

# Value Creation





## When energy became a business

Votorantim Energia expanded its portfolio of external customers and established a position as an increasingly important asset in the company's portfolio.

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otorantim Energia was created in 1996 to integrate and coordinate all of Votorantim Industrial's company-owned electric power generation operations. In almost 20

years of experience, it has established itself as one of the largest operators in the country, with 2,600 MW of installed capacity and a portfolio of 29\* hydroelectric power plants, including

those that are company-owned and those held in consortia. The company has also developed its business as an energy trader, rising to be the fifth largest in Brazil. During this period,



This context has put it in a unique position to leverage its knowledge and transform what had been a strategic input into a product.

The turning point came in 2013, when the company geared up to offer energy management services and efficiency programs to other companies of all sizes and sectors. As it did so, it acquired knowledge and improved its processes for selling surplus energy on the open market. Thus, the company transformed itself from being a cost center into a business.

Its customer base has grown rapidly. At the end of 2013, it had about 24 external customers that counted on it for their energy supply. In the first half of 2014, with a more structured team and legal support to understand the industry regulatory issues, the company participated in the public auctions for marketing surplus energy, organized by the National Electrical Energy Agency (ANEEL). At these auctions, Votorantim Energia sold 327 MW of surplus energy from Votorantim Metais.

it has gained experience in a highly regulated market, and developed skills, abilities and capacities. As a result, the company has created the necessary conditions to take the next step and begin to look beyond the Votorantim companies.

In addition to acting as a generator, operator and marketer of energy, over time Votorantim Energia has come to have a deep understanding of the needs and difficulties of the industrial consumer, since it is part of a group with a number of businesses in the basic sectors of the economy.

By year-end, the customer base added up to over 90 customers, composed mainly of small and medium companies seeking greater price stability in the free market compared to the regulated market. The list included service sector companies such as shopping centers, supermarkets and retailers, as well as many different types of industries such as automotive, textile and electronics.

#### **Wind power** Manufactured Capital

The year of 2014 was also important for investments. The company invested in strategic partnerships for power generation, focusing on wind power

and small hydroelectric power plants (SHPs). The company held its first discussions with wind farm developers and specialist service providers. These latter companies carry out the technical analysis of the generation potential and provide services for the operation and maintenance of equipment, among other functions. The aim is to further strengthen these partnerships in 2015 and evaluate potential projects for new wind power parks at a more detailed level.

We opted for wind power given that it has become much more competitive in recent years. It is also a sustainable energy source and complementary to hydroelectric power generation, since the seasons of rain and wind alternate during the year in Brazil.

\* In addition to the 29 hydroelectric plants administered by Votorantim Energia, Votorantim Cimentos has four small hydroelectric plants (SHPs) supplying its plants directly.

## **VOTORANTIM ENERGIA IN A NUTSHELL**

**29\***  
hydroelectric  
power plants

**2,604 MW**  
of installed capacity

**94 clientes**  
at year-end 2014

**R\$ 2.4 bilhões**  
in net revenues

# A step ahead

Votorantim Metais and the Votorantim Institute are investing in a project in Rondon do Pará even before knowing whether it will be possible to operate on the site



years, rising to around 73 thousand inhabitants.

Historically, the city grew due to the construction of major highways in the 1970s and 1980s. However, the investments made then did not translate into good socio-economic indicators. The municipal budget in 2013 was for R\$ 68 million of revenues and R\$ 70 million of expenditures. About 70% of the population earns up to two minimum salaries and 20% have no income at all. More than 1,150 households do not have toilets or adequate sanitation. A number of sectors are deficient, especially in health and education.

It was in this context that Votorantim Metais initiated the Alumina Rondon project. Its main objective was to minimize the risks and adverse impacts by supporting initiatives that aimed to anticipate the needs of society. In partnership with the Votorantim Institute, the company began in 2013 a social action project in the region, even before setting up any form of operation on the site. These initiatives were extended to various stakeholder groups, and the local government authorities and the local community were directly involved.

The initiatives developed for government entities focused on supporting public administration

**T**he municipality of Rondon do Pará is located 500 kilometers from Belém, the capital of the state of Pará, and within its limits, there is an area of great mineral wealth. In that region, there are two enormous plateaus that have the potential to produce 1.6 billion metric tons of bauxite, the basic raw material for aluminum production. These deposits, discovered in 1974, have been the subject of many studies in recent decades, in order to define the best way to exploit its mineral capacity.

A viable operation on this site would require an investment of about R\$ 9 billion. The bauxite would be transported to the Port of Barcarena, 500 kilometers away. Such a project would generate jobs, which would peak at around 9 thousand people during the construction phase, considering those employed directly and indirectly. Then, when the construction work has been completed, an estimated 1,600 people will be needed for ongoing operations. It has also been estimated that the population of Rondon do Pará would grow by approximately 30% within five

using the methods developed by the Votorantim Institute. A three-year agreement, signed with the municipal government of Rondon do Pará, led to the creation of two work fronts: the modernization of public administration and the improvement of the municipality's infrastructure. With an investment of approximately R\$ 765 thousand in 2014, the company helped in a number of ways. It assisted the municipal government to apply for a R\$ 5 million loan from the Brazilian National Development Bank (BNDES) through its program for Tax Collection Improvement (PMAT). The investment was also used to arrange public hearings and to develop municipal government plans, including the Master Plan, the Basic Sanitation Plan, the Urban Mobility Plan and the Housing Plan.

The Master Plan is still under review by the municipal legislature, but the others have already been approved. These plans were passed into law and, therefore, they must be adopted by future administrations. These plans also included the preparation of detailed execution schedules for four projects: water supply, solid waste (landfill), urban drainage and the collection and treatment of sewage. Together, these projects represented a potential request for R\$ 190 million for funding by a number of federal government programs.

The reasoning for supporting the improvement of public administration also applies to education. In 2013, Votorantim Metals, in partnership with the Votorantim Institute, helped introduce the Federal Government's Pronatec program into the region. This program provides professional training courses and 112 classes have already

graduated. This corresponds to more than 2,300 students who have taken training courses to prepare themselves to work in the areas of civil engineering, production, agriculture, sales and local industrial development. Furthermore, the participants were equally divided between men and women with the clear intention of promoting diversity in the workforce. By the end of 2016, it is estimated that the project will have trained around 8,000 people in the region, which covers the municipalities of Rondon do Pará, Abel Figueiredo and Dom Eliseu, facilitating their entry into the labor market.

### Environmental license

The plans to install operations in the region also depend on other factors. In 2014, an important step was made when the State Council for the Environment (Coema), in an unanimous decision, approved a preliminary environmental license for the project. The technical feasibility studies were concluded in the first half of the year, after which discussions with potential investment partners began. It is expected that the Alumina Rondon project will begin operations in 2019, with an annual production capacity of 3 million metric tons of alumina and 9 million metric tons of processed bauxite.

There are also important infrastructure issues to be resolved. To be viable the project requires improvements to the logistics systems in the region, especially in the highway and railway networks, and infrastructure at the Port of Barcarena. This has become one of the biggest challenges of the project. However, regardless of the project's implementation, the doors to the local community have been opened and the benefits for the public administration

and population in the region have already become a reality. **G4-24 G4-26**

**G4-SO1** Social and Relationship Capital

## ALUMINA RONDON PROJECT – FACTS AND FIGURES

**1.6 billion metric tons** of bauxite potential of mineral reserves in the Rondon do Pará region

**3 million metric tons** is the expected annual alumina production capacity of the project

**9 million metric tons** of bauxite processing capacity

**R\$ 9 billion** is the estimated investment for the Alumina Rondon project

**R\$ 765 thousand** were invested by Votorantim Metals in 2014, in programs to provide support to the public administration and the local community

**100 training courses** were held in the region

**2,300 people** trained in the industrial, commercial, agricultural and service areas

# A precious reserve

The Legado das Águas – Reserva Votorantim (Water Legacy) is an area of Atlantic Forest which has been preserved by Votorantim for more than 50 years. The natural reserve has enormous potential to generate new business opportunities and contribute to the development of the Ribeira Valley region.

**F**or over 50 years, Votorantim has preserved a huge area of pristine Atlantic Forest in the Ribeira Valley region of the state of São Paulo. The region comprises the municipalities of Juquiá, Miracatu and Tapiraí. The area of the Reserve is located between state parks and other protected areas. It covers 31 thousand hectares and today is one of the largest private reserves of Atlantic Forest in Brazil.

The area was officially established as a reserve in 2012 in a memorandum of understanding signed between Votorantim and the government of the state of São Paulo. It soon showed how a partnership between the private sector, the government and civil society can contribute to

environmental protection, scientific research and regional development. This vocation evolved in 2014 with the expansion of a series of initiatives carried out in partnership with universities, local municipal governments and the community in the region.

The Reserve immediately became a major subject of research by academics from the Luiz de Queiroz College of Agriculture (ESALQ), the University of São Paulo (USP), the Federal University of São Paulo (UNIFESP) and the State

University of Campinas (Unicamp). The Reserve has facilities for lectures, courses and fieldwork. The research currently being carried out includes the gathering of information on the fauna and flora, as well as studies on the preservation of biodiversity and the genetic enrichment of the forest. This research, and other studies conducted by partner institutions such as The Institute for the Conservation of Neotropical Carnivores





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(Pró-Carnívoros) and the Pro-Muriqui Association, has resulted in the sightings of a number of different animal species, many of them rare in the region, such as jaguars, ocelots and spider monkeys. The latter animal is the largest non-human primate in the Americas, endemic to the Atlantic Forest. The survey of flora, carried out through fieldwork, resulted in the identification of 782 plant species.

The initiatives with the local municipal authorities also advanced in 2014. A partnership was established to develop a public administration improvement plan between the Legado das Águas, the Votorantim Institute, Votorantim Energia and the municipal authorities in the region. The first phase of the program focused on the analysis of the accounts and budgets of five cities in the region (Miracatu, Tapiraí, Juquiá, Ibiúna and Votorantim). The next phase, planned for 2015, is to develop specific projects that help municipalities access Federal Government resources, through its various incentive mechanisms (*please see page 54 for more information on the Public Management Program*). **G4-SO1 G4-24 G4-26**

In relation to education, in 2014, the first courses of the Environment School, organized by Votorantim's corporate university, the Academy of Excellence, were held at the Reserve. The courses covered the issues related to obtaining operating licenses, environmental legal aspects and best management practices. It was attended by 20 company employees.

In 2015, we intend to increase the number of Versions of the course and extend them to external audiences. We will also offer other corporate training courses for managers of companies interested in learning about Votorantim's technology, and its environmental and social management methods. **G4-A9**

### New business

The work at the Reserve opens up opportunities to better exploit the economic potential of the region, such as eco-tourism, and the fostering of small businesses that contribute to local development. The Reserve itself has great potential for generating shared value and is a good example of how Votorantim's assets can generate opportunities that go far beyond the traditional sectors in which the company operates.

The approval of the Reserve's business plan in 2014 opened up a number of possibilities in this regard. In 2015, a seedling nursery will be installed to cultivate and market native Atlantic Forest species for reforestation and sustainable landscaping. The goal is to have the first seedlings available by the end of the year and be ready to enter this market in 2016. Other opportunities are under development, such as the rental of forestry offsets, the sustainable exploitation of forest assets, and numerous possibilities related to biodiversity research in the Atlantic Forest biome. **G4-EN13**

**Natural Capital Social and Relationship Capital GCDE**



## 5 INTERESTING FACTS ABOUT THE LEGADO DAS ÁGUAS

1. The area of the Reserve corresponds to 1.5% of the remaining Atlantic Forest in the state of São Paulo
2. The Reserve is ten times larger than the Tijuca Forest in Rio de Janeiro, and five times larger than the Cantareira Park, in São Paulo
3. Over R\$ 1 million was invested in the Reserve's management plan. Work on the development of the plan began in 2013 and it will be completed in 2015 **G4-EN31**
4. Research in the region indicated that 75% of the area of the Reserve is in excellent state of conservation. The remaining 25% is in intermediate stage of regeneration
5. In a pioneering initiative, with the photographer Luciano Candisani, we obtained the first recorded sighting of an albino tapir, in its natural habitat, using trip cameras installed in the Reserve