicators related to each of these topics and also their location along the report, go to the <u>Summary of GRI Contents</u>. [GRI 102-55]

If any information issued in the latest report is corrected in a more recent publication, we will record and justify such change.

If you want to learn more about any themes covered in this report or have any questions about its contents, please contact us. [GRI 102-53]

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# Learn more about Light by clicking on the links below

Light's stakeholder consultation process and materiality matrix

The Integrated Report

The GRI (English only)

Light's Reference Form

Light's Financial Statements

- > The project for a new solution web and mobile is under development, with the objective of increasing the participation of virtual channels. Go Live is divided into two stages, one in the first half, and another in the second half of 2020.
- > In accordance with the strategy of simultaneous and interconnected use of different communication channels, we have already made consumer-related communications on our social networks, and we are planning to implement push communications (app) and proactive messages via chatbot (Whatsapp, Facebook and web).
- > We made three Public Calls for energy efficiency projects, covering the most modern technologies available.
- > With Public Calls, we direct resources to actions in municipalities, hospitals, day care centers and other philanthropic entities.
- > We have intensified awareness actions in communities, schools and social assistance reference centers, aiming at the dissemination of important information on conscious energy consumption.
- > We partnered with CRAS, positively impacting the registration of families entitled to the Social Tariff.
- > We ended the year with 45 R&D projects, totaling almost R\$ 30 million.
- > We resumed the cultural program of the Lamartine Babo Theater, bringing musical, theater and film shows to the public.
- We set up a new permanent exhibition Décadas e Descobertas which addresses the connection between the main events of the last 100 years and the evolution of electric energy as a driving force for consumer electronics products that we have today, portraying the consumption habits of society.
- We apply Integrity Forms to 383 suppliers deemed as strategic for the company.
- We comply with all regulatory commitments for water transposition into Rio Guandu basin.
- > We started the modernization of Vigário and Santa Cecília pumping power plants.
- We operate and maintain our facilities in compliance with environmental legislation.

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- Enhance Light's Integrated Risk Management model in accordance with the 2017 updated version of COSO Enterprise Risk Management (ERM) and ISO 31000: 2018 Risk Management.
- Reduce Scope 1 emissions by 6%.
- Use the resources of the social sub-credit of the 2015-2016 CAPEX Financing Agreement in actions to improve the infrastructure of three school facilities in the state school system.
- Intensify educational activities in communities, schools and CRAS, aiming at the dissemination of relevant information on conscious consumption, losses caused by the theft of energy, and enhancement of the registration of families in the Social Tariff.
- Foster community engagement in projects conducted in communities where we operate, and enhance the benefit of the Social Tariff, expanding the number of joint efforts to register low income families.
- Maintain educational actions on the correct waste disposal and environmental preservation in public and private schools that have ecopoints.
- Start work on the North Channel Spillway of UHE Ilha dos Pombos, after the environmental license was issued by IBAMA.
- Complete the necessary studies for environmental license, and the construction of the bypass tunnel in the Lajes Complex.
- Implement innovation projects that use smart grid/meter technologies, mobility, data mining, analytics (credit recovery and field services) and digital transformation, as well as to maintain the technical update levels of SAP platform, according to the manufacturer road map. In addition, deploy a new ADMS (Advanced Distribution Manager System).
- Invest R\$ 30 million in research and development projects at Light SESA, and R\$ 4.2 million in Light Energia.
- Complete the implementation of initiatives to promote digital transformation at Light.

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## **General Coordination**

#### **INVESTOR RELATIONS SUPERINTENDENCE**

Rodrigo Vilela Renato Parentoni Regiane Monteiro de Abreu Camilla Stohler Gonzaga Lilian Kaufman Taynara Carou de Azevedo

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GRAPHIC PROJECT AND LAYOUT: Multi Design
PICTURES: Divulgação Light e Adobe Stock



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