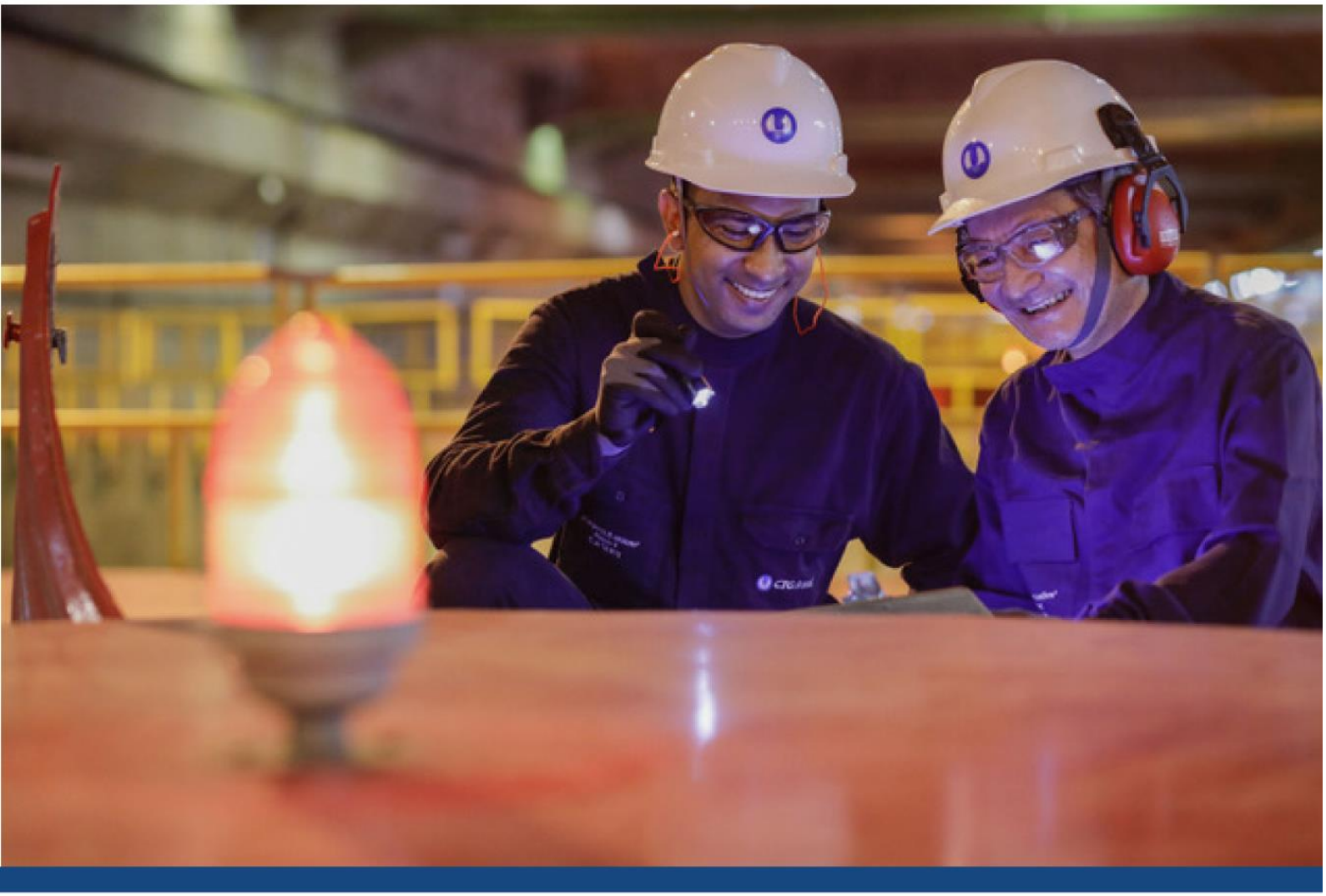


ANNUAL SUSTAINABILITY REPORT 2018

About the report

For the third consecutive year, CTG Brasil publishes its Annual Report in accordance with the GRI Standards, a sustainability report template developed by the Global Reporting Initiative (GRI). Both the economic-financial and the socio-environmental information refers to the period from January 1 to December 31, 2018, and covers the operations of the subsidiaries Rio Paraná Energia S.A. ("Rio Paraná"), Rio Canoas Energia S.A. ("Rio Canoas"), Rio Verde Energia S.A. ("Rio Verde"), and Rio Paranapanema Energia S.A. ("Rio Paranapanema") **|GRI 102-45, 102-50, 102-52|**

The consolidated financial statements follow the International Financial Reporting Standards (IFRS) and have been audited by PwC. The socio-environmental indicators were collected internally, based on Brazilian regulatory standards and quality certifications, and were not externally verified.

The published information covers the 12 Hydroelectric Power Plants (HPPs) and two Small Hydropower Plants (SHPs) of CTG Brasil: two HPPs of Rio Paraná, eight HPPs and two SHPs of Rio Paranapanema, one HPP of Rio Canoas, and one HPP of Rio Verde. Therefore, it does not consider data referring to the three hydropower plants and 11 wind farms which the Company has equity interest in but does not have control nor does exercise management of. Information that does not refer to the whole group is identified throughout the text or in explanatory notes. **|GRI 102-56|**

The content was organized based on six pillars that support the company's Sustainability Strategy: Community Engagement, Environmental Protection, Sustainability and Innovation in Operations, Employee Development and Well-being, Responsibility in the Value Chain, and Responsible Performance.

Materiality |GRI 102-46|

This Report's content is based on CTG Brasil's first materiality process, carried out in 2017 with the support of an external consulting firm. The relevant themes were defined following the GRI guidelines and included three steps: Mapping and Surveying Secondary Data, Prioritization, and Validation, explained below. **|GRI 102-49|**

The representatives of the audiences to be engaged were chosen by the Sustainability Committee, according to the stakeholders' prioritization. **|GRI 102-42|**

The final matrix, approved by the Company's managers, is correlated to both its Sustainability Strategy and the Global Compact Principles, an initiative of the United Nations that aims to encourage companies to adopt social, corporate and sustainability responsibility policies, and resulted in the following material topics:

RELEVANT TOPICS

Material topic |GRI 102-47|	Material topic explanation |GRI 103-1|	
	Why is it relevant to CTG Brasil?	Where the impacts occur	Involvement with the impacts
Compliance and anti-corruption	Brazilian context, with charges and corruption investigations; Performance in a regulated industry; Relevant topic for a government company in China; High investment volume; Regulatory, reputational, operational and financial risks.	All operations	CTG Brasil
Human Rights	Condition linked to a Chinese company's image; Outsourcing; Multicultural diversity; Financial, reputational and regulatory risks.	All operations	CTG Brasil and suppliers
Operational excellence and reliable energy	Competitiveness; Cost management; Performance in a regulated industry; Operational, financial and reputational risks.	All operations	CTG Brasil
Innovation	Operational efficiency; Competitiveness; Financial risk.	All operations	CTG Brasil
Health and safety	Electrical industry has many occupational hazards; It is one of CTG Brasil's values ; Operational, financial, reputational and regulatory risks.	All operations and local communities	CTG Brasil
Development of employees	Retain specialized professionals who have potential to grow; Qualification for operation improvement; Organizational climate; Operational, reputational and regulatory risks.	All operations	CTG Brasil
Work conditions	Attract qualified professionals to support business growth; Reputable and operational risks.	All operations	CTG Brasil
Local communities	Direct and indirect impacts on neighboring communities; Social license to operate; Reputational and regulatory risks.	Power plants and local communities	CTG Brasil
Supplier chain	Impact on results; Influence on the entire value chain; Financial, operational and reputational risks.	Suppliers	CTG Brasil and suppliers
Customer management	Growth in the Unregulated Contracting Environment (ACL); Financial risks.	Customers	CTG Brasil
Water	Basic input for hydroelectric power generation;	Power plants and local communities	CTG Brasil

Material topic |GRI 102-47|	Material topic explanation |GRI 103-1|	
	Why is it relevant to CTG Brasil?	Where the impacts occur	Involvement with the impacts
	Operational and environmental risks.		
Biodiversity	Impacts on fauna and flora; Environmental, reputational and regulatory risks.	Power plants and local communities	CTG Brasil and suppliers
Wastewater and residue	Impacts on soil and water resources; Environmental, reputational, regulatory and operational risks.	Power plants and local communities	CTG Brasil
Climate changes	Positive impact for a clean energy business like CTG's; GHG emissions in the logistics fleet; Environmental, reputational and regulatory risks.	Global impact	CTG Brasil and suppliers

A Message from the Management

|GRI 102-14|

We celebrated, in October 2018, five years of CTG operations in Brazil. During this short period of time, we managed to build a solid portfolio, have become the second largest independent electricity producer in the country, with an installed capacity of 8.28 GW, employed more than one thousand people between in-house and outsourced contractors, and earned a gross revenue of BRL 5.6 billion.

We have brought together a strong team, with a culture guided by safety, operational excellence, ethics, transparency in business and respect for people and the environment. We work towards our mission to provide clean energy, creating value for all our stakeholders: customers, suppliers, local communities and partners, shareholders and employees.

We have invested BRL 23 billion in the country during these five years. We have experienced accelerated growth after buying interest in hydropower plants and wind farms as well as in the Salto and Garibaldi plants, coupled with our winning the concession bid for Jupiá and Ilha Solteira, in Paraná River, and acquisition of the assets from Rio Paranapanema.

In 2018 alone, our investments amounted to BRL 300.6 million, allocated mainly to the Jupiá and Ilha Solteira plants in what turned out to be the largest ever investment to modernize plants in Brazil. Budgeted at R$ 3 billion over the course of ten years, this project serves to reinforce the long-term commitment we have made to the country. This includes retrofitting and automating the 34 pieces of machinery from both plants, a brand-new Generation Operations Center, improving ancillary services, lifting equipment and spillways.

In 2019, we will begin the second stage, which consists of replacing another four generation units at each one of the plants. It was also in 2018 that we finished modernizing and repowering three generation units at Capivara Plant, resulting in a 8.1 MW increase to our guaranteed power output.

Working closely with engineers from both Brazil and China, we managed to achieve efficiency indicators that outperform regulations and an exemplary operation. As the year went on, in what was a complex and challenging process that taught us much, we advanced in this direction to evolve from preventive maintenance to a predictive model.

Furthermore, we put BRL 8.0 million into Research & Development activities for projects geared towards creating technical and scientific knowledge to support the growing electricity sector in Brazil and our Company's own efficiency gains.

Concerning the management of occupational health and safety, our primary value, we perfected technical and behavioral programs and training with the goal of preventing all types of accidents related to our industry, showing how much we care about our employees, contractors, communities and assets. We have optimized our inspection processes to ensure the safety conditions at our workplaces improve continuously. We also introduced the Preventive Safety Index (PSI), a tool for periodical inspection that focuses on prevention. It assesses the field performance and progress of our programs and procedures. An example that shows the results of this set of actions, the rates and severity of accidents have been constantly dropping. Not only that, we have had no serious accidents during the Jupiá machine retrofitting project, which at one point had as many as 350 workers at the site.

Moreover, we have completed an important step towards improving our corporate governance by creating, reviewing and harmonizing policies that lay down guidelines on various topics and fields and strengthen a continuous process of improvement. We started to break down strategic goals and performance indicators that will help us keep our priorities aligned and monitor our performance in a manner that is far-reaching and balanced.

In this process, we advanced our sustainability strategy and became signatories to the ten principles of the Global Compact with the intention of strengthening our business practices based on fundamental values concerning human rights, labor rights, environmental conservation and the fight against corruption. We reaffirmed our commitment to the sustainable development of our communities, promoting initiatives that benefited over 600,000 people in 2018. And, in order to increase biodiversity in rivers and reservoirs, we released 3.6 million fish fingerlings of native species.

Our plants generated 33,948.9 GWh in 2018, 1.4% less than the previous year. This result was basically due to the unfavorable hydrological conditions over at the areas where our reservoirs are located, particularly those run by Rio Paranapanema, causing the National System Operator (ONS) to distribute a lower amount of power to these plants and leading to a 7.9% drop in the volume generated.

Based on this performance and the behavior of prices in the electricity market, we earned a net revenue of BRL 2.8 billion and our Ebitda was BRL 1.4 billion, with a margin of 48.1%. This result mainly reflects the adjustment of the accounting methodology applied to the financial assets related to the Rio Paraná concession agreement, in accordance with the technical instruction of the Committee of Accounting Pronouncements (ICPC 01). Normalizing this accounting effect, the net revenue reached BRL 4.7 billion and our Ebitda was BRL 3.2 billion, with a margin of 68.4%.

Our stable and responsible management of operations was recognized by rating agency Moody's, which improved our Aaa.br credit risk rating from "negative" to "stable," and graded Rio Paranapanema higher, from Aa1.br to Aaa.br, both on the highest investment level. These were great achievements of ours.

Even though the current business environment has proved challenging, Brazil is a key market for us and we trust its potential for growth. We believe that the growing population and power needs of the country will demand massive investments in infrastructure, and that we will be able to contribute to the country's economic development. We see the government's willingness to improve the framework of regulations as positive. We want to become a leader in the Brazilian electricity market, combining the expertise that comes from both Brazil and China to create clean energy solutions on a large scale.

One of the main challenges ahead will be solidifying our organizational culture. We are a company made up of different businesses, private and government-owned, national and foreign alike. Each of them possesses their own particularities, management models, professionals with diversified profiles, combining expertise of the two different countries together. We consider these differences an opportunity to learn, and the talents that work with us an important asset to build our culture.

We are determined to simplify the way we do things to face a complex business environment, identify priorities, invest in the continuous improvement of our operations, connect all efforts and organize the way we manage our business in an objective and strategic manner, perfecting the relationship with all stakeholders. We are aware that this transformation is a long journey that has just begun. The year of 2019 will be one of many challenges and certainly a major boost for the process of harmonization we are looking for to build an organization that is even stronger and more efficient.

Li Yinsheng

CEO

CTG Brasil | Who We Are

Brazil's second largest independent clean energy generator, China Three Gorges Brasil Energia Ltda. – CTG Brasil – reached the end of 2018 with an installed capacity of 8.28 GW, which corresponds to 7.9% of the country's total hydroelectric power generation, according to data from the Ministry of Mines and Energy.

A closely held corporation with private equity, the company operates in the generation and commercialization of energy and is an indirect subsidiary of China Three Gorges Corporation (CTG), the world's largest hydroelectric power generator. Currently, CTG Brasil is CTG's main operation outside China, accounting for about 50% of international business. **|GRI 102-1, 102-2, 102-5, EU1|**

CTG Brasil operates in the power generation and commercialization areas and maintains, under its direct management, 12 Hydropower Plants (HPPs) and two Small Hydropower Plants (SHPs) in the states of São Paulo, Mato Grosso do Sul, Santa Catarina and Goiás. Additionally, it has capital participation in three other HPPs (Santo Antônio do Jari, State of Pará; Cachoeira Caldeirão, State of Amapá; and São Manoel, State of Mato Grosso, which started operations in 2018) and 11 wind farms (in the States of Rio Grande do Sul, Santa Catarina and Rio Grande do Norte, with a 49% equity interest.) The headquarters and corporate office are located in São Paulo, State of São Paulo. The Company also has an office in Brasília (Federal District), a technical support center in Chavantes (State of São Paulo), and a Shared Services Center in Curitiba (State of Paraná). **|GRI 102-7|**

In 2018, taking into account only the plants under its direct management, the total energy generated was 33,948.9 GWh, which is 8.3% of the total power generated by hydroelectric sources in the country (408,459 GWh) during the year, according to data from the National Power System Operator (ONS). This energy was allocated through quotas to electric power distributors and marketed directly to customers through agreements signed under the Regulated Contracting Environment (electric power distributors) and under the Unregulated Contracting Environment (marketers and free customers). **|GRI EU2, 102-6, 102-7|**

CTG Brasil has direct and indirect control of plants that are operated by the following companies:

Rio Paraná – Ilha Solteira and Jupiá HPPs, on the border of the States of São Paulo and Mato Grosso do Sul.

Rio Paranapanema – Jurumirim, Chavantes, Salto Grande, Canoas I, Canoas II, Capivara, Taquaruçu, Rosana HPPs, at Paranapanema River, on the border of the States of São Paulo and Paraná (except Jurumirim HPP, which is located in the State of São Paulo), and Palmeiras and Retiro SHPP, at Sapucaí River, in the State of São Paulo.

Rio Verde – Salto HPP, in the State of Goiás.

Rio Canoas – Garibaldi HPP, in the State of Santa Catarina.

CTG Brasil ended 2018 with 1,064 employees, of which 813 were in-house employees, 232 service providers, 11 trainees and eight young apprentices. Net revenue reached BRL 2.8 billion and the cash flow (Ebitda, Earnings Before Interest, Taxes, Depreciation and Amortization) was BRL 1.4 billion, considering the combined data of the four generating companies. **|GRI 102-7|**

FIVE YEARS IN BRAZIL

The main milestones throughout CTG's five years of operation in Brazil were:

2013 – Launch of the platform for investments in clean energy in Brazil.

2014 – Acquisition of equity interest in Santo Antônio do Jari (PA) HPP – 50% of the capital, Cachoeira Caldeirão (AP) HPP – 50% of the capital, and São Manoel (MT) HPP – 33.3%.

2015 – Acquisition of Salto and Garibaldi HPPs from Triunfo Participações.

2016 – Winning of the Ilha Solteira and Jupiá HPPs' concession in a bidding process promoted by Aneel.

2016 – Acquisition of Duke Energy assets in the country (eight HPPs at Paranapanema River and two SHPs at Sapucaí River).

2017 - Beginning of the modernization process Jupiá and Ilha Solteira plants.

2018 - CTG completes five years of operation in Brazil.

In order to mark the date, celebrated in October, an electronic portal was created (https://ctgbrasil5anos.com.br) where the employees could, voluntarily and spontaneously, upload photos with a phrase or text telling what was their most memorable moment in CTG Brasil.

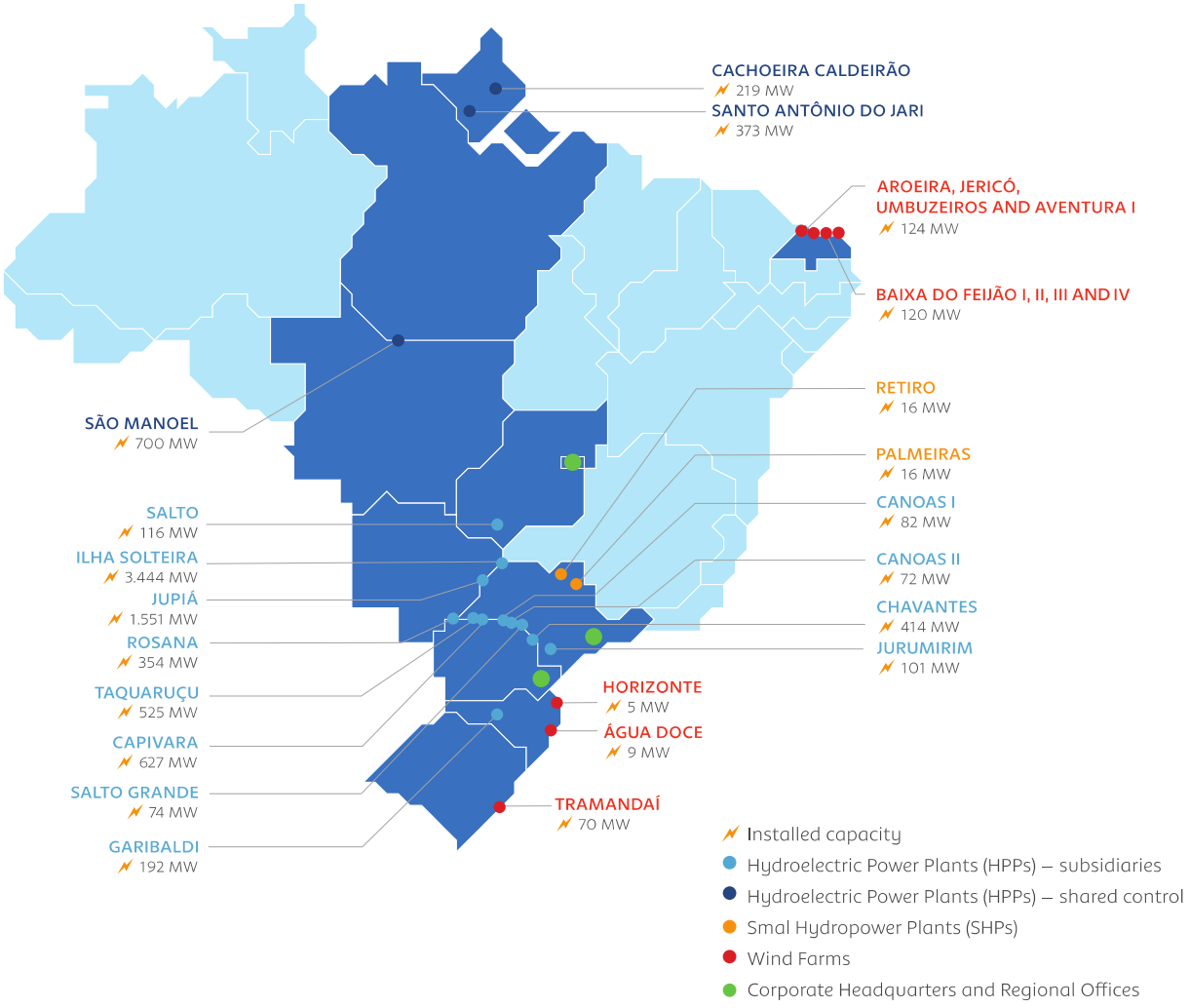
CTG

China Three Gorges Corporation (CTG) is the world's largest hydroelectric power producer with an installed capacity of 124 GW and operations in approximately 50 countries.

It is a clean energy group that develops and operates large hydropower plants, as well as wind and solar generation plants. Its history began with the construction and operation of the world's largest hydropower plant: the Three Gorges, at Yangtze River, in China.

In 2018, CTG produced 284.6 TWh of electricity and had operating revenues of USD 13 billion.

CTG BRASIL'S OPERATIONS |GRI 102-4|



Mission, Vision and Values

|GRI 102-16|

Mission

Provide clean energy to people through projects in harmony with the planet.

Vision

Become a top-tier in clean energy group in Brazil.

Values

Safety

We are personally committed at all levels to working and living safely, encouraging others to do the same.

Respect

For everything and everyone. For society, employees, partners and, always, a lot of respect for differences.

Integrity

It goes far beyond internal relationships. It drives the actions between the organization and the society, with honesty as the principle for all of us.

Dedication

We share the motivation, commitment and effort to reach the best results. We believe rewards are fruits of our dedication.

Excellence

We cultivate a culture of high performance, embracing our works with excellence and always aiming for higher results.

Simplicity

We perform our duties with full transparency, in a clear and straightforward manner.

Happiness

Work well, satisfied and joyfull. Be proud of being part of CTG Brasil, integrate and collaborate towards the same purpose.

Awards and Recognitions

Transparency Trophy – For the third consecutive year, Rio Paranapanema was awarded the Transparency Trophy by the National Association of Finance, Business Administration, and Accounting Executives (ANEFAC) in a partnership with the Accounting, Actuary, and Financial Research Institute Foundation (FIPECAFI), and Serasa Experian. In 2018, the trophy was awarded in the "Oscar of Accounting" category, for the transparency of the financial statements of the previous year. The ceremony took place in October, in São Paulo.

Aberje Award – The Legal Space campaign, which aims to raise the awareness of the populations living around the plant reservoirs on regular occupation and the correct use of these sites, was the regional (São Paulo) winner in the Communication of Corporate Sustainability Programs category in the 2018 edition, awarded by the Brazilian Association for Business Communication (Aberje), which is the most important award of the sector in the country.

100 Most Influential in the Energy Industry – Li Yinsheng, CEO of CTG Brasil, and the Company were listed by Grupo Mídia and Full Energy magazine as one of the most important influencers of the sector in Brazil. The listed people were defined through vote on the magazine's website, market research and analysis of the publication's editorial board.

Benchmarking Brazil – Two cases developed by the Environment and Heritage teams were recognized as examples of best socio-environmental and business sustainability practices. The Fish Ecology and Management project, for restocking fish in the Paraná and Paranapanema rivers, was ranked 4th. And the Legal Space campaign was ranked 5th. Benchmarking Brazil selected 15 projects that were in line with at least one of the Sustainable Development Goals (SDGs) defined by the United Nations.

Best & Largest – CTG Brasil has moved ten places up in Exame magazine's ranking published in August. It ranked 114th among the 1,000 listed companies. Rio Paranapanema ranked 176th among the 500 largest companies in Sales. Rio Paraná was mentioned in the sales rankings, in the Largest Chinese Companies and Wealth Created per Employee categories.

Largest Companies – CTG Brasil has moved up 20 positions, going from 160th to 140th, among the 1,000 largest companies listed by the Valor Econômico Yearbook, which gathers 25 sectors of the economy. Among the country's energy companies, it ranked 6th in highest Ebitda. Rio Paranapanema is ranked 386th among the largest companies in Brazil.

Ecosystem Services – R&D project developed by the Environment team was recognized by Página 22 magazine, published by Getulio Vargas Foundation (FGV). Entitled "Development of Technologies for Evaluation of Ecosystem Services and Natural Capital in Environmental Programs", carried out by CTG Brasil in partnership with the Ipê Ecological Research Institute, the project was one of the 16 chosen, out of a total of 33, from all over Brazil, for the Natural Capital Business Management Cases Report, carried out by the Trends in Ecosystem Services of Getulio Vargas Foundation and the Regional-Local TEEB Project – a joint venture between the Ministry of Environment, the National Confederation of Industry (CNI) and the German agency GIZ.

Responsible performance

Work in a responsible, ethical and transparent manner, ensuring the Company's good reputation and compliance

R$ 3 billion will be invested in ten years to modernize Jupiá and Ilha Solteira HPPs
100% of the employees were trained about the Code of Ethics and the Compliance Program

Strategy and vision of the future

SIX STRATEGIC PILLARS FOCUS ON EXCELLENCE, GROWTH AND CULTURE

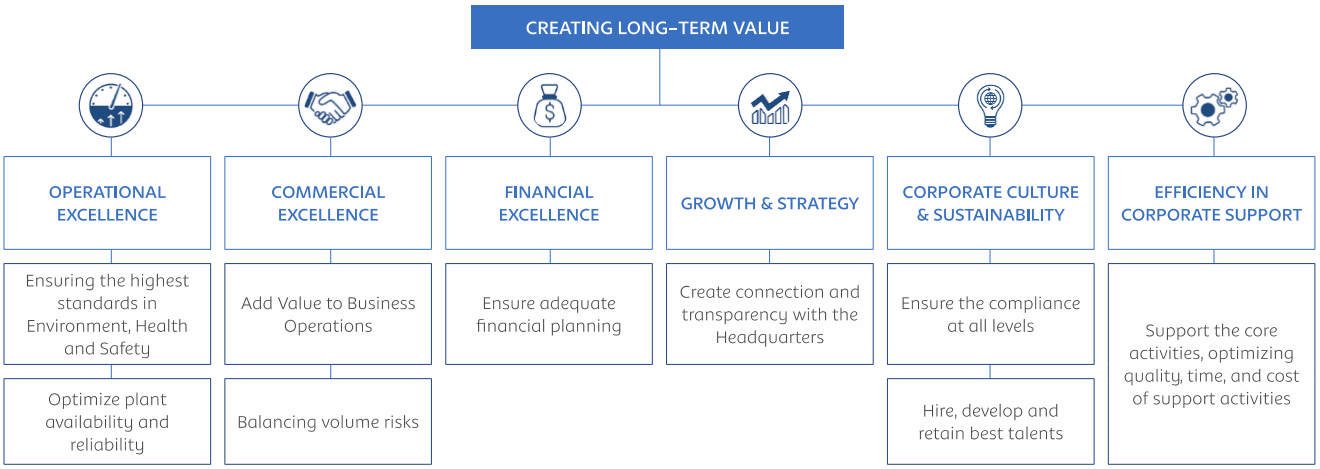
|GRI 103-2, 103-3|

CTG Brasil's commitment is "to provide clean energy to people through projects in harmony with the planet". In order to achieve this vision of the future, the company focuses on improving management practices based on sustainable practices and long-term value generation.

Since 2017, the company has clear strategic objectives, supported by six pillars: pursuit of operational excellence, financial efficiency and discipline, commercial performance optimization, sustainable practices, and the building of a corporate culture that combines the best Brazilian and Chinese operation characteristics of CTG Brasil. Each of these objectives has key indicators established to monitor the effectiveness of the work developed.

A Town Hall Meeting, which is open to employees and is transmitted real-time by videoconference to all units, is held every quarter. This is the opportunity for Li Yinsheng, the CEO of the company, to address any important issue related to the Company's strategy, share experiences, and talk about challenges, lessons and values of CTG Brasil.

CTG BRASIL'S STRATEGIC OBJECTIVES



Integration

In October, CTG Brasil completed five years of operation in the country. In 2018, the company focused on further integrating its businesses, which have diverse origins, experiences and cultures (in addition to equally different processes and maturity levels).

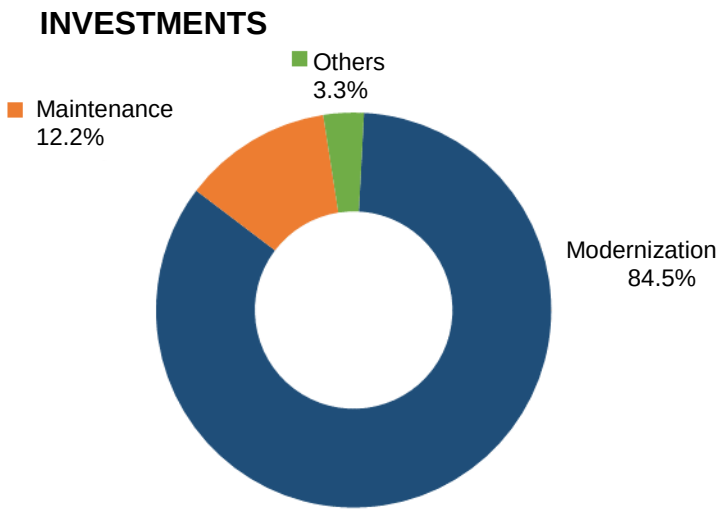
By sharing best practices with the entire organization, the company invested in standardizing policies and harmonizing management processes and systems. Three examples of this work were:

1. The definition of priorities and indicators for each area – work whose mission is to help manage the business in an objective and strategic way.
2. The standardization of the organizational structure of the whole company. In May 2018, the integration between Rio Paranapanema and other CTG Brasil companies was completed.
3. The preparation and approval of about 100 policies that define guidelines for several areas, covering the operation specificities based on the Company's culture. This project was completed in June 2018 (*more information in the Governance chapter*).

There were also several actions to simplify processes, such as a unified procurement portal, a customized system to manage Legal demands, change in the air ticket purchase management, and the installation of videoconference rooms in all units.

Investments

The Brazilian electricity sector developed in the late 1960s and throughout the 1970s. Thus, several plants completed 40 years of operation when many concessionaires were still waiting for definitions regarding concessions, which made many investments be postponed. Now, CTG Brasil is the precursor of a new wave of plant renovations and modernization, so that 100% of its operation is automated, ensuring more safety, reliability and availability to the National Interconnected System.



In 2018, BRL 300.6 million were invested mainly in equipment and system modernization in the Jupiá and Ilha Solteira hydropower plants (Rio Paraná) and Capivara hydropower plant (Rio Paranapanema).

Most of these funds were allocated in the first phase of the modernization project of CTG Brasil's two main assets – the Jupiá and Ilha Solteira HPPs: BRL 245 million for the general renovation of two generating units and the acquisition of 16 power transformers. The first phase of the modernization project is the pilot project of a BRL 3 billion-budgeted program, which includes the general renovation of all 34 generating units of the two plants and the replacement of all 20 power transformers of Ilha Solteira, in addition to the spillway renovation by 2026 (read more below).

In that year, the renovation of two generating units (01 and 02) of Capivara HPP was completed. Thus, failure rates are reduced and availability is increased. This HPP renovation included the

replacement of hydraulic turbines with equipment that produces more energy at a lower water consumption (better performance), and this was one of the pioneering projects in the electricity sector to be recognized by regulatory agencies (MME and Aneel) due to the increased physical guarantee of the plant.

The investment in Salto and Garibaldi HPPs was made to standardize the automation processes by implementing a hotline between the Jupiá Generation Operation Center and the National Power System Operator for both plants. Although they are new (both started operating six years ago), the equipment needed to be updated in order to allow full communication. In total, approximately BRL 8 million were invested and the works were carried out during regular maintenance shutdowns, without affecting the availability required by the regulatory agency.

The construction of the new Generation Operation Center is planned to start in 2019 to control 70 generating units all over the country remotely. The estimated cost is BRL 40 million, included in the BRL 700 million budgeted for phase 2 of the Jupiá and Ilha Solteira modernization project.

INVESTMENTS (BRL Thousand)

	Total		Rio Paraná		Rio Paranapanema		Rio Canoas		Rio Verde	
	2017	2018	2017	2018	2017	2018	2017	2018	2017	2018
Modernization	400,139	254,140	342,197	222,933	57,942	31,207	0	0	0	0
Maintenance	17,954	36,512	526	21,611	16,000	12,392	751	2,278	677	231
Operation	0	0	0	0	0	0	0	0	0	0
Others	23,532	9,973	791	521	12,448	4,261	5,579	4,228	4,714	963
Total	**441,625**	**300,625**	**343,514**	**245,065**	**86,390**	**47,860**	**6,330**	**6,506**	**5,391**	**1,194**

MODERNIZATION BRINGS PLANTS TO THE TWENTY-FIRST CENTURY

Started in 2017, the modernization project for the Jupiá and Ilha Solteira hydropower plants is expected to be completed in up to ten years, with the objective of improving efficiency, reliability and availability of the plants that have been operating for about 50 years. All generating units, transformers, and water spillways of the reservoirs will be renovated, modernizing the assets with the best technologies of the twenty-first century.

The first phase consists of the modernization and renovation of two generating units in each of the plants and, in order to increase the safety of the assets, we are replacing 16 transformers in advance, with completion expected within two years, by 2020, in comparison to the originally expected time of eight years. The Company will invest BRL 3 billion to modernize and renovate the 34 machines of the two plants within ten years.

In 2019, the second phase will consist in the replacement of another four generating units at each plant. At the same time, the spillways will be renovated and a new Generation Operation Center will be built, serving all CTG plants in Brazil.

Chinese and Brazilian Expertise

Since the beginning of the modernization process, all the work is monitored on a daily basis by a team of 15 to 20 Brazilian engineers, supported by 10 Chinese experts who coordinate the constructions and renovation work of large plants in China. They all work side by side, exchanging experiences and improving procedures. This exchange of best practices increases the integration between the teams, since CTG in China is known for its capacity to develop and build large hydroelectric projects, whereas Brazil is at a moment of modernization of assets built 40 or 50 years ago.

The goal is to work above regulatory operational indicators. For this, one of the tasks is to automate the plants, which are now operated manually. The technology will increase the reliability standard, as the systems that control temperature, pressure and other relevant indicators to the operation display the tendencies and allow operators to monitor the machines more accurately.

Corporate Governance

IMPROVEMENT OF STRUCTURE AND MANAGEMENT PROCESSES

|GRI 103-2, 103-3|

Based on principles of transparency and the pursuit of the highest standards of governance, CTG Brasil has improved its structure and management processes. In June 2018, the Company completed an important step to improve these corporate governance processes, with the approval of approximately 100 policies. They reflect the Company's operations and culture and meet the dynamics of the business world, which requires permanent analyzes and possible changes in these policies, in a continuous process of improvement.

In 2017, a Compliance Program was structured and a Code of Ethics and Business Conduct was signed by all employees. We created the Ethics Channel and the Policies for Internal Control Systems, Corporate Risk Management, Compliance, Conflict of Interest, Hiring of Relatives,

Disciplinary Measures, Prevention of Corruption, Prevention and Fight against Money Laundering, Interaction with the Government, Reports of Non-Compliance and Due Diligence of Suppliers, Clients and Partners. This process included the preparation of the respective procedures that support these policies.

In order to improve the management and integration processes, the areas that support the operation were evaluated in terms of performance and corporate identity, with a focus on excellence in service. The survey result showed the need for progress in all areas, so that the Company may achieve its objective of becoming a leader.

CTG Brasil is a limited liability company, in accordance with the applicable Brazilian legislation. The statutory officers are members of the Executive Board (EBM). CTG Brasil also has an Advisory Board, whose scope of operations was extended during 2018 with the introduction of issues subject to its approval or prior review, such as the Company's relevant policies, operating results and establishment of business guidelines. In November, the Advisory Board held its first meeting at the Company's headquarters.

Executive Board – ***EBM*** – In late 2018, the Executive Board was composed of four members, and the appointment of executive officers is subject to the approval of the Advisory Board and members. The Executive Board is responsible for managing CTG Brasil's social business. Processes are maintained to ensure the functioning and regularity of these instances, including a schedule of in-person annual meetings and in-person or remote special meetings.

Advisory Board – **ABM** – Among other activities, it supervises the directors' actions; reviews books, company documents, Management and Executive Management's report, and Financial Statements; approves and/or modifies the annual business plan, the annual budget, or capital expenditure (Capex); and submits to the meeting of shareholders the proposal to establish compensation plans or benefits to executives. At the end of 2018, it was composed of three members: Wang Yu, chairman of CTG International; Zhan Pingyuan, CFO of CTG International; and Li Yinsheng, CEO of CTG Brasil.

Companies Rio Paraná, Rio Paranapanema, Rio Verde and Rio Canoas have their own governance structures established in their Articles of Incorporation and/or Articles of Organization. All companies adopt practices that ensure the compliance of their operations, including the engagement of an independent audit firm to assess the Company’s balance sheets and financial statements.

Rio Paraná

It is a closely-held corporation. It has a Board of Directors and an Executive Management, whose members have a term of office of three years, with the possibility of reelection. The Board of Directors is responsible for, among other things, setting the Company’s strategy and policies, safeguarding the Company’s assets, defining the policy for payment of dividends, and guiding the Management to maximize the business value. The six officers – one chairman and five officers without specific designation – are elected by the General Meeting.

The Management has three members, all with no specific designation, elected by the Board of Directors.

Upon the shareholder’s request, a Supervisory Board may be assembled with five effective members and an equal number of alternates, who remain in office until the Annual Meeting following their election, provided that their reelection is allowed. No Supervisory Board was assembled in 2018.

Rio Paranapanema

Rio Paranapanema is a publicly-held corporation, with shares traded in B3 (*Brasil, Bolsa, Balcão* – Stock Exchange and Over-the-Counter Market) in São Paulo. It operates in accordance with the Business Corporation Act, under the applicable instructions and standards set forth by the Brazilian Securities Commission (CVM), as well as under the guidance of the Brazilian Institute of Corporate Governance (IBGC). Its quarterly and annual financial statements are audited by an external audit firm hired for this purpose.

Its administration is held by two bodies: the Board of Directors and the Executive Management. The Board of Directors, among other responsibilities, is charged with setting up the business guidelines, appointing the Executive Management, defining their roles and inspecting their performance. The Executive Management includes up to five members and their respective alternates appointed by the Annual General Meeting for a three-year term of office, given that reelection is allowed. In December 2018, the Executive Management had four effective members and one alternate (provided that one effective member and his respective alternate were appointed separately by the employees).

The Executive Management is responsible for managing the businesses and executing the decisions of the Board of Directors. The members of the Board of Directors are appointed by the directors for a two-year term of office, given that reelection is allowed. In December 2018, the Board of Directors had four members, of which one was necessarily the President and another the Investor Relations Officer. The Management's activities and the financial statements are inspected by the Supervisory Board, a non-permanent body that is assembled whenever requested by the shareholders. Since 2006, the Annual General Meeting has been requesting the assembling of the Supervisory Board.

Rio Verde and Rio Canoas

Rio Verde and Rio Canoas are closely-held corporations. They have a Board of Directors and an Executive Management, whose member enjoy a term of office of two years, with the possibility of reelection. The Board of Directors is responsible for, among other things, setting the Company's strategy and policies, safeguarding the Company's assets, defining the policy for payment of dividends, and guiding the Management to maximize the business value. The four officers – one chairman, one vice-chairman and two officers without specific designation – are elected by the General Meeting.

Management has three members, all with no specific designation, elected by the Board of Directors.

Upon the shareholder's request, a Supervisory Board may be assembled with five effective members and an equal number of alternates, who remain in office until the Annual Meeting following their election, provided that their reelection is allowed. The Supervisory Board was not assembled in 2018.

Sustainability Management

INTEGRATED SOCIO-ENVIRONMENTAL COMMITMENTS THROUGHOUT THE ORGANIZATION

|GRI 103-2, 103-3|

Strengthening a matrix capable of defining priority topics for the Company in the future was the main development of the Sustainability area in 2018. Based on the Sustainability Policy and Strategy, which had been built the previous year, the work reinforced each of the six Sustainability pillars: Community Engagement, Environmental Protection, Sustainability and Innovation in Operations, Employee Development and Well-Being, Responsibility in the Value Chain, and Responsible Performance.

In this process, the ISO 26000 and NBR 16000 standards of social responsibility and ISO 14001 of environmental management were adopted as reference, focusing on the systematic management of risks and socio-environmental impacts and opportunities to promote sustainable development, ensuring the adoption of the principle of precautions to address possible socio-environmental impacts of its operations. **|GRI 102-11|**

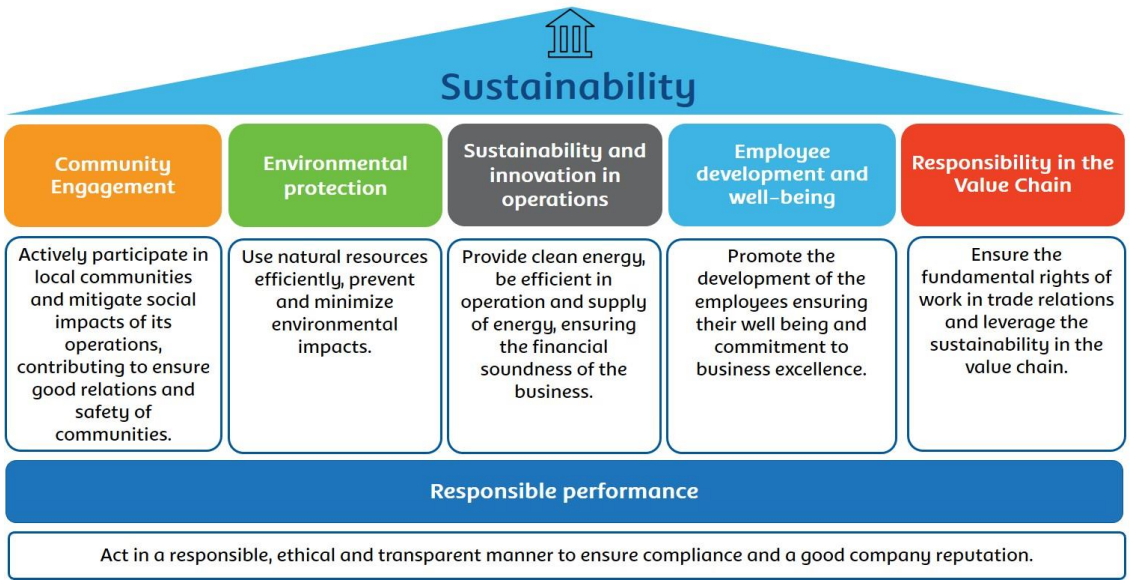
BOX

ALIGNMENT WITH THE GLOBAL COMPACT

Sustainability is one of CTG Brasil's bases of work and in 2018, as part of this mission, the company became member of the Global Compact Network in Brazil and joined the UN Global Compact Brazilian Committee, a governance body that carries out the programs in the country. Promoted by the United Nations (UN), this is the largest corporate sustainability initiative in the world.

In this process, started in 2017, when all the companies controlled by CTG Brasil became signatories of the Global Compact, a commitment was made to make this initiative and its principles part of the strategy, culture and daily operations, and to get involved in cooperative projects that promote the broader development goals of the United Nations, including the Sustainable Development Goals. **|GRI 102-12|**

SUSTAINABILITY STRATEGY



Sustainability Governance

The Sustainability topics are managed with the support of a specific governance, whose objective is to create and maintain an environment in which these principles and commitments are implemented and integrated throughout the organization. The structure is composed of:

• **Sustainability Committee** – Its mission is to coordinate and present practices that will be subject to the approval of the Executive Board. On a day-to-day basis, it works to ensure the employees' engagement and communicate the actions to the management. It also periodically reviews the Company's performance based on its Sustainability Strategy pillars.

• **Sustainability Work Groups –** Created on the demand of the Sustainability Committee, they are responsible for preparing action plans related to the Sustainability pillars, as well as proposing and monitoring management indicators.

• **Brand, Communication & Sustainability Area –** It is responsible for the internal and external mobilization and promotion of Sustainability actions in the Company.

RELATIONSHIP WITH STAKEHOLDERS

Stakeholder |GRI 102-40|	Main concerns |GRI 102-44|	Engagement initiatives |GRI 102-43|
Customers	Contract management | Satisfaction with the product and services | Ethics and integrity.	Meetings, Phone Calls, E-mail, Email Marketing | Events | Promotional campaigns | Satisfaction survey | Website | Contact us (corporate website) | Social media.
Employees	Health and safety | Compliance | Culture | Development | Ethics and integrity	Daily talks on topics that all employees should know about | *Acontece* (weekly e-mail with business and industry-related subjects) | We Chat (daily news, in English) | CTG TV (company news and upcoming events) | Internal campaigns | Ethics Channel.
Suppliers	Contract management | Product and service price negotiations |	Agreements and meetings between the Supplies area and the main suppliers in new hiring processes | Monthly monitoring of compliance with

	Health and safety of outsourced employees | Ethics and integrity.	contractual obligations by management areas | Onboarding meetings at the beginning of the service | Health and safety meetings.
Local communities (associations, leaderships)	Support for local development | Creation of employment and income | Environmental preservation and protection | Ethics and integrity.	Legal Space and Emergency Operating System Meetings | Emergency Action Plan | Participation in State and Federal Watershed Committees | *Telecheia* (a 24-hour telephone service with information on the river flows) | Ethics Channel | Website | Social Media | Contact us (corporate website) | Talk to us (V2V Volunteer platform) | Press relations office.
Government and regulatory agencies	Compliance with industry regulations | Operation stability and reliability.	On-site meetings, audio and videoconference | Sector forums and events.
Industry associations	Improvement of public policies and regulation of the Brazilian electricity sector.	Periodic meetings with the main representative entities of the electricity sector. In 2018, CTG Brasil's representatives were members of the committee, coordinated and participated in work groups of the Brazilian Association of Independent Electric Power Producers (APINE); were members of the committee and work groups of the Brazilian Association of Electric Power Generating Companies (ABRAGE); were part of committees and work groups of the Brazilian Energy Traders Association (ABRACEEL) and the Brazilian Association of Electric Energy Companies (ABCE). The Company is also associated with: Brazilian Association of Clean Energy Generation (ABRAGEL), Acende Brasil Institute, Brazilian Association for Business Communication (ABERJE), Reputation Institute; Brazilian Association of Chinese Companies (ABEC), Brazilian Corporate Volunteer Council (CBVE), and China Council for the Promotion of International Trade (CCPIT). **|GRI 102-13|**
Third sector organizations (NGOs, international organizations)	Partnerships aiming to contribute to local development | Creation of employment and income | Environmental preservation and protection | Ethics and integrity.	E-mails, phone calls and on-site meetings | Website | Social media | Contact us (corporate website) | Talk to us (V2V volunteer platform) | Press relations office.
Press	Environmental and socioeconomic compliance | Support for local development | Operation stability and reliability | Ethics and integrity.	Press Relations Office | Website | Social Media | Interviews with spokespersons.

BOX

SOCIAL MEDIA

CTG Brasil uses social media to further strengthen its relationship with the communities and its different audiences. On our pages on Facebook, LinkedIn, Instagram, We Chat, and YouTube we share photos, videos and information about our main actions and projects. In 2018, there were about 340 posts. Additionally, social media also allows CTG Brasil to interact with its audience. In total, we have more than 130,000 followers on our social networks.

Ethics and integrity

COMPANY-WIDE ALIGNMENT AROUND INTEGRITY VALUE

|GRI 103-2, 103-3|

The key initiatives implemented in 2018 to improve the Company's alignment with one of its values –integrity – included strengthening the Code of Ethics and Business Conduct published the previous year, holding a Compliance Week and having an independent consulting company evaluate the Compliance program. **|GRI 102-16, 205-1|**

Refresher mandatory employee training courses related to the Code of Ethics and Business Conduct began to be given through an on-line platform, reinforcing correct behaviors that lead to business sustainability and enabling training to take place remotely. On-boarding training for new employees remains on site.

In 2018, 100% of the employees were trained about the Code of Ethics and the Compliance Program. Every person, when hired, undergoes training and signs a term of commitment to the Company's compliance rules. An annual refresher is carried out with all employees in order to renew their commitment to the company's ethical stances. **|GRI 205-2|**

The Compliance Week, held in December, was dedicated to the reflection on dilemmas faced on our day to day activities, both in our personal and professional lives. These dilemmas were discussed by email, marketing, and in card games distributed to the employees. The week started off with a *Town Hall Meeting,* in Curitiba, broadcast live to all units, when the Company's CEO spoke about the importance of compliance for the organization.

In October and November, an independent consulting company carried out an assessment and concluded that the Compliance Program adheres to the industry's best practices and correctly anticipates all anti-corruption measures.

CTG Brasil maintains a Reporting Channel so that the employees and the general public may report non-compliant situations involving the Company's operations. This Channel is available 24/7, both in English and Portuguese, by phone (0800 601 6888) and on-line (https://contatoseguro.com.br/ctgbr). CTG Brasil guarantees the anonymity, non-retaliation, secrecy, and confidentiality of the entire process.

The channel, which is run by an independent company, is prepared to receive reports of suspected fraud, bribery, money laundering, sexual harassment, harassment, discrimination, physical violence, noncompliance with laws and organizational guidelines, among others. Always with guaranteed secrecy and confidentiality. In 2018, no corruption case was registered on this channel. **|GRI 102-17, 205-3|**

Risk management

IDENTIFICATION AND MONITORING OF RISKS THAT MAY AFFECT THE BUSINESS

|GRI 103-2, 103-3, GRI former EU6, former EU21|

A Risk and Compliance Committee was established at corporate level in 2018 to better identify and monitor risks that may adversely affect the business. Composed of five members (the president, the three vice-presidents and the Risks and Compliance officer), the committee deliberates on all issues that expose the Company. **|GRI 102-20|**

There are established risk indicators that are monitored by the Corporate Risk Department, which provides a methodology based on the best international practices (ISO 31000 and COSO), so that each area follows and adopts mitigation measures for the risk factors under their responsibility.

The management of operational risks is supported by the management of dam safety risks, electromechanical equipment risks, and hydrological risk.

Dam safety

The management of risks related to dam safety is fully in compliance with Brazilian legislation on this subject, which defines a series of obligations for electric power generation utilities. The Dam Safety Plan is comprehensive, preventive and based on a broad system of monitoring, control, and maintenance of these structures. Additionally, each plant maintains its own Emergency Action Plan to manage situations involving a potential dam rupture.

The operational risk management also includes the Emergency Response Plan, which addresses accidents involving equipment in the plants, and the Emergency Operating System, which mainly deals with flood control. The company participates annually, together with other generation agents, in the development of the Annual Flood Control Plan, coordinated by the National Power System Operator.

These initiatives for the management of operational risks are being consolidated by CTG Brasil, within the scope of a Crisis Management Plan.

Hydrological risk

The hydrological risk, however, is systemic. It affects all the hydropower plants taking part in the Energy Relocation Mechanism and it is mainly related to water scarcity or high-water flow for energy generation. In 2018, the National Interconnected System was serviced by 71.8% of hydraulic generation.

In order to mitigate these risks, the Energy Relocation Mechanism was created to share the hydrological risks of the plants in use and centralized by the National Power System Operator among the regions of the National Interconnected System.

Lower rainfall volumes and regulatory interference have left generating companies exposed to the need to purchase energy in the short-term market, usually at a price above that established in contracts with their customers. In these cases, the Company adopts *a* hedging strategy to mitigate

the financial impact caused by this risk, and monitors and engages in regulatory discussions on this issue.

Electromechanical equipment

The risk management related to electromechanical equipment is ensured by an efficient monitoring program using the most advanced technologies available on the market and an effective preventive maintenance program, in addition to a consistent investment in equipment modernization.

Sustainability and innovation in operations

Provide clean energy, be efficient in operation and supply of energy, ensuring the soundness of the business.

33,948.89 GWh of energy generated
30,088.29 GWh of energy sold
R$ 2.8 billion in net revenue
R$ 8.0 million invested in Research & Development

Economic and financial performance

Economic and industry scenario

The expectation that the Brazilian economy would recover proved to not be true, and the country went through another year of economic and political instability, especially because of the elections held in October. The Gross Domestic Product (GDP), which had increased 1.0% in the previous year, maintained a low growth level: an estimated rise of 1.3% according to the Brazilian Central Bank's Focus bulletin published at the end of December.

The manufacturing segment had 1.1% growth in 2018, and the retail market had a 2.6% increase in sales in the 12-month period that ended in November. The average unemployment rate was 12.3%, compared to 12.7% at the end of 2017, according to the Brazilian Institute of Geography and Statistics (IBGE).

The Special System for Settlement and Custody (SELIC) interest rate, set by the Brazilian Central Bank, closed out at 6.5% against the 7.0% at the beginning of 2018. The inflation rate measured by the Extended National Consumer Price Index (IPCA) was 3.75%, above the 2.95% in 2017, but still at a low level, due to the low economic growth, and within the Brazilian Central Bank's target.

Energy market

The total installed capacity of hydroelectric energy generation in Brazil reached 104,195 MW in December 2018, an increase of 3,876 MW (3.9% increase) in comparison with the previous year, according to the Brazilian Electricity System Monitoring Bulletin, published by the Ministry of Mines and Energy. The National System Operator’s figures, however, show that the hydroelectric sources correspond to 73.8% of the generated energy (408,459 GWh of the total 553,206 GWh). Thermal and nuclear plants were responsible for 17.4%; wind farms for 8.3%; and solar plants for 0.5%.

Energy consumption was 1.1% higher than in 2017, reaching 472.242 GWh, according to the Energy Research Company (EPE). All consumer segments recorded a rise: 1.3%, industrial, 1.2% residential; 0.6% commercial, and 1.0% others. Consumption in the regulated market fell 1.3% and the migration of consumers supported the 6.3% increase for the free market.

Regulatory environment

Two regulatory issues mobilized the electricity generation segment over the course of 2018: a physical guarantee adjustment factor (Generation Scaling Factor – GSF) and the review of the physical guarantee of the hydropower plants.

GSF

The GSF issue was judicially discussed in 2015, when the Brazilian Association of Independent Electric Power Producers (APINE) requested and obtained an injunction to remove all non-hydrological risks from the GSF calculation (order outside the merit of the issue, import of energy and reduction of the distributors' load). In October 2018, Aneel was granted the suspension of this injunction by the Superior Court of Justice (STJ); however, the decision did not include the GSF amounts withheld between July 2015 and February 2018.

This decision has no impact on the Company's financial statements as there is a provision for these amounts for Rio Paranapanema. In addition, the decision determined that the GSF-related impacts be accounted for in a retroactive manner to February 2018, when the Company started supporting them on the settlements made by the Chamber of Electric Energy Commercialization (CCEE). On the other hand, Rio Paraná, with over 70% of its physical guarantee traded via quotas, did not challenge the hydrological risk renegotiation conditions established in 2017 by the regulatory agency.

However, this issue was not settled. Bill No. 10985/2018 was approved by the Senate, and provides a solution to the hydrological risk of the generators; it is to be voted by the House of Representatives.

Physical guarantee

Rio Paranapanema filed claims to suspend Ordinance No. 178/2017 of the Ministry of Mines and Energy, which defines the new amounts of physical guarantee of the hydroelectric plants used in a central manner, effective as of January 1, 2018. Injunctions were obtained in April 2018, which remained effective until the end of the year. For Rio Paranapanema, there was a decrease of approximately 5% in the physical guarantee in force in December 2017. In April, two injunctions were obtained, firstly including the HPPs Chavantes, Capivara, Taquaruçu, and Rosana, then HPPs Canoas I and Canoas II for the portion exceeding the 10% decrease in physical guarantee on the base value determined for the year 2000, when the amendment to the concession agreement of these plants was executed.

On July 5, 2018, with Aneel Order No. 1.434/2018, there was an increase of 2.9 MW in HPP Capivara's physical guarantee, as a consequence of the completion of the repowering process of generating unit 1. Accordingly, the new total physical guarantee of Capivara HPP is 327.2 MWm (previously, 324.3 MWm).

Operational performance

SUPPLY AVAILABILITY RATE MAINTAINED ABOVE REGULATORY LIMITS

From January 1 to December 31, 2018, the plants controlled and operated by CTG Brasil generated 33,948.89 GWh of electrical energy, a reduction of 1.4% against the same period in the previous year, which recorded 34,439.75 GWh. This decrease was due to the reduction in the rainfall volume in the country, which led the National Power System Operator to distribute less energy from hydroelectric power sources, especially affecting Rio Paranapanema plants.

The eight plants of Rio Paranapanema and the two small hydropower plants of Rio Sapucaí recorded a reduction of 7.9%, totaling 12,457.81 GWh. Rio Paraná, with the Jupiá and Ilha Solteira HPPs, generated 20,226.52 GWh, or 2.5% above the previous year. Rio Verde's Salto HPP generated 3.3% more, totaling 607.43 GWh in the year; and Rio Canoas's Garibaldi HPP generated 10.9% more, closing out the year with a volume of 657.13 GWh.

The plants' availability rate was again above regulatory limits, thanks to the accumulated experience, technical capacity, workers' commitment, Company's consistent investment policy, and efficient equipment maintenance program.

GENERATING AVAILABILITY[1] |GRI EU30|

Plant	2017	Regulatory limit	2018
Ilha Solteira HPP	91.98%	89.58%	92.57%
Jupiá HPP	91.88%	89.58%	92.84%
Garibaldi HPP	96.60%	89.58%	97.87%
Salto HPP	96.72%	93.02%	96.67%
Jurumirim HPP	99.02%	93.02%	99.04%
Chavantes HPP	97.65%	89.58%	98.39%
Salto Grande HPP	95.04%	90.97%	96.32%
Canoas II HPP	96.11%	90.97%	97.52%
Canoas I HPP	98.29%	90.97%	97.65%
Capivara HPP	95.08%	89.58%	97.78%
Taquaruçu HPP	95.87%	89.58%	95.75%
Rosana HPP	94.63%	89.58%	95.21%
Palmeiras SHP	81.84%	Not applicable	98.32%
Retiro SHP	97.65%	Not applicable	88.97%

Note: The availability rate is the amount of time that the generating units of a plant are available for to generate electricity divided by the total time of the period, considering scheduled and unscheduled interventions at the generating units. ONS is responsible for monthly processing these rates using equations of equivalent rates, except for SHPs.

Commercialization

Although the economy did not recover as expected, the Company achieved consistent sales results in the year. The commercial strategy is based on the negotiation of energy two years in advance (A-2), always with a diversified customer portfolio featuring a robust credit quality and the support of the Strategic Business Committee for analysis and alignment of strategic matters.

The volume of energy sold, not considering the Short-term Market and Energy Relocation Mechanisms, totaled 30,088.29 GWh, of which 20,768.82 GWh came from Rio Paraná, 7,858.16 GWh from Rio Paranapanema, 897,666 GWh from Rio Canoas, and 563.64 GWh from Rio Verde.

In Rio Paraná, 25% of the energy sales were made in the Unregulated Contracting Environment, and 75% in the Regulated Contracting Environment. The Paraná River concession agreement establishes that, starting January 1, 2017, 70% of the energy generated is to be traded under the physical guarantee quota regime, while the 30% remaining capacity can be negotiated under the Regulated or Unregulated Contracting Environment.

In the case of Rio Paranapanema, 97% of 2018 sales were made to the Unregulated Contracting Environment, and 3% to the Regulated Contracting Environment. Rio Verde had 100% of its physical guarantee negotiated in the Unregulated Contracting Environment, and Rio Canoas maintained 46% in the Unregulated Contracting Environment and 54% in the Regulated Contracting Environment.

Currently, with the great rainfall deficit, the generating companies observe the ONS in lower volumes than their physical guarantee and to comply with the agreements with customers they buy energy in the market to cover this difference, exposed to the risk of paying higher prices in spot trading. Accordingly, by doing the purchases and sales both in the future and spot markets, the Company efficiently managed these variations.

Another significant aspect for CTG Brasil's business performance was that the Business area had its ISO 90001 certification renewed, now to reflect the 2015 version (the Company previously had the 2008 version).

CTG Experience

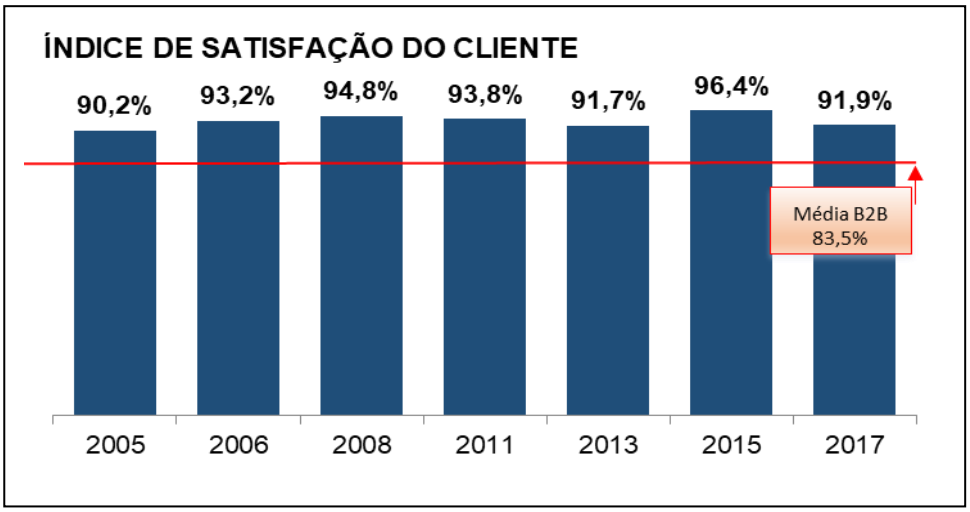
The first edition of the event was held on April 26, and gathered over 420 clients, commercial partners, suppliers, and electricity sellers. Established with the mission of consolidating the CTG Brasil brand, the *CTG Experience* was inaugurated by the CEO, Li Yinsheng, and featured lectures with experienced professionals for reflections on innovation, corporate governance, corporate management, the future of energy and humanity. One of the events held with the customers was a hang-gliding flight simulation over a portion of the Brazilian water basins.

Although the economy did not recover as expected, Rio Paranapanema achieved consistent sales results in the year: 102% of the forecast in relation to the volume traded was achieved, with prices better than those defined in a future forecast curve. The Company's commercial strategy is to negotiate energy two years in advance (A-2), always having a diversified portfolio of customers with solid credit quality.

Currently, with the great rainfall deficit, the generating companies observe the National System Operator in lower volumes than their physical guarantee and, to comply with the agreements with customers, buy energy in the market to cover this difference, exposed to the risk of paying higher prices in short term trading. Accordingly, by doing the purchases and sales of electric power in both the long and short term markets, the Company efficiently managed these variations.

Customer satisfaction

Every two years, Rio Paranapanema holds a customer satisfaction survey, conducted by an independent company. The last survey, held in 2017, recorded that 91.9% of the customers are satisfied, an above-market-average rate (83.5%).



Financial performance

IMPROVEMENT IN THE ACCOUNTING METHODOLOGY FOR THE FINANCIAL ASSETS OF RIO PARANÁ

Result

The combined net revenue of CTG Brasil's operations totaled BRL 2.8 billion in 2018 and the operating cash generation (EBITDA) was BRL 1.4 billion, with a margin of 48.1%. The net result was BRL 105.5 million negative, with a net margin of -3.7%. This reduction was basically due to the improvement in the accounting methodology for the financial assets of Rio Paraná Energia (ICPC 01 -– Technical Interpretation of the Committee of Accounting Pronouncements, applicable to concession contracts). This result reflects the adjustment of the accounting methodology IFRC 12 (International Financial Reporting Standard).

For comparison purposes, that is, by normalizing the ICPC 01 effects applied to the financial assets related to Rio Paraná's concession contract, the combined net revenue of CTG Brasil's operations totaled BRL 4.7 billion and the EBITDA was BRL 3.2 billion, with a margin of 68.4%. In this normalized scenario, the net income was BRL 1.1 billion positive, with a net margin of 23.5%.

2018 MAIN FINANCIAL INDICATORS |GRI 102-7|

	CTG Brasil (Combined[1])	Rio Paraná	Rio Paranapanema	Rio Canoas	Rio Verde
Gross revenue (BRL thousands)	5,592,135	3,685,576	1,459,658	198,215	248,686
Net revenue (BRL thousands)	2,850,989	1,130,449	1,318,862	178,138	223,540
Operating costs and expenses (BRL thousand)	(1,990,451)	(883,134)	(828,994)	(117,047)	(161,276)
Operating income (BRL thousand)	860,720	247,497	489,868	61,091	62,264
EBITDA (BRL thousand)	1,372,556	485,305	702,936	97,192	87,123
EBITDA Margin (%)	48.1%	42.9%	53.3%	54.6%	39.0%

Net revenue (BRL thousand)	(105,477)	(422,306)	255,911	22,434	38,484
Net margin (%)	-3.7%	-37.4%	19.4%	12.6%	17.2%

[1] In 2018, combined operating data of the Group's generating units, considering that CTG Brasil became, from the corporate aspect, an indirect shareholder of Rio Paranapanema Energia on November 30, 2018, with 96.19%. This result reflects the aforementioned improvement in the accounting methodology used at Rio Paraná.

Value added |GRI 201-1|

The combined value added of CTG Brasil was BRL 1.9 billion, representing the difference between gross revenue and amounts paid for materials and services acquired from third parties, depreciations and amortization, that is, it is the aggregated wealth by business activity.

Of the total value added, 14.7% was distributed to the government and the society in the form of taxes, fees and contributions; 7.7% to the employees, through wages, benefits and social charges; 83.3% to third parties, related to payment of interest and rents; and -5.7% in dividends and interest on shareholders' equity.

VALUE ADDED STATEMENT [1] |GRI 201-1|

	2018
Revenue	**3,433,922**
Sales of energy and services	3,386,875
Revenue related to the construction of own assets	47,047
Inputs acquired from third parties (includes taxes – ICMS, IPI, PIS and Cofins)	**(1,252,931)**
Costs of products, goods and services sold	(975,357)
Materials, energy, third party service and others	(145,480)
Loss/Recovery of asset values	(47,047)
Others	(85,047)
Gross value added	**2,180,991**
Reintegration of depreciation/amortization amount	(512,134)
Net value added produced by the entity	1,668,857
Value added received through transfers	186,981
Equity accounting result	183
Financial income	174,267
Others	12,531
Total value added to be distributed	**1,855,838**
Value added distribution	
Personnel	143,456
Government	272,662
Third Parties	1,545,197
Shareholders	-105,477

[1] In 2018, combined operating data of the Group's generating units, considering that CTG Brasil became, from the corporate aspect, an indirect shareholder of Rio Paranapanema Energia on November 30, 2018, with 96.19%.

Financing

The main achievements of the year were the issuance of two debentures and the renegotiation of a loan agreement. In March, Rio Paranapanema issued BRL 320 million, with a maturity term of five and seven years, with interest of 106.75% p.a. for the series in CDI (Certificates of Interbank Deposits) and monetary correction based on the IPCA (Extended National Consumer Price Index) with interest of 5.5% p.a. for the second series.

In June, Rio Paraná issued BRL 480 million, also maturing in five and seven years, with the commitment to pay interest of CDI +1.05% for the first series, and the monetary correction based on the IPCA with interest of 6.15% for the second series. It was the first bond issue of Rio Paraná and also the first time that CTG Brasil's project was considered, by the Ministry of Mines and Energy, a priority for infrastructure debentures.

The renegotiation of the loan agreement (BRL 2.7 billion) with the MUFG bank aimed to swap a fixed rate (13.365%) for a variable one. In June 2018, the fixed rate increased to 13.165% and in June/2019 of the following year the interest paid will be based on the CDI +0.45%, with the maturity term extended to 2023.

Ratings

Rio Paraná and Rio Paranapanema were recognized with investment grade ratings. Both have the highest rating awarded by the risk rating agency Moody's on the national scale (triple A), with their prospects rising to stable in 2018, following the credit review of the Sovereign rating.

Rio Paranapanema's good credit score is also confirmed by Standard and Poor's, who also rated it with highest score, brAAA.

The ratings reflect the Company's stable and predictable cash flows, which result from long-term concession agreements.

CORPORATE CREDIT RATING – RIO PARANAPANEMA ENERGIA

Agency	Scale	Rating	Perspective	Date
Rio Paranapanema				
Standard & Poor's	Global	BB	Stable	11/27/2018
Standard & Poor's	National	brAAA	Stable	11/27/2018
Moody's	Global	Ba1	Stable	4/10/2018
Moody's	National	Aaa.br	Stable	4/10/2018
Moody's	Debentures	Aa1.br.	Stable	2/8/2018
Rio Paraná				
Moody's	Global	Ba1	Stable	8/15/2018
Moody's	National	Aaa.br	Stable	8/15/2018

Innovation

SUPPORT FOR THE GROWTH OF THE ELECTRICITY SECTOR AND THE EFFICIENCY GAINS OF THE COMPANY

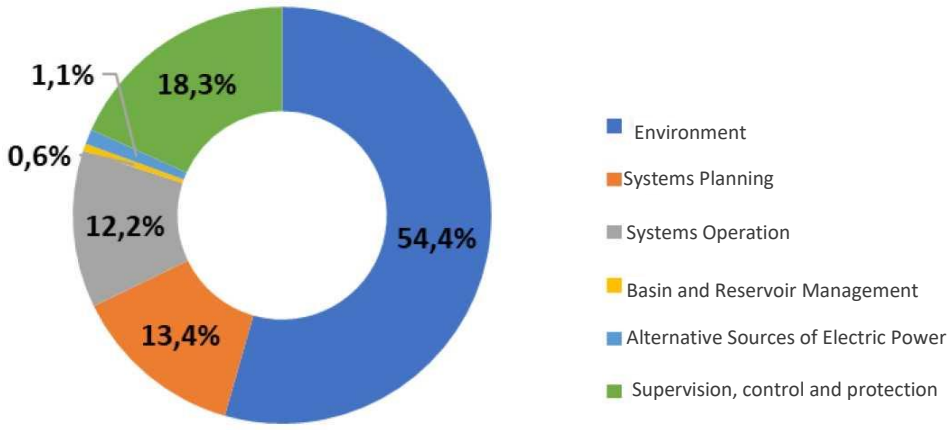
|GRI 103-2, 103-3, former EU8|

Research & Development (R&D) Projects received funds of BRL 8.0 million in 2018, in compliance with the regulatory obligation of allocating 1% of the net operating income to these initiatives. The funds are allocated in order to support the Company's innovation initiatives and efficiency gains, with the highest volume (54.4%) intended for environmental projects. The priority is to find the needs that may be fulfilled by projects aligned with CTG Brasil's strategic actions, which aims to comply with the vision of becoming a benchmark of clean energy in Brazil.

The major task of the year was to create a technological roadmap to guide the R&D projects in order to allocate the resources so that the objectives and lines of research have a positive impact on efficiency gains and the communities involved. This work was completed in December and ten initiatives prioritized and approved by the Executive Board should begin in 2019.

This year, fifteen scientific papers were submitted to different journals, magazines, seminars, symposia, and other academic channels, reflecting the innovative character and cutting-edge techniques of the project portfolio.

INVESTMENT IN R&D PER AREA – 2018



Main R&D projects

The R&D projects are detailed in the R&D Yearbook, which is available on CTG Brasil's website (click here: http://www.ctgbr.com.br/anuarioped2018/). The highlights of 2018 were:

Golden Mussel – The golden mussel (*Limnoperna fortunei*) is a mollusk that is among the most feared invasive species in Brazilian rivers. In July, CTG Brasil started the second phase of this pioneering project, whose objective is to create a genetically modified mussel capable of breeding with its wild relatives and producing only sterile offspring – a technique similar to that already used to control the population of mosquitoes that transmit diseases such as dengue and malaria. This research stage – called Biotechnology Control of the Golden Mussel Infestation – should last 24 months and will be carried out in partnership with Bio Bureau and the Senai Technology Center of Chemical and Textile Industry. The project was selected as one of the most innovative in its category in the Industry Innovation Report, in a cooperation agreement signed between CTG Brasil and Senai. The project will be carried out using the structures, laboratories and researchers of the entity, which will also finance part of the study.

Macrophytes – Macrophytes, both floating and submerged, may affect the operation of hydropower plants. The project uses an automated tool that analyzes multispectral images to identify macrophytes. The technique also uses modeling of hydrological, hydrodynamic and hydroacoustic parameters to reduce the number of field surveys in order to collect samples of water quality. This reduces the monitoring costs, improving plant performance.

Pneumatic regulator – Prototype being created in partnership with Revaix that uses pneumatics to regulate the hydroelectric turbine speed. The system will be designed to replace higher-cost

hydraulic units. It will also provide a cleaner operation (without the environmental impact of the mineral oil used in the hydraulic units) and make the maintenance easier.

Rio Peixe Stocks – **Phase 1** – It was ranked 4th in the Brazilian Environmental Benchmarking due to its approach and techniques in the management of fish diversity. The project was selected from over 40 pieces of work. The evaluators highlighted the ecology-biology-genetics combination of the project.

Ecosystem Service Valuation – Carried out in partnership with the Institute for Ecological Research (IPE), the project was published in the P22-on magazine of Getulio Vargas Foundation (FGV) for its relevant contributions regarding natural capital in Ecosystem Services in Environmental Programs.

Employee development and well-being

Promote the development of the employees ensuring their well-being and commitment to business excellence.

1,064 employees
813 own employees
36,535 hours of training
0 accidents with deaths

People management

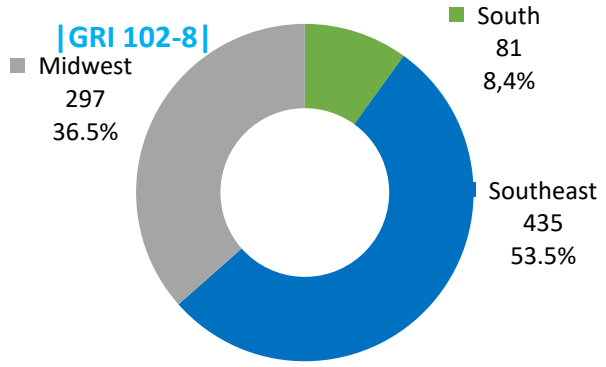
INTEGRATED VISION OF HUMAN RESOURCES AND A HIGH PERFORMANCE CULTURE

|GRI 103-2, 103-3|

On December 31, 2018, CTG Brasil had 1,064 employees: 813 in-house employees, 232 outsourced workers, 11 trainees, and eight young apprentices. Of the in-house employees, 78.1% were men and 21.9% women.

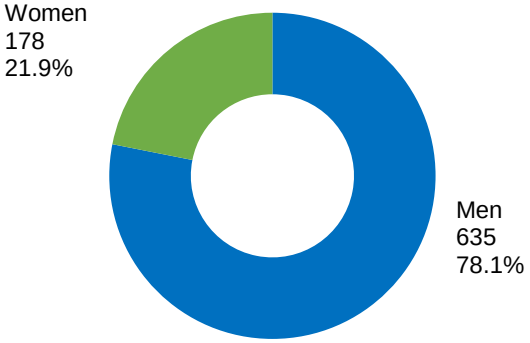
EMPLOYEES PER REGION

|GRI 102-8|

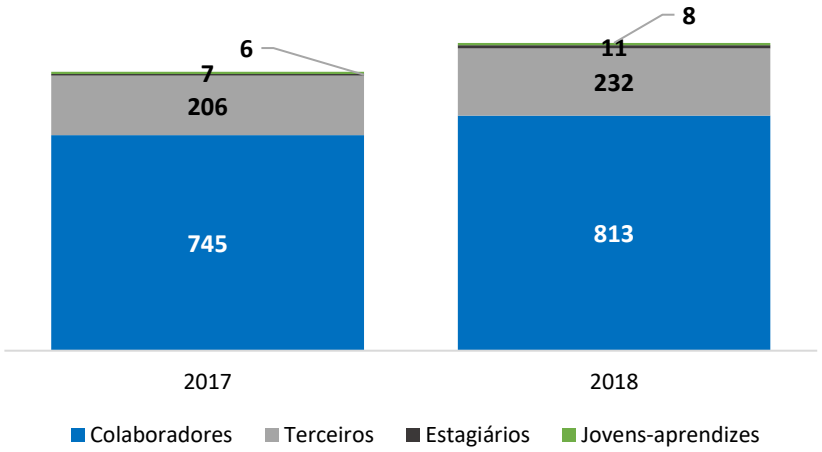


EMPLOYEES PER GENDER

|GRI 102-8|



TOTAL EMPLOYEES |GRI 102-8|



The focus of the Human Resources work in 2018 was to establish and consolidate processes and procedures, develop and publish policies. We defined the mission of the HR Officers and sought to work on the identification of each area's needs, which were met through projects in agreement with the Company's strategy, in order to comply with the vision of becoming a benchmark in Brazil.

Over the year, projects and measures were developed aiming at attracting and selecting people, compensation, corporate education, engagement, employee training and development, in addition to maintaining the focus on both an integrated HR vision and a high-performance culture. HR Day was created, an initiative that aims to bring HR closer to all locations and expand the employees' understanding of the area's processes.

The attraction and selection processes were revised and improved. Priority was given to the Internal Recruitment Program and the Recommendation Program, which encourages current employees to recommend professionals in agreement with the organizational culture and values.

Fired employees who used to hold executive positions received advice from a specialized company to guide them in finding a new job, a process called outplacement. **|GRI 404-2|**

TOTAL NUMBER OF WORKERS |GRI 102-8|

Company	Employees		Third Parties		Trainees		Young Apprentices	
	Men	Women	Men	Women	Men	Women	Men	Women
Rio Paraná	292	28	96	21	1	0	2	1
Rio Paranapanema	236	55	67	12	5	3	0	3
Rio Canoas	25	4	8	0	0	0	0	0
Rio Verde	36	36	16	3	0	0	1	0
Corporate	46	55	5	4	0	2	0	1
Total by gender	635	178	192	40	6	5	3	5
Grand total	**813**		**232**		**11**		**8**	

EMPLOYEES BY EMPLOYMENT CONTRACT[1] |GRI 102-8|

Company	Open-ended employment contract (permanent)		Fixed term employment contract (temporary)	
	Men	Women	Men	Women
Rio Paraná	280	27	12	1
Rio Paranapanema	236	52	0	3
Rio Canoas	25	4	0	0
Rio Verde	35	36	1	0
Corporate	40	49	6	6
Total by employment contract type	616	168	19	10
Total	**784**		**29**	

[1] All employees are hired full time

PERSONNEL TURNOVER |GRI 401-1|

New hire number and rate	Rio Paraná		Rio Paranapanema		Rio Canoas		Rio Verde		Corporate	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Men	49	15.3	4	1.4	4	13.8	10	13.9	10	9.9
Women	9	2.8	10	3.4	0	-	12	16.7	25	24.8
Up to 30 years old	29	9.1	11	3.8	3	10.3	16	22.2	12	11.9
31–40 years old	20	6.3	2	0.7	1	3.4	6	8.3	15	14.9
41–50 years old	9	2.8	1	0.3	0	-	0	-	7	6.9
Over 50 years old	0	-	0	-	0	-	0	-	1	1.0
Number of layoffs and turnover rate	**Rio Paraná**		**Rio Paranapanema**		**Rio Canoas**		**Rio Verde**		**Corporate**	
	No.	(%)	No.	(%)	No.	(%)	No.	(%)	No.	(%)
Men	16	5.0	13	4.5	2	6.9	4	5.6	9	8.9
Women	2	0.6	12	4.1	0	-	3	4.2	6	5.9
Up to 30 years old	0	-	10	3.4	2	6.9	1	1.4	2	2.0
31–40 years old	1	0.3	8	2.7	0	-	4	5.6	8	7.9
41–50 years old	2	0.6	1	0.3	0	-	2	2.8	5	5.0
Over 50 years old	15	4.7	6	2.1	0	-	0	-	0	-

AVERAGE TIME WORKING IN THE COMPANY (MONTHS)[1] |GRI 401-1|

Employees who left the company in the year	Men	Women	Total
Up to 30 years old	25	23	48
30–50 years old	41	49	90
Over 50 years old	23	33	55

[1] Consolidated from all companies

BOX

BEST INTERNATIONAL EMPLOYEE

In February, Rodrigo Sanomya, O&M manager of the Jupiá, Salto and Garibaldi HPPs, was chosen 2017's Best International Employee by CTG. The award was given at the Three Gorges plant in China, when he also had the opportunity to visit the company's headquarters in Beijing. Also in 2018, João Rossetto and Carlos Pedroso, from the Financial and Supply Chain areas, respectively, were recognized by CTG International and awarded in Brazil.

Training and development

SKILLS DEVELOPMENT OF COMPETITIVE PROFESSIONALS IN THE LABOR MARKET

|GRI 404-2|

The objective of the training and qualification programs is to develop skills and enable the professionals to remain competitive in the labor market. The process also aggregates beneficial results to the Company, since que qualification translates into motivation and engagement. Over the year, a total of 36,535 training hours were given, with an average of 44.9 hours per employee.

The following programs were the highlight of 2018: ***Leader Coach***, which aims to enhance people and leadership development skills in leaders; **New Generation**, which is focused on developing and preparing young technicians to work in the Operation and Maintenance areas. In this program, the managers are the mentors, contributing to the qualification of these new technicians; ***Energy Experts***, in which employees with expertise in different areas share their knowledge about the electricity sector with their colleagues; and ***CTG Experts***, a program that uses the experience of an employee to multiply their knowledge with colleagues, addressing various themes and areas of the Company.

As part of the development and recognition for high performance, ten employees were selected to participate in the 2018 China Three Gorges Outstanding Foreign Employees Training Program. The objective was to broaden the Company's global strategic vision, deepen understanding of Chinese culture and enhance pride and sense of belonging.

TRAINING HOURS |GRI 404-1|

Level and gender	Total number in the position	No. of people in training	Total training hours	Average hours per employee
Total number of employees	**813**	**4,300**	**36,535**	**44.9**
Executive Board	**22**	**79**	**641**	**29.1**
Men	20	59	457	22.9
Women	2	20	184	92.0
Management	**41**	**176**	**1,342**	**32.7**
Men	32	126	1,094	34.2
Women	9	50	248	27.6
Administrative	**364**	**1,515**	**9,174**	**25.2**

Men	207	836	5,824	28.1
Women	157	679	3,350	21.3
Operational	**386**	**2,530**	**25,378**	**65.7**
Men	376	2,481	24,913	66.3
Women	10	49	465	46.5

CTG Brasil Academy

In 2018, CTG Brasil created the Leadership Academy to help to implement a culture of development, create high-performance teams, accelerate leadership readiness for succession, and prepare the company for organizational change. The Academy is based on areas of knowledge (Leadership, Market and Business, and Results). Over the year, Leadership content was addressed, with the participation of all levels of leadership in the Company. In 2019, other fronts will be worked on.

Also in 2018, the LMS (Learning Management System) of CTG Brasil Academy was implemented, a platform that concentrates on-line development actions and allows the management of the training activities, such as the Internal Control Systems, Code of Ethics and Business Conduct, and mandatory courses of Safety, Health and Environment. In 2019, the platform will include technical courses and also training activities aiming to develop behavioral skills of CTG Brasil employees.

Performance Evaluation

Every year, the employees must define their goals and challenges for the year and regularly follow the Performance Evaluation Policy. The annual program monitors both the individual performance and the management effectiveness in order to achieve the goals. In two of the three annual steps, the managers are recommended to carry out a formal feedback session with each member of their team. In that year, a formal performance evaluation process was carried out for 97.7% of the employees.

PERFORMANCE EVALUATION |GRI 404-3|

Functional level	Men	Women	Total
Management[1]	96.2%	127.3%	101.6%
Administrative	99.5%	91.1%	95.9%
Operational	99.5%	70.0%	98.7%
Total number of employees	**99.2%**	**92.1%**	**97.7%**

[1]Percentage exceeds 100% because employees who retired in 2018 were also included – they were eligible for the Performance Cycle program as they had worked more than five months within the year. Thus, the number of employees evaluated was higher than the number of employees at the end of the year.

FIRST WOMAN MECHANICAL MAINTENANCE TECHNICIAN

Geicielle Aparecida Vaz, 24, is the first woman to be part of a predominantly male team at the Jupiá HPP. With a technical background in Mechanics and Electrotechnics, Ms. Vaz made a great stride in the fight against prejudice. "When I was selected, I was very happy to know that CTG Brasil does not see gender and selects who is more prepared," she says. About working with a male team, she is emphatic: "I do not suffer any kind of discrimination. On the contrary, everyone is keen to teach me, clarify my doubts, encourage me."

The employee began her career as a trainee in the electrical sector at Estreito HPP (State of Minas Gerais). Then, she went to Salto HPP (State of Goiás), also operated by CTG Brasil, until she was transferred to Jupiá HPP. "I am very happy I am the first female mechanic of the plant. I cannot imagine doing anything else other than working in a hydropower plant and I hope I am able to build a solid career in the company."

Compensation and benefits

The project to integrate the compensation management structure was completed in May 2018. Job descriptions were rewritten, and all companies and plants now have compatible structures, which allows people to be transferred and/or promoted more easily. For 2019, we plan to adopt a formal methodology for merit pay and promotions.

The compensation system was unified, maintaining wages and benefits aligned with the market and a high level of satisfaction. This process, due to its presence in different states, required the negotiation with eight trade unions representing CTG Brasil employees.

The benefits offered exclusively to full-time employees include life insurance, health care plan, dental care plan, maternity/paternity leave, child care allowance, meal voucher, food voucher, transportation (corporate bus or transportation voucher depending on the location), and parking lot. **|GRI 401-2|**

The company also offers private pension plans, which are optional and voluntary. The participating employees contribute with 9.74% of their wage and the Company complements the 4.29% of the contribution. Only Rio Paranapanema maintains an established benefit plan that has the participation of some employees. For this plan, the pension payment is made through a fund held separately from the organization's resources (private pension fund), with the entire plan liability being fully covered by the assets. **|GRI 201-3|**

In 2018, 17 employees were entitled to paternity leave and 6 to maternity leave, with 100% returning to work after the end of the period. After 12 months, 16 men (94.1% of the total) and 6 women (100%) remained in the Company. **|GRI 401-3|**

All employees are covered by collective bargaining agreements. Employees are allowed to become members of trade associations and unions, provided that they do not use it as an illegal way to negotiate an undue advantage for themselves or for the Company. CTG Brasil's instructions are that all meetings that the employee takes part in during office hours must be registered in minutes or in an internal report containing all the items discussed and the decisions. **|GRI 102-41|**

Health and safety

MAIN VALUE OF THE COMPANY MOTIVATES BEHAVIORAL INITIATIVES

|GRI 103-2, 103-3|

Safety is the main value of the Company and drives investments in programs and initiatives for the sustainable improvement of occupational health and the safety culture, such as the development of a safe behavior and the implementation of modern technical solutions for the identification and elimination of hazards, focusing on creating accident-free environments in all units of the organization. These initiatives meet CTG Brasil's objective of becoming a benchmark in labor safety.

We highlight the following projects that took place in 2018:

Preventive Safety Index (PSI) – Periodical inspection tool for field assessment of the adoption of the programs, proceedings, and best practices. Each inspection results in a score, which enables us to generate a ranking and thus promote a positive competition to achieve the safety goals. Every month, each plant receives a score and, at the end of the year, the best one in two different category receives a prize. In 2018, Garibaldi HPP won best performance and Jupiá HPP won best evolution.

Golden Rules – Safe behavior and operational discipline development program. The seven golden rules were defined based on the analysis of the most common accidents in the electricity sector. They are simple phrases (the idea is that they are never forgotten) that aim to prevent work accidents.

Near Miss– In this program, any employee or outsourced worker can report unsafe conditions and behaviors.

4 Steps (Stop, Think, Prevent yourself, Continue") – Continuous development of risk analysis to enhance people's awareness of the risks in the work environment.

In 2018, the decrease in the number of accidents and their severity at CTG Brasil is an indication that the labor health and safety programs and initiatives are leading to good results:

- The rate of work accidents was 2.17 for employees, and 5.60 for outsourced workers.
- The rate of lost-time injury for employees and outsourced workers was 1.63 and 0.75, respectively.

As a continuity of the work, the focus in 2019 will be the implementation of a safety management program for outsourced workers, with the objective of ensuring people's safe behavior, which will contribute to the occupational health and safety results, in agreement with the Company's strategic planning.

SAFETY INDICATORS[1] |GRI 403-9, 403-10|

	Rio Paraná, Rio Verde and Rio Canoas		Rio Paranapanema and Rio Sapucaí-Mirim	
	Employees	Third Parties	Employees	Third Parties
Number of deaths	0	0	0	0
Number of lost-time injuries [2]	1	2	2	0
Severity rate	0.86	1.03	24.81	0.00
Number of no lost-time injuries [2]	1	12	0	1
Frequency rate (lost-time injury and no lost-time injury)	1.72	6.83	2.94	1.59
Number of occupational diseases [3]	0	0	0	0

Note: Most common types of injuries recorded: Upper limb injuries, twisting, limb crushing, bruise.
[1] There are no accident indicators by gender and age group.
[2] Excludes deaths.
[3] Occupational diseases considered: Repetitive strain injury/Work-related musculoskeletal disorder, hearing loss, etc.

Safety management

The objective of the health and safety management system is to promote continuous process improvement through four actions: Plan, Do, Check, and Act, covering all employees and contractors. The processes adopted to make the improvements include internal and external communication channels to receive suggestions, promote employee's participation and consultation, address nonconformities, identify improvement opportunities, establish objectives and goals, and promote periodic reviews with top management and strategic leadership. **|GRI 403-1, 403-6, 403-7, 403-8|**

Risks and hazards are identified based on the Environmental Risk Prevention Program, which also includes internal management processes by which employees can anonymously report identified risk situations, unsafe behavior and near misses. CTG Brasil's management system provides for the right of refusal in case the employee identifies a risk or they do not feel safe to perform the service. **|GRI 403-2|**

Training activities are conducted to comply with the current legislation (Regulatory Standards), defensive driving, risk awareness, 4 Steps of Safety Awareness (Stop, Think, Prevent, and Go.) Practical drill exercises are also performed for emergency response according to the internal Emergency Response Plan. **|GRI 403-5|**

Employees' health care includes influenza vaccination at all units and awareness campaigns on the importance of screening tests and early diagnosis of breast and prostate cancer. Occupational Health and Medical Surveillance Program management is performed by an outsourced and qualified company, which annually carries out complementary and clinical examinations, guiding employees on their health and a healthier lifestyle. **|GRI 403-3|**

Internal communication channels (such as e-mails, TVs, and bulletin boards) are used to share information on health and safety, and health and safety procedures can be found on the Intranet and hard copies at the units. The Internal Commissions for Accident Prevention (CIPAs) are composed of employees from different areas and positions and work at all levels of the organization to both develop risk identification activities for work processes and prepare risk maps, with the advice from the Specialized Service in Safety Engineering and Occupational Medicine (SESMT), and thus support the implementation of prevention actions in each unit. With the restructuring, 100% of the employees are represented by CIPAs. **|GRI 403-4|**

Responsibility in the value chain

Ensure the fundamental rights of work in trade relations and leverage the sustainability in the value chain.

R$ 1.25 billion paid to suppliers

|GRI 103-2, 103-3|

In 2018, important reinforcements were incorporated in the selection and hiring policies and processes for suppliers. A tool that controls the information on the suppliers on-line and in real-time has enhanced the control over the hiring of third parties. Previously, before signing a contract (or renewing it), the verification was done manually. Now, the system indicates potential risks and makes a series of assessments that help the Company to improve this control.

Supplier management

STRATEGY IS TO MAINTAIN STRONG AND MEDIUM AND LONG-TERM RELATIONSHIPS

|GRI 102-9|

Partially centralized, supplier management is jointly performed by the Administrative/Supplier Registration area and the contract managers, who request the material or service and are responsible for the monthly follow-up in order to ensure the compliance with the agreed obligations. In 2018, the supplier registration database was unified and two registration systems are now used (Totvs and PeopleSoft).

There are small, medium and large companies among the suppliers and the Company's strategy is to prioritize, whenever possible, the relationship with those located near the hydroelectric power plants, as a way to encourage their development, strengthen the relationship with the community, and boost social and economic aspects of each region. Permanent contracts are also maintained with large companies, technology owners, skilled labor, and last-generation spare parts suppliers. Historically, we do not have a low turnover of suppliers, which is the result of our strategy of seeking to maintain solid, medium and long-term relationships.

At the end of the year, CTG Brasil had 2,194 active suppliers, without registering a change in the supply chain or suppliers' location. In 2018, expenditures with suppliers, including energy acquisition, totaled BRL 1.25 billion in the four generating companies. **|GRI 102-10|**

In services, they are mainly contractors, service providers (preventive and corrective maintenance of equipment and machinery, surveillance, reception, gate security, employee transportation, cleaning, etc.) and various consulting companies. In materials, we focus on the acquisition of electrical and mechanical equipment, electrical materials, hydraulic materials, tools, fuels, computers, hygiene products, office supplies, oils, lubricants, cleaning items, etc.

Selection and hiring

The selection of suppliers follows principles established in the Purchasing and Contracting Policy, which takes into account technical and commercial aspects, financial health of the company that will be contracted, in addition to compliance criteria, in accordance with current legislation.

In the second half of the year, more than 350 employees of the plants took part in training and qualification programs so everyone would know how to request the hiring processes, with emphasis on the on the creation of Technical Specifications and Technical Analysis of proposals received. In order to ensure greater sustainability to the process, the Health and Safety and Insurance areas have been included in the preparation of the Technical Specification, a step that only Rio Paranapanema and Sapucaí-Mirim used to have and now the whole Company does.

A risk assessment is performed for all service contracts, categorizing them as high and low. The analysis is carried out in an integrated way, including aspects of environment, health, and safety; however, no environmental or social criteria is addressed to determine the supplier selection, and this subject is under analysis for future evaluation. The contractual requirements are analyzed in the payment release processes with support of the areas using the services, according to the Contract Management Policy. Significant investment agreements are submitted for approval of the local Advisory Board and CTG in China. In 2018, four contracts related to the modernization of Jupiá and Ilha Solteira HPPs were in compliance with this criterion. **|GRI 412-3|**

All the Company's contracts include clauses guaranteeing human rights and social responsibility, demanding the contracted supplier not to apply child, forced or slave labor. In 2018, no such risks were identified in the operations. **|GRI 408-1, 409-1|**

Prior to the beginning of the service, the area responsible for the follow-up conducts meetings with the suppliers, providing them with the safety practices that avoid potential accidents and negative impacts that may occur during the activities. The contract can be terminated if any incident occurs due to negligence or malpractice of the service provider or violations of labor practices are identified. All contracts include a clause requiring the supplier to monthly submit the social security charge bills and other fees/taxes specific to the service rendered, duly paid.

Community Engagement

Actively participate in local communities and mitigate any social impacts of its operations, contributing to ensure good relations and safety of communities.

More than 600,000 people benefited from initiatives in the communities
R$ 15.5 million of investments with own resources and tax relief incentives in 2018
350 volunteers performed on Good Deeds Day
10,000 people visited the HPPs

|103-2, 103-3|

CTG Brasil understands that strengthening the communities surrounding the locations where the Company operates is vital for business; thus, it has promoted initiatives to develop lasting relationships with these communities. They are focused on education, culture and encourage sports.

In 2018, initiatives in the communities benefited around 600,000 people with the Company's own and incentive resources. The amounts applied based on fiscal incentive laws (Rouanet, Sports Incentive, National Program of Support to Cancer Oncology (Pronon), National Support Program for Patients with Disabilities (Pronas), Children and Adolescents Municipal Funds, and the Elderly Funds) totaled BRL 8.8 million, for actions that will be carried out over 2019. Likewise, amounts invested in projects carried out in 2018 had been disbursed in 2017 (BRL 15.4 million). The total investment in 2018, adding projects carried out with our own resources, was BRL 15.5 million. **|GRI 201-4|**

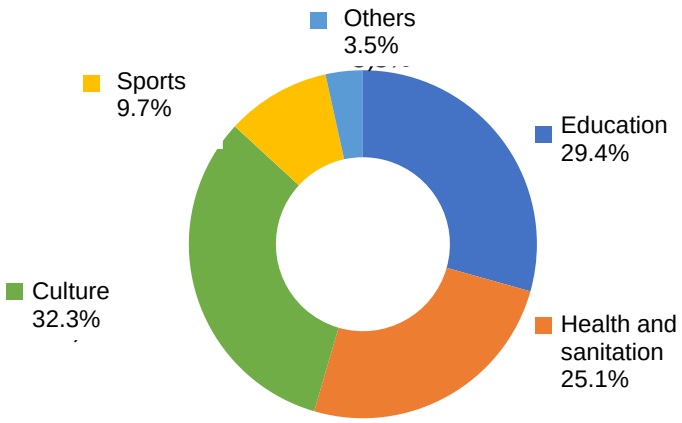
Investments in socio-cultural projects are reviewed by the Sustainability Committee and submitted for approval at the weekly Executive Board Meeting (EBM).

EXTERNAL SOCIAL INVESTMENT (BRL thousand) – INCENTIVE RESOURCES [1] |GRI 201-1, 203-1|

	CTG Total	Rio Paraná	Rio Paranapanema	Rio Verde
Education	2,593	2,193	120	280
Health	2,221	1,321	783	117
Culture	2,854	217	2,400	237
Sports	852	270	500	82
Others	305	305	0	0
Total	**8,825**	**4,306**	**3,803**	**716**

[1] In 2018, Rio Canoas did not allocate any resources to community initiatives. Over the year, the company invested approximately 2.5 million in community initiatives through the Term of Adjustment of Conduct, Environmental Compensation, and Socio-Environmental Programs.

EXTERNAL SOCIAL INVESTMENT – 2018



Impact management |GRI 413-1|

The communities are affected both positively and negatively by the operations of hydroelectric generation companies. Positive aspects include the creation of jobs and the hiring of local suppliers, which help the socioeconomic development of the communities neighboring the plants. Negative impacts occur during the construction of the plants and involve mainly environmental aspects, such as the flooding of the areas that will form the future reservoir and the interference in the flora and fauna in the region (*These impacts are covered in the* "*Environmental protection*" *chapter.*)

As the ventures controlled by CTG Brasil were already in operation when they were acquired, the main negative impacts from when these plants were under construction had already been mitigated and compensated in the licensing stages for construction and operation, in accordance with the requirements of the licenses issued by the inspection agencies.

Volunteering

One of the main focus of action is the volunteering project, which reinforces the engagement of employees with both the Company and their communities. In 2018, some volunteering actions stood out, especially the Good Deeds Day, held in April. Seeking to engage people in different social causes, this event reached its third edition in Brazil (sponsored by CTG Brasil via Rouanet Law). One of the Volunteer Program's goals is to contribute to a sustainable development of the communities surrounding the plants. Thus, the Company decided to invest its own resources to expand the Good Deeds Day, which would take place only in São Paulo, to nine other cities near the plants.

Employees who work as volunteer leaders chose the entities to be benefited by the activities carried out in each locality. In the month prior to the event, a series of workshops were carried out in Ilha Solteira (SP), Rio Verde (GO), Cândido Mota (SP), Porecatu (PR), Rosana (SP), Salto Grande (SP), Curitiba (PR), and Três Lagoas (MS) to prepare the participating NGOs and the Company's employees. On the Good Deeds Day (April 21), the actions took place simultaneously in ten cities and more than 350 volunteers were involved in the activities, which included painting and renovating classrooms, a party for socially vulnerable children, recovery of a playground and garden, and bingo games in a nursing home.

CTG Brasil is associated with the Brazilian Corporate Volunteer Council (CBVE), a network that brings together business companies, confederations, institutes and foundations with the purpose of promoting and developing voluntary work, through the dissemination of experiences and the

exchange of knowledge and practices regarding this subject. Additionally, CBVE has important partnerships, such as with UN, which helps to achieve the Sustainable Development Goals.

Education

Guri Project – The largest socio-cultural program of musical education for children and adolescents in the country. Currently, 35,000 young people aged 6-18 years are benefited by it. CTG Brasil sponsors, through the Rouanet Law, the maintenance of seven locations (in Fartura, Rosana, Salto Grande, Mirante do Paranapanema, Sandovalina, Ilha Solteira, and Castilho, all in the State of São Paulo), directly assisting more than 1,000 students.

Library – Investing in educational and reading projects is one of CTG Brasil's commitments to the communities surrounding the plants. In 2018, Fun Reading, one of the new initiatives supported by the Company, built and delivered eight libraries neighboring the reservoirs of Chavantes and Jurumirim plants, States of São Paulo and Paraná, respectively. Two other existing libraries received books. The project is an initiative of the Oldenburg Institute. The CTG Brasil Volunteer Program collected 127 books that were donated to the new libraries.

Children and Adolescent Municipal Funds – Twenty-four projects related to sports, environment, education, culture, qualification, health, and citizenship were carried out in the cities near CTG Brasil reservoirs in 2018 with the support of the Children and Adolescent Municipal Funds (FMDCA), which had been collected in 2017.

"By sponsoring the Reading Rooms that we have installed in public schools, CTG Brasil demonstrates that the sustainability issue is addressed in an integrated way with education and culture. Education, which begins at school, is the most effective basis for all socioeconomic development. The book, in addition to providing knowledge, is an important relationship instrument. The partnership with CTG Brasil strengthens our purpose."
Cristina Oldemburg
President of the Oldenburg Development Institute

Sports

Correndo pelo Verde ("Running for the Green") – Through the Sports Incentive Law, the Company sponsored sports activities in five cities near the reservoirs. *Correndo pelo Verde* project, conducted by the Paralympic Association of Campinas (SP), promoted five races in the cities of São Paulo (SP), Ilha Solteira (SP), Três Lagoas (MS), Avaré (SP) and Ourinhos (SP) throughout the year. In addition to the community, CTG Brasil employees, their families and friends were able to participate in one of the three modalities available: 10K race, 5K race and 5K walk. Participants could donate a kilogram of non-perishable food, distributed to local charities. In total, more than 9,000 people took part in the races.

Brincando na Praça ("Playground Games") – *Brincando na Praça* project promoted team sports, board games, dancing, and outdoor games for kids in 23 cities in 2018. Over 20,000 thousand people benefited from the activities organized by the RMC Sports League in localities near Rio Paraná and Rio Paranapanema plants.

Culture

Splash Musical – After performing in São Paulo, the multimedia theatrical performance Splash made free presentations to more than 3,000 spectators in 16 cities in the States of São Paulo and Paraná (neighboring Rio Paranapanema hydroelectric power plants). Splash was nominated for the 2018 São Paulo Award for Incentive to Children and Adolescent's Theater, in the Best Performance of the Year in Sustainability category.

Uli Luli e as Latas Mágicas **("Uli Luli and the Magic Cans") –** The show was performed in 125 cities neighboring CTG Brasil plants. The children's play addressed the importance of waste management. The free presentations were sponsored through Rouanet Law and benefited approximately 24,000 children.

Musicando Talentos ("Musical Talents") – The cultural festival, held in Três Lagoas (MS), offered free music lessons (from March to December) to 150 youngsters above the age of 15, especially students from public schools. In 2018, Musicando Talentos completed six consecutive years. CTG Brasil sponsors the project through the Rouanet Law. In September, the students of this project held a presentation at the Art and Culture Festival of Três Lagoas.

Young Orchestra of Ilha Solteira – The Young Orchestra of Ilha Solteira received new uniforms and instruments, promoted open rehearsals, and started in July a series of didactic concerts (in Ilha Solteira and other cities close to hydropower plants of CTG Brasil, who sponsors the group through the Rouanet Law).

CTG Movie Theater – CTG Movie Theater (“Cine CTG”) offers free movie sessions open to the public and this project toured some cities surrounding the Paranapanema River Basin, in the States of São Paulo and Paraná. With the support of Cepar Cultural and the resources sponsored through the Rouanet Law, the project has the main objective of providing culture and leisure to communities that do not have a movie theater. All movies shown were suitable for all ages, with audio, subtitles and Brazilian Sign Language, ensuring the inclusion of spectators with special needs. The approximately 7,000 spectators also got free popcorn and soda.

Iceberg Project – The theater play *Ursa Rosa Projeto Iceberg – Entendendo as Mudanças Climáticas* ("Pink Bear Iceberg Project – Understanding Climate Change"), sponsored by CTG Brasil through the Rouanet Law, mixed theater and science and toured 31 cities surrounding the reservoirs of the Company's plants.

Beija-flores do Brasil **Book ("Hummingbirds of Brazil")** – CTG Brasil sponsored, through the Rouanet Law, the book written by Luís Fábio Silveira, which brings more than 80 national species of these birds. The book, published by Marte publishing company and available in bookstores, has illustrations by Eduardo Parentoni Brettas and scientific texts detailing the characteristics of hummingbirds. As a result of this partnership, the authors developed a coloring book (with the same theme) and held educational workshops for 3,000 students of public schools in Ilha Solteira.

Health

Municipal Elderly Fund – CTG Brasil supported five projects for the elderly through the Municipal Elderly Fund. Social, interactive, sports, leisure, and health activities were offered in order to improve people's quality of life. Three projects were carried out in the region of Rio Paranapanema, benefiting about 150 elderly people, with an investment of BRL 83,000. In the region of Rio Paraná, approximately 900 elderly people were benefited by two projects with the investment of BRL 300,000. Lastly, the Support for the Elderly project of Barretos Cancer Hospital (State of SP), now

known as Hospital do Amor, received BRL 1.5 million from Rio Paranapanema and Rio Paraná to enhance its service to patients and their families.

Toilet construction – Toilet facilities were built for vulnerable families in the Cruzeirinho community in Cerro Negro (SC). **|GRI 203-1|**

"The Hospital de Amor – the new name of Barretos Cancer Hospital – is the largest and most advanced oncology hospital in the country, fully free through the Brazilian Unified Health System (SUS), with an average of 4,100 visits per day. And, thanks to companies such as CTG Brasil, we can continue to offer all our patients the best cancer treatment. Since 2016, CTG Brasil makes donations to our project through the elderly law, which is the most important resource for the Hospital; and in 2018, it also began to support our project through the children and adolescent law, providing for the children's hospital."
Henrique Moraes Prata
Director of Social Responsibility of Hospital do Amor

Other projects |GRI 203-1|

New homes for families in Santa Catarina – Forty-two wooden houses with 60 m² were built for vulnerable families living in communities around the Garibaldi HPP reservoir, in the cities of Anita Garibaldi, Cerro Negro, Belo do Campo, São José do Cerrito, and Abdon Batista, in the State of Santa Catarina. The Women's Association of Cruzeirinho Community, in Cerro Negro, was one of the institutions benefiting from a house, which became a place for meetings and courses.

Development of the local community infrastructure – Works to improve access, with the construction of a stormwater drainage system, were done in the communities surrounding the Garibaldi Plant, in the State of Santa Catarina. In Cerro Negro, the Umbu community had a piece of infrastructure to collect and distribute water for consumption built, while that Araçá community had the community center's party room renovated. Also in Cerro Negro, a water collection and distribution structure is being implemented in the Raitz community, and the community center of Campinho community is being renovated (church, party room, barbecue grills, and rural school) to serve the families resettled over there. A new church for families resettled in the Rodeio da Pedra community, in the city of Campo Belo do Sul, will be finished in 2019. Rio Canoas also maintains a drinking water collection, storing and distribution system that serves approximately 300 families living in Abdon Batista.

Protected area unit open to the public – Rio Canoas funded, through the environmental compensation, the structuring of Rio Canoas State Park (PAERC), in Campos Novos (SC), a protected area unit integrated to the National System of Protected Areas (SNUC). With the support of the plant, the unit headquarters was built and furnished, equipped with a research room, cafeteria, auditorium, office, accommodation facilities, bathrooms, and storage. Also ecological trails were opened to receive the communities of the region, schools and researchers. The park also had the incentive of Rio Canoas to purchase a 4x4 vehicle, as well as research and office equipment.

Restoration of historical and architectural heritage – Through the compensatory measure, Rio Canoas is investing in the structural and architectural restoration of Juca Antunes House, a property listed as historical and cultural architectural heritage of the State of Santa Catarina. Located in Lages, the property dating from 1850 is the last Luso-Brazilian architecture building in the urban area of the city. Its historical context and relevance is linked to the path of the troops who headed to the Santa Catarina mountains.

Socioeconomic reintegration of the communities – Families affected by the Garibaldi HPP were supported through social programs developed by Rio Canoas focused on the reintegration and economic prosperity, in order to mitigate the impacts caused by the project implementation. Among the support fronts, the communities received assistance to improve the soil of the areas intended for agriculture as well as technical assistance and the insertion of new crops adapted to the region.

ENERGY MUSEUM

Learning and preserving history is key to understand the present and build a better future. Therefore, CTG Brasil sponsored the reopening and maintenance of the Energy Museum in São Paulo. This cultural space, which had been closed for a year, was given new rooms and audiovisual resources that address topics such as the history of public lighting in the city and the sustainable use of energy, in addition to having a "Space of Waters". An interactive wing that shows the operation of a hydroelectric power plant and other sources of clean energy. The investment, through Rouanet Law, was BRL 807,000.

Visit to the plants

The visits to Rio Paraná and Rio Paranapanema plants are important to strengthen the relationship with the surrounding communities. In 2018, these activities gathered 9,000 people (about 10,000 in the previous year).

This program of CTG Brasil consists of guided visits conducted by monitors who explain the plant operation while the group walks through control rooms, turbines and dam – a 1-hour tour. The audience also receives information about the Company's environmental programs, as well as the importance of the sustainable use of water, which is everyone's energy source and natural heritage.

In 2018, Rosana HPP inaugurated another permanent historical exhibition, open to the public as part of the Visit Program. The exhibition displays the most memorable facts of the 31 years of activities of the unit and was carried out in partnership with the Energy and Sanitation Foundation, with the purpose of preserving the regional development history. Chavantes and Salto Grande HPPs have also created an exhibition space.

The visit to the exhibition, as well as to other spaces of the plants, is free and open to students and any other person interested, and carried out in groups of 25 to 50 people. The visits must be previously scheduled by e-mail (visita.ctgbrasil@ctgbr.com.br). In the case of school groups (elementary, secondary and higher education), students must be accompanied by three representatives of the institution.

Environmental Protection

Use natural resources efficiently, prevent and minimize environmental impacts.

107,735 tree seedlings donated in the Paranapanema River region
R$ 3.6 million fry released in the plants' reservoirs
950 seedlings planted in the Canoas River regions
43,000 hectares of monitored areas

|GRI 103-2, 103-3|

Sustainable use of resources, protection of biodiversity, restoration of natural habitats, pollution prevention, and adaptation to climate change are part of the Environmental Protection pillar of CTG Brasil's Sustainability Strategy. We understand that respecting the environment is vital to fulfill the mission of providing clean energy through projects in harmony with the planet.

The Board of Environment, Health, Safety and Heritage is responsible for the management of environmental impacts, with the support of specific teams in all units. They are responsible for monitoring the aspects and mitigating environmental impacts by implementing actions to eliminate, reduce or control the associated risks. Thus, it incorporates a precautionary approach through measures to prevent environmental incidents, accidents and liabilities, in accordance with Principle 15 of the Rio Declaration on Environment and Development (Eco92). **|GRI 102-11|**

Water

|GRI 103-2, 103-3|

Hydropower plants do not consume water in the production process. Water passing through turbines for power generation is fully returned to watercourses (in volume and in quality), since the reservoirs are the company's main interface with local communities, who use the water for production, irrigation, leisure, etc. The actual water consumption is insignificant, and it is mainly for human and sanitary use (toilets, cafeterias and general cleaning). **|GRI 303-5|**

The quality of the water in the reservoirs is constantly monitored based on limnological variables (analyses of biological, chemical, physical and other conditions), established in the operating licenses. Rio Paranapanema and Rio Canoas have an active contract with a specialized company for scheduled removal of sanitary wastewater from treatment facilities (septic tanks) when this volume increases considerably. **|GRI 303-2|**

Groundwater collection is authorized by the concession of right of use and is taken from the Serra Geral, Botucatu and Caiuá aquifers (at Rio Paranapanema) and the Guarani aquifer (at Rio Paraná, Rio Canoas and Rio Verde). The impact of the withdrawal on the volume of water stored in these aquifers cannot be estimated because they have different depths and connect to other aquifers. **|GRI 303-1|**

Collection

Rio Paranapanema plants maintain hydrometers to measure the groundwater collection and none of the operations occur in areas of water stress. Salto Grande HPP also has a digital flow meter. In the year, 130,000 m³ of water were collected from these sources, compared to 127,000 m³ in the previous year. **|GRI 303-3|**

For emission calculation purposes, the amount of 80% of the volume collected as sanitary wastewater will be considered. The Rio Canoas Garibaldi HPP has four artesian wells, three of which serve the relocated communities and are in the process of passing on responsibility and operation to Abdon Batista government. The artesian well that supplies the plant was equipped with an analog hydrometer in 2018. The other companies of the group will start measuring the collection volumes in 2020.

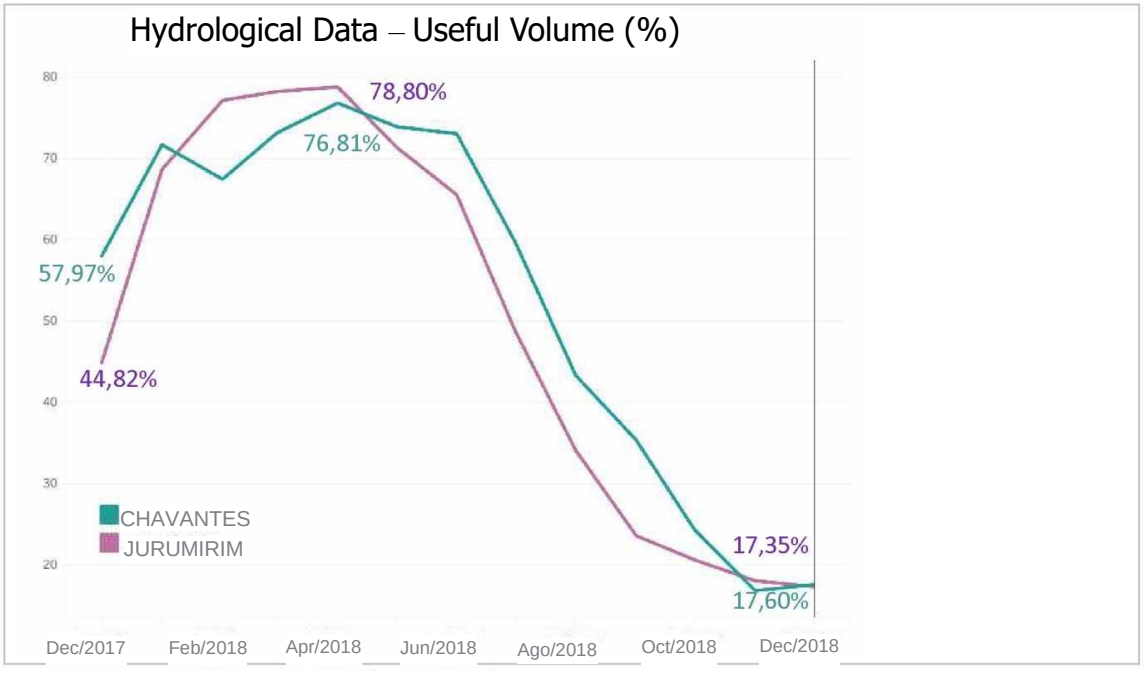
At Rio Paranapanema and Rio Sapucaí-Mirim, lectures and information bulletins support environmental education programs in the communities surrounding the reservoirs by addressing topics related to environmental preservation, including the judicious use of water and reforestation, as one of the methodologies to preserve the water in springs.

RESERVOIR LEVEL

In December 2018, the governments of six cities in the region of Avaré blamed CTG Brasil for the low water level of Jurumirim and Chavantes dams, State of São Paulo, a situation that affected the local tourism.

However, the Company explained that the wastewater flow levels of the reservoirs are determined by the National Power System Operator, the agency who controls and coordinates the water use for energy generation, the reservoir use, and the opening of spillway floodgates of most of the energy generation businesses in the country, including all those operated by CTG Brasil.

The low levels of reservoirs in the Paranapanema River Basin caused by unfavorable hydrology led the National Power System Operator to determine a reduction of 25% in the generation of the Jurumirim HPP, compared to the previous year, and 20.2% in the Chavantes HPP, precisely not to aggravate the level of the reservoirs. The useful volume of the Jurumirim reservoir went from 57.97% in late 2017 down to 17.54% in late 2018. The level of the Chavantes reservoir fell from 44.80% to 17.60% in the same period, according to the National Power System Operator data.



Source: National Power System Operator

Wastewater

Only sanitary waste is considered wastewater in the plants, and it is treated in the company's stations or in the city's treatment facilities. After treatment, the sanitary wastewater must meet the parameters established by CONAMA (National Environmental Council) Resolution 430/2011, and be periodically monitored.

All plants must have water/oil separator boxes, in addition to containing and removing occasional oil leaks, in order to prevent soil and water contaminations. In 2018, no significant leakage was identified at CTG Brasil's facilities. **|GRI 306-3|**

This management is key, since wastewater and waste can impact the quality of the water used as a source by surrounding cities (non-compliance can lead to administrative, civil and/or criminal sanctions). CTG Brasil constantly monitors and does not identify any negative impact of its operations on water bodies in its area of operation. **|GRI 306-5|**

Waste

|GRI 103-2, 103-3|

All industrial waste is stored, transported and properly disposed of, in compliance with its risk classification (hazardous and non-hazardous) and following specific internal procedures to comply with the Brazilian Policy on Solid Waste (Law 12305/2010).

In 2018, the Company set up a solid waste management plan to consolidate this issue in all plants and improve the stowing, storage and disposal of class 2 waste. After its implementation in 2019, it will be possible to create indicators and better manage this waste in the companies.

Priority is given to sustainable forms of disposal, such as co-processing and recycling, for hazardous waste generated by Rio Paranapanema. In other companies, they are currently sent to class 1 landfills. Non-hazardous waste goes to municipal landfills (class 2) near the units and to recycling centers, where they exist. Municipal landfills in the region of Rio Paranapanema are monitored based on the Landfill Pollution Index published annually by the Environmental Company of the State of São Paulo (CETESB).

The transportation of hazardous waste is carried out by companies that specialize in waste treatment and disposal. Volumes totaled 117 tonnes in 2018. **|GRI 306-4|**

WASTE BY TYPE AND DISPOSAL |GRI 306-2|

	Rio Paraná	Rio Paranapanema	Rio Canoas	Rio Verde
Non-hazardous waste	**1,435,500**	**135,100**	**-**	**283**
Composting (m³)	500	-	-	-
Others – Sale of scrap, such as copper and steel (kg)	1,435,000	135,100	-	283
Hazardous waste (kg)	**15,007**	**89,410**	**5,300**	**7,310**
Co-processing	9,607	21,890	-	-
Reuse	-	-	-	-
Recycling	-	5,000	-	5,503
Landfill	5,400	-	5,300	1,807
On-site storage	-	-	-	-
Re-refining – Lubricating oil and insulation	-	59,800	-	-

Others	-	2,720	-	-

Biodiversity

|GRI 103-2, 103-3|

In hydroelectric power generation, the major impact on biodiversity occurs during the construction of the plants, with the flooding of the areas that will form the future reservoir and the interference in the flora and fauna in the region. Although CTG Brasil acquired the units when they were already in operation, the company maintains preservation actions with the objective of restoring the natural dynamics. The monitoring of flora, fauna and ichthyofauna helps to understand the conditions of the restored areas and their importance for the local preservation.

Although some impacts are irreversible, it is possible to restore some areas and recover the balance with reservoir bank reforestation and river stocking programs. The Company's initiatives include educational lectures on the environment, river stocking, and forest development, with the donation of tree seedlings to people living around the reservoirs. In 2018, 107,735 seedlings were donated for planting in third-party areas in 25 cities of the region of Rio Paranapanema, and 950 seedlings were planted in the region of Garibaldi HPP of Rio Canoas, State of Santa Catarina.

IMPACTS ON BIODIVERSITY |GRI 304-2|

Potential or actual negative impacts	Impacted areas	Duration of impact	Mitigation measures
Reduction of ichthyofauna diversity and reduction of gene flow due to reservoir damming up.	Reservoirs downstream and upstream.	Undetermined	Rescue of fish and fish stocking in reservoirs and streams.
Change in the physical, chemical and biological characteristics of the water, jeopardizing the aquatic ecosystem.	Reservoirs downstream and upstream.	Undetermined	Limnological and water quality monitoring program.
Fish entrapment during power plant shutdowns.	Fish communities downstream the HPPs.	During emergency and scheduled shutdowns of the power plants.	Rescue of fish in a timely manner.
Damage to biodiversity; reduction of native forests, and gene flow impairment of aquatic and terrestrial species.	Areas directly and indirectly affected by the reservoir.	Undetermined	Nature preservation program; implementation of Protected Areas and forestry promotion; fauna monitoring program.
Oil leakage into the water body.	Reservoirs upstream and downstream.	Undetermined	Oil containment structures and water-oil separation; environmental emergency kit; water quality monitoring.
Change of aquatic communities and the threat to native species due to the proliferation of invasive species (golden mussel and exotic fish).	Area of influence of the reservoir and connected areas.	Undetermined	Invasive species monitoring program (implementation of Ichthyofauna R&D Phase II; continuity of Golden Mussel R&D).

Disordered occupation of the reservoir environment.	Areas of Permanent Preservation and adjacent areas.	Permanently	Program for monitoring the use and disciplining of the reservoir edges; Legal Space Campaign.
Damage to the aquatic ecosystem and problems due to the multiple uses of the reservoir (water use for consumption, recreation, fishing, etc.) caused by the increase of aquatic plants.	Reservoirs upstream.	While the operation is active.	Macrophyte monitoring program; lowering of the Salto Grande reservoir to control macrophytes.
Contamination of the water body due to the disposal of sanitary wastewater.	Reservoir upstream and downstream.	In case of wastewater not in compliance with the permitted parameters.	Program for wastewater monitoring and control according to the parameters established by CONAMA 430/2011.
Degradation of the reservoir banks by erosion, removal of the fertile layer, and silting of rivers.	Reservoirs upstream and downstream.	Undetermined	Program of hydrosedimentometric monitoring and erosive processes; implementation of control measures, such as blanket-type gabions and/or reforestation.
Groundwater collection for sanitary purposes.	Underground water sources.	While the operation is active; there are people in the plant	Monthly monitoring of the collected consumption through reading of the hydrometers, thus, complying with the concession of water collection issued by the competent agencies.

Protection

Own areas with high biodiversity are the Protected Areas located on the banks of the dams, and which are continuously monitored by the Environment and Heritage Department. All plants have reforestation projects and the implementation schedules meet the requirements of the operating licenses.

Rio Paranapanema develops a Forestry Promotion Program with the objective of supporting the owners of land surrounding the plants through the donation of seedlings of native species. In Paranapanema and Sapucaí Rivers, the company has managed, over the last 18 years, 12,443,000 hectares (124.43 km²) of semideciduous seasonal forest and Cerrado areas. Rio Paranapanema's Forestry Promotion Program donated, in 2018, 107,735 native forest seedling to 25 cities, which corresponds to approximately 65 hectares (0.6 km²) of reforestation.

Rio Canoas has a Forestry Replacement Program (Areas of Permanent Preservation and Riparian Forest) and a Degraded Area Recovery Program at the construction site. Throughout 2018, 66 hectares of Areas of Permanent Preservation were implemented along the banks of the Garibaldi HPP reservoir, thus rebuilding the riparian forest with native plant species and meeting the schedule established by the environmental agency, which aimed to implement a total of 80 hectares between 2017 and 2018. **|GRI 304-3|**

Most of CTG Brasil's projects were built before the environmental legal framework, therefore, there are no pre-building studies that allow a comparison between original and recovered habitats. |GRI EU13|

There is intense control over the use and occupation of these areas and numerous actions have been carried out to remove structures that may cause negative impacts to the environment. In addition, a permanent guidance initiative for the users of these areas is in place, through the Legal Space campaign (learn more about this program in the table below).

The companies monitor fauna species included in the Red List of the International Union for Conservation of Nature and Natural Resources (IUCN). In 2018, 34 species were identified at different levels of risk in the plant areas. |GRI 304-4|

HABITAT RESTORATION |GRI 304-3|

Action	Total Area (ha)	Location	Power Plant	Recovered Area (ha)	Expenses (BRL thousand)
Reforestation – Areas of Permanent Preservation	1,766.0	Caçu and Itarumã (GO)	Salto HPP (Rio Verde)	186	1,373.01
Reforestation – Areas of Permanent Preservation – Riparian Forest	80.0	Abdon Batista, Cerro Negro, Campo Belo do Sul, São José do Cerrito, and Vargem (SC)	Garibaldi HPP (Rio Canoas)	66	760.0
Reforestation – Areas of Permanent Preservation	239.0	Angatuba, Miguelópolis, Guaíra, and Ipuã (SP)	Jurumirim HPP (Rio Paranapanema) and Retiro SHPP (Sapucaí-Mirim)	239	2,350.43
Forestry Promotion – Third party area	64.7	25 cities of the State of São Paulo	8 HPPs of Rio Paranapanema	107,735 forest seedlings	93.51

SPECIES AT RISK INCLUDED IN THE RED LIST |GRI 304-4|

Category	Rio Paraná	Rio Paranapanema	Rio Sapucaí-Mirim	Rio Canoas	Rio Verde
Critically Endangered (CR)	-	-	-	-	2 species: Avifauna: bare-faced curassow (*Crax fasciolata*), rusty-margined guan (*Penelope superciliaris*)
Endangered (EN)	1 species: Ichthyofauna: Piracanjuba (*Brycon orbignyanus*)	1 species: Ichthyofauna: Piracanjuba (*Brycon orbignyanus*)	1 species: Avifauna: Sun parakeet (Aratinga solstitialis)	1 species: Ichthyofauna: Suruvi (*Steindachneridion scriptum*)	2 species: Avifauna: Red-billed scythebill (*Campylorhamphus trochilirostris*). Mammals: South American tapir (*Tapirus terrestris*).

Vulnerable (VU)		1 species: Mammals: South American tapir (Tapirus terrestris).	2 species: Avifauna: Buffy-fronted seedeater (Sporophila frontalis) Mammals: Giant anteater (Myrmecophaga tridactyla)	6 species: Mammals: Pygmy brocket (Mazama nana); white-lipped peccary (Tayassu pecari); southern tiger cat (Leopardus guttulus) Avifauna: Vinaceous-breasted amazon (*Amazona vinacea*); red-spectacled amazon (*Amazona pretrei*) Ichthyofauna: Golden dorado (Salminus brasiliensis)	5 species: Mammals: Maned wolf (*Crysocyon brachyurus*), giant anteater (*Myrmecophaga tridactyla*), giant armadillo (*Priodontes maximus*); cougar (*Puma concolor*). Avifauna: Channel-billed toucan (*Ramphastus vitellinus*).
Near Threatened (NT)		3 species: Mammals: Margay (Leopardus wiedii); neotropical river otter (Lontra longicaudis); black capuchin (Sapajus nigritus)	3 species: Avifauna: Golden-capped parakeet (*Aratinga auricapillus*); Mammals: Neotropical river otter (*Lontra longicaudis*), and maned wolf (*Chrysocyon brachyurus*)	5 species: Mammals: Margay (*Leopardus wiedii*); neotropical river otter (*Lontra longicaudis*) Avifauna: Chaco eagle (*Urubitinga coronata*); helmeted woodpecker (*Celeus galeatus*), and marsh tapaculo (*Scytalopus iraiensis*)	1 species: Avifauna: Greater rhea (*Rhea americana*)

FISH STOCKING IN THE RESERVOIR

In order to maintain the ichthyofauna biodiversity, the Company maintains a fish stocking program. In 2018, 3.6 million fingerlings were introduced into its reservoirs. Local students took part in this initiative as one of the environmental education program activities, which also includes lectures on the conservation of rivers and their banks. Fingerlings are produced at the Aquaculture Station in Salto Grande (State of São Paulo), on the banks of the Paranapanema River.

In the Paraná River basin alone, 2.1 million native species of fish were distributed in the reservoirs of Jupiá and Ilha Solteira hydropower plants. Achieving the annual goal, 1.5 million of pacus, piaparas, threespot leporinus, streaked prochilod, tetras, golden dorados, piracanjubas, and piauçus were released into the reservoirs of Jurumirim, Chavantes, Salto Grande, Canoas I and II, Capivara, Taquaruçu and Rosana. They are all native species of economic and cultural value to the inhabitants of the basin, which guarantees biodiversity.

In March, for the celebration of the World Water Day, we released 23,000 young fish into the dams of Palmeiras and Retiro SHP, in Sapucaí River. In the year, the total was 132,000 fingerlings. In addition to this action, CTG Brasil organized an environmental education activity with 50 students from public schools of Guará. In Rio Pardo, the World Water Day was celebrated for the eighth consecutive year, also with fish being released.

The only reason the program is not applied in Garibaldi and Salto HPPs is because the rivers in both regions did not have fish and the environmental agency did not make this requirement.

Asset

CTG Brasil monitors 100% of the 43,000 hectares of area and the 9,000 km of perimeter of its plants. In 2018, 1,533 inspections were carried out to identify the misuse of reservoir banks, promote their regularization, and ensure the correct identification and registration of properties built on the banks of reservoirs in concession areas. Sixty-two meetings, lectures, field work or exchange of information activities with inspecting and environmental licensing authorities were also carried out. Real estate management is supported by the Territory Management System.

Fire prevention activities were carried out in an area spanning 525 hectares, with the maintenance of firebreaks, as well as the replacement and maintenance of 80.4 kilometers of fences to protect 10,966 hectares in areas of environmental conservation.

LEGAL SPACE

The Legal Space campaign is an unprecedented initiative of CTG Brasil on the use of reservoir banks, not only with regards to the compliance with the law, but also the importance of community commitment to environmental preservation. It was created to help people on the banks of the plant reservoirs better understand what their legal obligations are and how it is possible to use these areas without jeopardizing the environment.

This is supported by the publication of the Legal Space Guide, which provides information on how to ensure that the property is in compliance, whether for agricultural or leisure activities, or small interventions (ramps, fishing platforms, etc.), land lots or ranches.

The campaign won the São Paulo 2018 Aberje Award, in the Communication of Corporate Sustainability Programs category. This prize is Brazil's most important communication award and recognizes policies, strategies and practices adopted by companies to achieve sustainable development. The Company also ranked fifth in Benchmarking Brazil - Sustainability Legitimate, organized by Instituto Mais, and was selected and presented as representative of best practices in the Eighth Brazilian Seminar of Environment and Social Responsibility of the Electricity Market (SMARS), organized by Cigré Brazil.

The guide is available at: http://ctgbr.com.br/2017/wp-content/uploads/2017/09/Espaço-Legal_CTG-Brasil_Final.pdf.

Each power plant has service channels to answer questions and assist in the progress of requests for new interventions or regularization of established situations. Contact us through the following emails: patrimonio.rp@ctgbr.com.br (Rio Paraná); patrimonio.rpp@ctgbr.com.br (Rio Paranapanema); patrimonio.rc@ctgbr.com.br (Rio Canoas), and patrimonio.rv@ctgbr.com.br (Rio Verde).

Climate changes

|GRI 103-1, 103-2|

Hydropower plants are not considered the primary emission sources of greenhouse gas (GEE). Thus, they do not impact climate change significantly. CTG Brasil, however, considers this subject relevant and of high risk to the electricity sector. As part of the Company's Sustainability Strategy, specific goals and indicators will be defined for monitoring climate change, and worked into a policy that will be submitted in the future to the Executive Board.

CLIMATE CHANGE RISKS AND OPPORTUNITIES |GRI 201-2|

Risks	Opportunities
Physical	
▪ **Changes in precipitation extremes and droughts:** These conditions can directly affect the hydroelectric power generation of the interconnected system and, consequently, increase the risk of GSF (Generation Scaling Factor), which relates energy generated with the physical guarantee of the plant. ▪ **Change in precipitation patterns:** Changes in stormwater and hydrological regimes can aggravate the environmental impacts on reservoirs, such as increased bank erosion and silting, reducing the reservoir useful life and leading to higher maintenance costs. ▪ **Increased precipitation patterns:** Excessive rainfall can lead river levels to increase too much and cause damage to the plant operation.	▪ **Changes in precipitation extremes and droughts:** These conditions also affect the monthly Settlement Price for Differences. The assured energy seasonality may produce short-term market gains when the Settlement Price for Differences is high (dry month or season). ▪ **Increased precipitation patterns:** This condition may increase the revenue from the Energy Relocation Mechanism.
Regulatory	
▪ **Uncertainty of the new regulations:** The potential requirement for carbon assessment or other instruments for emission reduction may be required in the GHG emission reports, determining adjustments to existing processes and procedures, which are already well established. ▪ **Reduction of energy consumption:** The 10% reduction target, based on 2004 data, in the energy consumption by 2030 established in the National Energy Efficiency Action Plans (NEEAP) of the Ministry of Mines and Energy, may impact the Company's business.	▪ **International Agreements: Brazil has signed the Paris Agreement, committing** to reduce its GHG emissions and increase the share of renewable energy in the power supply by at least 23%, which may contribute to increase the demand for the energy generated by the Company. Policies to encourage energy efficiency projects can be established, with the Company having the opportunity to take advantage of these incentives to increase the energy efficiency of its operations. ▪ **Carbon taxes:** The Environmental Company of the State of São Paulo (Cetesb) plans to establish emission limits for the industrial sector. Thus, purchasing renewable energy can help companies to achieve their goals. ▪ **More restrictive goals:** The state of São Paulo, where the Company operates, has set a 20% reduction target for 2020 compared to 2005, which will increase the demand for renewable energy. ▪ **Cap-and-trade systems:** The establishment of a cap-and-trade emissions trading market in Brazil will allow the Company to become a major supplier of GHG reduction certificates, due to its clean energy generation. ▪ **Emission report:** Companies are looking for solutions to reduce their emissions due to demands from environmental agencies, investors, financiers and customers, which increases the opportunities to commercialize energy from renewable sources.
Others – Reputation	

▪ **Reputation:** If the Company does not meet its customers' expectations regarding GHG emissions management, it may lose market opportunities in future contracts, directly impacting its revenues. ▪ **Consumer behavior:** Lower consumption of electricity, motivated by discussions and incentive programs, such as self-generation of energy (photovoltaic panels and wind generators), can impact the energy supply liquidity and reduce prices in the free market. ▪ **Humanitarian demands:** Precipitations above regular levels can bring undesirable impacts to the properties located downstream of the reservoirs, potentially increasing the demands of the communities living on the banks of the river.	▪ **Reputation:** Some customers have already demanded information on GHG emissions. The development of an emission inventory and the public registration of the results through the Brazilian GHG Protocol program leaves the Company well positioned and prepared for the future market competition. ▪ **Consumer behavior:** The probable increase in average temperatures will cause changes in the consumption patterns such as an increase in the use of ventilation and cooling systems, which will result in an increase in the demand for electricity. ▪ **Energy Alternatives:** The greater demand for energy may have repercussions in the search for low-GHG energy alternatives, which benefits the commercialization of low-emission electricity.

Emissions

Rio Paranapanema has prepared Greenhouse Gas (GHG) emission inventories since 2008, based on procedures to map, quantify and manage these emissions. In August 2018, for the fourth consecutive year, Rio Paranapanema was awarded by the Brazilian FGV/GHG Protocol the gold seal for the Greenhouse Gas Emission Inventory.

One of CTG Brasil's challenges for the coming years is to meet the goals and indicators defined in the Sustainability Strategy, with the preparation of emission inventories for all plants. Rio Paranapanema writes the inventory of the eight HPPs and the two SHPs under its responsibility. It is divided into three scopes: the emissions generated by the company itself, the emissions of purchased and consumed electricity, and the emissions from sources not owned or controlled by the plants.

The 2018 GHG emissions inventory will be completed by the end of the first half of 2019. Based on the data from January to December 2017, Rio Paranapanema Energia's GHG emissions totaled 2,642.12 tonnes of equivalent carbon content (tCO2e), of which 608.17 tCO_2e corresponded to the company's direct emissions (scope 1), 21.48 tCO_2e were from purchased energy (scope 2), and 2,012.48 tCO2e represented indirect emissions, such as third party goods and services, and flights (scope 3). **|GRI 305-1, 305-2, 305-3|**

The result represented a reduction in the emission intensity of 0.0001958 tCO_2/MWh of energy generated in 2017, compared to 0.0001947 tCO_2e/MWh recorded in the 2016 inventory. This information is published in national and international corporate initiatives (Brazilian GHG Protocol Program and Carbon Disclosure Project – CDP). **|GRI 305-4|**

Conscious Consumption

Throughout the year, a major awareness-raising campaign for the efficient use of resources began to be implemented in the Company.

In order to encourage employees to turn off the light in the meeting rooms, for example, e-mails and internal bulletins were sent out while mini posters were placed on the switches in every room.

Aneel Indicators / Corporate Financial Statements

Rio Paraná Energia

OPERATIONAL AND PRODUCTIVITY INDICATORS

Technical data (inputs, production capacity, sales, losses)

	2016	2017	2018
Energy generated (GWh) |GRI EU2|	21,375.84	19,734.49	20,226.52
Ilha Solteira HPP	Not available	12,369.18	12,703.02
Jupiá HPP	Not available	7,365.31	7,523.50
Energy sold (GWh) [1]	28,518.36	21,396.8	20,730.89
Installed capacity (MW) |GRI EU1|	4,995.2	4,995.20	4,995.2

[1] This data considers shares and sales contracts and does not consider the Short-Term Market and the Energy Relocation Mechanisms.

GOVERNANCE - ADMINISTRATORS

	2016				2017				2018			
	BD	EB	AC[1]	Total	BD	EB	AC[1]	Total	BD	EB	AC[1]	Total
Number of members	5	2	-	**7**	4	3	-	**7**	4	3	-	**7**
Number of paid members	0	2	-	**2**	0	2	-	**2**	0	2	-	**2**
Annual fixed compensation (BRL thousand)												
Monthly compensation or pay	-	294	-	**294**	-	1,462	-	**1,462**	-	1,517	-	**1,517**
Direct or indirect benefits	-	75	-	**75**	-	269	-	**269**	-	273	-	**273**
Committee sharing	-	-	-	**-**	-	-	-	**-**	-	-	-	**-**
Others	-	117	-	**117**	-	584	-	**584**	-	604	-	**604**
Variable pay (BRL thousand)												
Bonus	-	-	-	**-**	-	-	-	**-**	-	-	-	**-**
Profit sharing	0	100	-	**100**		514	-	**514**	-	704	-	**704**
Meeting sharing	-	-	-	**-**	-	-	-	**-**	-	-	-	**-**
Commissions	-	-	-	**-**	-	-	-	**-**	-	-	-	**-**
Others	-	-	-	**-**	-	-	-	**-**	-	-	-	**-**
Post-employment pay	-	28	-	**28**	-	134	-	**134**	-	142	-	**142**
Job termination	-	-	-	**-**	-	-	-	**-**	-	-	-	**-**
Based on shares	-	-	-	**-**	-	-	-	**-**	-	-	-	**-**
Total compensation	**-**	**615**	**-**	**615**	**-**	**2,963**	**-**	**2,963**	-	3,240	-	**3,240**

BD: Board of Directors; EB: Executive Board; AC: Audit Committee.

[1] No Audit Committee was assembled.

ECONOMIC AND FINANCIAL INDICATORSH*

Wealth Generation — Value Added Statement — BRL thousand |GRI 201-1|

	2017	2018
Revenue	**4,048,604**	**1,480,653**
Sales of energy and services	4,048,604	1,480,653
Other revenue	0	0
Revenue related to the construction of own assets	0	0
Provision for doubtful accounts – Reversion (Constitution)	0	0
Inputs acquired from third parties (includes taxes – ICMS, IPI, PIS and Cofins)	**-587,859**	**-526,093**
Costs of products, goods and services sold [1]	-511,257	-437,272
Materials, energy, third party service and others [1]	-52,891	-73,446
Loss/Recovery of asset values	0	0
Others [1]	-23,711	-15,375
Gross value added [1]	**3,460,745**	**954,560**
Depreciation, amortization and depletion	0	0
Gain / (Loss) due to non-recoverability of assets (CPC 01)	0	0
Reintegration of depreciation/amortization amount	-220,020	-237,990
Net value added produced by the entity [1]	**3,240,725**	**716,570**
Value added received through transfers	**148,108**	**93,836**
Equity accounting result	-50	183
Financial income	54,144	81,459
Others	94,014	12,194
Total value added to be distributed [1]	**3,388,833**	**810,406**

[1] 2017 data revised

Value added distribution

	2017	2018
Personnel [1]	**59,694**	**66,592**
Direct compensation [1]	39,917	40,965
Benefits [1]	16,634	22,413
Guarantee Fund for Length of Service (FGTS)	3,143	3,214
Welfare charges (except for INSS)	0	0
Government – Taxes, fees and contributions [1]	**1,667,910**	**(94,430)**
Federal [1]	1,525,368	(245,657)
State	6,664	9,836
Municipal	118	256
Intra-sector obligations	135,760	141,135
Funders – Compensation of third-party capital [1]	**815,954**	**1,260,550**
Interest (on loans/debentures) [1]	505,329	538,725
Rentals	2,605	2,533
Monetary variation on debentures	0	0
Recovery of interest and monetary correction of debentures	0	0
Other financial expenses [1]	259,905	173,034
Others [1]	48,115	546,258
Shareholders – Compensation on shareholders' equity	**845,275**	**(422,306)**
Interest on Shareholders' Equity	602,000	578,000
Dividends [1]	200,753	0
Retained earnings/Loss for the period [1]	42,522	(1,000,306)
Non-controllers share in retained earnings (only for consolidation)	0	0
Payment of deemed cost of property, plant and equipment	0	0
Others	0	0
Society – Community investments	0	0
= Value Added Distributed (total) [1]	**3,388,833**	**810,406**

[1] 2017 data revised

Investments

	2017	2018	
	BRL thousands	BRL thousands	Δ%
Expansion	0	0	-
Modernization	342,197	222,933	-34.9%
Maintenance	526	21,611	4008.6%
Operation	0	0	-
Others	791	521	-34.1%
Total	**343,514**	**245,065**	**-28.7%**

* results based on the financial statements

INTERNAL SOCIAL INDICATORS

Employees / employability / administrators

a) General information	2016	2017	2018
Total number of employees	271	278	320
Total number of outsourced workers (outsourced workers, subcontracted, self-employed) by employment type, employment contract and region	180	95	117
Employees aged up to 30 (%)	10.0%	8.6%	15.0%
Employees aged 31-40 (%)	19.2%	23.4%	25.3%
Employees aged 41-50 (%)	36.5%	33.8%	31.6%
Employees aged over 50 (%)	34.3%	34.2%	28.1%
Women in relation to total number of employees (%)	8.5%	8.3%	8.8%
Women in management positions – in relation to total management positions (%)	0%	0%	0%
Black female employees in relation to total number of employees (%)	1.1%	1.1%	1.6%
Black male employees in relation to total number of employees (%)	21.0%	20.1%	22.8%
Black employees in management positions in relation to total management positions (%)	0.0%	0.0%	0.0%
Trainees in relation to total number of employees (%)	0.0%	0.4%	0.3%
Employees of the apprentice program (No.)	0	0	3
Employees with disabilities (No.)	2	2	0
b) Compensation, benefits and career	**2016**	**2017**	**2018**
Compensation (BRL thousand)			
Gross payroll (BRL thousand)	52,851	71,095	78,062
Compulsory social charges (BRL thousand)	6,762	14,544	14,859
Benefits (BRL thousand)			
Education (BRL thousand)	2	26	116
Food (BRL thousand)	2,224	4,298	4,933
Transportation (BRL thousand)	684	1,513	1,186
Health Care (BRL thousand)	1,465	3,348	4,093
Foundation (private pension plan) (BRL thousand) [1]	623	1,697	1,784
Occupational Health and Safety (BRL thousand)	244	37	247
Culture (BRL thousand)	0	0	0
Professional qualification and development (BRL thousand)	7	402	424
Day care or childcare allowance (BRL thousand)	0	16	29
Employees' profit sharing (BRL thousand)	1,609	4,569	8,723
Others (housing, life insurance, gift vouchers) (BRL thousand)	20,866	1,004	927
c) Profit Sharing program	**2016**	**2017**	**2018**
Total investment in the profit sharing program (BRL thousand)	1,609	4,569	8,723
Amounts distributed in relation to gross payroll (%)	3.0%	6.4%	11.2%
Division of the highest compensation by the lowest compensation paid by the grantee	27.14	27.14	30.93
Division of the company's lowest compensation by the current minimum wage	2.27	2.22	2.03

d) Compensation profile	2016	2017	2018
Categories (average wage in the current year) – BRL			
Board positions	45,595	37,892	40,354
Management positions	29,347	31,738	30,832
Administrative positions [2]	12,763	11,125	10,039
Production positions	6,345	5,826	5,427
e) Health and safety	**2016**	**2017**	**2018**
Average overtime hours per employee/year	31.48	73.61	107.21
Total Accident Frequency Rate of the company in the period, for employees	0	5.01	2.78
Accident Severity Rate in the period, for employees	0	26.05	45
Total Accident Frequency Rate of the company in the period, for outsourced/ contracted workers	0	7.34	7.79
Accident Severity Rate in the period, for outsourced/ contracted workers	0	39.83	68
Accident Frequency Rate of the company in the period, for labor force (in-house + outsourced)	0	6.15	6.36
Accident Severity Rate in the period, for labor force (in-house + outsourced)	0	32.78	62
Deaths – in-house	0	0	0
Deaths – outsourced	0	0	0
Lost work days rate, for employees [3]	0	0.029	0.036
Occupational disease rate, for employees	0	0	0
Absenteeism rate	0.71	Not available	Not available
f) Professional development	**2016**	**2017**	**2018**
Education profile – percentage in relation to total number of employees (%)			
Elementary and Middle school	0.74%	1.8%	1.6%
High school	45.0%	43.5%	45.0%
Technical education	0%	0.0%	0.6%
Higher education	38.7%	39.6%	38.4%
Graduate degree (specialization, master's, doctorate)	15.5%	15.1%	14.4%
Amount invested in professional development and education (BRL thousand)	0.02	428	540
Average hours of training session per year, per employee, listed by functional level			
Executive Board	Not available	Not available	7.6
Management	13.1	24.6	29.6
Administrative	19.1	22.7	30.7
Operational	78.1	15.9	86.9
Total training hours per employee/year	58	18.6	65.3
g) Behavior regarding layoffs	**2016**	**2017**	**2018**
Number of employees at the end of the period	271	278	320
Number of hires during the period	280	26	58
Turnover rate	3.0%	7.73%	5.92%
Labor-related claims			
Accrued amount in the period	0	0	42,603
Number of labor-related claims filed against the company in the period	5	4	44
Number of labor-related claims held valid in the period [5]	0	1	0
Number of labor-related claims held invalid in the period	0	0	24
Total amount of indemnities and fines paid per court order in the period	0	0	0
h) Preparation for retirement	**2016**	**2017**	**2018**
Investments in supplementary pension plans (BRL thousand)	623	1,697	1,784
Number of beneficiaries of the supplementary pension plan program	227	251	265

[1] The Foundation item refers to the foundation for the administration of private pension.
[2] Administrative positions: assistants, analysts, coordinators, supervisors and specialists.
[3] In this case, lost work days includes only absences due to accidents and occupational diseases.

EXTERNAL SOCIAL INDICATORS

Communities

Impacts on health and safety	2016	2017	2018
Total number of non-fatal accidents with the population |GRI EU25|	0	0	0
Total number of fatal accidents with the population |GRI EU25|	0	0	0
Lawsuits in consequence of accidents with the population – General Litigation Basis	0	0	0
Company's engagement in social actions	**2016**	**2017**	**2018**
Resources applied in education (BRL thousand)	Not available	1,918	2,193
Resources applied in health and sanitation (BRL thousand)	Not available	750	1,321
Resources applied in culture (BRL thousand)	Not available	4,666	617
Resources applied in sports (BRL thousand)	Not available	1,823	270
Other resources applied in social actions (BRL thousand)	Not available	0	305
Employees who perform voluntary work in the community outside the company/total number of employees (%)	Not available	*	26.3%
Number of monthly hours donated (released from regular working hours) by the Company for employees to perform voluntary work	Not available	*	0
Company's engagement in cultural, sports and social projects (Rouanet Law, Sport Incentive Law, National Program of Support to Cancer Oncology – Pronon, National Support Program for Health of the Patients with Disabilities – Pronas, Children and Adolescent Fund, Elderly Fund)	**2016**	**2017**	**2018**
Amount of resources allocated to the projects (BRL thousand)	Not available	9,157	4,706
Number of projects benefited	Not available	24	15
Amount of resources allocated to the major project (BRL thousand)	Not available	870	800
Project name	Not available	*Circuito Corrida pelo Verde*	*Peixes do Brasil* (book)
Proponent	Not available	Benedito Franco Leal Filho	Marte Cultura e Educação

- In 2017, the total number of volunteers from all CTG Brasil units was consolidated in Rio Paranapanema

ELECTRICITY SECTOR INDICATORS

Resources applied in technological and scientific research and development (BRL thousand)
By research topics (Research and Development Manual – Aneel)

	2016	2017		2018	
	Amount (BRL thousand)	Amount (BRL thousand)	%	Amount (BRL thousand)	%
Alternative Sources of Electric Power Generation	The company was in the process of signing a contract to	0.0	0.0%	0	0%
Thermoelectric Power Generation		0.0	0.0%	0	0%
Basin and Reservoir Management		0.0	0.0%	0	0%
Environment		0.0	0.0%	737	38.0%
Safety		0.0	0.0%	0	0%

Energy Efficiency	start the R&D projects.	0.0	0.0%	0	0%
Electric Power Systems Planning		11.7	2.1%	68	3.5%
Electric Power Systems Operation		0.0	0.0%	182	9.4%
Electric Power Systems Supervision, Control and Protection		0.0	0.0%	951	49.1%
Electric Power Service Quality and Reliability		0.0	0.0%	0	0%
Measurement, Billing and Fighting Commercial Losses		0.0	0.0%	0	0%
Other		538.0	97.9%	0	0%
Total		**549.7**	**100.0%**	**1,938**	**100.0%**

ENVIRONMENTAL INDICATORS

Waste generation and treatment	2016	2017	2018
Emission			
Annual volume of greenhouse gases (CO_2, Ch_4, N_2O, HFC, PFC, SF_6) emitted into the atmosphere (in tonnes of equivalent CO_2 content)	Not available	Not available	Not available
Annual volume of emissions that destroy the ozone layer (in tonnes of equivalent CFC content)	Not available	Not available	Not available
Wastewater			
Total water discharge, by quality and destination (m^3/year)	Not available	Not available	Not available
River (m^3/year)	Not available	Not available	Not available
Wastewater Treatment Plant (m^3/year)	Not available	Not available	Not available
Municipal sanitation company (m^3/year)	Not available	Not available	Not available
Solids			
Annual quantity (in tonnes) of solid waste generated (garbage, waste, debris, etc.)	182.0	171.8	168.3
Quantity of PCB-contaminated waste (Ascarel) discharged (Kg)	0.0	0.0	0.0
Use of resources in the production process and management processes of the organization	**2016**	**2017**	**2018**
Total energy consumption by source, in GJ	**44,331**	**27,086**	**154,448**
Non-renewable fuels	44,300	25,089	66,829
Diesel	44,000	20,841	58,161
Gasoline	300	3,768	7,518
Natural gas	0	Not applicable	Not applicable
Others – Emergency auxiliary group (diesel replacement)	0	480	1,150
Renewable fuels	30.98	1,997	10,415
Ethanol	0	1,997	10,415
Electricity (GJ)	30.98	12.96	12.96
Electric power sold (GJ)	39,721,922	77,028,563	74,631,210
Energy consumption per GJ sold (GJ)	0.001116	0.0003516	0.00207
Total water consumption by source (in m^3)			
Supply (mains water system)	Not available	Not available	Not available
Underground source (well)	Not available	Not available	Not available
Surface collection (watercourses)	Not available	Not available	Not available
Bottled mineral water (human consumption)	Not available	67,920	83,000
Total water consumption (in m^3)	Not available	67,920	83,000

Total water consumption by employee (in m³)	Not available	244.3	259.4

Environmental education and awareness	2016	2017	2018
Environmental education – In the organization			
Number of employees trained in environmental education programs.	222	215	200
Percentage of employees trained in environmental education programs / total number of employees.	62%	100%	12%
Number of environmental training hours / total training hours.	0.1%	0.2%	0.2%
Environmental education – Community			
Number of elementary and high schools engaged.	0	5	38
Number of students engaged.	0	1,270	2,145
Number of teachers trained.	0	Not available	0
Number of technical and higher education institutions engaged.	58	0	1
Number of students engaged.	1,580	0	1,422
Resources applied (BRL thousand).	30	38	24

Performance indicators	2016	2017	2018
Electric power consumption of generating and auxiliary units (kWh)	57,187,000	28,226,339	26,722,793
Water consumption per KWh generated (Maximum flow consumption (m³/s) per KWh delivered)	Not available	Not available	Not available
Restoration of riparian forests (seedling units or planted/recovered area per year) (hectares)	Not available	0	0
Rescue of fish in turbines (kg of fish per machine shutdown)	Not available	542	2,800
Fish stocking (Quantity of fingerlings)	11,056	2,168,000	2,100,000
Leakage of lubricating and hydraulic oils in turbines (Tonnes/year or m³/year, depending on the type of oil)	Not applicable	Not applicable	0
Recovery of areas degraded by coal extraction and its generated waste (Recovered area unit – hectare per year)	Not applicable	Not applicable	Not applicable
Recovery of areas degraded by coal extraction and its generated waste (Resource allocation to recovery and preservation projects (BRL/year))	Not applicable	Not applicable	Not applicable
Make-up water consumption during generation (m³/MWh)	Not available	Not available	Not available

Rio Paranapanema Energia

OPERATIONAL AND PRODUCTIVITY INDICATORS

Technical data (inputs, production capacity, sales, losses)

	2016	2017	2018
Energy generated (GWh) |GRI EU2|	**14,616.1**	**13,525.0**	**12,457.9**
Jurumirim HPP	708.8	720.0	540.2
Chavantes HPP	2,450.8	2,533.7	2,021.9
Salto Grande HPP	531.7	568.8	517.1
Canoas II HPP	559.9	556.2	494.3
Canoas I HPP	649.5	665.3	549.38
Capivara HPP	4,035.6	3,367.9	3,496.2
Taquaruçu HPP	3,053.9	2,653.0	2,466.8
Rosana HPP	2,507.0	2,390.6	2,281.3
Palmeira SHPP	55.4	29.2	43.3
Retiro SHPP	63.5	40.3	47.4
Energy sold (GWh) [1]	Not available	8,286.19	7,858.16
Installed capacity (MW) |GRI EU1|	2,273.8	2,281.8	2,289.8

[1] This data considers sales contracts and does not consider the Short-Term Market and the Energy Relocation Mechanisms.

GOVERNANCE - ADMINISTRATORS

	2016				2017				2018			
	BD	EB	AC	Total	BD	EB	AC	Total	BD	EB	AC	Total
Number of members	6	6	6	**18**	6	5	6	17	7	5	6	**18**
Number of paid members	4	6	6	**16**	2	3	6	11	4	4	6	**14**
Annual fixed compensation (BRL thousand)												
Monthly compensation or pay	352	3,602	815	**4,770**	390	4,577	880	**5,847**	383	2,110	902	**3,395**
Direct or indirect benefits	55	241	-	**297**	74	252	-	**326**	78	104	-	**182**
Committee sharing	-	-	-	**-**	-	-	-	**-**	-	-	-	**-**
Others	345	1,670	163	**2,178**	216	1,546	176	**1,938**	187	428	180	**796**
Variable pay (BRL thousand)												
Bonus	65	1,640	-	**1,705**	40	837	-	**877**	21	165	-	**186**
Profit sharing	28	192	-	**220**	39	102	-	**141**	129	254	-	**383**
Meeting sharing	-	-	-	**-**	-	-	-	**-**	-	-	-	**-**
Commissions	-	-	-	**-**	-	-	-	**-**	-	-	-	**-**
Others	23	581	18	**622**	14	295	22	**331**	7	58	26	**91**
Post-employment pay	26	282	-	**308**	27	180	-	**208**	22	82	-	**104**
Job termination	-	-	-	**-**	-	-	-	**-**	-	-	-	**-**
Based on shares	-	37	-	**37**	-	-	-	**-**	-	-	-	**-**
Total compensation	895	8,246	996	**10,136**	**801**	**7,789**	**1,078**	**9,668**	827	3,202	1,108	**5,137**

BD: Board of Directors; EB: Executive Board; AC: Audit Committee.

ECONOMIC AND FINANCIAL INDICATORS*

Wealth Generation — Value Added Statement — BRL thousand |GRI 201-1|

	2017	2018
Revenue[1]	**1,709,539**	**1,506,368**
Sales of energy and services	1,631,236	1,459,321
Other revenue	0	0
Revenue related to the construction of own assets[1]	75,622	47,047
Provision for doubtful accounts – Reversion (Constitution)[1]	2,681	0
Inputs acquired from third parties (includes taxes – ICMS, IPI, PIS and Cofins)[1]	**-754,778**	**-517,969**
Costs of products, goods and services sold	-595,746	-392,024
Materials, energy, third party service and others[1]	-51,033	-53,027
Loss/Recovery of asset values	-75,625	-47,047
Others[1]	-32,374	-25,871
Gross value added[1]	**954,761**	**988,399**
Depreciation, amortization and depletion	-224,204	-213,068
Gain / (Loss) due to non-recoverability of assets (CPC 01)	16,878	0
Reintegration of depreciation/amortization amount	0	0
Net value added produced by the entity[1]	**747,435**	**775,331**
Value added received through transfers[1]	**91,579**	**85,181**
Equity accounting result	0	0
Financial income	91,195	84,844
Others[1]	384	337
Total value added to be distributed	**839,014**	**860,512**

[1] 2017 data revised.

Value added distribution

	2017	2018
Personnel	**85,292**	**64,581**
Direct compensation	49,190	38,811
Benefits	25,739	17,342
Guarantee Fund for Length of Service (FGTS)	6,583	4,644
Welfare charges (except for INSS)	3,780	3,784
Government – Taxes, fees and contributions	**336,620**	**306,598**
Federal	314,153	300,592
State	22,273	5,939
Municipal	194	67
Intra-sector obligations	0	0
Funders – Compensation of third-party capital	**173,221**	**233,422**
Interest (on loans/debentures)[1]	113,509	105,730
Rentals	4,762	2,704
Monetary variation on debentures	19,428	36,453
Recovery of interest and monetary correction of debentures	0	0
Other financial expenses [1]	35,522	88,535
Others	0	0
Shareholders – Compensation on shareholders' equity	**243,881**	**255,911**
Interest on Shareholders' Equity	74,000	74,000
Dividends	242,649	240,934
Retained earnings/Loss for the period	0	0
Non-controllers share in retained earnings (only for consolidation)	0	0
Payment of deemed cost of property, plant and equipment	-72,768	-59,023
Others	0	0
Society – Community investments	0	0
= Value Added Distributed (total)	**839,014**	**860,512**

[1] 2017 data revised.

Investments

	2017	2018

	BRL thousands	BRL thousands	Δ%
Expansion	0	0	-
Modernization	57,942	31,207	-46.1%
Maintenance	16,000	12,392	-22.6%
Operation	0	0	-
Others	12,448	4,261	-65.8%
Total	**86,390**	**47,860**	**-44.6%**

[1] Rio Sapucaí-Mirim data included
* results based on the financial statements

INTERNAL SOCIAL INDICATORS

Employees / employability / administrators

a) General information	2016	2017	2018
Total number of employees	329	304	291
Total number of outsourced workers (outsourced workers, subcontracted, self-employed) by employment type, employment contract and region	79	77	79
Employees aged up to 30 (%)	24.3%	22.7%	21.3%
Employees aged 31-40 (%)	31.6%	29.9%	29.2%
Employees aged 41-50 (%)	25.8%	31.3%	32.6%
Employees aged over 50 (%)	18.2%	16.1%	16.8%
Women in relation to total number of employees (%)	20.7%	18.8%	18.9%
Women in management positions – in relation to total management positions (%)	24.0%	19.2%	14.3%
Black female employees in relation to total number of employees (%)	1.5%	2.0%	2.1%
Black male employees in relation to total number of employees (%)	9.4%	10.2%	10.3%
Black employees in management positions in relation to total management positions (%)	4.0%	3.9%	0.0%
Trainees in relation to total number of employees (%)	3.7%	1.6%	2.7%
Employees of the apprentice program (No.)	6	7	3
Employees with disabilities (No.)	10	9	9
b) Compensation, benefits and career	**2016**	**2017**	**2018**
Compensation (BRL thousand)			
Gross payroll (BRL thousand)	92,363	95,680	74,183
Compulsory social charges (BRL thousand)	18,817	20,752	18,030
Benefits (BRL thousand)			
Education (BRL thousand)	911	825	310
Food (BRL thousand)	4,701	5,181	6,301
Transportation (BRL thousand)	0	75	82
Health Care (BRL thousand)	5,261	6,809	3,077
Foundation (private pension plan) (BRL thousand)	1,214	1,121	1,003
Occupational Health and Safety (BRL thousand)	669	945	556
Culture (BRL thousand)	0	0	0
Professional qualification and development (BRL thousand)	905	675	466
Day care or childcare allowance (BRL thousand)	96	105	99
Employees' profit sharing (BRL thousand)	-	4,002	7,871
Others (housing, life insurance, gift vouchers) (BRL thousand)	8,906	8,287	558
c) Profit Sharing program	**2016**	**2017**	**2018**
Total investment in the profit sharing program (BRL thousand)	3,852	4,002	7,871
Amounts distributed in relation to gross payroll (%)	4.2%	4.2%	10.6%
Division of the highest compensation by the lowest compensation paid by the grantee	38.09	27.42	38.05

Division of the company's lowest compensation by the current minimum wage	2.31	2.45	1.67

d) Compensation profile	2016	2017	2018
Categories (average wage in the current year) – BRL			
Board positions	62,011	59,894	46,467
Management positions	20,534	24,428	25,656
Administrative positions [1]	7,047	9,053	9,470
Production positions	5,570	5,037	5,966
e) Health and safety			
Average overtime hours per employee/year	Not available	141.39	132.94
Total Accident Frequency Rate of the company in the period, for employees	0	0	2.92
Accident Severity Rate in the period, for employees	84.35	0	24.81
Total Accident Frequency Rate of the company in the period, for outsourced/ contracted workers	8.3	0	1.6
Accident Severity Rate in the period, for outsourced/ contracted workers	84.35	0	0
Accident Frequency Rate of the company in the period, for labor force (in-house + outsourced)	Not available	0	2.29
Accident Severity Rate in the period, for labor force (in-house + outsourced)	Not available	0	12.97
Deaths – in-house	0	0	0
Deaths – outsourced	0	0	0
Lost work days rate, for employees [2]	Not available	0	
Occupational disease rate, for employees	Not available	0	0
Absenteeism rate	Not available	Not available	Not available
f) Professional development	**2016**	**2017**	**2018**
Education profile – percentage in relation to total number of employees (%)			
Elementary and Middle school	0.3%	0.3%	0.3%
High school	4.0%	13.8%	13.1%
Technical education	15.5%	17.4%	17.2%
Higher education	59.0%	46.7%	47.4%
Graduate degree (specialization, master's, doctorate)	21.3%	21.7%	22.0%
Amount invested in professional development and education (BRL thousand)	1,605	1,281	776
Average hours of training session per year, per employee, listed by functional level			
Executive Board	Not available	Not available	51.3
Management	81.0	51.2	26.7
Administrative	224.1	42.8	18.4
Operational	315.6	73.8	43.1
Total training hours per employee/year	233.8	57.5	31.6
g) Behavior regarding layoffs	**2016**	**2017**	**2018**
Number of employees at the end of the period	329	304	291
Number of hires during the period	26	22	14
Turnover rate	9.42%	15.26%	8.36%
Labor-related claims			
Accrued amount in the period	12,316	13,907	22,174
Number of labor-related claims filed against the company in the period	86	1	94
Number of labor-related claims held valid in the period	Not available	1	0
Number of labor-related claims held invalid in the period	Not available	0	1

Total amount of indemnities and fines paid per court order in the period	Not available	148	BRL 22,804.99
h) Preparation for retirement	**2016**	**2017**	**2018**
Investments in supplementary pension plans (BRL thousand)	1,214	1,121	1,003
Number of beneficiaries of the supplementary pension plan program	296	300	293

[1] The Foundation item refers to the foundation for the administration of private pension.
[2] Administrative positions: assistants, analysts, coordinators, supervisors and specialists.
[3] In this case, lost work days include only absences due to accidents and occupational diseases.

EXTERNAL SOCIAL INDICATORS

Communities

Impacts on health and safety	**2016**	**2017**	**2018**
Total number of non-fatal accidents with the population **|GRI EU25|**	0	0	2 (1)
Total number of fatal accidents with the population **|GRI EU25|**	0	0	0
Lawsuits in consequence of accidents with the population – General Litigation Basis	0	0	0
Company's engagement in social actions	**2016**	**2017**	**2018**
Resources applied in education (BRL thousand)	719	1,740	120
Resources applied in health and sanitation (BRL thousand)	11	1,935	783
Resources applied in culture (BRL thousand)	2,883	1,554	2,000
Resources applied in sports (BRL thousand)	484	754	505
Other resources applied in social actions (BRL thousand)	229	0	0
Employees who perform voluntary work in the community outside the company/total number of employees (%)	21%	40%	41%
Number of monthly hours donated (released from regular working hours) by the Company for employees to perform voluntary work	552	37	0
Company's engagement in cultural, sports and social projects (Rouanet Law, Sport Incentive Law, National Program of Support to Cancer Oncology – Pronon, National Support Program for Health of the Patients with Disabilities – Pronas, Children and Adolescent Fund, Elderly Fund)	**2016**	**2017**	**2018**
Amount of resources allocated to the projects (BRL thousand)	3,357	5,983	3,403
Number of projects benefited	Not available	33	9
Amount of resources allocated to the major project (BRL thousand)	789	600	2,000
Project name	*Circuito Estradafora – Brasil Afora II (Pronac 162645)*	*Amparo ao Idoso – Barretos Cancer Hospital*	*Balé da China*
Proponent	Núcleo Experimental Teatro de Tabuas (NETT)	FMI of Barretos	DellArte - Ballet da China

[1] Non-serious traffic accidents, caused by a person of the community with their vehicle.

ELECTRICITY SECTOR INDICATORS

Resources applied in technological and scientific research and development (BRL thousand)

By research topics (Research and Development Manual – Aneel)

	2016		2017		2018	
	Amount (BRL thousand)	%	Amount (BRL thousand)	%	Amount (BRL thousand)	%
Alternative Sources of Electric Power Generation	1,545	10.0%	0.0	0.0%	0.0	0.0%
Thermoelectric Power Generation	0	0.0%	0.0	0.0%	0.0	0.0%
Basin and Reservoir Management	3,616	23.3%	880	22.6%	44.0	2.1%
Environment	5,361	34.6%	1,253	32.2%	1,152.5	53.9%
Safety	0	0.0%	0	0.0%	0.0	0.0%
Energy Efficiency	0	0.0%	0	0.0%	0.0	0.0%
Electric Power Systems Planning	382	2.5%	1,242	31.9%	62.3	2.9%
Electric Power Systems Operation	3,608	23.3%	0	0.0%	778.2	36.4%
Electric Power Systems Supervision, Control and Protection	995	6.4%	254	6.5%	100.9	4.7%
Electric Power Service Quality and Reliability	0	0.0%	0	0.0%	0.0	0.0%
Measurement, Billing and Fighting Commercial Losses	0	0.0%	0	0.0%	0.0	0.0%
Other	0	0.0%	267	6.8%	0.0	0.0%
Total	**15,506**	**100%**	**3,895**	**100.0%**	**2,138**	**100.0%**

ENVIRONMENTAL INDICATORS

Waste generation and treatment	**2016**	**2017**	**2018**
Emission			
Annual volume of greenhouse gases (CO_2, Ch_4, N_2O, HFC, PFC, SF_6) emitted into the atmosphere (in tonnes of equivalent CO_2 content)	2,840.15	2,642.12	Not available
Annual volume of emissions that destroy the ozone layer (in tonnes of equivalent CO_2 content)	16.3	14.7	Not available
Wastewater			
Total water discharge, by quality and destination (m^3/year)	121,138	103,989	93,825
River (m^3/year)	0	0	Not applicable
Wastewater Treatment Plant (m^3/year)	121,138	103,989	93,825
Municipal sanitation company (m^3/year)	0	0	Not applicable
Solids			
Annual quantity (in tonnes) of solid waste generated (garbage, waste, debris, etc.)	24.5	313.4	224.5
Quantity of PCB-contaminated waste (Ascarel) discharged (Kg)	0	0	0.0
Use of resources in the production process and management processes of the organization	**2016**	**2017**	**2018**
Total energy consumption by source, in GJ	**5,144,146**	**5,271,171**	**4,426,550**
Non-renewable fuels	4,474,283	4,881,780	4,201,335
Diesel	1,940,600	1,947,739	1,616,835
Gasoline	2,282,948	2,687,212	2,318,100
Natural gas	-	-	
Others – Emergency auxiliary group (diesel replacement)	250,736	246,828	266,400
Renewable fuels	669,863	389,391	225,215

Ethanol	669,863	389,391	225,073
Electricity (GJ)			142
Electric power sold (GJ)	31,223,858	29,830,313	28,289,386
Energy consumption per GJ sold (GJ)	0.1648	0.1767	0.1565
Total water consumption by source (in m³)			
Supply (mains water system)	960	Not available	Not available
Underground source (well)	151,423	126,797	129,987
Surface collection (watercourses)	Not applicable	Not applicable	Not applicable
Bottled mineral water (human consumption)	204	130	103
Total water consumption (in m³)	31,449	126,927	130,090
Total water consumption by employee (in m³)	96.5	843.4	447.0

Environmental education and awareness	2016	2017	2018
Environmental education – In the organization			
Number of employees trained in environmental education programs.	14	66	0
Percentage of employees trained in environmental education programs / total number of employees.	4%	Not available	0%
Number of environmental training hours / total training hours.	2	2	0.0%
Environmental education – Community			
Number of elementary and high schools engaged.	27	27	19
Number of students engaged.	1,774	2,768	1,612
Number of teachers trained.	0	520	0
Number of technical and higher education institutions engaged.	1	0	0
Number of students engaged.	24	0	0
Resources applied (BRL thousand).	Not available	Not available	Not available

[1] 2018 emission data was not available when this report was completed

Performance indicators	2016	2017	2018
Electric power consumption of generating and auxiliary units (kWh)	30,768,440	30,362,684	29,126,690
Water consumption per KWh generated (Maximum flow consumption (m³/s) per KWh delivered)	Not applicable	Not applicable	Not applicable
Restoration of riparian forests (seedling units or planted/recovered area per year) (hectares)	260.22	33.67	239
Rescue of fish in turbines (kg of fish per machine shutdown) [1]	382	683	1,085
Fish stocking (Quantity of fingerlings)	1,502,000	1,685,000	1,551,500
Leakage of lubricating and hydraulic oils in turbines (Tonnes/year or m³/year, depending on the type of oil)	0	0	70.55
Recovery of areas degraded by coal extraction and its generated waste (Recovered area unit – hectare per year)	Not applicable	Not applicable	Not applicable
Recovery of areas degraded by coal extraction and its generated waste (Resource allocation to recovery and preservation projects (BRL/year))	Not applicable	Not applicable	Not applicable
Make-up water consumption during generation (m³/MWh)	Not applicable	Not applicable	Not applicable

[1] The data refers to the **total number of fish rescued in 2018** and not kilograms of fish per machine shutdown

Rio Canoas Energia

OPERATIONAL AND PRODUCTIVITY INDICATORS

Technical data (inputs, production capacity, sales, losses)

	2016	2017	2018
Energy generated (GWh) |GRI EU2|	**949.49**	**592.43**	**657.13**
Garibaldi HPP	949.49	592.43	657.13
Energy sold (GWh) [1]	685.15	577.52	577.53
Installed capacity (MW) |GRI EU1|	191.9	191.9	191.9
Transmission lines (in km)	31.2	31.2	31.2

[1] This data considers sales contracts and does not consider the Short-Term Market and the Energy Relocation Mechanisms.

GOVERNANCE - ADMINISTRATORS

	2016				2017				2018			
	BD	EB	AC	Total	BD	EB	AC[1]	Total	BD	EB	AC[1]	Total
Number of members	3	1	-	**4**	4	2	-	**6**	4	3	-	**7**
Number of paid members	-	-	-	-	-	-	-	-	-	-	-	-
Annual fixed compensation (BRL thousand)												
Monthly compensation or pay	-	-	-	-	-	-	-	-	-	-	-	-
Direct or indirect benefits	-	-	-	-	-	-	-	-	-	-	-	-
Committee sharing	-	-	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-	-	-
Variable pay (BRL thousand)												
Bonus	-	-	-	-	-	-	-	-	-	-	-	-
Profit sharing	-	-	-	-	-	-	-	-	-	-	-	-
Meeting sharing	-	-	-	-	-	-	-	-	-	-	-	-
Commissions	-	-	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-	-	-
Post-employment pay	-	-	-	-	-	-	-	-	-	-	-	-
Job termination	-	-	-	-	-	-	-	-	-	-	-	-
Based on shares	-	-	-	-	-	-	-	-	-	-	-	-
Total compensation	-	-	-	-	-	-	-	-	-	-	-	-

BD: Board of Directors; EB: Executive Board; AC: Audit Committee.

[1] Audit Committee was not assembled.

ECONOMIC AND FINANCIAL INDICATORS*

Wealth Generation — Value Added Statement — BRL thousand |GRI 201-1|

	2017	2018
Revenue	**122,511**	**198,215**
Sales of energy and services	122,511	198,215
Other revenue	0	0
Revenue related to the construction of own assets	0	0
Provision for doubtful accounts – Reversion (Constitution)	0	0
Inputs acquired from third parties (includes taxes – ICMS, IPI, PIS and Cofins)	**-31,634**	**-80,417**
Costs of products, goods and services sold	-19,297	-72,190
Materials, energy, third party service and others	-7,342	-9,265
Loss/Recovery of asset values	0	0
Others [1]	-4,995	1,038
Gross value added [1]	**90,877**	**117,798**
Depreciation, amortization and depletion	0	0
Gain / (Loss) due to non-recoverability of assets (CPC 01)	0	0
Reintegration of depreciation/amortization amount [1]	-35,339	-36,101
Net value added produced by the entity [1]	55,538	81,697
Value added received through transfers	5,369	2,776
Equity accounting result	0	0
Financial income	5,369	2,776
Others	0	0
Total value added to be distributed [1]	**60,907**	**84,473**

[1] 2017 data revised.

Value added distribution

	2017	2018
Personnel	**2,410**	**2,917**
Direct compensation [1]	1,590	1,697
Benefits [1]	706	1,086
Guarantee Fund for Length of Service (FGTS) [1]	114	134
Welfare charges (except for INSS)	0	0
Government – Taxes, fees and contributions	**17,440**	**25,222**
Federal	12,833	19,585
State	9	0
Municipal	0	0
Intra-sector obligations	4,598	5,637
Funders – Compensation of third-party capital [1]	**37,082**	**33,900**
Interest (on loans/debentures)	35,519	31,849
Rentals	77	51
Monetary variation on debentures	0	0
Recovery of interest and monetary correction of debentures	0	0
Other financial expenses [1]	1,486	2,000
Others	0	0
Shareholders – Compensation on shareholders' equity	**3,975**	**22,434**
Interest on Shareholders' Equity	0	8,000
Dividends	944	5,328
Retained earnings/Loss for the period	3,031	9,106
Non-controllers share in retained earnings (only for consolidation)	0	0
Payment of deemed cost of property, plant and equipment	0	0
Others	0	0
= Value Added Distributed (total) [1]	**60,907**	**84,473**

[1] 2017 data revised.

Investments

	2017	2018

	BRL thousands	BRL thousands	Δ%
Expansion	0	0	-
Modernization	0	0	-
Maintenance	751	2,278	203.3%
Operation	0	0	-
Others	5,579	4,228	-24.2%
Total	**6,330**	**6,506**	**2.8%**

* results based on the financial statements

INTERNAL SOCIAL INDICATORS

Employees / employability / administrators

a) General information	2016	2017	2018
Total number of employees	32	27	29
Total number of outsourced workers (outsourced workers, subcontracted, self-employed) by employment type, employment contract and region	8	8	8
Employees aged up to 30 (%)	78.1%	81.5%	72.4%
Employees aged 31-40 (%)	12.5%	11.1%	20.7%
Employees aged 41-50 (%)	9.4%	7.4%	6.9%
Employees aged over 50 (%)	0.0%	0.0%	0.0%
Women in relation to total number of employees (%)	21.9%	14.8%	13.8%
Women in management positions – in relation to total management positions (%)	0.0%	0.0%	0.0%
Black female employees in relation to total number of employees (%)	3.1%	0.0%	0.0%
Black male employees in relation to total number of employees (%)	15.6%	18.5%	17.2%
Black employees in management positions in relation to total management positions (%)	0.0%	0.0%	0.0%
Trainees in relation to total number of employees (%)	6.3%	0.0%	0.0%
Employees of the apprentice program (No.)	0	0	0
Employees with disabilities (No.)	0	0	0
b) Compensation, benefits and career	**2016**	**2017**	**2018**
Compensation (BRL thousand)			
Gross payroll (BRL thousand)	4,272	2,808	3,374
Compulsory social charges (BRL thousand)	803	513	591
Benefits (BRL thousand)			
Education (BRL thousand)	1	1	7
Food (BRL thousand)	389	250	272
Transportation (BRL thousand)	7	1	247
Health Care (BRL thousand)	317	215	247
Foundation (private pension plan) (BRL thousand)	46	23	25
Occupational Health and Safety (BRL thousand)	133	1	22
Culture (BRL thousand)	0	0	0
Professional qualification and development (BRL thousand)	3	40	18
Day care or childcare allowance (BRL thousand)	0	0	0
Employees' profit sharing (BRL thousand)	67	142	217
Others (housing, life insurance, gift vouchers) (BRL thousand)	64	95	30
c) Profit Sharing program	**2016**	**2017**	**2018**
Total investment in the profit sharing program (BRL thousand)	67	142	217
Amounts distributed in relation to gross payroll (%)	1.6%	5.1%	6.4%
Division of the highest compensation by the lowest compensation paid by the grantee	5.62	6.62	6.62
Division of the company's lowest compensation by the current minimum wage	1.57	1.54	1.57

d) Compensation profile	2016	2017	2018
Categories (average wage in the current year) – BRL			
Board positions	Not available	0	0
Management positions	Not available	0	0
Administrative positions [1]	Not available	0	4,074
Production positions	2,273	2,802	2,720
e) Health and safety	**2016**	**2017**	**2018**
Average overtime hours per employee/year	114.36	110.24	107.54
Total Accident Frequency Rate of the company in the period, for employees	0	0	0
Accident Severity Rate in the period, for employees	0	0	0
Total Accident Frequency Rate of the company in the period, for outsourced/ contracted workers	0	0	0
Accident Severity Rate in the period, for outsourced/ contracted workers	0	0	0
Accident Frequency Rate of the company in the period, for labor force (in-house + outsourced)	0	0	0
Accident Severity Rate in the period, for labor force (in-house + outsourced)	0	0	0
Deaths – in-house	0	0	0
Deaths – outsourced	0	0	0
Lost work days rate, for employees [2]	0	0	
Occupational disease rate, for employees	0	0	0
Absenteeism rate	4.01	Not available	Not available
f) Professional development	**2016**	**2017**	**2018**
Education profile – percentage in relation to total number of employees (%)			
Elementary and Middle school	3.1%	-	0.0%
High school	71.9%	85.2%	79.3%
Technical education	0.0%	-	6.9%
Higher education	21.9%	11.1%	10.3%
Graduate degree (specialization, master's, doctorate)	3.1%	3.7%	3.5%
Amount invested in professional development and education (BRL thousand)	4	41	26
Average hours of training session per year, per employee, listed by functional level			
Executive Board	Not available	Not available	0.0
Management	61.0	-	0.0
Administrative	18.9	21.0	47.3
Operational	9.7	21.0	59.3
Total training hours per employee/year	17.9	21.0	56.4
g) Behavior regarding layoffs	**2016**	**2017**	**2018**
Number of employees at the end of the period	32	27	29
Number of hires during the period	3	2	4
Turnover rate	9	20.45	7.21%
Labor-related claims			
Accrued amount in the period	0	0	221,028
Number of labor-related claims filed against the company in the period	1	5	6
Number of labor-related claims held valid in the period	0	0	1
Number of labor-related claims held invalid in the period	1	0	0
Total amount of indemnities and fines paid per court order in the period	0	0	0
h) Preparation for retirement	**2016**	**2017**	**2018**

Investments in supplementary pension plans (BRL thousand)	46	23	25
Number of beneficiaries of the supplementary pension plan program	29	31	26

[1] The Foundation item refers to the foundation for the administration of private pension.
[2] Administrative positions: assistants, analysts, coordinators, supervisors and specialists.
[3] In this case, lost work days include only absences due to accidents and occupational diseases.

EXTERNAL SOCIAL INDICATORS

Communities

Impacts on health and safety	**2016**	**2017**	**2018**
Total number of non-fatal accidents with the population [1] **|GRI EU25|**	0	1	0
Total number of fatal accidents with the population **|GRI EU25|**	0	0	0
Lawsuits in consequence of accidents with the population – General Litigation Basis	0	0	0
Company's engagement in social actions	**2016**	**2017**	**2018**
Resources applied in education (BRL thousand)	0	0	0
Resources applied in health and sanitation (BRL thousand)	0	0	0
Resources applied in culture (BRL thousand)	0	0	0
Resources applied in sports (BRL thousand)	0	0	0
Other resources applied in social actions (BRL thousand)	0	0	0
Employees who perform voluntary work in the community outside the company / total number of employees (%) [2]	Not available	0	59%
Number of monthly hours donated (released from regular working hours) by the Company for employees to perform voluntary work [2]	Not available	0	Not available
Company's engagement in cultural, sports and social projects (Rouanet Law, Sport Incentive Law, National Program of Support to Cancer Oncology – Pronon, National Support Program for Health of the Patients with Disabilities – Pronas, Children and Adolescent Fund, Elderly Fund)	**2016**	**2017**	**2016**
Amount of resources allocated to the projects (BRL thousand)	0	0	0
Number of projects benefited	0	0	0
Amount of resources allocated to the major project (BRL thousand)	0	0	0
Project name	-	-	-
Proponent	-	-	-

[1] Non-serious traffic accident, caused by a third party driving a contracted company's vehicle, involving a person of the community.
[2] In 2017, the total number of volunteers from all CTG Brasil units was consolidated in Rio Paranapanema

ELECTRICITY SECTOR INDICATORS

Resources applied in technological and scientific research and development (BRL thousand)

By research topics (Research and Development Manual – Aneel)

		2017		2018	
	Amount (BRL thousand)	**Amount (BRL thousand)**	**%**	**Amount (BRL thousand)**	**%**
Alternative Sources of Electric Power Generation	The company was in the process of signing a contract to start the R&D projects.	0	0%	0	0.0%
Thermoelectric Power Generation		0	0%	0	0.0%
Basin and Reservoir Management		0	0%	0	0.0%
Environment		920	84.6%	1,572	78.9%
Safety		0	0%	0	0.0%
Energy Efficiency		0	0%	0	0.0%
Electric Power Systems Planning		105	9.7%	421	21.1%
Electric Power Systems Operation		0	0%	0	0.0%
Electric Power Systems Supervision, Control and Protection		0	0%	0	0.0%
Electric Power Service Quality and Reliability		0	0%	0	0.0%

Measurement, Billing and Fighting Commercial Losses		0	0%	0	0.0%
Other		63	5.8%	0	0.0%
Total		1,088	100.0%	1,993	100.0%

ENVIRONMENTAL INDICATORS

Waste generation and treatment	2016	2017	2018
Emission			
Annual volume of greenhouse gases (CO_2, Ch_4, N_2O, HFC, PFC, SF_6) emitted into the atmosphere (in tonnes of equivalent CO_2 content)	Not available	Not available	Not available
Annual volume of emissions that destroy the ozone layer (in tonnes of equivalent CFC content)	Not available	Not available	Not available
Wastewater			
Total water discharge, by quality and destination (m^3/year)[1]	Not available	Not available	Not available
River (m^3/year)	Not available	Not available	Not available
Wastewater Treatment Plant (m^3/year)	Not available	Not available	Not available
Municipal sanitation company (m^3/year)	Not applicable	Not applicable	Not applicable
Solids			
Annual quantity (in tonnes) of solid waste generated (garbage, waste, debris, etc.)	6.7	3.3	7.3
Quantity of PCB-contaminated waste (Ascarel) discharged (Kg)	0.0	0.0	0.0
Use of resources in the production process and management processes of the organization	**2016**	**2017**	**2018**
Total energy consumption by source, in GJ:	7,628	10,132	28,425
Non-renewable fuels	Not available	Not available	20,312
Diesel	Not available	8,000	8,634
Gasoline	Not available	Not available	2,678
Natural gas	Not available	Not available	Not available
Others – Emergency auxiliary group (diesel replacement)	Not available	Not available	9,000
Renewable fuels	7,628	2,132	Not available
Ethanol	Not available	Not available	Not available
Electricity (GJ)	7,628	2,132	8,113
Electric power sold (GJ)	2,466,547	2,079,104	3,231,597
Energy consumption per GJ sold (GJ)	0.0030925	0.0048732	
Total water consumption by source (in m^3)			
Supply (mains water system)	Not available	Not available	0
Underground source (well)	Not available	Not available	1
Surface collection (watercourses)	Not available	Not available	0
Bottled mineral water (human consumption)	Not available	Not available	4
Total water consumption (in m^3)	Not available	Not available	6
Total water consumption by employee (in m^3)	Not available	Not available	0

[1] There are five sanitary wastewater outputs that are not equipped with hydrometers, thus, no measurements are available.

Environmental education and awareness	2016	2017	2018
Environmental education – In the organization			

Number of employees trained in environmental education programs.	0	4	19
Percentage of employees trained in environmental education programs / total number of employees.	0%	100%	68%
Number of environmental training hours / total training hours.	0	64	1
Environmental education – Community			
Number of elementary and high schools engaged.	13	2	9
Number of students engaged.	Not available	353	900
Number of teachers trained.	120	5	90
Number of technical and higher education institutions engaged.	3	2	1
Number of students engaged.	458	350	100
Resources applied (BRL thousand).	101,238	164,682	10,600

Performance indicators	2016	2017	2018
Electric power consumption of generating and auxiliary units (kWh)	2,118,980	2,054,470	2,253,690
Water consumption per KWh generated (Maximum flow consumption (m^3/s) per KWh delivered)	Not available	Not available	Not available
Restoration of riparian forests (seedling units or planted/recovered area per year) (hectares)	81.65	30.00	66
Rescue of fish in turbines (kg of fish per machine shutdown)	7,923	250	0
Fish stocking (Quantity of fingerlings)	0	0	Not applicable
Leakage of lubricating and hydraulic oils in turbines (Tonnes/year or m^3/year, depending on the type of oil)	Not available	Not available	0
Recovery of areas degraded by coal extraction and its generated waste (Recovered area unit – hectare per year)	Not applicable	Not applicable	Not applicable
Recovery of areas degraded by coal extraction and its generated waste (Resource allocation to recovery and preservation projects (BRL/year))	Not applicable	Not applicable	Not applicable
Make-up water consumption during generation (m^3/MWh)	Not available	Not available	Not available

Rio Verde Energia

OPERATIONAL AND PRODUCTIVITY INDICATORS

Technical data (inputs, production capacity, sales, losses)

	2016	2017	2018
Energy generated (GWh) |GRI EU2|	**618.61**	**587.81**	**607.43**
Salto HPP	618.61	587.81	607.43
Energy sold (GWh) [1]	574.85	573.11	563.64
Installed capacity (MW) |GRI EU1|	116.0	116.00	116.0
Transmission lines (in km)	23.0	23.0	23.0

[1] This data considers sales contracts and does not consider the Short-Term Market and the Energy Relocation Mechanisms.

GOVERNANCE - ADMINISTRATORS

	2016				2017				2018			
	BD	EB	AC[1]	Total	BD	EB	AC[1]	Total	BD	EB	AC[1]	Total
Number of members	3	1	-	**4**	4	2		**6**	4	3	-	**7**
Number of paid members	-	-	-	-	-	-	-	-	-	-	-	-
Annual fixed compensation (BRL thousand)												
Monthly compensation or pay	-	-	-	-	-	-	-	-	-	-	-	-
Direct or indirect benefits	-	-	-	-	-	-	-	-	-	-	-	-
Committee sharing	-	-	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-	-	-
Variable pay (BRL thousand)												
Bonus	-	-	-	-	-	-	-	-	-	-	-	-
Profit sharing	-	-	-	-	-	-	-	-	-	-	-	-
Meeting sharing	-	-	-	-	-	-	-	-	-	-	-	-
Commissions	-	-	-	-	-	-	-	-	-	-	-	-
Others	-	-	-	-	-	-	-	-	-	-	-	-
Post-employment pay	-	-	-	-	-	-	-	-	-	-	-	-
Job termination	-	-	-	-	-	-	-	-	-	-	-	-
Based on shares	-	-	-	-	-	-	-	-	-	-	-	-
Total compensation	-	-	-	-	-	-	-	-	-	-	-	-

BD: Board of Directors; EB: Executive Board; AC: Audit Committee.

[1] Audit Committee was not assembled.

ECONOMIC AND FINANCIAL INDICATORS*

Wealth Generation – Value Added Statement – BRL thousand |GRI 201-1|

	2017	2018
Revenue[1]	**180,263**	**248,686**
Sales of energy and services [1]	180,263	248,686
Other revenue	0	0
Revenue related to the construction of own assets	0	0
Provision for doubtful accounts – Reversion (Constitution)	0	0
Inputs acquired from third parties (includes taxes – ICMS, IPI, PIS and Cofins)	**-91,583**	**-128,452**
Costs of products, goods and services sold	-44,697	-73,871
Materials, energy, third party service and others [1]	-8,476	-9,742
Loss/Recovery of asset values	0	0
Others [1]	-38,410	-44,839
Gross value added [1]	**88,680**	**120,234**
Depreciation, amortization and depletion	0	0
Gain/(Loss) on non-recoverability of assets	0	0
Reintegration of depreciation/amortization amount [1]	-22,990	-24,975
Net value added produced by the entity [1]	**65,690**	**95,259**
Value added received on transfer [1]	7,279	5,188
Equity accounting result	0	0
Financial income [1]	7,279	5,188
Others	0	0
Total value added to be distributed [1]	**72,969**	**100,447**

[1] 2017 data revised.

Value added distribution

	2017	2018
Personnel [1]	**8,105**	**9,366**
Direct compensation [1]	5,024	5,354
Benefits [1]	2,725	3,617
Guarantee Fund for Length of Service (FGTS) [1]	356	395
Welfare charges (except for INSS)	0	0
Government – Taxes, fees and contributions [1]	**22,920**	**35,272**
Federal [1]	18,207	29,638
State	0	0
Municipal [1]	0	0
Intra-sector obligations	4,713	5,634
Funders – Compensation of third-party capital [1]	**20,504**	**17,325**
Interest (on loans/debentures)	18,276	15,699
Rentals	795	710
Monetary variation on debentures	0	0
Recovery of interest and monetary correction of debentures	0	0
Other financial expenses [1]	1,433	916
Others	0	0
Shareholders – Compensation on shareholders' equity	**21,440**	**38,484**
Interest on Shareholders' Equity	13,000	13,000
Dividends	5,092	0
Retained earnings/Loss for the period	3,348	25,484
Non-controllers share in retained earnings (only for consolidation)	0	0
Payment of deemed cost of property, plant and equipment	0	0
Others	0	0
= Value Added Distributed (total) [1]	**72,969**	**100,447**

[1] 2017 data revised.

Investments

	2017	2018	
	BRL thousands	BRL thousands	Δ%
Expansion	0	0	-
Modernization	0	0	-
Maintenance	677	231	-65.9%
Operation	0	0	-
Others	4,714	963	-79.6%
Total	**5,391**	**1,194**	**-77.9%**

* results based on the financial statements

INTERNAL SOCIAL INDICATORS

Employees / employability / administrators

a) General information	2016	2017	2018
Total number of employees	63	58	72
Total number of outsourced workers (outsourced workers, subcontracted, self-employed) by employment type, employment contract and region	18	13	19
Employees aged up to 30 (%)	57.1%	55.2%	56.9%
Employees aged 31-40 (%)	30.2%	31.0%	31.9%
Employees aged 41-50 (%)	11.1%	12.1%	8.3%
Employees aged over 50 (%)	1.6%	1.7%	2.8%
Women in relation to total number of employees (%)	44.4%	46.6%	50.0%
Women in management positions – in relation to total management positions (%)	20.0%	0.0%	0.0%
Black female employees in relation to total number of employees (%)	3.2%	1.7%	4.2%
Black male employees in relation to total number of employees (%)	9.5%	6.9%	6.9%
Black employees in management positions in relation to total management positions (%)	0.0%	33.3%	0.0%
Trainees in relation to total number of employees (%)	0.0%	0.0%	0.0%
Employees of the apprentice program (No.)	0	0	1
Employees with disabilities (No.)	0	0	0
b) Compensation, benefits and career	**2016**	**2017**	**2018**
Compensation (BRL thousand)			
Gross payroll (BRL thousand)	7,178	9,503	10,725
Compulsory social charges (BRL thousand)	1,377	1,620	1,812
Benefits (BRL thousand)			
Education (BRL thousand)	1	14	28
Food (BRL thousand)	472	829	1,030
Transportation (BRL thousand)	6	142	414
Health Care (BRL thousand)	414	606	691
Foundation (private pension plan) (BRL thousand)	114	154	148
Occupational Health and Safety (BRL thousand)	17	27	35
Culture (BRL thousand)	0	0	0
Professional qualification and development (BRL thousand)	11	135	100
Day care or childcare allowance (BRL thousand)	0	5	0
Employees' profit sharing (BRL thousand)	674	772	1,011
Others (housing, life insurance, gift vouchers) (BRL thousand)	102	367	153
c) Profit Sharing program	**2016**	**2017**	**2018**
Total investment in the profit sharing program (BRL thousand)	674	772	1,011
Amounts distributed in relation to gross payroll (%)	9.4%	8.1%	9.4%

Division of the highest compensation by the lowest compensation paid by the grantee	20.80	20.27	11.22
Division of the company's lowest compensation by the current minimum wage	1.61	1.73	2.03
d) Compensation profile	**2016**	**2017**	**2018**
Categories (average wage in the current year) – BRL			
Board positions	Not available	0	0
Management positions	19,416	22,757	21,241
Administrative positions [1]	4,233	4,600	4,814
Production positions	2,175	2,600	2,455
e) Health and safety	**2016**	**2017**	**2018**
Average overtime hours per employee/year	117.58	61.13	68.23
Total Accident Frequency Rate of the company in the period, for employees	0	0	0
Accident Severity Rate in the period, for employees	0	0	0
Total Accident Frequency Rate of the company in the period, for outsourced/ contracted workers	0	0	16.44
Accident Severity Rate in the period, for outsourced/ contracted workers	0	0	0
Accident Frequency Rate of the company in the period, for labor force (in-house + outsourced)	0	0	4.74
Accident Severity Rate in the period, for labor force (in-house + outsourced)	0	0	0
Deaths – in-house	0	0	0
Deaths – outsourced	0	0	0
Lost work days rate, for employees [2]	0	0	0
Occupational disease rate, for employees	0	0	0
Absenteeism rate	1.48	Not available	
f) Professional development	**2016**	**2017**	**2018**
Education profile – percentage in relation to total number of employees (%)			
Elementary and Middle school	1.6%	-	0.0%
High school	39.7%	43.1%	36.1%
Technical education	0.0%	-	0.0%
Higher education	42.9%	34.5%	44.4%
Graduate degree (specialization, master's, doctorate)	15.9%	22.4%	19.5%
Amount invested in professional development and education (BRL thousand)	12	149	128
Average hours of training session per year, per employee, listed by functional level			
Executive Board	-	-	-
Management	9.3	12.7	81.0
Administrative	20	7.2	30.9
Operational	10.6	-	27.3
Total training hours per employee/year	11.9	7.7	31.4
g) Behavior regarding layoffs	**2016**	**2017**	**2018**
Number of employees at the end of the period	63	58	72
Number of hires during the period	22	10	22
Turnover rate	6	22.22	11.07%
Labor-related claims			
Accrued amount in the period	0	0	16,457
Number of labor-related claims filed against the company in the period	2	1	5
Number of labor-related claims held valid in the period	0	1	1
Number of labor-related claims held invalid in the period	0	0	0
Total amount of indemnities and fines paid per court order in the period	0	0	0
h) Preparation for retirement	**2016**	**2017**	**2018**
Investments in supplementary pension plans (BRL thousand) [4]	114	154	148
Number of beneficiaries of the supplementary pension plan program	53	63	71

[1] The Foundation item refers to the foundation for the administration of private pension.
[2] Administrative positions: assistants, analysts, coordinators, supervisors and specialists.
[3] In this case, lost work days include only absences due to accidents and occupational diseases.
[4] 2017 data revised.

EXTERNAL SOCIAL INDICATORS

Communities

Impacts on health and safety	**2016**	**2017**	**2018**
Total number of non-fatal accidents with the population |GRI EU25|	0	0	0
Total number of fatal accidents with the population |GRI EU25|	0	0	0
Lawsuits in consequence of accidents with the population – General Litigation Basis	0	0	0
Company's engagement in social actions			
Resources applied in education (BRL thousand)	0	250	280
Resources applied in health and sanitation (BRL thousand)	180	0	117
Resources applied in culture (BRL thousand)	376	0	237
Resources applied in sports (BRL thousand)	0	0	82
Other resources applied in social actions (BRL thousand)	Not available	0	0
Employees who perform voluntary work in the community outside the company / total number of employees (%) [1]	Not available	0	22%
Number of monthly hours donated (released from regular working hours) by the Company for employees to perform voluntary work	Not available	0	0
Company's engagement in cultural, sports and social projects (Rouanet Law, Sport Incentive Law, National Program of Support to Cancer Oncology – Pronon, National Support Program for Health of the Patients with Disabilities – Pronas, Children and Adolescent Fund, Elderly Fund)	**2016**	**2017**	**2018**
Amount of resources allocated to the projects (BRL thousand)	556	250	716
Number of projects benefited	4	1	5
Amount of resources allocated to the major project (BRL thousand)	346	250	280
Project name	*Circuito Photo Truck* (Rouanet Law)	*Guri Project*	*Prazer de Ler*
Proponent	André François Imagens (Imagem Magica).	Associação Amigos do Projeto Guri	Instituto Oldemburg

[1] In 2017, the total number of volunteers from all CTG Brasil units was consolidated in Rio Paranapanema

ELECTRICITY SECTOR INDICATORS

Resources applied in technological and scientific research and development (BRL thousand)

By research topics (Research and Development Manual – Aneel)

	2016		2017		2018	
	Amount (BRL thousand)	%	Amount (BRL thousand)	%	Amount (BRL thousand)	%
Alternative Sources of Electric Power Generation	222	100.0%	344	39.9%	91	5.0%
Thermoelectric Power Generation	0	0%	0	0%	0	0.0%
Basin and Reservoir Management	0	0%	0	0%	0	0.0%
Environment	0	0%	0	0%	823	45.6%
Safety	0	0%	0	0%	0	0.0%
Energy Efficiency	0	0%	0	0%	0	0.0%
Electric Power Systems Planning	0	0%	104	12.0%	504	27.9%
Electric Power Systems Operation	0	0%	0	0%	0	0.0%
Electric Power Systems Supervision, Control and Protection	0	0%	0	0%	386	21.4%
Electric Power Service Quality and Reliability	0	0%	0	0%	0	0.0%
Measurement, Billing and Fighting Commercial Losses	0	0%	0	0%	0	0.0%
Other	0	0%	414	48.0%	0	0.0%
Total	**222**	**100.0%**	**861**	**100.0%**	**1,804**	**100.0%**

ENVIRONMENTAL INDICATORS

Waste generation and treatment	2016	2017	2018
Emission			
Annual volume of greenhouse gases (CO_2, Ch_4, N_2O, HFC, PFC, SF_6) emitted into the atmosphere (in tonnes of equivalent CO_2 content)	Not available	Not available	Not available
Annual volume of emissions that destroy the ozone layer (in tonnes of equivalent CFC content)	Not available	Not available	Not available
Wastewater			
Total water discharge, by quality and destination (m³/year)	876	868	852
River (m³/year)	Not available	Not applicable	Not applicable
Wastewater Treatment Plant (m³/year)	Not available	868	852
Municipal sanitation company (m³/year)	Not available	Not applicable	Not applicable
Solids			
Annual quantity (in tonnes) of solid waste generated (garbage, waste, debris, etc.)	6.9	6.7	2.5
Quantity of PCB-contaminated waste (Ascarel) discharged (Kg)	0.0	0.0	0.0
Use of resources in the production process and management processes of the organization	**2016**	**2017**	**2018**
Total energy consumption by source, in GJ:	**Not available**	**Not available**	16,083
Non-renewable fuels	Not available	Not available	7,961
Diesel	Not available	Not available	7,001

Gasoline	0	Not available	760
Natural gas	0	Not available	Not applicable
Others – Emergency auxiliary group (diesel replacement)	0	Not available	200
Renewable fuels	Not available	Not available	Not available
Ethanol	0	Not available	Not available
Electricity (GJ)	161	161	161
Electric power sold (GJ)	2,069,474	2,063,202	2,029,102
Energy consumption per GJ sold (GJ)	Not available	Not available	0.00793
Total water consumption by source (in m³)			
Supply (mains water system)	Not available	Not available	0
Underground source (well)	Not available	Not available	0
Surface collection (watercourses)	Not available	Not available	0
Bottled mineral water (human consumption)	Not available	Not available	10,400
Total water consumption (in m³)	Not available	Not available	10,400
Total water consumption by employee (in m³)	Not available	Not available	144.4

Environmental education and awareness	2016	2017	2018
Environmental education – In the organization			
Number of employees trained in environmental education programs.	0	0	0
Percentage of employees trained in environmental education programs / total number of employees.	0%	0%	0%
Number of environmental training hours / total training hours.	0	0	0.0%
Environmental education – Community			
Number of elementary and high schools engaged.	4	0	2
Number of students engaged.	Not available	0	470
Number of teachers trained.	8	0	0
Number of technical and higher education institutions engaged.	0	0	0
Number of students engaged.	736	0	0
Resources applied (BRL thousand).	3,800	0	0

Performance indicators	2016	2017	2018
Electric power consumption of generating and auxiliary units (kWh)	350,900	4,103,590	1,882,570
Water consumption per KWh generated (Maximum flow consumption (m³/s) per KWh delivered)	Not applicable	Not applicable	Not available
Restoration of riparian forests (seedling units or planted/recovered area per year) (hectares)	142.93	60	185.58
Rescue of fish in turbines (kg of fish per machine shutdown)	29	Not available	0
Fish stocking (Quantity of fingerlings)	0	0	Not applicable
Leakage of lubricating and hydraulic oils in turbines (Tonnes/year or m³/year, depending on the type of oil)	0	0	0
Recovery of areas degraded by coal extraction and its generated waste (Recovered area unit – hectare per year)	Not applicable	Not applicable	Not applicable

Recovery of areas degraded by coal extraction and its generated waste (Resource allocation to recovery and preservation projects (BRL/year))	Not applicable	Not applicable	Not applicable
Make-up water consumption during generation (m^3/MWh)	0	Not available	Not available

GRI Standards Summary

|GRI 102-55|

This report was prepared in accordance with the Core option of GRI Standards |GRI 102-54|

GRI Standard	Disclosure	Page and/or link	Omission	Global Compact
GRI 101: 2016 Framework				
Standard contents				
GRI 102: 2016 standard contents	**Profile**			
	102-1 Name of organization	CTG Brasil	-	-
	102-2 Activities, brands, products, and services	CTG Brasil	-	-
	102-3 Headquarters location	Corporate information	-	-
	102-4 Operation location	CTG Brasil/Operations	-	-
	102-5 Ownership and legal form	CTG Brasil	-	-
	102-6 Markets served	CTG Brasil	-	6
	102-7 Scale of organization	CTG Brasil | Financial performance	-	-
	102-8 Information on employees and other workers	People management	-	-
	102-9 Supply chain	Supplier management	-	-
	102-10 Significant changes in the company and supply chain	Supplier management	-	-
	102-11 Approach or precautionary principle	Sustainability management | Environmental protection	-	-
	102-12 External initiatives	Sustainability Management	-	-
	102-13 Membership in associations	Sustainability Management	-	-
Energy sectors	**EU1** Capacity installed (MW), listed by primary energy source and regulatory system	CTG Brasil	-	-
	EU2 Net energy production, listed by primary energy source and regulatory system	CTG Brasil	-	-
	EU5 Allocation of CO_2 content emission allowances, listed by structure of the carbon credit market	Not commercialized	-	-
GRI 102: 2016 standard contents	**Strategy**			
	102-14 Statement of the main decision-maker	A Message from the Management	-	-
	Ethics and integrity			
	102-16 Values, principles, standards and behavior rules	CTG Brasil | Ethics and integrity	-	-
	102-17 Counseling mechanisms and concern about ethical behavior	Ethics and integrity	-	10
	Governance			
	102-18 Governance structure	Corporate Governance	-	-
	102-20 Executives' responsibility for economic, environmental, and social issues	Risk management	-	

	102-40 List of stakeholder groups	Sustainability Management	-	-
	102-41 Collective bargaining agreements	People management	-	3
	102-42 Base used for identification and selection of stakeholders for engagement	About the report	-	-
	102-43 Stakeholder engagement approach	Sustainability Management	-	-
	102-44 Key issues and concerns raised during engagement	Sustainability Management	-	-
	Reporting practice			
	102-45 Entities included in the consolidated financial statements	About the report	-	-
	102-46 Definition of report content and topic scopes	About the report	-	-
	102-47 List of relevant topics	About the report	-	-
	102-48 Restatements of information	Did not occur	-	-
	102-49 Changes in the material topic list and topic scopes	About the report	-	-
	102-50 Reporting period	About the report	-	-
	102-51 Date of most recent report	2017, published March 2018	-	-
	102-52 Reporting cycle	About the report	-	-
	102-53 Contact person for questions relating to the report	Corporate information	-	-
	102-54 Statement of report preparation in accordance with the Standards	GRI Standards Summary	-	-
	102-55 Table of Contents	GRI Standards Summary	-	-
	102-56 External verification assurance	About the report	-	-
GRI Standard	**Disclosure**		**Omission**	
Material Topics				
GRI 200 Standards – Economic Series				
Economic performance				
GRI 103: 2016 management approach	**103-1** Explanation of the material topic and its scope	About the report	-	-
	103-2 Management approach and its components	Strategy | Risk management | Engagement with the community	-	-
	103-3 Evaluation of the management approach	Strategy | Risk management | Engagement with the community	-	-
GRI 201: 2016 economic performance	**201-1** Direct economic value generated and distributed	Financial performance	-	-
	201-2 Financial implications and other risks and opportunities due to climate change	Environmental Protection	-	7
	201-3 Obligations under the established pension plan and other retirement plans	People management	-	-
	201-4 Financial assistance received from the government	Engagement with the community	-	-
Indirect economic impacts				
	103-1 Explanation of the material topic and its scope	About the report	-	-

GRI 103: 2016 management approach	**103-2** Management approach and its components	Engagement with the community	-	-
	103-3 Evaluation of the management approach	Engagement with the community	-	-
GRI 203: 2016 Indirect economic impacts	**203-1** Investments in infrastructure and services offered	Engagement with the community	-	-
Purchase practices				
GRI 103: 2016 management approach	**103-1** Explanation of the material topic and its scope	About the report	-	-
	103-2 Management approach and its components	Supplier management	-	-
	103-3 Evaluation of the management approach	Supplier management	-	-
GRI 204: 2016 Purchase practices	**204-1** Expense ratio with local suppliers	-	The supplier management process is being improved and it should be considered as from 2020.	-
Anti-corruption				
GRI 103: 2016 management approach	**103-1** Explanation of the material topic and its scope	About the report	-	-
	103-2 Management approach and its components	Ethics and integrity	-	-
	103-3 Evaluation of the management approach	Ethics and integrity	-	-
GRI 205: 2016 Anti-corruption	**205-1** Operations evaluated on corruption risks	Ethics and integrity	-	10
	205-2 Communication and training in anti-corruption policies and procedures	Ethics and integrity	-	10
	205-3 Confirmed cases of corruption and measures taken	Ethics and integrity	-	10
Energy sector – Availability and reliability				
Management approach	**EX-EU6** Management to ensure the availability and reliability of short- and long-term electric power supply	Risk management	-	-
Availability and reliability	**EU10** Planned capacity (MW) compared to the long-term electric power demand projection, listed by energy source and regulatory system	Operational performance		-
Energy sector – Research and development				
Research and development	**EX-EU8** Research and development activities and expenses aiming at the reliability of the electric power supply and the promotion of sustainable development	Innovation	-	-
GRI 300 Standards – Environmental Series				
Water				
GRI 103: 2016 management approach	**103-1** Explanation of the material topic and its scope	About the report	-	-
	103-2 Management approach and its components	Environmental Protection	-	-

	103-3 Evaluation of the management approach	Environmental Protection	-	-
GRI 303: 2016 Water	**303-1** Interactions with water as a shared resource	Environmental Protection	-	7, 8, 9
	303-2 Management of impacts related to water discharge	Environmental Protection	-	8
	303-3 Water collection	Environmental Protection		7, 8
	303-5 Water consumption	Environmental Protection		7, 8
Biodiversity				
GRI 103: 2016 management approach	**103-1** Explanation of the material topic and its scope	About the report	-	-
	103-2 Management approach and its components	Environmental Protection	-	-
	103-3 Evaluation of the management approach	Environmental Protection	-	-
GRI 304: 2016 Biodiversity	**304-2** Significant impacts of activities, products and services on biodiversity	Environmental Protection	-	8
	304-3 Protected or recovered habitats	Environmental Protection	-	8
	304-4 Species included in the IUCN red list and in national conservation lists with habitats located in the areas affected by operations	Environmental Protection	-	8
Energy sector | Biodiversity	**EU13** Biodiversity of replacement habitats compared to biodiversity of affected areas	Environmental Protection	-	8
Emissions				
GRI 103: 2016 management approach	**103-1** Explanation of the material topic and its scope	About the report	-	-
	103-2 Management approach and its components	Environmental Protection	-	-
	103-3 Evaluation of the management approach	Environmental Protection	-	-
GRI 305: 2016 Emissions	**305-1** Direct greenhouse gas emissions (GEE) (Scope 1)	Environmental Protection	-	7, 8
	305-2 Indirect greenhouse gas emissions (GEE) from the purchase of energy (Scope 2)	Environmental Protection	-	7, 8
	305-3 Other indirect greenhouse gas emissions (GEE) (Scope 3)	Environmental Protection	-	7, 8
	305-4 Intensity of greenhouse gas emissions (GEE)	Environmental Protection	-	7, 8
Wastewater and waste				
GRI 103: 2016 management approach	**103-1** Explanation of the material topic and its scope	About the report	-	-
	103-2 Management approach and its components	Environmental Protection	-	-
	103-3 Evaluation of the management approach	Environmental Protection	-	-
GRI 306: 2016 Wastewater and waste	**306-2** Total waste weight by type and method of disposal	Environmental Protection	-	8
	306-3 Significant leakages	Environmental Protection	-	8
	306-4 Transportation of hazardous waste	Environmental Protection	-	8

	306-5 Water bodies affected by water discharge and drainage	Environmental Protection	-	8
Environmental compliance				
GRI 103: 2016 management approach	**103-1** Explanation of the material topic and its scope	About the report	-	-
	103-2 Management approach and its components	Ethics and integrity | Environmental protection	-	-
	103-3 Evaluation of the management approach	Ethics and integrity | Environmental protection	-	-
GRI 307: 2016 Environmental compliance	**307-1** Non-compliance with environmental laws and regulations	None registered in 2018	-	8
Environmental Evaluation of Suppliers				
GRI 103: 2016 management approach	**103-1** Explanation of the material topic and its scope	About the report	-	-
	103-2 Management approach and its components	Supplier management	-	-
	103-3 Evaluation of the management approach	Supplier management	-	-
GRI 308: 2016 Environmental Evaluation of Suppliers	**308-1** New suppliers selected based on environmental criteria	-	The supplier management process is being improved and it should be considered as from 2020.	8
GRI 400 Standards – Social Series				
Employment				
GRI 103: 2016 management approach	**103-1** Explanation of the material topic and its scope	About the report	-	-
	103-2 Management approach and its components	People management	-	-
	103-3 Evaluation of the management approach	People management	-	-
GRI 401: 2016 Employment	**401-1** New hires and employee turnover	People management	-	6
	401-2 Benefits granted to full-time employees that are not offered to temporary or part-time employees	People management	-	6
	401-3 Maternity/paternity leave	People management	-	6
Occupational Health and Safety				
GRI 103: 2016 management approach	**103-1** Explanation of the material topic and its scope	About the report	-	-
	103-2 Management approach and its components	Health and safety	-	-
	103-3 Evaluation of the management approach	Health and safety	-	-
GRI 403: 2016 Occupational Health and Safety	**403-1** Occupational health and safety management system	Health and safety	-	-
	403-2 Hazard identification, risk assessment and incident investigation	Health and safety	-	-
	403-3 Occupational health services	Health and safety	-	-
	403-4 Employees' participation, consultation and reporting on occupational health and safety	Health and safety	-	-

	403-5 Employees' training on occupational health and safety	Health and safety	-	-
	403-6 Promotion of employees' health	Health and safety	-	-
	403-7 Prevention and mitigation of occupational health and safety impacts directly linked to commercial relationships	Health and safety	-	-
	403-8 Employees covered by the occupational health and safety management system	Health and safety	-	-
	403-9 Work-related injuries	Health and safety	-	-
	403-10 Work-related health problems	Health and safety	-	-
Training and Education				
GRI 103: 2016 management approach	**103-1** Explanation of the material topic and its scope	About the report	-	-
	103-2 Management approach and its components	People management	-	-
	103-3 Evaluation of the management approach	People management	-	-
GRI 404: 2016 Training and Education	**404-1** Average hours of training sessions per year per employee	People management	-	6
	404-2 Refresher courses for employees and retirement preparation programs	People management	-	-
	404-3 Percentage of employees who regularly receive performance and career development feedback	Health and safety	-	6
Freedom of association and collective bargaining agreement				
GRI 103: 2016 management approach	**103-1** Explanation of the material topic and its scope	About the report	-	-
	103-2 Management approach and its components	People management | Ethics and integrity	-	-
	103-3 Evaluation of the management approach	People management | Ethics and integrity	-	-
GRI 407: 2016 Freedom of association and collective bargaining agreement	**407-1** Operations and suppliers whose right to freedom of association and collective bargaining agreement may be at risk	The Company maintains relationships with all trade unions of the prevailing categories of employees, carries out its actions in compliance with current legislation, supports the free trade union association and releases employees from work to participate in meetings related to collective bargaining agreements.	-	3
Child labor				
GRI 103: 2016 management approach	**103-1** Explanation of the material topic and its scope	About the report	-	-
	103-2 Management approach and its components	Supplier management	-	-
	103-3 Evaluation of the management approach	Supplier management	-	-
GRI 408: 2016 Child labor	**408-1** Operations and suppliers with significant risk of employing child labor	Supplier management	-	5
Forced or slave labor				
	103-1 Explanation of the material topic and its scope	About the report	-	-

GRI 103: 2016 management approach	**103-2** Management approach and its components	Supplier management	-	-
	103-3 Evaluation of the management approach	Supplier management	-	-
GRI 409: 2016 Forced or slave labor	**409-1** Operations and suppliers with significant risk of employing forced or slave labor	Supplier management	-	4
Human rights evaluation				
GRI 103: 2016 management approach	**103-1** Explanation of the material topic and its scope	About the report	-	-
	103-2 Management approach and its components	Ethics and integrity | Supplier management	-	-
	103-3 Evaluation of the management approach	Ethics and integrity | Supplier management	-	-
GRI 412: 2016 Human rights evaluation	**412-1** Operations subjected to analysis or evaluations of human rights-related impacts	100% of operations	-	1
	412-3 Significant investment agreements and contracts that include human rights clauses or that have undergone human rights evaluation	Supplier management	-	2
Local communities				
GRI 103: 2016 management approach	**103-1** Explanation of the material topic and its scope	About the report	-	-
	103-2 Management approach and its components	Engagement with the community | Risk management	-	-
	103-3 Evaluation of the management approach	Engagement with the community | Risk management	-	-
GRI 413: 2016 Local communities	**413-1** Operations with the engagement of the local community, impact evaluation, and local development programs	Engagement with the community	-	1
Energy sector	**EX-EU21** Contingency planning measures, management plan, and disaster/emergency training programs, as well as recovery/restoration plans	Risk management	-	-
Social evaluation of suppliers				
GRI 103: 2016 management approach	**103-1** Explanation of the material topic and its scope	About the report	-	-
	103-2 Management approach and its components	Supplier management	-	-
	103-3 Evaluation of the management approach	Supplier management		-
GRI 414: 2016 Social evaluation of suppliers	**414-1** New suppliers selected based on social criteria	-	The supplier management process is being improved and it should be considered as from 2020.	2
Socioeconomic compliance				
GRI 103: 2016 management approach	**103-1** Explanation of the material topic and its scope	About the report	-	-
	103-2 Management approach and its components	Ethics and integrity	-	-

	103-3 Evaluation of the management approach	Ethics and integrity	-	-
GRI 419: 2016 Socioeconomic compliance	**419-1** Non-compliance with socioeconomic laws and regulations related to products and services	Payment of BRL 22,804.99 resulted from a judicial decision in a labor lawsuit against a company providing services to Rio Paranapanema.	-	-
Energy sector – Access				
GRI 103: 2016 management approach	**103-1** Explanation of the material topic and its scope	About the report	-	-
	103-2 Management approach and its components	Risk management | Operational performance	-	-
	103-3 Evaluation of the management approach	Risk management | Operational performance	-	-
Energy sector – Access	**EU30** Average plant availability factor, listed by energy source and system	Operational performance	-	-

Corporate information

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Credits

General coordination

Brand, Communication & Sustainability Management

We would like to thank all areas of CTG Brasil for the survey and consolidation of economic, social and environmental indicators presented in this Report.

Text, content editing and GRI/Aneel indicators

Editora Contadino

Materiality

Key Associados

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