

# ANNUAL REPORT 2019



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# 1

## Introduction

### About the Report

Welcome to the SPIC Brasil 2019 Annual Report.

In this document, we publish the highlights of our operations between January 1st and December 31st, 2019, as well as our business model and its value creation.

This publication is part of the Company's commitment to open communication, transparency and the sustainability of our operation.

**Enjoy your reading!**

If you have any questions or comments about the information presented here, contact us by email:

➤ [comunicacao@spicbrasil.com.br](mailto:comunicacao@spicbrasil.com.br)





## Message from the Management

The year 2019 was a consolidation period for SPIC Brasil. We dedicated ourselves to the internal structuring and organization of all areas and activities of the Company, establishing a robust base that will underpin our growth in the coming years.

We have implemented the Risk Management and Compliance Department, systematized risk management and launched the Integrity Program.

During the period, we also approved the Future Mission, a project to modernize the São Simão Hydroelectric Power Plant (HPP), with an investment of approximately R\$ 1.0 billion planned for the next nine years.

We are signatories of the United Nations (UN) Global

Compact and, in keeping with our commitment, we invest in actions and projects aimed at the environment (page 42) and the communities around SPIC Brasil's enterprises (page 64).

One of these initiatives was the first edition of Imagination Island, a project that directly impacted more than ten thousand children and young people and, due to its success, had its second edition approved and started in 2020.

For another year in a row, we achieved positive results that exceeded the goals set for the period.

Our generation assets showed an availability index of 92.03% at HPP São Simão, 97.48% at the Millennium Wind Farm and 98.68% at Vale dos Ventos Wind

Complex, demonstrating our operational excellence.

In trading, we continued to achieve our revenue goals and, in 2019, we began to diversify our client portfolio following our expansion process.

For the continuous evolution of our people, we invested in training and in the creation of our corporate university, SPIC University. The first course module was launched in 2019 and addressed assertive communication and interculturality.

Aiming to position ourselves as a strong employer brand, in 2019 we also started the SPIC Brasil Culture Project, further strengthening who we are and where we want to go. Although at a fast pace, the year brought us the peace of mind of being on the right track.

We will continue to grow and invest in improvements for our operations, people and the entire value chain of SPIC Brasil.

We are excited by new achievements and challenges outlined for 2020, and happy to share with you the results of our history so far.

**Adriana Waltrick,**  
CEO of SPIC Brasil



# Who we are

## About SPIC Global



São Simão Hydro Power Plant.

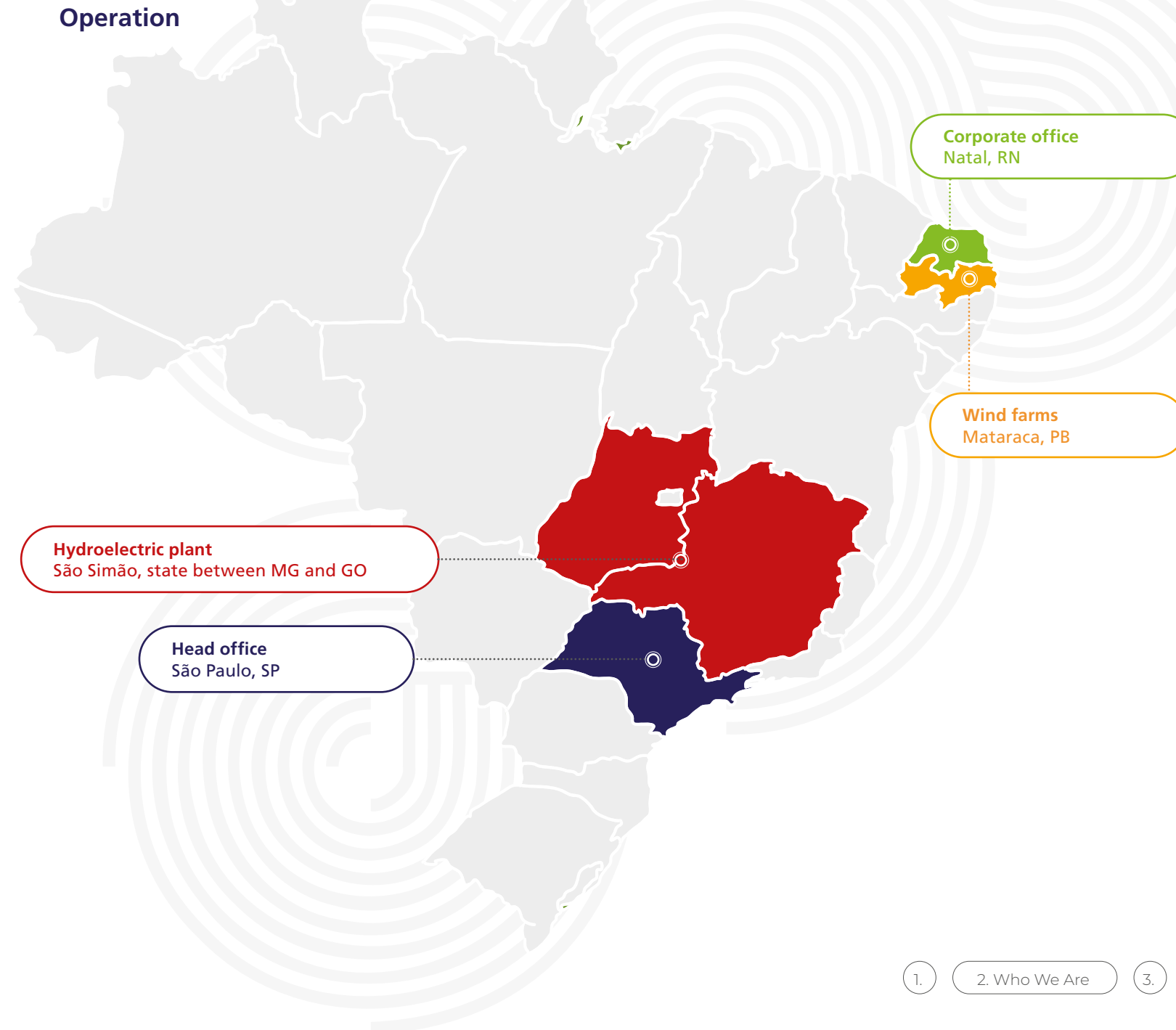
We are part of SPIC Corporation, a Chinese company that develops solutions for the energy market with a portfolio focused on renewable sources.

Created in 2015, the Group today is present in 43 countries and its global operation has more than 140 thousand employees, more than 140 GW of installed capacity, the largest installed capacity of solar energy in the world, corresponding to 47.18% of the global solar energy generation.

For more information access:  
▶ <http://eng.spic.com.cn/>

## About SPIC Brasil

SPIC Brasil is a subsidiary of State Power Investment Corporation of China (SPIC), a global power generation and related projects company with 140 GW, total assets of US\$ 113 billion and 140 thousand employees, distributed in 43 countries. SPIC Brasil currently operates the São Simão Hydroelectric Power Plant, on the border between the states of Minas Gerais and Goiás, and two wind farms in Paraíba, totaling 1.7 GW installed in the country.



### Generation

1,768 MW installed power.

### Hydroelectric Energy

São Simão Hydro Plant (HPP)

- ▶ 10 TWh\* annual average generation capacity;
- ▶ 1,710 MW installed power.

### Wind Power

Vale dos Ventos Wind Complex;

- ▶ 104 GWh annual average generation capacity;
- ▶ 48 MW installed power.

### Millennium Wind Farm

- ▶ 27 GWh average generation capacity;
- ▶ 10.2 MW installed power.

\* 1 TWh = 1,000 GWh.



### Sales

2,494,221 MWh of energy negotiated in the Free Contracting Environment (ACL).

Sale of electric energy in the Regulated Contracting Environment and in the Free Contracting Environment, through the:

- ▶ Electronic auctions;
- ▶ Bilateral negotiations (over-the-counter);
- ▶ Standardized electronic platforms.



## 2019 Outlook

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Enough renewable  
energy generated in  
wind farms to supply

**132,000**  
households

---

**2,494,221.000**  
**MWh**

OF ENERGY  
TRADED IN THE ACL

(page 40)

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LAUNCH OF THE  
**Integrity  
Program**

(page 22) and

**SPIC University**

(page 54)

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**Extensive  
organizational  
culture  
consolidation**

PROJECT  
(page 50)

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**250**

MOBILE WORKSHOPS  
focused on reading  
and audiovisual of the  
Imagination Island  
project

(page 72)

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Promoting local  
development  
AND IMPACTING MORE THAN

**10 thousand**  
CHILDREN AND  
ADOLESCENTS

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ANNOUNCEMENT OF THE  
**Missão Futuro**  
project for  
modernization of  
**HPP São Simão**

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RESEARCH & DEVELOPMENT  
PROJECTS,  
**including the  
Golden Mussel  
Project**

(page 46)

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PARTICIPATION OF  
SPIC GLOBAL CEO  
**BRICS meeting  
in Brazil**

(page 21),  
for closer ties with the  
sector and the government

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# Performance

## Operational



### SÃO SIMÃO HPP

- › Installed capacity capable of serving about six million homes;
- › 1,710 MW installed power;
- › 9.15 Terawatt-hour generated in 2019;
- › 92.03% availability index (above the target).



### SALES

- › 2.494.221,000 MWh in energy traded.



### VALE DOS VENTOS WIND COMPLEX

- › 104 GWh annual average generation capacity;
- › Enough to supply 100,000 homes;
- › 48 MW installed power;
- › 9,641.80 MWh generated in 2019;
- › 98.68% availability index.

### MILLENNIUM WIND FARM

- › 27 GWh annual average generation capacity;
- › Enough to supply 40,000 homes;
- › 10.2 MW installed power;
- › 2,557.65 MWh generated in 2019;
- › 97.48% availability index.

## FINANCIAL

The Company's economic and financial performance continued to grow in 2019, evolving along with the business.

Throughout the year, we presented a solid performance, with an operating margin above expectations for the generation and sales fronts.

The results presented in the period brought more security to the path traced by the Company, underpinning its growth.

**Net Revenue:**  
**R\$ 1.5 billion**

**Debt:**  
**R\$ 4.5 billion**

**EBITDA:**  
**R\$ 1.2 billion**

**Operating costs and expenses:**  
**R\$ 356 million**



(R\$ THOUSAND)	HPP SÃO SIMÃO		WIND FARMS	
Net Operating Revenue	R\$	1,494,108	R\$	59,486
EBITDA	R\$	1,177,825	R\$	38,248
Operating Expenses And Costs	R\$	326,377	R\$	30,567
Profit For The Year	R\$	483,663	R\$	14,980

# 3.

## How we operate

### Value Relationships



Vale dos Ventos Wind Complex

Being part of SPIC Corporation, a group with global strength, guarantees us the vision of a multinational company coupled with the local experience of our specialized management team with a broad history in the energy sector.

We manage the quality of our operation with certificates. Our wind farms are already certified in environmental and occupational health and safety standards, with quality certification expected by 2020.

We also have global quality certification in our Natal and São Paulo offices, and our plant has already conducted internal audit processes as part of the preparation for certification as well.

Since excellence is in the hands of the people who make SPIC, we are a Company that values diversity. We encourage the plurality of cultures and people in the different regions where we operate.

Moreover, we are very proud of our diverse team, with a leadership full of women and the presence of expatriates who add knowledge to our work.



SPIC employee at São Simão Hydro Power Plant.



Chairman's visit to São Paulo office.

Maintaining a transparent and close relationship with all its audiences is a priority for the Group. In November, the Chairman of the Board of SPIC Corporation and leading Chinese political figure, Qian Zhimin, visited Brazil to participate in the BRICS meeting, coordination between Brazil, Russia, India, China and South Africa that deals with the development of these emerging markets.

During this visit to the country, the Chairman also participated in the signing ceremony of a Memorandum of Understanding (MoU) between SPIC Brasil, EIG and Siemens.

The document sealed a cooperation agreement for the development of energy projects in Brazil.

SPIC Brasil's contribution is due to the expertise in operation and project management strategy in the country. The partnership allows to expand the range of projects, ensuring confidence in investments in the sector.

Also part of our contribution to the sector is the exchange of knowledge with companies in the segment, part of SPIC Brasil's project for the development of Hourly Price Projection.

The initiative was structured bearing in mind that the Brazilian electricity sector is organizing itself for the free market expansion.

This is the appropriate time to specialize and delve deeper into the energy pricing concepts from the perspective of a competitive market while understanding the risk mitigation structures typical of this type of market.



# Management Principles

## Integrity Program

Launched in December 2019, the SPIC Brasil Integrity Program covers all actions related to the Company's ethical performance, such as the Code of Conduct and Ethics, the Gifts Policy, Fighting Corruption, the Ethics Channel and training.

Its implementation reinforces the strength of internal processes, guiding decisions, choices and the conduct of employees, observing ethics in all the Company's businesses.

With the motto, "**Orientation to do it right**", the program systematizes the values of our culture, guided by respect and integrity



To learn about the program, 100% of the employees attended various face-to-face training sessions in which we approach ethics within the Company.

The main policies presented were those of anti-corruption, interaction with public authorities and gifts and presents.

Furthermore, we developed specific training for both the **Executive Board**, addressing integrity as a strategic pillar, as well as for the Supply area, due to its criticality and sensitivity in relation to the topic.

In 2020, training will be extended to other sensitive areas and to our suppliers and third parties, ensuring that integrity is addressed in the entire Company's value chain.

## Code of Conduct and Ethics

Belonging to our Corporate Governance, SPIC Brasil's Code of Conduct and Ethics presents the Company's fundamental principles guided by ethics and safety in the work environment of all our shareholders, managers, employees and business partners.

The document is valid for an indefinite period of time and any adjustments, changes or updates are submitted to the deliberation of the SPIC Brasil Board of Directors.



**Ethics Channel**  
Independently managed by the company KPMG, SPIC Brasil's Ethics Channel was developed to report and monitor, in a safe and confidential manner, situations that fail to comply with the Company's Code of Conduct and Ethics.

The interested party can anonymously report information that represents misconduct, fraud and misappropriation of resources, through a website, e-mail, 0800 phone and PO box.

### LEARN MORE

Integrity Program:  
▶ <https://www.spicbrasil.com.br/integridade>

Code of Conduct and Ethics:  
▶ <https://bit.ly/2D88bYr>

## Ethics and Integrity Committee

In 2019, the Ethics and Integrity Committee was created, responsible for the analysis and application of disciplinary measures resulting from reports found in the ethics channel, as well as in the monitoring of preventive actions, for developing integrity and ethics culture implementation in all the Company's business and interactions.



# Corporate Governance



SPIC Brasil’s corporate governance model is succinct, oriented towards fast and collegiate decision making and aligned with the model adopted by SPIC Global.

Our advantage is our executives’ experience in the Brazilian electric sector, coupled with the intellectual capital gathered by the group in its global operations.

Our governance is based on international best practices and we rely on a Board of Directors with 11 directors, among which are our independent directors.

The boards are responsible for deliberating and continuously evaluating the Company performance, as well as preparing the strategic planning and monitoring its progress.



Reception committee for Mr. Qian’s visit.

**Organizational chart  
SPIC Brasil**



# Risk Management

We continuously invest in risk mitigation and reduction, paying attention to any impact generated on the environment and on the communities in which we operate.

In addition to the conditions required by law, SPIC Brasil works with security as a fundamental pillar in initiatives and policies that disseminate the safety culture throughout the Company.

Our safety policy is conducted in four phases:



## Integrate

Knowledge about risks in each one of the facilities and activities is shared through training with the disclosure of the Risk Management policy.

Procedures in the Company's areas are also presented, in addition to accident and disease prevention and well-being programs, always in line with Brazilian legal requirements.



## Raising awareness

Employees' awareness is maintained by weekly safety meetings in the operational units.

In these situations the concerns and doubts are resolved and the procedures are passed on to follow the goal of zero work accidents in the year.

We also emphasize the senior leadership's commitment to internal communication campaigns, preparation and sharing of booklets and information materials on the topic.



## Manage

Certified by ISO 9001, ISO 14001 and ISO 45000, our system addresses multidisciplinary aspects with a focus on risk management, crises and emergencies that may impact our people, suppliers, communities and the environment.



## Recognize

We believe that safety at work is everyone's responsibility and, therefore, we encourage responsibility for complying with and adopting good practices in the workplace at all hierarchical levels of the Company.

Part of this safety culture is the Safety Observations Program, developed annually throughout the Company.

► Find out more on the page 59.



**Implemented in 2019, the new Risk and Compliance Management Department is responsible for evaluating and implementing new processes and procedures following the best risk management practices: COSO 2017 frameworks, a North American organization dedicated to offering management and governance guidelines, and frameworks used by publicly traded companies listed both in Brazil and the United States.**



# 4.

## How we create value

### Wind Power

We operate in two wind farms: the Vale dos Ventos Wind Complex and the Millennium Wind farm, both located in Mataraca (PB).

#### Vale dos Ventos Wind Complex

- › Opened in 2009;
- › 60 wind turbines;
- › Mataraca (PB).
  
- › 104 GWh annual average generation capacity;
- › Enough to supply 100,000 homes;
- › 48 MW installed capacity;
- › 9,641.80 MWh generated in 2019;
- › 98.68% availability index.



Vale dos Ventos Wind Complex.

## Millennium Wind Farm

- › Opened in 2007;
- › 13 wind turbines;
- › Mataraca (PB).
- › 27 GWh annual average generation capacity;
- › Enough to supply 40,000 homes;
- › 10.2 MW installed capacity;
- › 2,557.65 MWh generated in 2019;
- › 97.48% availability index.



Millennium Wind farm.

In 2019, we invested in the maintenance and continuous optimization of these assets.

This action reflected in the availability index of the wind turbines, which exceeded the target of 97.5%, reaching 98.5%, causing a direct increase in energy generation and, consequently, an increase in the Company's revenue.

At the beginning of the year, we completed the maintenance of the 39 blades in the wind turbines of Millennium wind farm, which started in 2018, carrying out the process in the 13 wind turbines of the unit.

At the end of 2019, we resumed the project, with several inspections and monitoring carried out by third parties, and in early 2020 we made adjustments to this maintenance service in order to complement it and guarantee a high operational and safety performance.

We have approved three wind projects to be implemented in the state of Rio Grande do Norte, which are expected to start operating in 2022.

This expansion will bring even more relevance to SPIC Brasil's wind energy front, as the new plants may add approximately 150 MW of installed capacity to the 58.2 MW already in operation.

The Company is working to make farms increasingly efficient, with continuous improvements and attention to innovation opportunities.

We believe that Brazil has every chance to make wind energy the second largest source of the national electric matrix, followed by hydro.

In 2020, we will carry out renovations in the unit substations to receive new medium voltage switches, keeping the operation with updated equipment with easy replacement and exchange.

We have also implemented a system to optimize processes and data management for performance evaluation, with a customized management system unprecedented in Brazil.



## Hydroelectric Power

Hydroelectric power, which represents 97% of SPIC Brasil's installed power, is the largest source of the country's electrical matrix.

During 2019, we completed our first 12 months of operation at São Simão HPP and ended the year with 9.15 Terawatt-hours generated.

The result is similar to 2018 but brings a difference: in October, the plant broke a production record reaching, in just one month, a value greater than 1 Terawatt-hour of generated energy.

In view of our commitment to delivering excellence and our operation and our employees

safety, SPIC Brasil's focus in 2019 was the development of the plant's modernization project, Missão Futuro.

► Learn more on page 36.

### São Simão Hydro Plant

- Opened in 1978;
- Six turbines;
- Santa Vitória (state limit between Minas Gerais and Goiás).
- The installed capacity of the São Simão HPP is capable of serving around six million households;
- 1,710 MW installed power;
- 9.15 Terawatt-hour generated in 2019;
- 92.03% availability index.



São Simão Hydro Power Plant.



# Missão Futuro

A SPIC Brasil cresce com você.

The Missão Futuro, the São Simão HPP modernization project, approved by the Board of Directors in December, was one of the main highlights of the Company's operations in 2019.

São Simão HPP was established in the seventies and, with the accelerated technological advances of the last few years and natural wear and tear, its equipment and systems have become outdated, in need of updating, allowing for efficiency gain.

The Project, which aims to guarantee the best performance indicators and the high reliability and safety of the operation, within the best management and technology procedures and practices, is made possible through the receipt, by SPIC Brasil, of the compensation defined in the concession agreement.

Planning began in 2018, with the hiring of a specialized engineering company that prepared an energy study to assess the possibility of increasing capacity and energy.

A basic project was developed to assess the situation of equipment, systems and technical specifications, respecting the bidding process.

With the diagnosis of the analyzes carried out in 2018, the project was divided into seven packages:

**PACKAGE 1:** Modernization of handling equipment, gantries and overhead cranes used to move large plant equipment.

Since this package is necessary for the next steps, this will be the first system to be ready, allowing the safe movement of the equipment that will be renovated. This package started in 2019 and is expected to be completed in 2021.

**PACKAGE 2:** Priority for the most critical equipment: the main transformers.

The six machines, responsible for making it possible to increase the voltage from 16.5 kV to 500 kV of the energy produced in the generating units and which will be delivered at SS Cemig of the basic grid.

From 2020, two transformers will be replaced by new ones. The package should be completed by 2022.

**PACKAGE 3:** Modernization of the spillway and hydraulic system of Tomada D'água, aiming to further improve the safety of the dam.

Due to its relevance, the package also starts in 2020 and will be completed in 2022.

**PACKAGE 4:** Engineering support with specialties in various areas of the work to be carried out, bringing even more expertise to the project management.

**PACKAGE 5:** It is the big package of the process, the modernization of the generating units, auxiliary systems, supervision and control system, protection, speed and voltage regulators, etc.

This technological complex involves huge modernization work. The package contracting process began in 2019 and will be completed in late 2020.

From 2023, the generating units will be stopped, one by one, so that the modernization is completed not affecting the plant's operation.

**PACKAGE 6:** Maintenance of equipment complementary to the generating units and which are not in package 5, such as internal and external lighting.

**PACKAGE 7:** Civil works not foreseen in package 5, such as the dam's crest, handrails, warehouses, spillway surface and other support structures.





SPIC Brasil Directors in the São Paulo Office.



Employees at the São Paulo Office.

As most of the work will be carried out inside the powerhouse and indoors, the project presents low environmental risk.

Even so, procedures will be adopted to mitigate any risks to the environment. Both waste collection and the preservation of ichthyofauna and wild animals in the region are planned.

Our top priority is to maintain the health and safety of the approximately 500 SPIC employees and service providers involved throughout the project.

Since it causes a change in the HPP routine, all Occupational Health and Safety (OHS) processes and management were studied and redesigned to mitigate all the risks involved.

For this purpose, we created a Risk Committee, comprised by specialists in modernization, health and safety, operations and maintenance departments.

The Compliance and Risks Department is preparing a risk matrix, from a complete analysis of the entire modernization process to provide a careful assessment of the risks involved and the mitigating measures.

When there are changes in the system, procedures are installed maintaining not only operational continuity but also safety, such as actions related to adequate drainage, lighting and ventilation.

Scheduled for the next nine years, the modernization will take place in stages, with a detailed schedule for each of them, following the plan prepared to meet

the rules established by the Brazilian National Agency of Electrical Energy (ANEEL) and the National Electric System Operator (ONS), counting on the coexistence between the operation and the modernization while ensuring the operational and employee safety.



## Sales

In 2019, we consolidated our energy sales operation, which started in 2018, with the implementation and integration of systems, process improvement and new hires. This work provided our newly created Energy Commercialization Directorate with a safer and more efficient operation.

Also in this period, we worked on specializing the team in relation to the 2018 performance, segregating activities within the area, ensuring greater focus for each of them. This initiative generated a Commercialization team more dedicated to the results and growth.

At the end of the period, we also started to diversify the customer portfolio, addressing large energy consumers in addition to the large traders and generators that were the focus of 2018.

With significant commercial and financial result from the sale of 2,494,221 MWh, the structuring of the area allowed SPIC Brasil to start preparing for the new reality of the Brazilian market, involving the implementation of the hourly price that will come into force in 2021.

## Safety and Compliance

SPIC Brasil's priority is to maintain the safety of people, communities and the environment, with a careful eye on all aspects of the operation.

The safety culture is dealt with daily, preventing any complications and performing risk management of our assets.

To ensure that safety is present in all day-to-day actions, we engage employees with specific and constant actions, in addition to adhering to the Occupational Health and Safety (OHS) best practices.

► Learn more on page 59.

Our wind farms operate with safety certifications ISO-9001, ISO-14001 and OSAHS 18001 and the hydroelectric plant, having been acquired more recently, had its management system implemented in early 2019 with the aim of achieving certifications in 2021.

Another strong movement in this direction was the preparation for Missão Futuro (page 36), our modernization project for São Simão HPP.

We prepared a modernization manual, with guidelines for internal and outsourced personnel, including mandatory criteria for employees, such as compliance with legislation, licenses, monitoring, necessary certifications and care for the local community.

In 2019, there were four accidents involving employees in our operations, one of them at the wind farm and the other three at São Simão HPP.

All of them were described in monthly reports sent to shareholders and had their mitigation measures implemented without permanent damage to the employees involved.

## Environment

In addition to being a value for the Company, sustainability is paramount to the Group's business strategy and core, which focuses on the generation of clean energy. We work to generate sustainable value for all the Company's stakeholders.



### At SPIC Brasil, Sustainability Is A Business Strategy, One Of The Company's Value Generation Pillars.

In 2019, our second year of operation, we evolved our strategy and sustainability planning, seeking to mature the theme management at SPIC Brasil.

Throughout the year, we carried out actions and initiatives in the locations of our operations which worked in the economic, social and environmental spheres.

In the second half of the year, we created our Sustainability Seal, translating SPIC Brasil's concern and commitment to sustainability, in all internal and external communications.

Next are some of the Company's programs:



### Projeto Quintais Produtivos (Productive Backyards Project)

Quintais Produtivos is a SPIC Brasil project that was born from the need to guide communities on the creation of vegetable gardens, contributing to the improvement in the quality of food for those who live in the communities covered by SPIC Brasil's facilities.

In the first year of the Project, four gardens were implemented with 28 direct participants, covering the municipal school of Mataraca-PB and three residences.

In addition to the guidelines on planting and cultivation, participants received information on health, safety and the environment related to the activity.

For the continuity of the Project, an orientation booklet was prepared, which will be used in 2020.



"Quintais Produtivos" Project.

### Wind Farms

Even though the wind farms' Operating Licenses do not present environmental monitoring as conditions, we understand the preservation of the environment as a constant responsibility of SPIC Brasil over its projects.

Therefore, in 2019 we continue to work on our own initiative to monitor avifauna and bats in wind farms properties.

The program was implemented and started its activities already in 2019, with the objective of understanding how the different populations

of our fauna are reacting to the changes that occurred due to the implementation of the project.

These changes can be considered both negative (e.g., installation of machines) and positive (e.g., preservation of green areas). Such surveys provide fundamental data for decision-making in management plans, implementation of ecological corridors, improvement of infrastructure for fauna, among others.

## Hydroelectric Plant

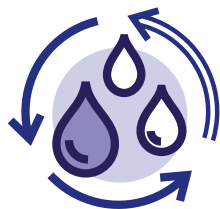


### Ichthyofauna Monitoring Program at the São Simão Hpp

As part of our concession at the Hydroelectric Power Plant, the Program aims to evaluate the reaction of the community of fish, eggs and larvae of the Paranaíba River in relation to the changes, positive or negative, that occurred due to the operation of the São Simão HPP.

This monitoring observes the composition and richness of species in the reservoir, Paranaíba river and its tributaries, allowing estimates to be made about the diversity of the local ichthyofauna.

In addition, the monitoring allows SPIC Brasil to create an information Database about the existing species, the evolution and behavior of these communities, which makes possible the relation between the ichthyofauna data and the fishing bank and also those related to water quality, which are obtained in the Water Quality Program.



### Water Quality Monitoring Program

The Program's objective is to diagnose and measure changes in water quality resulting from the operation of the HPP.

The evaluation of water meets the standards and

conditions established by CONAMA legislation 357/2005, which classifies and establishes environmental guidelines in relation to surface water bodies.

Furthermore, the aquatic communities are evaluated. As already mentioned, the results on physical, chemical and biological water variables are related to the Ichthyofauna Conservation Program.

With this monitoring, we can also provide information that serves as an input for the adoption of control measures, if necessary.



### Riparian Reforestation Program

Upon taking over the operation of the São Simão Hydroelectric Plant, SPIC Brasil was responsible for taking care of the concession area, including the Permanent Preservation Areas (APP) of the reservoir.

For this, we rely on the Riparian Reforestation Program, whose objective is to recompose vegetation on the margins of the São Simão HPP reservoir, covering APPs, areas owned by the Company or third parties.

As SPIC Brasil took over the operation of the São Simão plant while reforestation was

still under planting by the former concessionaire for the 2017/2018 cycle, the goals established for 2019 were:

- ▶ to monitor the completion of the reforestation works and the receiving the areas planted by the former concessionaire;
- ▶ to carry out maintenance in areas already reforested and implanted prior to 2019 and implement new areas corresponding to the planting cycles 2018/2019 and 2019/2020.

Altogether 11 areas were reforested, with a total of 84,017 seedlings planted.

The average seedling survival rate was above 80%, reaching the value stipulated by the Company.

The index achieved shows how a well-done and dedicated work may bring good results.

**In addition to these, several programs related to the environment and communities are part of our concession and the Company's activities, such as:**

- ▶ **monitoring of erosion gullies;**
- ▶ **assistance in environmental emergencies;**
- ▶ **environmental education and social communication.**

## Innovation

In 2018, our Research and Development (R&D) area was established, responsible for carrying out studies and projects focused on the optimization of resources, processes and best operational practices for SPIC Brasil. It is made up of industry experts and partnerships with internationally renowned institutions.

The area maintains a constant dialogue with the other companies of the Group. From this exchange and, understanding the context of operation in the national market, knowledge can be acquired from solutions found in different countries, making it possible to implement innovation projects in the Company. We seek cooperation with the SPIC Corporation R&D centers, with the aim of promoting technological exchange among countries and thus developing solutions for the electricity sector and its energy matrix.

In 2019, ANEEL opened a public hearing to address regulatory requirements for R&D projects.

In this process, SPIC Brasil actively participated in technical meetings with the regulatory body and other companies in the sector, discussing the challenges and best guidelines for the development of the program in the sector.

Learn more about our innovation projects for the year:

### **Free Energy Market Study:**

Approved in 2018 and running in 2019, the project is focused on the study of changes in the Free Energy Market scenario, such as the hourly Differences Settlement Price (PLD).

Some products have already been delivered and the project will be completed in early 2021, when the hourly pricing model is expected to come into effect.

### **Golden Mussel (Mexilhão Dourado):**

The project, in cooperation with two sector companies and partners Biobureau and Hubz, seeks to find ways to structurally fight the population growth of the Golden Mussel in the hydrographic basins of Brazil.

The mussel is an invasive species, among the three most harmful in the country, which has been spreading in Brazilian rivers and causing biodiversity loss and incrustations.

Also, mollusk infestation may cause operational problems in hydroelectric plants.

The project has advanced in a genetic engineering solution to this problem, to avoid the proliferation of the species.

### **Gas Monitoring and Analysis:**

Approved in 2019 and carried out in partnership with the University of São Paulo (USP), the project combines telecommunication tools for analysis and monitoring of gases in transformers.

The objective of the initiative is to find preventive technology to monitor the operation of the plant's transformers.

### **Innovative Training Module:**

In 2019, together with the HR area, the R&D team provided a training module for employees based on disruptive methodologies. Based on the design sprint method, the training took innovative concepts for diagnosing and solving issues in the areas, such as process improvement.



# 5.

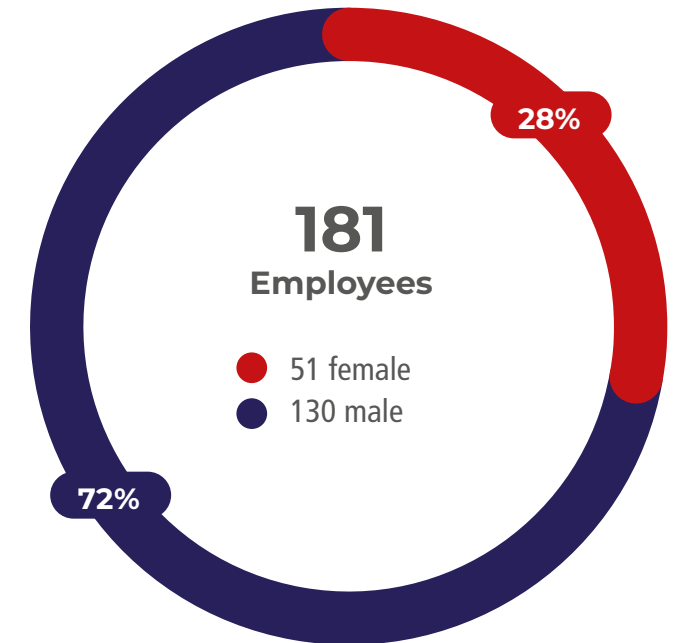
## Relationships

### Our People

The excellence of SPIC Brasil's performance is the result of dedicated work, guided by demanding values, policies and practices.

This result is a consequence of the commitment and delivery of the 181 people who invest daily in their roles within the Company.

During 2019, the internal structuring process was consolidated, going through the stages of attracting talent, as well as continuous training of the team and employees retention.



### Employees

› 5.629,5 training hours.



### Culture Project

As a newly formed organization, which had a large volume of hires in a short period of time, bringing employees from different sectors and areas, we understand the need to define our mission, vision, values and culture.

For this reason, in 2019, we worked to build the Company's employing brand internally and externally and started the SPIC Brasil Culture Project.

Throughout the year, the first phase of the project was completed: the culture diagnosis, which measured the employees perception in relation to SPIC Brasil's culture, comparing it with the culture that each one considers ideal.

### Interculturality

As part of an international group based in China, SPIC Brasil works with interculturality in its performance.

In 2019, we developed dialogues about Chinese culture with our executives, in which topics of daily impact were discussed and how it is possible to reflect them through the interculturality perspective.

The objective is to continue to promote integration between Brazilian employees and Chinese expatriates, offering playful and diversified actions for the exchange and learning between Brazilian and Chinese cultures.

### Integration of new employees

The **Integration Program** is the initiative to welcome and integrate the Company's new talents. New employees are received with all the structure they need already available (equipment, presentations and interaction actions), to help them to adapt to the new work environment.

At this moment, they are undergo institutional presentations in the areas of Human Resources (HR), Information Technology (IT), Health, Safety and Environment (HSE) and Compliance. From 30 to 60 days after their arrival, interviews are conducted to understand whether the initial expectations have been met and also to develop plans for the continuation of their work.

### Satisfaction and Recognition

In 2019, still with the team in consolidation and integration, we implemented our first Climate Survey with employees.

With guaranteed confidentiality, the survey engaged 74% of employees and showed 68% favorability.

We have the Recognition Program, an initiative practiced at SPIC's local and global level.

Globally, employees from all units around the world are recognized by the headquarters, who stood out throughout the year for their deliveries and participation in strategic projects.

Locally, the recognition of employees appears in the SPIC Award Program, a project in which professionals nominate colleagues for their exceptional performance. Recognition is linked to performance and behavior.

The People Committee analyzes the nominations and selects employees who are recognized and awarded travel vouchers at the celebration party in each location.

## Development

During 2019, we carried out several actions aimed at the development of our professionals:

### Performance Evaluation

It is based on the analysis of the company's corporate results together with the individual results of each eligible employee.

Our goal is to ensure the alignment between SPIC Brasil's strategy and the direct contribution from our employees to maintain an excellent operation.

Employees of all functional levels are eligible for evaluation.

### Scholarships and Languages

Aiming at the continuous training of our people, SPIC Brasil has also implemented a scholarship and language program.

The Scholarship Program covers undergraduate, graduate, extension and language courses.

The focus is on the medium- and long-term development of employees, preparing them for future challenges.

English scholarships are available to professionals who use the language as a work tool, while Mandarin is offered to executives who have constant interaction with the head office.

# PROGRAMA DE BOLSAS DE ESTUDOS E IDIOMAS



Launched in 2019, SPIC Brasil's Corporate University has the valorization of human capital as its main goal.

To officially open the program and talk about career prominence, we invited the consultant, speaker and writer specialized in training and development, Vania Ferrari, to a Kickoff with our São Paulo employees.

The experience was also broadcasted live to the other units of the Company, and was attended by the President of the Company, Adriana Waltrick.

With the slogan "Knowledge that moves us today and tomorrow", SPIC University has several teaching modalities and methodologies, offering face-to-face learning.

Three development fronts are worked on: behavioral, business knowledge and technical knowledge.

The courses are structured in modules, allowing professionals to have full independence to choose the activities of greatest affinity and interest.

In the year, we launched the first module: assertive communication and interculturality, which addressed the context of

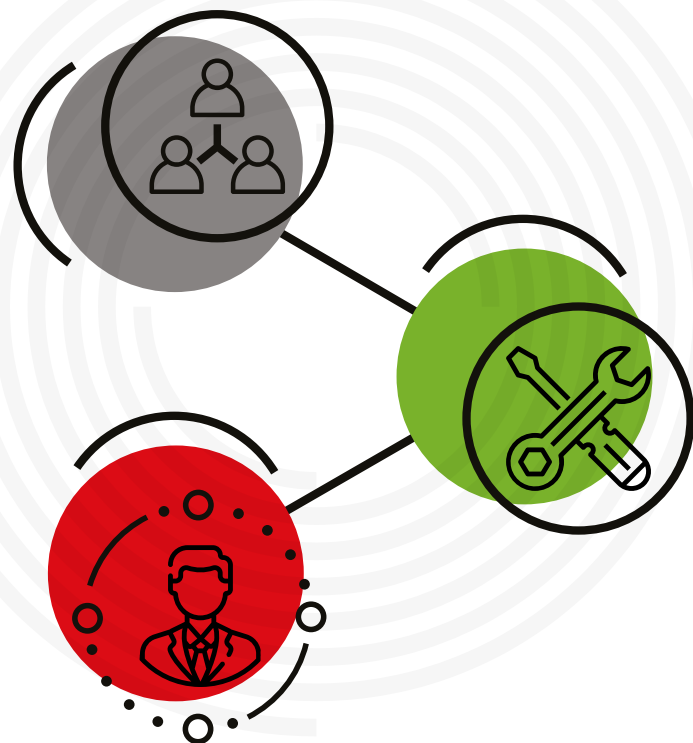
cultural differences between Brazil and China, dealing broadly with how to use culture in communication with the interlocutor.

The overall reaction rating was 4.7, on a scale of 1 to 5.



SPIC University Class - São Simão employees.





## Sharing Knowledge

Sharing Knowledge is a program intended to share learning internally in the Company. In practice, people volunteer to share any topic that he or she has expertise.

These employees organize training on the topics to be disseminated to the Company, present workshops or various training courses, practicing responsibility for the collective, with genuine and mutual exchanges within SPIC Brasil.

Among the subjects covered in this initiative, topics such as Research&Development, Project Management, Regulatory and Energy Commercialization are included.

## Summer Experience SPIC Brasil



## Internship Program Summer Experience

SPIC Brasil's vacation internship program was developed for students who are studying Electrical Engineering or Mechanical Engineering and who express an interest in learning from the energy sector.

During a month-long, the participant performs job rotation among the Company departments, getting a wider vision of the business, closely monitoring the operation at São Simão HPP.

During the program, the intern also has a Company manager as a mentor and, at the end, presents a learning project as a conclusion.

The Summer Experience pilot project was developed in 2019 and the first immersion took place in January 2020, having a young talent participation. We believe that initiatives like this benefit the Company by attracting new professionals while providing early career students with development, supporting them to gain a foothold in the job market.



SPIC Brasil employees at Day One in São Simão Hydro Power Plant.

## Occupational Health and Safety (OSH)

We understand that the safety culture depends directly on the daily engagement of the team, carried out through campaigns, actions and training.

The Health, Safety, Environment and Quality Policy (HSEQ), complies with legal obligations and also reinforces our commitment to preventing complications in operations.

Our employees have a booklet on the OSH Management System and campaigns that include a series of videos and web cards to raise awareness on the main risks and potential accidents in our operations, engaging them with safety policies, standards and practices at work.

We also work on the corporate Safety Observations program, the Company's permanent program that aims to achieve goals set annually.

With this Program, employees send alerts and remarks about any safety situation, being actively involved with their concerns and ensuring safe performance for all.

In 2019, we received around 1,500 observations, which were analyzed and filtered to carry out action plans when necessary.

In recognition for the joint action to minimize and eliminate accidents, employees who presented the two best observations will be awarded travel vouchers to Peru with a companion included.

**As part of our OHS initiative, in 2019 we offer an ambulance service at the São Simão HPP.**

**The mobile unit is available 24 hours a day throughout the year to assist employees.**

In 2019, the Internal Workplace Accident Prevention Weeks (SIPATs), held both at the plant and in the wind farms, dealt with topics such as health, well-being, safety and preventive action, aiming to make employees aware of risks in the workplace, including ways to improve quality of life and fighting stress.

## Quality of life

We rely on a broad **Health and Quality of Life Program** conducted by a Committee composed of representatives from the Health, Safety and Environment (HSE), Communication and Human Resources departments.

Through it, the Company performs continuous engagement, adopting healthier habits, such as sports practices, healthy food and mental health.

An individual nutritional monitoring program is offered to employees, with bioimpedance assessment, healthy eating suggestions and massage, for employees located in Natal (RN) and São Simão (GO).

The latter also has a partnership with a leisure and sports club for the physical activities of the team.

For those who are located in the offices in Natal and São Paulo, there are also a series of actions focused on health, sport and leisure, such as mindfulness, in São Paulo and, and Gympass in both units.

**SPIC Brasil has implemented the Count on Me Program (Conte Comigo), a project that offers psychological support to employees.**

**Also, support is provided on legal issues and financial guidelines that do not involve the employee's relationship with the Company.**



The SPIC2you program was created to promote a pleasant environment with relaxing moments and integration of employees.

The project's goal is to stimulate the pride and sense of belonging in employees, as well as increasing participation in quality of life activities that are already carried out.

The initiative is divided into two pillars:

### BE HAPPY

Initiatives related to the integration and well-being of employees.

### BE HEALTHY

Initiatives related to employee health.

Among the project's actions are:

- › Workplace exercise;
- › Partnership with a gym app, by subscription, allowing access to gyms in Brazil and worldwide;
- › Sports advice;
- › Participation in race;
- › Lectures related to health and well-being;
- › Annual influenza vaccination campaign;
- › Count on Me Program;
- › Business partnership for employee companion who are traveling.







Employees at the São Simão HPP.

## Suppliers

In 2019, the Supply Area was restructured and a Department was created. During this period, a strategic planning for the Area was prepared to support the processes in 2020, in addition to a new policy, approved with the goal of underpinning the procurement processes, which enabled relevant improvements in terms of organization and adherence to the isonomy, fairness and governance principles.

We reduced purchasing processes service times, as well as an improvement in the partnership with suppliers and internal areas, in order to strengthen the relation between Supplies and those involved throughout the chain.

The intention is to gradually reinforce SPIC Brasil's role in the relation with its suppliers.

This work will be developed by structuring the monitoring and registration of suppliers, so that we have the entire value chain mapped to expand the management of contracting processes.



## Communities

We continuously work to engage the communities surrounding our projects, fostering sustainable local development.



We pay particular attention to the Sustainable Development Goals (SDGs), prioritizing - in 2019 - actions aimed at SDG 11: Sustainable Cities and Communities.

At the São Simão HPP, we carry out activities in partnership with the municipalities covered by the plant's reservoir. In Santa Vitória (MG), SPIC Brasil participated in the organization of the XXIII

Symposium on Milk Livestock (XXIII SPL) in partnership with Emater-MG, Municipal Secretary of Agriculture, Livestock and Supply and Rural Union of Santa Vitória. The event sought to address good hygiene practices and

dairy quality in the field, in addition to more sustainable agricultural practices, such as compliance with the new Forest Code by rural producers.



We are associated with the Ethos Institute, whose mission is to engage and support companies towards the responsible management of their business.

Our partnership for a fair and egalitarian society was also materialized in 2019 when we became signatories to the United Nations (UN) Global Compact.



São Simão Hydro Power Plant.





We also participated in the National Clean Field Day, a date with the purpose of recognizing the results achieved by the reverse logistics of empty crop protection packaging in Brazil.

The event takes place annually and was organized in partnership with National Institute for Processing Empty Packages (InpEV).

Held in Quirinópolis (GO), in 2019 it had the participation of approximately 208 students, in addition to teachers and local authorities.

SPIC Brasil held the first Open Doors event at the São Simão HPP with the participation of local city halls.

The event consisted of receiving representatives of the local community at the São Simão HPP to learn about issues related to the operation, socio-environmental programs, modernization and asset management activities of the plant. The visit ended with a tour of the plant and lunch at a local hotel.

Due to its relevance and direct impact on the relationship with the local community, connecting people to our operations, in 2019 we have also created our Open Doors Newspaper.

The publication is annual and brings important information about the performance of SPIC Brasil locally.

In addition, we implemented the communication channel by e-mail to receive demands, questions, suggestions and doubts related to the São Simão HPP, at:

➤ [portasabertas@spicbrasil.com.br](mailto:portasabertas@spicbrasil.com.br)



Vale dos Ventos Wind Complex.

All of these initiatives are part of the Open Doors Program, which has become an important communication channel, bringing information to the community and providing contact between the public and the Company.

In the wind farms, we kept the projects focused on local development, with the SPIC Brasil Community Fund, which annually supports social projects in Barra do Camaratuba and encourages local initiatives such as the

group of women “**Hands that Create**”. (Learn more on page 80).

## Socioeconomic Diagnosis

In 2019, we started mapping the 13 municipalities around the São Simão HPP.

In the diagnosis, we raised important information such as HDI, main economic activities developed in the region, latent social projects and socioeconomic demands that allowed us to know more deeply its socioeconomic context, understand the community and identify demands, enabling the development of action plans that contribute to the development of the region.

In 2020, we intend to launch the SPIC Brasil Community Fund in São Simão.

### Monitored Cities:

#### Minas Gerais

- ▶ Ituiutaba;
- ▶ Santa Vitória;
- ▶ Capinópolis;
- ▶ Gurinhatã;
- ▶ Ipiaçu;
- ▶ Cachoeira Dourada de Minas.

#### Goiás

- ▶ São Simão;
- ▶ Quirinópolis;
- ▶ Bom Jesus de Goiás;
- ▶ Cachoeira Dourada;
- ▶ Gouvelândia;
- ▶ Inaciolândia;
- ▶ Paranaiguara.



## Our advantage: Communication

We maintain an open and constant dialogue with the communities. For this reason, one of SPIC Brasil's advantages is its way of communicating in relation to the Company's activities.

We develop a comprehensive publicity material, organized to maintain not only transparency, but to engage the community in all our activities.

With that in mind, we developed cards, short videos with information about the programs and what SPIC Brasil does, which can be shared with the public and on social networks.

We also broadcast on the radio and in our newspaper, the first edition of Newspaper *Portas Abertas*.





# ILHA DA IMAGINAÇÃO

Um novo capítulo onde suas ideias viram histórias

120

students trained in the vocational course

More than 10 thousand in the mobile workshops

Initiative that offers free training courses for children, adolescents and young people from public schools in the municipality of São Simão (GO); had its first edition between the months of July and December 2019.

As part of the project, audiovisual content production courses and mobile literature and animation workshops are offered.

Approved by the Culture Incentive Law, Imagination Island aims to seek alternative ways to bring benefits to communities, by promoting social and cultural responsibility projects.

Vocational course:

with the participation of young people aged 10 to 15 years, the course lasted four months and included classes three times a week in writing, reading and 2D animation techniques and stop motion, to create an animated film.

**In view of our objective to impact the communities and residents of the surroundings positively and continuously, SPIC Brasil was proud to receive the project result.**



Students from the Imagination Island project.





Imagination Island closing event in São Simão.

First group graduation concluded **120 students**

Imagination Island's first group graduation concluded the process of professional training of 120 students, in addition to impacting more than ten thousand children and adolescents who participated in 250 mobile workshops focused on reading and audiovisual. In all, 31 public schools in Minas Gerais and Goiás participated in the activities.

During the graduation event, which brought together the community and SPIC Brasil employees, we presented the videos produced by the participants, and the audience had fun with the young talents' work.

We conducted a survey to evaluate the Project results and thanks to its success and the positive impact generated, we confirm its continuity for 2020, with the second edition started in March, online, due to the COVID-19 Pandemic.

To learn more, visit: [ilhadaimaginacao.com.br](http://ilhadaimaginacao.com.br)



Imagination Island closing event in São Simão.





## SPIC Brasil Community Fund

During 2019, we continued to finance social projects through the Community Fund.

Since 2014 (before Pacific Hydro, the company that operated wind farms became part of SPIC Brasil), the Fund has financed local development projects in Mataraca (PB), where our Vale dos Ventos and Millennium wind farms operate.

The Community Fund is SPIC Brasil's strategy for promoting and valuing the communities in its area of influence, financing social projects prepared by the communities themselves in the areas of health, social well-being, education, training, environment, sport, recreation , tourism, culture and arts.

Eligible to submit projects are: individuals over 21, resident in Mataraca and who has not had any employment relationship with SPIC Brasil in the last six months.

The Public Call is open once a year, and the Company offers training related to preparation and management of social projects.

The initiatives undergo an internal analysis by SPIC Brasil and subsequently the best ones are evaluated by an examining board, following selection criteria such as: support for sustainable issues, capacity for social mobilization and contribution to local public policies, in addition to support for future generations, among others.



"Aprendendo Ponto Cruz" social project.

In 2019, eight projects were financed, covering themes focused on preserving the environment, cooking, education, culture and crafts.

Learn more about the projects:

### Mais Aprendizado:

Supported by the third year, the project assists children in the learning process through play activities.

**In 2019, the project also included aid in the adult literacy process.**



## Resgatando a Cultura:

For two years, it has spread the tradition of coconut dancing among the residents of Barra do Camaratuba, rescuing a manifestation of the forgotten regional culture.

This year, the project included rescuing the ciranda in its scope. The group has performed in several events related to the “coco de roda” in Paraíba, becoming a successful case of the Community Fund.



“Resgatando a Cultura” social project.



“Dicas e Delícias” social project.

## Confeitaria Dicas e Delícias:

Financed for the third year, the project trains women in the community in culinary art, preparing cakes and snacks and perfecting confectionery techniques. In 2019, the focus of the project was the training of adolescents.

## Aprendendo ponto cruz:

For three years, we contributed to empower the community in the cross-stitch art, producing embroidery on bath towels and other clothing articles.

The project offers yet another opportunity to create jobs and income in the community.

## Nosso Amigo Amigurumi:

The unprecedented project brings a crochet technique, which involves making decorative pieces with a children’s theme, producing dolls and pets, with high therapeutic power for children in the neonatal ICU.

It is another modality in artisanal production, contributing to greater product diversification. At the end of the course, the idea is to donate the pieces made to children undergoing treatment at the Cancer Hospital in Paraíba.



“A Arte Com Crochê de Grampo” social project.





"Bordado Ponto Russo" social project.

### A arte com crochê de grampo:

Project that teaches this crochet technique to interested teenagers in the community.

It is another option of artisanal technique, spreading the culture and promoting greater income generation capacity, like other projects aimed at this area.

### Bordado ponto russo:

Project that teaches the embroidery technique in Russian stitch to young people in the community, stimulating the local potential and teaching how to handle needles, which types of threads are best suited for each embroidery, among others. Thus, we qualify the workforce and provide job and income generation.



"Nosso amigo amigurumi" social project.



"A Arte com Crochê de Grampo" social project.



"Barra Limpa, Barra Linda" social project.

### Barra limpa, Barra linda:

Aimed at raising awareness about caring for the environment, focusing on children and adolescents.

The project aims to preserve the mangrove and collect the waste, aiming to reduce the impact caused by its incorrect disposal in the locality.

In 2019, we positively impacted 128 people directly in Barra do Camaratuba. To date, more than 50 projects have been funded that have benefited more than 1,000 people in the community.





"Grupo de Mulheres Mãos que Criam" social project.

In addition to the projects financed annually, SPIC Brasil has been supporting the women's group "**Mãos que Criam**" since 2016, proposing a series of technical training courses, involving female emancipation and structuring the group's business, aimed at the production and sale of handicrafts.

In 2019, the group participated in fairs and in the craft fair at Campina Grande, during the Biggest São João Party in the World, in addition to fairs in the city of João Pessoa (PB).

During the year, the group's store was also structured at the Tourist Center in Barra do Camaratuba (PB).

The female artisans won the National Craftsman's Card, which is a national identification for artisans and manual workers from all over Brazil, which allows participation in the most important handicraft salons.



"Grupo de Mulheres Mãos que Criam" social project.

With about 20 highly active women, the group's chief result is women's protagonism, since today these women earn an income from their own workforce, starting to support themselves financially in their homes or even ensure the full support of their families.

We refer to women in a situation of social and economic vulnerability and who found in crafts and cooking a possibility to increase income, which did not exist before.



## Social-Patrimony Management

Our Social-Patrimony Management Program aims to implement procedures and actions for the conservation of land assets linked to the concession areas of São Simão HPP.

In 2019, SPIC Brasil did a robust asset management job by performing periodic inspections along the reservoir and its margins to avoid inappropriate or prohibited uses and occupations.

The Program is one of the conditions for the asset's operating license, issued by Ibama and aims to maximize the useful life of the project and maintain good environmental quality around the reservoir.



# 6.

## Credits

### Coordination

SPIC Brasil Communication

### Editorial project: consulting, writing and translation

RICCA Sustentabilidade

<https://riccari.wixsite.com/sustentabilidade>

### Graphic design: layout, diagramming, illustrations

RICCA Sustentabilidade

<https://riccari.wixsite.com/sustentabilidade>



