

# REPORT 2016



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## Education as a legacy

About to celebrate its 100th anniversary, Votorantim elects education as its great legacy for future generations

16

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## Strength of the Portfolio

Diversity of portfolio and financial discipline help mitigate the challenges imposed by the political scenario and downturn of the economy in Brazil

51

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## Governance, Risk, and Compliance

Introduction of the new Code of Conduct and review of the anticorruption policy are the highlights in the process to improve risk management and compliance

21

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## Centers of Excellence

New system to prevent losses expands the control over processes and increases productivity

29

## Introduction

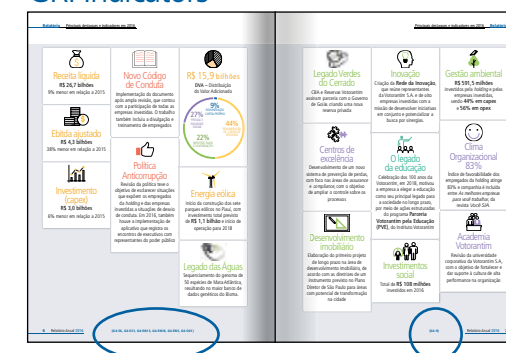
The 2016 Votorantim S.A. Report presents the main activities and results of the holding Votorantim S.A. and of the investee companies in the period, including financial and non-financial information pertaining to the main indicators monitored by the company.

Content development considered the principles and guidelines of the Global Reporting Initiative (GRI), G4 version, of the International Integrated Report Council (IIRC), of the United Nations Global Compact (UNGC), and of the Organization for Economic Co-operation and Development (OECD).

Detailed information regarding the investee companies (Votorantim Cimentos, Votorantim Metais, Companhia Brasileira de Alumínio, Votorantim Siderurgia, Votorantim Energia, Fibria, Citrosuco, and Banco Votorantim) can be found in the annual reports of each company.

The PDF version of this report can be accessed at [www.votorantim.com/relatorio](http://www.votorantim.com/relatorio) and includes the Consolidated Financial Statements of the holding company Votorantim S.A., as well as the Content Index with all GRI indicators. To help us continue advancing in our reporting process and in our management, send your feedback, suggestions and comments to [contato@votorantim.com](mailto:contato@votorantim.com).

## GRI Indicators



GRI indicators are located in the footers of the pages where the topics are covered.

## Interactive PDF

Click the [links](#), index items, and GRI indicators in the footer to navigate through the report and access additional information.



MESSAGE FROM THE MANAGEMENT  
**Ready for the future**

4

**Highlights  
of the year**

6



**Portfolio Management**

8

INVESTEES COMPANIES

**Long-Term Businesses**



12



STRUCTURE

**The role of each of us**

Constantly evolving companies require a solid governance structure, with different instances acting together in strategic decision-making

21

COMPLIANCE AND ANTICORRUPTION POLICY

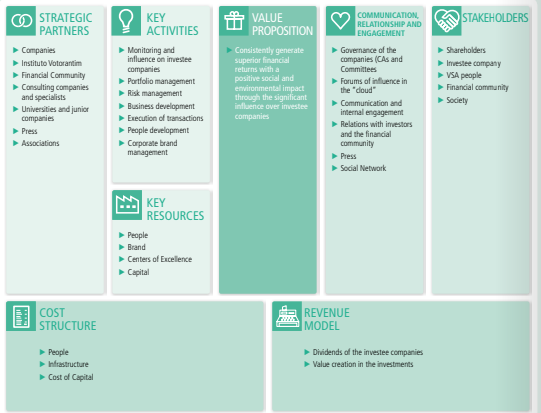
**Responsible autonomy**

24



BUSINESS MODEL

**A Defined Path**



15

100 YEARS OF VOTORANTIM

**Education as a Legacy**

About to celebrate 100 years of activity, Votorantim elects education as its main legacy to society.

16

MANAGEMENT

**Challenges for the Future**

Several aspects influence the activities of Votorantim S.A.. See the most important ones.

18



CENTERS OF EXCELLENCE

**Benchmark performance**

29

INSTITUTO VOTORANTIM

**Social strategies**



Focused on public management, education, and other aspects that are relevant to society, the Votorantim Institute programs contribute to creating shared value between the investee companies and the surrounding communities

32

RESERVAS VOTORANTIM

**Biodiversity as a business**

38

REAL ESTATE DEVELOPMENT

**Urban planning**

40

INNOVATION

**Invitation to innovate**

41



MARKET CONTEXT

**Strength of the Portfolio**

51



DEVELOPMENT

**Focus on development**

45

ATTRACTION AND RETENTION

**Young Talent**

Talent attraction initiatives and partnerships with universities and junior companies already fill 12% of the job openings at Votorantim S.A.

47

ENGAGEMENT

**The importance of work environment**



Employee satisfaction, measured in the annual engagement survey, reflects the improvement of personnel management within Votorantim S.A. and guides action and improvement plans

48



Highlights for the period and the main projects and actions in the social and environmental area. An overview of the eight investee companies of Votorantim S.A.

57

ABOUT THE REPORT

74

GRI INDICATORS

77

INDEPENDENT AUDIT

111



# READY FOR THE FUTURE

Votorantim will celebrate its 100th anniversary in 2018. Having started as a textile plant in the State of São Paulo, the company has transformed itself and expanded its company portfolio – it currently employs 44,000 people and operates in 23 countries.

Throughout the 20th century, Votorantim's journey was closely linked to Brazil's industrialization and development. Over the past 20 years, the company has been enhancing its governance model in an ongoing process that has resulted in a revitalized structure which maintained family control. Shareholders migrated from management to the Boards; company values were reinforced; best management practices were identified and synergies were captured; sustainability principles were incorporated into our strategy; and the Votorantim Institute was created in order to guide the company's private social investments, in line with the strategy of each company in the portfolio.

In the last three years, the company has accelerated this transformation process. The ownership structure was simplified and Votorantim S.A., the holding company that holds interests

in investee companies, focused its attention on portfolio management and the operation of three solution centers in the areas of information technology; shared services in finance, human resources and accounting; and real estate asset management. The investee companies have gained more autonomy to develop their strategies, advisory committees were created, and independent members joined the Boards of Directors of the companies and Votorantim S.A.

The legacy of this journey of almost 100 years inspires new generations and the people who work at Votorantim to face the challenges expected for the coming years: climate change, geopolitical issues, and increasingly less predictable high-impact events. To face these challenges, Votorantim is constantly improving its business management, with great attention to social and environmental issues.

The concept of sustainability was developed nearly 30 years ago, when a UN commission published the report "Our Common Future," in which sustainable development was defined as a way to meet the needs of present generations without compromising the ability of future generations to satisfy their own needs. Since then, sustainability has become part of the public debate.

While revisiting its history, Votorantim identified several moments in which it showed concern for this aspect, long before it was incorporated in its corporate jargon. The company became signatory to the UN Global Compact and defined streamlined production as one of its management principles, respecting the legitimate demands of society.

To mark the passing of its centennial, Votorantim, which has always been committed to building a better future, chose to focus its efforts on Education. As of 2017, the company will expand its *Parceria Votorantim pela Educação - PVE* (Votorantim Partnership for Education) program, which has proved to be very effective in improving public education in Brazil, given that participating municipalities increased their grades on official

assessments by 35%, on average, compared with other similar cities in Brazil.

This is a long-term commitment, since the PVE has an average duration of four years in each municipality in order to ensure the continuity of the achievements. Votorantim understands that quality education is the basis of a fairer and more inclusive society, as it builds more conscious citizens, and prepares future generations of more qualified professionals, thereby helping improve the business environment and the country's competitiveness.

As it approaches its centennial, Votorantim seeks to renew itself for the challenges of an increasingly volatile, complex, ambiguous, and uncertain world. In 2016, we launched "18.18", a company transformation initiative based on the major aspects that will affect or are already transforming the business environment. The company's entire senior management - almost 400 L - interacts with references, content and experiences, and is encouraged to create specific action plans for each company. We believe that people are still our main competitive advantage.

Votorantim's planned investments in education and development have come at a particularly challenging time for its companies. 2016 was fraught with uncertainties in the Brazilian and global scenario.

In Brazil, we had the impeachment of the President of the country, advances in the fight against corruption, and the most severe economic crisis in the country's history, with a drop in GDP of nearly 8% in the last three years. As a result of this scenario, there was an increase in unemployment among the economically active population, restricted access to credit, and a sharp decline in several sectors of the economy, directly affecting our businesses in the domestic market.

In the international scenario, events such as the UK's decision to exit the European Union and the result of the presidential election in the United States brought about new perspectives. We also witnessed the escalation of the conflict in Syria and the refugee crisis, as well as concerns about the soundness of economic growth.

In this environment, Votorantim paid special attention to its financial metrics in order to properly cope with this period. The planning process and the long-term vision allowed the company to prepare for a more challenging scenario, and the necessary adjustments were made to the operations of our investee companies before the crisis escalated so that our business could remain competitive.

The planned investments were maintained as a demonstration of

our confidence in the future. These include the expansion of Fibria's pulp plant in the state of Mato Grosso do Sul, new cement plants in the United States and Turkey, the extension of the useful life of our zinc mines in Brazil and Peru, and the beginning of the construction of our first wind farms in the state of Piauí. The company's internationalization process, initiated in 2001, and the diversification of its businesses enabled it to face the turmoil and mitigate impacts from the downturn in the Brazilian market.

Throughout our history, we have learned that business has cycles and that it is critical to make portfolio decisions with a long-term vision. We have demonstrated we are able to respond to this challenge. We are overcoming the current crisis with hard work, planning, and resilience. Our values, our beliefs, our history, and our vision for the future have guided our day-to-day decisions and allowed Votorantim to remain sound and enterprising, with the ability to reinvent itself and continuously grow and excel.

**Raul Calfat**, Chairman of the Board of Directors of Votorantim S.A.

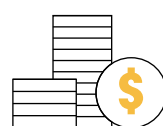
**João Miranda**, CEO of Votorantim S.A.





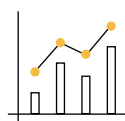
## Net revenue

**BRL 26.7 billion**  
9% less than in 2015



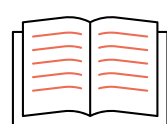
## Adjusted EBITDA

**BRL 4.3 billion**  
38% less than in 2015



## Investment (Capex)

**BRL 3.0 billion**  
6% less than in 2015



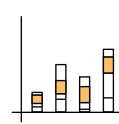
## New Code of Conduct

Implementation of the document after extensive revision, with the participation of all investee companies. The work also included the communication of the New Code of Conduct and training of employees.



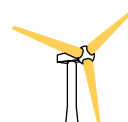
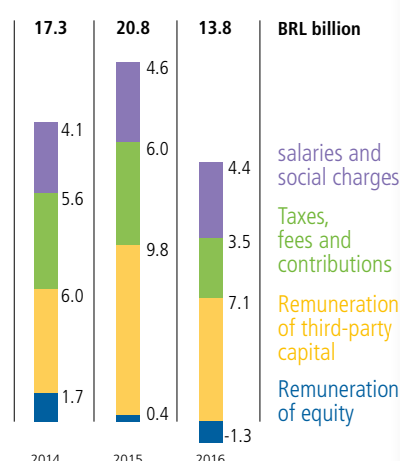
## Anti-corruption policy

The goal of the policy revision was to clarify situations that expose the employees of the holding company and investee companies to potential misconduct. In 2016, there was also the launch of an app that registers meetings between executives and public authorities.



## BRL 13.8 billion

VAS - Value Added Statement



## Wind power

Beginning of the construction of the seven wind farms in Piauí, with total planned investments of **BRL 1.1 billion** and start of operations in 2018.



## Legado das Águas

Genome sequencing of **50 species** native to the Atlantic Rainforest created the largest genetic database of this biome.



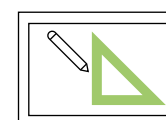
## Legado Verdes do Cerrado

CBA and Reservas Votorantim enter into a partnership with the Goiás State Government in order to create a new private reserve



## Centers of Excellence

Development of a new loss prevention system, focusing on assurance and compliance, with the aim of increasing control over processes.



## Real estate development

Creation of the first long-term project in real estate development, in accordance with the guidelines of the São Paulo Master Plan for areas with potential for transformation in the city.



## Innovation

Creation of the **Innovation Network**, which brings together representatives from Votorantim S.A. and eight investee companies with the mission of developing joint initiatives and strengthening the pursuit of synergies.



## The Education Legacy

Votorantim's 100th anniversary, in 2018, motivated the company to choose education as its main long-term legacy for society, through structured actions of the **Votorantim Partnership for Education (PVE)** program, promoted by the Votorantim Institute.



## Social Investment

More than **BRL 108 million** was invested in 2016



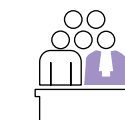
## Environmental management

**BRL 583,6 million** invested by the holding company and Votorantim companies, of which **44% in CAPEX** and **56% in OPEX**



## Organizational Climate 83%

The favorability rating among employees of *the holding company* reached 83%, and the company is included in *The Best Companies to Work for* list, of the magazine *Você S/A*.



## Votorantim Academy

Restructuring of Votorantim S.A.'s corporate university, in order to strengthen and support a high-performance culture with in the organization.



# Votorantim S.A.



## PORTFOLIO MANAGEMENT

Votorantim S.A. works to consistently generate superior financial returns with a positive social and environmental impact by exerting a significant influence on its investee companies.

Votorantim S.A. is a private equity organization, the holding company of the Votorantim companies. Controlled by the Ermírio de Moraes family, it is responsible

for defining and developing the business portfolio, in addition to contributing to the development of leaders and caring for the integrity of the corporate brand.

Its value proposition is to generate superior financial returns for its investments, with positive social and environmental impacts, working in the areas of

cement, polymetals, aluminum, long steel, energy, pulp, orange and finance. With headquarters in the city of São Paulo, Votorantim S.A. recorded net revenue of BRL 26.7 billion in 2016, a result that consolidated the performance of the business investments in the period.

The structure of the holding company also features three company-wide centers of excellence that seek to ensure competitiveness through administrative and financial solutions for the investee companies: the Shared Solutions Center (CSC), the Information Technology Competence Center (CCTI) and the Real Estate Solutions Center (CSI). These centers excel in developing management

systems and processes designed to generate gains in scale and increase the organization's productivity, operational stability, and business competitiveness ([read more on page 29](#)).

In the social area, the Votorantim Institute proposes and conducts private social investment programs. With social technologies that impact communities, the Institute offers investee companies opportunities for synergy between society and business.

In 2015, the company created Reservas Votorantim, with the mission of transforming natural and cultural assets into sustainable businesses capable of conserving biodiversity and generating shared value.

### VOTORANTIM S.A. IN NUMBERS



882 employees



41% men and  
59% women



8 investee companies



3 centers of excellence



Responsible for Legado das Águas, an area with 31,000 ha in the state of São Paulo, in February 2017, the Institute assumed the management of a new reserve in the state of Goiás, Legado Verdes do Cerrado, which belongs to Companhia Brasileira de Alumínio, and comprises an area of 32,000 ha ([read more on page 39](#)).

This vision has helped

consolidate Votorantim, over time, as one of the largest business groups in Brazil, gaining a prominent leading position in the various sectors in which it operates. In almost one hundred years of activity, to be completed in 2018, the organization has contributed to the country's development and has built a brand that is now present on five continents.

As it approaches its centennial, the corporation reaffirms its long-term vision and continues to invest in creating value for its various stakeholders, so that it may follow the evolution, the changes, and the challenges of the business environment, in an increasingly more volatile and dynamic world. ▼



## VOTORANTIM'S IDENTITY

Votorantim's identity is defined by a set of values and beliefs that guide the performance of all the people working for the holding company and the investee companies.

### OUR VALUES

**SOUNDNESS** – to seek sustainable growth and generate value  
**ETHICS** – to operate responsibly and with transparency  
**RESPECT** – to respect people and willingness to learn  
**ENTREPRENEURSHIP** – to grow with courage to accomplish, innovate, and invest  
**UNITY** – the whole is stronger

### OUR BELIEFS

**CULTIVATING TALENTS** – We believe in and trust people, so we invest time and resources in cultivating our talents.

**MERITOCRACY** – We believe that people are unique, and therefore, deserve to be valued fairly and according to their actions.

**EXCELLENCE** – We believe that we can always do more and better, overcoming challenges with discipline, humility, and simplicity.

**PRAGMATISM** – We believe that it is essential to dedicate efforts to what is important, with objectiveness and without losing the big picture and vision for the future.

**OPEN DIALOGUE** – We believe that a trusted environment provides open dialogue and space to speak and be heard, where diverse opinions build better solutions.

**ALLIANCE** – We believe that our success is the result of joint building, strengthened by genuine relationships and alliances in which everyone wins.

**SENSE OF OWNERSHIP** – We believe in those who take responsibility, work with passion, and lead by example, celebrating achievements and transforming mistakes into learning.

# Investee companies



Industry Sector:

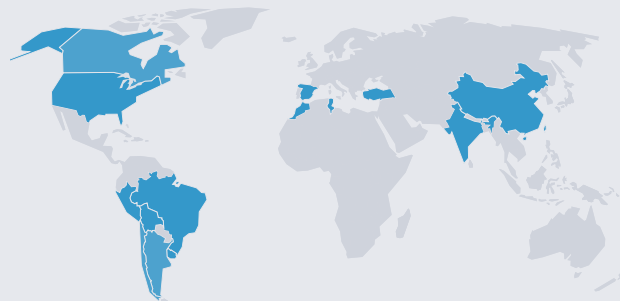
Cement, aggregates, concrete, and mortar



13,733  
employees

Presence in  
14 countries

352  
operating units



Industry Sector:

Special zinc alloys and its byproducts



5,561  
employees

Presence in  
7 countries

16  
operating units



Industry Sector:

Generation and trading of electricity



486  
employees

Presence in  
8 Brazilian states

34  
operating units



Industry Sector:

Pulp



4,309  
employees

Presence in  
4 countries

17  
operating units



Companhia Brasileira de Alumínio  
Votorantim

Industry Sector:

Aluminum and nickel



5,203  
employees

Presence in  
3 Brazilian states

9  
operating units



Industry Sector:

Long steel



4,908  
employees

Presence in  
3 countries

9  
operating units



Industry Sector:

Orange juice



5,388  
employees

Presence in  
7 countries

47  
operating units



Sector:

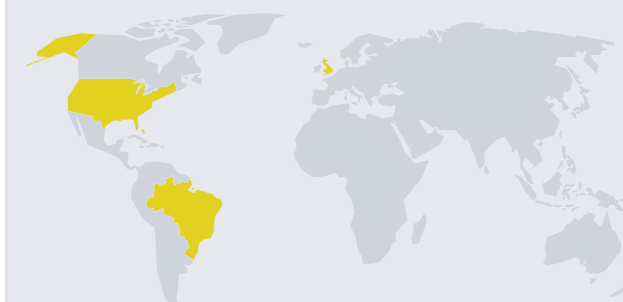
Wholesale banking, asset management, and retail



4,045  
employees

Presence in  
4 countries

81  
Units



Votorantim is present in core industry sectors through seven investee companies, in addition

to operating in the financial segment with Banco Votorantim. Together, these businesses employ 44,000

people worldwide and total over 560 operating units located in 23 countries in five continents. ▼



# DEFINED PATH

Votorantim S.A.'s value proposition is to consistently generate superior financial returns with a positive social and environmental impact.

Votorantim S.A. described its business model through the Canvas methodology; a tool that allows for the development of a visual map with the core elements that translate the priorities and responsibilities of the company.

Developed by leadership and subsequently presented and discussed with employees of the holding company, Canvas explains in a simple manner the role of the portfolio manager for the entire organization. The chart also shows the paths and

necessary resources for the company to generate value and achieve its goals, indicating its main partners and suppliers, key activities and necessary resources, relationships, cost structure and sources of income, among other aspects. ▼



## STRATEGIC PARTNERS

- ▶ Companies
- ▶ Instituto Votorantim
- ▶ Financial Community
- ▶ Consulting companies and specialists
- ▶ Universities and junior companies
- ▶ Press
- ▶ Associations



## KEY ACTIVITIES

- ▶ Monitoring and influence on investee companies
- ▶ Portfolio management
- ▶ Risk management
- ▶ Business development
- ▶ Execution of transactions
- ▶ People development
- ▶ Corporate brand management



## KEY RESOURCES

- ▶ People
- ▶ Brand
- ▶ Centers of Excellence
- ▶ Capital



## VALUE PROPOSITION

- ▶ Consistently generate superior financial returns with a positive social and environmental impact through the significant influence over investee companies



## COMMUNICATION, RELATIONSHIP AND ENGAGEMENT

- ▶ Governance of the companies (Executive Boards and Committees)
- ▶ Forums of influence in the "cloud"
- ▶ Communication and internal engagement
- ▶ Relations with investors and the financial community
- ▶ Press
- ▶ Social Network



## STAKEHOLDERS

- ▶ Shareholders
- ▶ Investee company
- ▶ Votorantim S.A. employees
- ▶ Financial community
- ▶ Society



## COST STRUCTURE

- ▶ People
- ▶ Infrastructure
- ▶ Cost of Capital



## REVENUE MODEL

- ▶ Dividends of the investee companies
- ▶ Value creation in the investments

# Long-Term Businesses



# EDUCATION AS A LEGACY



About to celebrate 100 years of activity, Votorantim elects education as its main legacy to society and creates a program that involves all its employees in the company's modernization

Votorantim will celebrate its 100th year in 2018 and the proximity of its centennial motivated the company to reflect on the legacy the company intends to leave to Brazilian society. After broad consultation, which included the participation of shareholders and employees, the holding company chose education as the main cause of this celebration, believing that improvement in this field is instrumental for the sustainable

development of Brazil.

Accordingly, through the Votorantim Partnership for Education (PVE), a program managed by the Votorantim Institute ([read more on page 37](#)) which works to elevate the quality of education, Votorantim has established that the investment will be substantially expanded so that more municipalities can benefit from this Program. By 2017, we expect to reach the mark of 50 Brazilian cities served.

We intend to involve all employees in the aspect of education, from those who work directly with the PVE to those who can participate more actively in the educational evolution of their children and other family members. To this end, an internal mobilization campaign will be initiated, whose main channel will be an electronic platform that will gather content about education, where employees may interact with this aspect.

## Program 18.18

What will Votorantim be like in the next 100 years? With its upcoming centennial, Votorantim asked its employees this question in order to stimulate reflection on current

issues that will have impact on the future, through five major aspects: High Performance Culture, Emerging Technologies and new forms of consumption, Business Design, Conscious Transformation, and a Global Mindset.

The idea is to raise awareness among the executives and managers concerning the changes that have been occurring in society, seeking a set of solutions that guarantee the company's continuity in a world that is quickly changing.

Created in 2016, the 18.18 program relies on several actions to broaden the connection of people with trends and movements that influence the future of organizations, to prepare leaders and teams to implement models compatible with emerging demands, to promote the alignment between purpose and vision for the future, and stimulate environments, behaviors and processes that strengthen the collective intelligence among different businesses and multiple generations.

To achieve these goals, the program offers extensive content to update and deepen participants' knowledge - gathered in an exclusive portal - as well as conferences, meetings, dialogues, exploratory research and other initiatives.

The objective is for the ideas and initiatives generated during the program to influence the planning and practices at Votorantim. ▼



## THE FIVE MOVEMENTS OF 18.18

### [2016 Movements] HIGH PERFORMANCE CULTURE

How organizations have adapted to the challenges of today:

- ▶ promoting differentiated environments
- ▶ encouraging autonomy and innovative behavior
- ▶ creating and supporting complex structures
- ▶ developing new labor models;
- ▶ and inspirational governance;

How to foster leadership development through the concepts of meritocracy, empathy, self-management, and transparency?

### [2017 Movements] EMERGING TECHNOLOGIES AND NEW FORMS OF CONSUMPTION

What are the impacts of technological developments and business models in companies and in our lives?

### [Upcoming movements] BUSINESS DESIGN

How to foster the creation, (re) design, or incorporation of business models with potential to disrupt the market, for:

- ▶ Innovative proposals for products, services, and technologies
- ▶ channels/market access
- ▶ marketing and client relations

### CONSCIOUS TRANSFORMATION

- ▶ How to promote individual changes through the expansion of awareness and the new way of viewing the organization and the dynamics of systems?
- ▶ What are the possible business models in which personal and collective values contribute to the growth and sustainability of the business?

### GLOBAL MINDSET

- ▶ How to encourage people to be prepared, motivated and active with global thinking?
- ▶ What are the attitudes and practices appropriate to the context of the world in which we live?





# CHALLENGES FOR THE FUTURE

Several aspects influence the activities of Votorantim S.A.; see the most important ones

## Business environment

The major challenge for Votorantim S.A. and its investee companies in recent year relates to the macroeconomic scenario, especially in Brazil. Votorantim's management model yielded better results than most corporations, despite the exchange variation and volatility of commodity prices, which are factors that directly impact the production and operation of the investee companies. To cope with the economic recession and remain

competitive, several plans have been implemented in every business. Operational excellence and strict cost management are among the most important, but they are not the only plans. There are also initiatives aimed at improving processes and specific strategies for the industry sector of each company.

## Portfolio Management

Portfolio diversification, planning, and assertive

decision-making contribute to the company's resilience, especially in times of crisis. Votorantim S.A. maintains an active portfolio management, attentive to the increasingly faster changes in the business environment. To guarantee the organization's continuity over the next 100 years, it will be necessary to advance the portfolio in order to face transformations in market, as well as to the new demands and necessities of society in general.

## Innovation

There are several ongoing initiatives in our investee companies that support innovation in order to raise business competitiveness, overcome challenges, enhance processes and develop products, or even improve management. There are examples of environmental, social, and operational innovation that also provide financial benefits and gains in productivity. At the holding company, however, the great challenge is to continue to foster, through governance, a culture of innovation and apply this culture to the business,

in order to create solutions that accompany the evolution and market needs in general. To this end, important actions are underway, such as the strengthening of a specific working group for this purpose, which brings together professionals from the holding company and the investee companies ([read more about this on page 41](#)). Innovation will also be instrumental for Votorantim S.A. to remain competitive in the long term, stay connected to macro trends, and be prepared to create value and meet the future demands of society.

## Diversity

In December 2016, only 15.5% of leadership positions at our investee companies and the holding company were held by women. In this sense, the effort has mainly occurred when joining the company. In the *Potenciar* Program, which integrates high-potential trainees and young employees and works to prepare future leaders, we have the following ratio: among trainees, 66% are men and 34% are women; among interns, 45% are men and 55% are women. ▼



# Governance, Risks, and Compliance

## THE ROLE OF EACH OF US

Constantly evolving companies require a solid governance structure, with different instances acting together in strategic decision-making

the company's Board of Directors. At Fibria, a publicly held company that is a member of BM&FBOVESPA's Novo Mercado, the holding company holds a 29.42% stake. Banco Votorantim has been sharing shareholding control with Banco do Brasil (BB) since 2009, when BB acquired 50% of the institution's capital stock.

In recent years, Votorantim S.A. implemented a governance model that consolidated the holding company in the instance of monitoring and influence upon its investee companies, responsible for defining strategic and portfolio macro-guidelines.

The highest body of this framework is the Board of Directors of Votorantim S.A., comprised of 12 members, and whose chairman is Raul Calfat, who took office in 2014. Eight members are a part of the Ermírio de Moraes family. Three others are independent board members.

The investee companies have their own Board of Directors and are responsible for operations and conducting business and for defining multiyear strategic planning and for the conduction of investments required to achieve their aspirations. The bodies are formed

by executives and members of Votorantim S.A. Board of Directors, and independent members.

### A HEJOASSU

Votorantim S.A. is controlled by Hejoassu, a holding company that is formed by 12 members involving the four branches of the Ermírio de Moraes family, with 25% interest each. From Hejoassu comes the values, principles, and strategies that permeate Votorantim

In order to more adequately reflect business operations, Votorantim Industrial S.A. merged with its parent company Votorantim Participações (VPAR) on January 1, 2016, and changed its corporate name to Votorantim S.A..

At Citrosuco, Votorantim S.A. divides shareholding control with the Fischer Group, with a 50% stake each, and is represented by two shareholders on

### Votorantim Metais

By June 2016, three businesses were managed under the name Votorantim Metais: zinc, nickel, and aluminum. After the segregation of these operations, Votorantim Metais concentrated its operations on mining and metallurgy and other products associated with these processes, benefiting from the integration between mines and smelters, both in



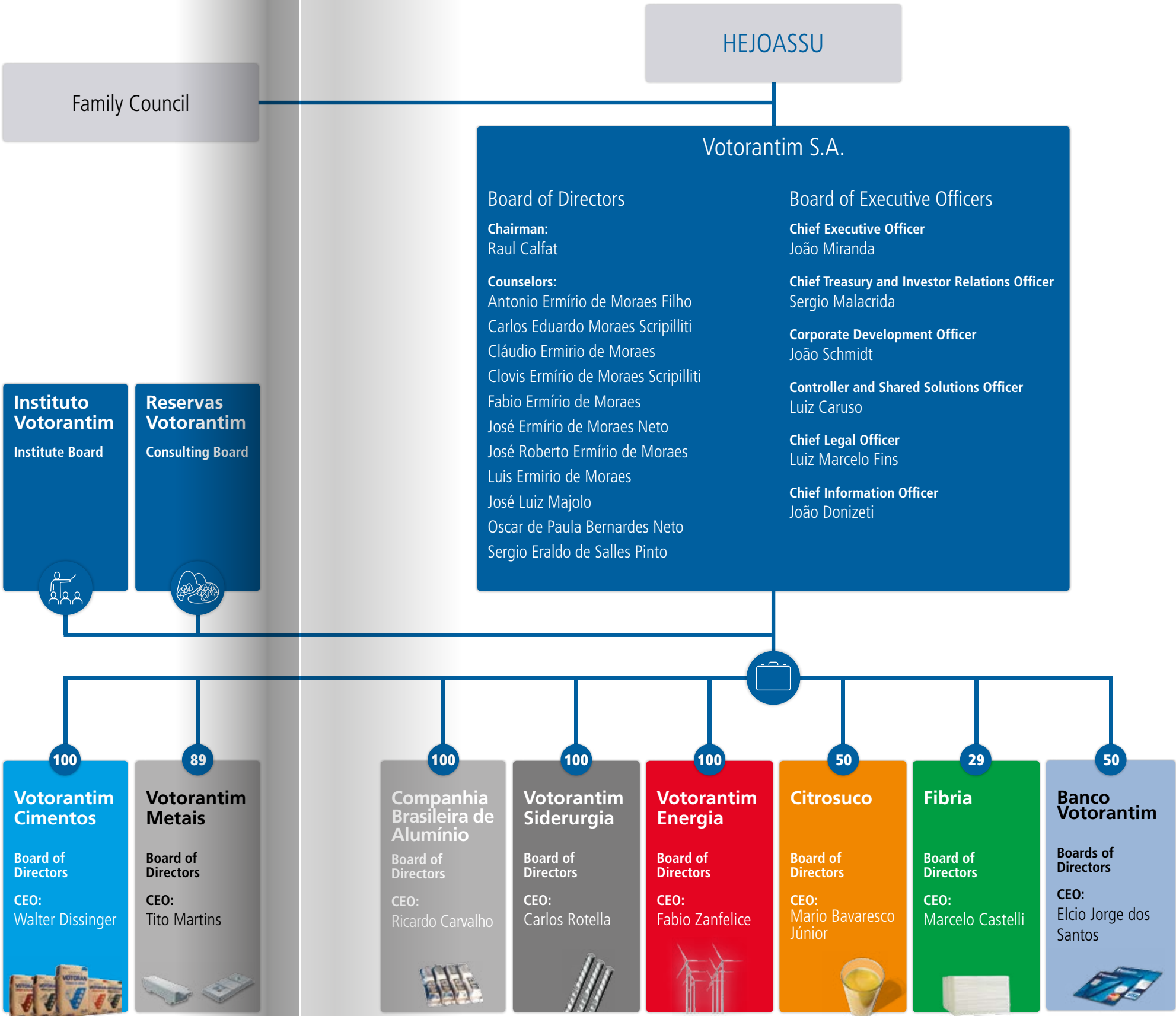
FAMILY COUNCIL

The Family Council has existed since 2001, and its strategy is to develop, support, and train sustainable leaders and shareholders for succession in the family and business of Votorantim, as well as to preserve the legacy and the values of the Ermírio de Moraes family, managing communication among members and manage the flow of information about the businesses, decisions, and family relationships. The council represents the whole family, which is now in its 5th generation. The council is composed of seven members of the third and fourth generations, over the age of 26.

Brazil and Peru. In this process, Votorantim Metais increased its participation to 80.24% in the Peruvian mining company Milpo, which repurchased 2.75% of its own shares. Additionally, VM received investments corresponding to 10.65% of its capital, from minority shareholders, aiming to consolidate itself among the major global players in the zinc industry.

Companhia Brasileira de Alumínio

Companhia Brasileira de Alumínio (CBA) operates in the aluminum value chain, from the mining of bauxite to the production of primary aluminum and products such as slabs, coils, sheets, and extruded profiles. As of June 2016, the assets of the nickel business were incorporated to CBA, and have had their operations suspended since April 2016 as a result of structurally depressed prices in the global market, rendering the operation infeasible.







# RESPONSIBLE AUTONOMY

Votorantim S.A. and the investee companies improve their risk management and compliance frameworks

## CORPORATE PROGRAMS

### COMPLIANCE PROGRAM

Created in 2013, the Compliance Program aims to ensure that Votorantim S.A. manages its business with integrity and transparency, always seeking high ethical standards. All actions, decisions, and relationships with stakeholders must be guided by the values of the company: soundness, ethics, respect, entrepreneurship, and unity.

The continuous evolution of the investee companies in this area is driven by the work of the Compliance Working Group, formed by the managers responsible for the aspect at the various companies. At regular meetings, experiences are shared and policies and guidelines are collaboratively constructed.

Votorantim S.A. and its companies also offer the Ethics Line (0800 89 11 729), a channel that answers questions and receives complaints about inappropriate conduct.

### RISK MANAGEMENT

For the continuity and sustainability of its businesses, Votorantim S.A. has in place a framework to manage a wide variety of risks: strategic, regulatory, financial, social, environmental, and political, among others.

The investee companies follow the same risk identification and mitigation model (see diagram on page 27); however, they are at different stages of implementation. In addition to the Governance, Risks, and Compliance area of the holding company, which operates in partnership with the various businesses, each company has its own risk management area that reports its activities through the company's governance structure.

Since the consolidation of the new governance in 2015, Votorantim S.A.'s Governance, Risk, and Compliance (GRC) area acts in a purposeful and consultative manner when improving the framework, processes, and procedures of the investee companies. With this, the holding company seeks to gradually transfer the management of the specific aspects of each company, retaining the attributions of a portfolio manager - that is, correlating the

risks and opportunities of the various segments in which it operates, adapting the portfolio when necessary, and preserving the image and reputation of Votorantim.

The work toward standardizing the criteria in the various businesses is through establishing principles and guidelines, which are discussed, disseminated, and monitored by corporate programs, working groups, audit committees, as well as by the Boards of

Directors of the companies and the holding company.

In 2016, this structuring movement was consolidated via significant advancements. One such advancement was implementing a new Code of Conduct, single for all the companies controlled, which was thoroughly revised by all investee companies. The document gained two new sections, on the Anti-Corruption Policy and conflicts of interest, and was generally rewritten to become



a clearer and more objective guide to what is expected of employees, outsourced professionals, and suppliers. The content was also expanded by developing concrete examples of situations concerning ethical dilemmas, which will be updated annually – something new in this type of document.

This work was followed by widespread dissemination and employee training. The process was supported by the information technology area, by launching e-learning and an app for tablets and smartphones. These tools and the intensive use of communication channels ensured buy-in of all internal stakeholder of the holding company to the content of the new code.

## Anti-corruption policy

A similar process was the revision of the Anti-Corruption policy (see table below), aiming to clarify situations that expose the employees of the holding company and of the investee companies to situations of misconduct. The document makes clear, for example, that it is forbidden to hire suppliers recommended by government representatives.

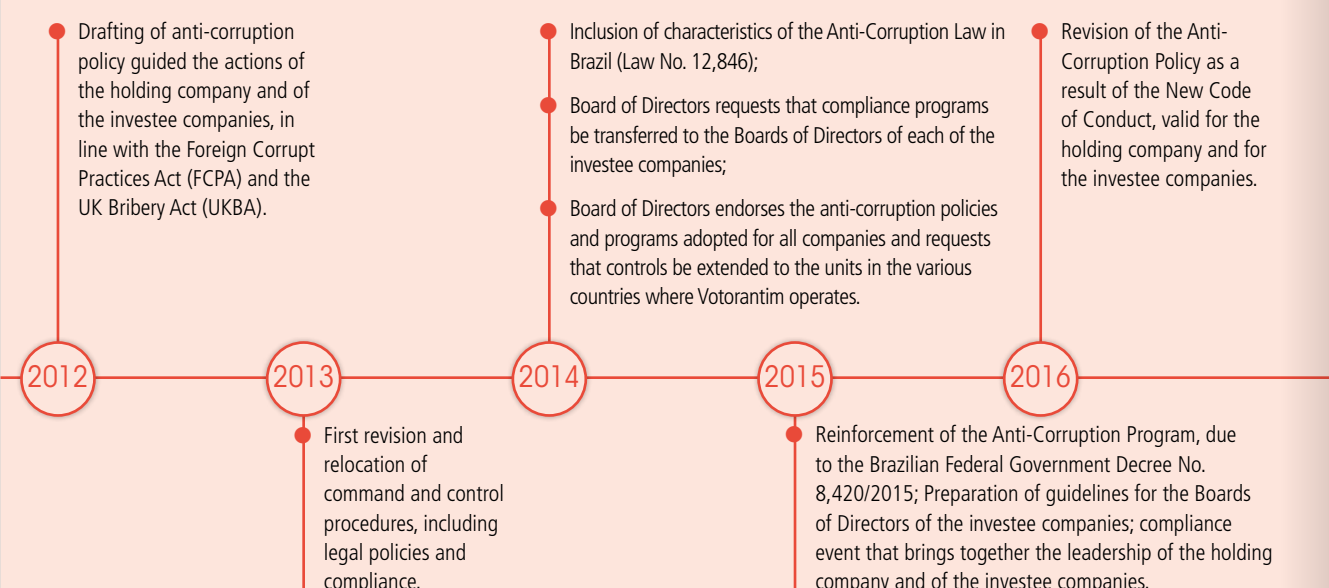
Supplier monitoring is now carried out by the contract manager, instead of the compliance area. The goal of this measure was to strengthen the company's day-to-day compliance culture. In 2017, a new questionnaire focused on the anti-corruption issue will

be integrated into the Votorantim S.A. supply process and made available to the investee companies.

Another relevant initiative in the anti-corruption improvement process was the development of an app through which meetings between executives and public authorities can be recorded.

Votorantim's investee companies are also encouraged to continually map their regulatory framework business, adequately preparing themselves to comply with legislation. They must also continually structure processes for identifying and mitigating risks specific to their businesses, based on a common management model. ▼

## ANTI-CORRUPTION INITIATIVES OVER TIME

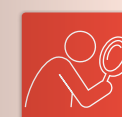


## VOTORANTIM'S RISK MANAGEMENT MODEL



### ESTABLISHING THE CONTEXT

Understanding of Votorantim's internal and external business model and environment, from a risk perspective. This stage involves the mapping and continuous review of business processes, and assesses and classifies them according to maturity levels.



### IDENTIFYING RISKS

Together, business areas and risk areas identify the events that threaten our chances of achieving our goals. These events are classified according to magnitude and follow legal, financial, strategic, operational, and compliance criteria, among others.



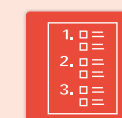
### RISK ANALYSIS

Collaborative construction of the risk matrix based on the probability of the occurrence of risk events and the magnitude of their tangible and intangible impacts. Risk analysis involves assessing the causes and sources of risks, their positive and negative consequences, and the likelihood that these consequences may occur. The matrix, in turn, guides action plans for handling risks of greater magnitude and probability of occurrence.



### RISK ASSESSMENT

The purpose of this stage is to assist decision making based on the results of risk analysis, including identifying which risks require attention and prioritizing how we handle each risk. Risk assessment also involves comparing the level of risk found according to risk appetite and tolerance criteria, defined and approved by the higher decision-making bodies.

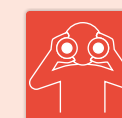


### HANDLING RISKS

Handling risks involves a cyclical process consisting of:

- ▶ assessing how the risk had already been handled;
- ▶ deciding whether the levels of residual risk are tolerable;
- ▶ if they are not tolerable, defining and implementing a new way of handling the risks, and assessing the effectiveness.

The business area is responsible for dealing with risks, accompanied by the one formally responsible for the risk (risk owner) and by the Governance, Risk and Compliance area.



### RISK MONITORING

Monitoring exposure to risk is carried out by the risk management area and reported to the higher decision-making bodies. This process is part of monitoring the context, identifying new risks, and updating exposure using KRI (Key Risk Indicators).

# Value Creation

## BENCHMARK PERFORMANCE

Centers dedicated to developing processes, such as CSC and CCTI, are increasingly recognized for excellence, innovation, and the ability to generate gains in scale.

Votorantim was one of the first companies in Brazil to implement robust centers of excellence, focused on standardizing norms and procedures, on economy of scale, and on increased productivity. Over time, these centers developed, incorporated new tasks, and gained attributions that resulted in capturing synergies among the investee companies, so that they ensure more efficient operations and increase the competitiveness of the business.

Today, these controls offer services in many areas and continue to expand their scope of operation. The oldest and largest is Votorantim Curitiba, created over 10 years ago and formed by the areas of CSC (Shared Solutions Center), General Accounting and Financial Center, and its main activity is to consolidate Votorantim and investee companies, in addition to operating in accounting,

finance, and payroll of the holding company and of the investee companies, in addition to working in solutions for cash management, risk management, middle office, and financial operations.

In 2016, an important action at Votorantim Curitiba was the development of a new loss

prevention system, focused on the assurance and compliance areas, in order to reduce losses generated by fraud and process errors. Based on a set of risk indicators and different detection strategies, the service provides a better internal control environment and will allow transactions that do not meet pre-established standards to be justified or blocked before they are finalized.

This type of service has enormous potential for generating economies of scale and optimizing resources. Known among telecom companies and

### ETHICS AND CONDUCT IN THE CLASSROOM

The *Clientar* Program, coordinated by Votorantim Curitiba, promotes a series of social actions to encourage volunteering and adoption of best practices that have a positive impact on society. In 2016, several initiatives were carried out in the capital city of Paraná, with emphasis on classes about ethics and conduct led by nearly forty CSC professionals in local public schools. Another project was collecting signatures for the campaign 10 Measures against Corruption, coordinated by the Federal Public Ministry (MPF) throughout the national territory - the action at Votorantim Curitiba resulted in the collection of almost 10,000 signatures. In 2016, other initiatives encouraged the donation of blood and bone marrow, as well as the collection of food, warm clothes, aluminum can tabs, and cooking oil.



within the financial market, it is uncommon in the industrial sector and in Brazil. Developed in partnership with another Votorantim S.A. center of excellence, the CCTI (Center for Competence in Information Technology), the project was tested throughout 2016 and will be available to companies in

2017. Due to the importance, extent, and results it presents, this became a pioneering action for Votorantim and CSC.

### Information Technology

Votorantim S.A. also has an advanced center of excellence in information technology,

recognized in the market for the effectiveness, safety, and quality of the services provided. CCTI's mission is to contribute to creating value for investee companies, incorporating improvements and competitive advantages into corporate operations and processes.

In practical terms, this work

aims to capture synergies and set norms and standards for companies so that they may focus on their business and develop their own projects based on a secure, pre-defined action protocol. In addition, CCTI caters to a single environment that unites the IT operations of the holding company and its investee companies, so that the user experience has up-to-date technologies and solutions, a sound and available system, and with excellent performance.

To this end, the center uses the best IT management practices and technological standards recognized worldwide, supported by certifications and renowned international organizations. A CCTI advantage in this regard is obtaining, without reservation, the ISAE 3402 (International Standard on Assurance Engagements) certification in 2010, which attests to compliance and confidence in process reports and financial controls.

This certification has the benefit of identifying and monitoring the risks inherent to the business and creating mechanisms capable of quickly identifying illegal activities. This helps prevent fraud and reduces the occurrence of multiple audits in companies, since the reports generated through the ISAE 3402 serve as a formal instrument for attesting processes and procedures ([see table for other CCTI certifications](#)). ▼

## CCTI CERTIFICATIONS

Certification	First year obtained	Scope
ISAE 3402	2010	IT with effective controls and compliance with SOX
ISO 20.000	2012	Best market practices in management for IT service providers
ISO 27.001	2013	Compliant with the best standards of Information Security control
ISO 9.001	2013	Uses best management practices in IT projects
SAP CCoE Advanced	2013	Compliant with the best SAP management processes*

\* The only company in Brazil with this certification

## REAL ESTATE SOLUTIONS

With 100 years of history, Votorantim has amassed significant real estate assets. In recent years, the analysis of these areas and the development of the real estate area at Votorantim S.A. have led to the creation of a specific center of excellence for the sector. Created in 2014, the Real Estate Solutions Center (CSI) consolidated its role as support for the management of Votorantim's real estate assets, responsible for the centralized service of the legal, technical and contractual processes of the investee companies. In 2016, this work gained momentum with the implementation of the real estate business plan, which established priorities and considered Votorantim S.A.'s various opportunities in the industry ([read more on page 40](#)).





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# SOCIAL STRATEGIES

Focused on public management, education, and other aspects that are relevant to society, the Votorantim Institute programs contribute to creating shared value between the investee companies and the communities



The Votorantim Institute acts as a core social strategy for Votorantim's companies and provides technical advice during all stages of the projects - from the pre-installation phase of new units, through operations and expansion, to discontinuing operations. The purpose of this work is to enhance the results of external social investments in the communities where the company is present.

Based on integrated planning, aligned with business challenges and opportunities, the Institute places a number of social tools and technologies at the service of companies and coordinates external partnerships that add new knowledge, broaden their reach, and maximize their impacts from the social investments.

An example is the Public Management Support Program (AGP), which involves three work fronts focused on strengthening the capacity of the government as an agent of development. The management modernization front provides technical support to municipalities in order to increase efficiency and achieve financial balance. Improving processes and developing tax management and control systems are some examples.

On the territorial planning front, the focus is to ensure municipalities the documents guiding government administration - such as industrial plans (Master Plan, Sanitation, Housing, or Mobility Plan) and executive projects - developed with the participation of the population and in accordance with the applicable legal rites.

In addition to being essential to guiding the city's growth, some of these documents are a legal requirement and a prerequisite in order for the municipality to request funding for specific business development lines.

In 2016, the Institute began carrying out, along with the companies, a third front, focused on the participation of society in the design and monitoring of government plans, which foresees long-term structuring operations within the municipality.

The AGP is developed in partnership with the National Bank for Economic and Social Development (BNDES), which shares the responsibility of financing the program with Votorantim. It is also supported by the Inter-American Development Bank (IDB) and the Arapyaú Institute. ▼

## MOBILIZATION



Over 3,000 volunteers, 5,553 people benefited, 65 Votorantim units mobilized in Brazil and Peru, 20,222 hours of volunteer work, and 24,387 actions carried out. These were the main results of the second edition of the Volunteer Challenge, a corporate event organized by the Institute in partnership with companies to encourage employee participation in actions to benefit the community. Organized into teams and following a set of criteria, volunteers are encouraged to choose the entity to benefit, plan activities, and establish the implementation schedule.

## INVESTMENT IN COMMUNITIES

In 2016, Votorantim's social investment, reached more than **108 million**, directed at **340 projects** in **151 cities**, from four countries, benefiting **719 thousand people**. Among the lines of action are: promoting the local economy, generating income, education, technical qualification of the government, and protecting civil rights. Learn more about some of the initiatives in the next pages.



SUPPORTING PUBLIC  
MANAGEMENT IN NUMBERS<sup>1</sup>

26 municipalities



40 projects

carried out with local government



BRL 12.8 million

invested by Votorantim and BNDES



22 sectorial plans

approved as municipal laws



7 projects

with approved financing  
(BRL 18 million)

BRL 10.6 million

raised through financial balance  
goals and funding<sup>1</sup> Consolidated data (2012-2016)

## The AGP in practice



## At Fibria

The company is building a pulp production line in the municipality of Três Lagoas (MS), with operations scheduled to begin in 2018. The AGP's activities began in the city in 2016, as soon as the project was approved by the company's Board of Directors. In addition to the actions toward qualifying management and territorial planning – with the revision of the Master Plan – the work foresees the creation of an action plan developed in line with the Emerging and Sustainable Cities Program (CES), of the Inter-American Development Bank (IDB). The IDB methodology guided the diagnosis of the current situation and the trends of the municipality regarding aspects related to environment/climate change, urban development/mobility and governance/fiscal management. Based on modeling of evolution scenarios, urban intervention strategies that the city government will put into practice were defined in 2016.

## At Votorantim Cimentos

The AGP methodology is one of the components of a project that is mobilizing the private sector, the government, academy, and society in the city of Sobral, Ceará, where the company has been operating since 1959. Throughout 2016, over 2,000 people attended seminars, district meetings, sector meetings, and planning workshops; the debates on virtual forums totaled 45,000 interactions. The result of this collaborative process was the

Sobral Vision Plan for the Future, which establishes strategies and goals to guide the progress of the city over the next 30 years in topics such as economic growth, appreciating local traditions, sanitation, waste management, land occupation, mobility, and leisure facilities, among others.

Stimulus to  
the economy

Low income and economic development rates are representative of almost half of the municipalities in the area of operation of Votorantim companies, considered to be social action priorities. In order to stimulate the economy of these cities, the Institute, in partnership with BNDES and the IDB, runs the ReDes program. Based on social and economic feasibility studies, cooperatives and production associations receive investments and technical, commercial, and managerial training, and are closely monitored for four to five years. The idea is to strengthen the businesses so they may achieve self-sufficiency. Since the beginning of the program in 2010, ReDes has supported 53 projects in 28 locations, benefiting 1,800 families. During the period, Votorantim companies and BNDES invested BRL 60 million in activities; the plan is to total BRL 82 millions by 2020.

In 2016, the monthly income for the 27 totaled BRL 560,000, starting with new products launched on the market, structuring of packaging and visual identity, and agreements with large retail chains (a 20% increase compared with projects already operating in 2015). Throughout the year, BRL 4.5 million of income distributed by 29 projects (35% growth compared with projects that already distributed income). Of the 53 projects supported in the year, 14 completed their receipt of program funding.

ReDes  
IN NUMBERS

53 projects

Supported since 2010



1,800 families

benefitted



BRL 60 million

Invested in ReDes activities

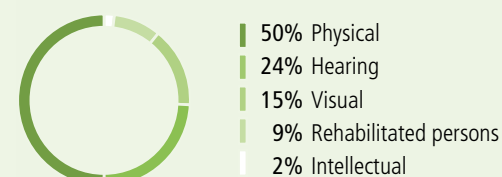




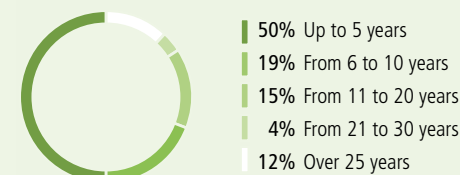
# Prepare for inclusion

In order to help define a strategic approach to the inclusion of people with disabilities in the workforces of investee companies, in 2016 the Institute carried out a diagnosis at Citrosuco, CBA, Votorantim Cimentos, Votorantim Energia, Votorantim Metais, Votorantim Siderurgia, in addition to Votorantim S.A.. Opinions of 798 people were obtained - among employees of the human resources areas, team managers and professionals with disabilities. More than half of the employees in this category participated. The study focused on four aspects considered

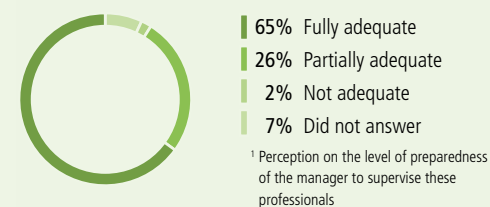
## TYPE OF DISABILITY



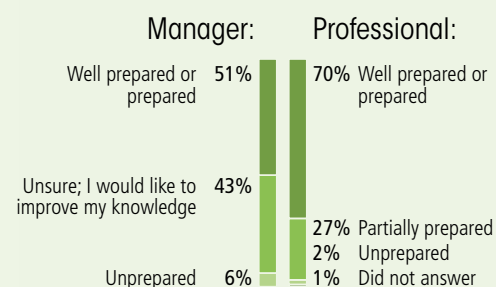
## COMPANY TIME



## ADAPTING SPACES TO SPECIFIC NEEDS<sup>1</sup>



## PERCEPTION ON THE LEVEL OF PREPAREDNESS OF THE MANAGER TO SUPERVISE THESE PROFESSIONALS



fundamental to the inclusion of these professionals:

- Recruitment and retention: policies and practices, training HR professionals on the aspect;
- Accessibility: physical structures and use of assistive technologies;
- Organizational culture: raising awareness of company employees, especially the managers, for the true integration of these professionals;
- Management: initiatives to guide professional growth and the development of their production potential.

Also in 2016, a workshop was held on the theme with all companies that motivated the creation of the Inclusion Work Group, with representatives from different areas of the invested companies, the realization of an initiative at Votorantim Cimentos, which included curriculum registration, training for People & Management (DHO) professionals and managers. These initiatives are helping the Institute to develop a methodology that will help companies on the subject of inclusion of people with disabilities.

# Education

The Institute relies on education to leverage local development over the long term. The Votorantim Partnership for Education (PVE) seeks to raise the quality of education and school management in municipalities, based on a structured action involving local governments, educational managers, parents, and students from the public network. The methodology includes training technicians from municipal boards of education, school principals, and coordinators, as well as engaging and mobilizing the community. The program seeks to develop the competencies of educational and school managers, positively impacting students' learning. It also seeks to strengthen the culture of continuing training of professionals in education, and increase community participation in education.

According to a study carried out by a specialized consulting company, the action has a positive impact on the Basic Education Development Index (IDEB). Analyzing the data from 2015, the study showed that the municipalities participating in the PVE evolved 35% faster than the other municipalities in Brazil, with a similar profile, in the Elementary School results, and 45% faster in Middle School.

It has also been proven that the performance of students impacted by the "Proof Brazil" program is 30% higher in Mathematics and 14% in Reading, in elementary school 1 and 67% and 18%, respectively, in elementary school 2. In addition, the dropout rate of these students is below the national standard.

## PVE IN NUMBERS



17 municipalities



2,300 young adults



252 schools impacted

## Parceria Votorantim pela Educação



## TALENT IN SUSTAINABILITY Award

Annually, Votorantim Institute honors projects developed by company employees and that promote environmental, social, and financial benefits. In 2016, projects were awarded in five categories, selected by a committee composed of internal and external professionals, in addition to an open voting process involving all employees of all the companies.



Category	Company	Winning Project
Environment	Citrosuco	Biological control: innovation in the control of Greening in citrus orchards
Productivity and efficiency	Companhia Brasileira de Alumínio	Mechanization of the process to supply aluminum oxide in the Furnace Rooms
Health and Safety	Fibria	Forestry Safety Program - Preservation of Life
Social Performance	Votorantim Cimentos	Sustainable Springtime - Return on Social Investments
Popular Vote	Citrosuco	Behavioral Group - a culture of health and safety



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# BIODIVERSITY AS A BUSINESS

The consolidation of the company Reservas Votorantim brings new prospects to Legado das Águas and paves the way for ecological tourism activities to begin in 2017



Created in 2015, the Reservas Votorantim was established to manage the environmental assets of Votorantim S.A. and create shared value from the natural resources and ecosystem services offered at these locations. The new company aims to look at these assets from a business standpoint while investing in the conservation of biodiversity, in order to generate social, environmental, and economic gains through a series of structured actions.

Reservas Votorantim adds to the holding company's assets a business associated with the new economy, combining environmental conservation and financial return in a sustainable manner. In practical terms, its first mission is to promote the management of Legado das Águas, a private reserve consisting of 31,000 hectares of Atlantic Rainforest, equivalent to 1.5% of the remaining area of this biome. Located in Vale do Ribeira, in the Southern region of

the state of São Paulo, Legado das Águas covers three municipalities - Juquiá, Miracatu, and Tapiraí - and was formed through the acquisition of several areas between the decades of 1920 and 1950.

Votorantim's progressive vision at the time was that the preservation of the plant cover was the best way to guarantee the long-term availability of water in the region, where there are seven hydroelectric plants that supply energy to Companhia Brasileira de Alumínio. This vision was materialized in a protocol of intentions, signed in 2012 between the Government of the State of São Paulo and Votorantim, for the implementation of a reserve that offers society a positive legacy, developing research, environmental education, and sustainable tourism activities, as well as business opportunities based on the existing environmental resources.

In the past few years, Votorantim S.A. has continuously invested in structuring these activities and some consistent results are already beginning to appear. With the help of the Public Management Support Program (AGP), headed by the Votorantim Institute and with the financial support of Legado das Águas, the governments of the three cities covered by the reserve developed strategic sectorial plans aimed at reorganizing

urban areas. Partnerships with universities enabled mapping of local wildlife and flora and opened a rich field for scientific research. Work with local communities has given rise to a robust project to develop production chains, with a focus on generating employment and income for the population living in the region.

## Open to the public

In 2016, Legado das Águas also took an important step towards opening for public visitation by hosting groups of Votorantim employees in nine test events held from October to December. On these occasions, the activities and itineraries prepared for 2017 were tested in practice, allowing an assessment of the necessary adjustments to the structure in order to serve the public. The opening of Legado das Águas to the general public is expected to occur by mid-2017.

In addition to public visitation, the reserve has developed a business plan that provides other possibilities for generating revenues, such as environmental compensation and selling of seedlings from its nursery. Inaugurated in 2016, the nursery has an annual production potential of 200,000 seedlings.

In the long-term, the idea is to exploit the reserve's huge biodiversity potential, researching the properties of the local flora for new products.

To this end, the initial step was to sequence the genome of 50 species native to the Atlantic Rainforest. This work gave rise to the biome's largest genetic database, called the "digital forest", through an unpreceden-

University of Rio de Janeiro (UFRJ).

In the future, through the process of bioprospecting, mapping can allow for the development of new products based on the biodiversity of the Atlan-



## LEGADO VERDES DO CERRADO

In February 2017, Companhia Brasileira de Alumínio, Reservas Votorantim and the Government of the State of Goiás signed a memorandum of understanding to create a new Private Reserve, the Legado Verdes do Cerrado. With 32,000 hectares and located to the north of that state, in the city of Niquelândia, more than 80% of the territory will be a protected area of Cerrado, in which research and business related to the green economy will be developed. In the remaining area, activities associated with the agribusiness will be developed, always pursuing integration with preservation and the purpose of the Reserve.

ted partnership with Bio Bureau, a biotechnology startup, incubated at the Federal

tic Rainforest, while allowing for the creation of scientific and economic value. ▼





# URBAN PLANNING

How Votorantim's real estate assets can be used to induce economic and social value in the largest city in Brasil.

A significant portion of the real estate assets of Votorantim has great potential for developing projects that generate value for the company and for society. These are areas of various sizes and purposes that have been acquired over decades in the vicinity of the plants and operational units, which may give rise to various types of projects.

In recent years, Votorantim S.A. has invested heavily in the mapping, analysis and regularization of this property, with a focus on identifying the possible uses and opportunities related to these real estate assets.

In 2016, this work reaches a new level with the development

of a long-term project, designed for an extensive area in Vila Leopoldina, in São Paulo (see below a photograph of the region).

The proposal follows the guidelines of an instrument provided in the Municipal Master Plan, called the Urban Intervention Project (PIU), for areas in the city that have transformation potential. The new regulatory framework enables urban project proposals to be formulated based on strategies collaboratively defined between the private sector and the government. The process involves several stages and a wide debate among public entities and society in general, including consultations and public hearings.

The Vila Leopoldina project seeks the development and revitalization of the area based on a comprehensive vision that induces economic and social value. The goal is to apply solutions that add value to public venues, mixed and common-use areas, respecting the characteristics of the region. The size of the area favors this type of intervention, allowing for the merging of spaces for residential, commercial, and

public use. The idea is to prioritize inclusive concepts for the more rational use and integration of the infrastructure and local public facilities.

The project proponents - Votorantim S.A., BVEP (a real estate and holding company of Banco Votorantim), SDI (a real estate management and development company), and URBEM (Institute of Urbanism and Studies for the Metropolis) - followed the rites established by law and, after protocol containing the diagnosis of the region and the public interest program, were formally authorized in December 2016 by the city hall to develop the project according to pre-defined guidelines.

The next step involves jointly leading the project, along with the city government, of the various aspects addressed - urban, social, economic, and legal. Towards the end, the project will serve as a basis for the bill about the use this territory. ▼



# INVITATION TO INNOVATE



The holding company and its investee companies advance by consolidating a culture of innovation as part of day-to-day operations

Votorantim S.A. believes that it is critical to foster a culture of innovation in order to maintain business continuity, identify long-term threats and opportunities, adjust its portfolio, and develop products and services that are relevant to society.

As a portfolio manager, the holding company encourages investee companies to follow this

path in a structured way. For that reason, in 2016, the holding led the creation of the Innovation Network, which brings together representatives of Votorantim S.A. and eight investee companies with the mission of sharing experiences and boosting the search for synergies.

This network includes bi-monthly meetings and day-to-day interactions of its

members, continuously encouraging follow-up and trend assessment, as well as joint prospecting of opportunities. The meetings also address possibilities for fostering research and innovation, as well as possible partnerships with universities, research institutes, and other organizations.

## Structuring

Votorantim's investee companies are at different stages of incorporating a culture of innovation. One of the missions of the network is precisely to support the structuring of



## ABILITY TO INNOVATE



The 2nd edition of the Valor Innovation Brazil Award, held in 2016, recognized the innovation capacity of Votorantim companies. In the ranking of the 100 most innovative companies in the country, Fibria ranked 31st, while VM was 44th (3rd in the "Heavy Industry and Metallurgy" sector) and VC ranked 85th (5th in the "Heavy Industry and Metallurgy" sector).

programs dedicated to the aspect, so that they all reach their full innovation potential.

In the first meetings, the group analyzed different corporate innovation models and methodologies. Each of the companies presented their initiatives in this area, as well as the errors and successes in this process.

These lessons served as orientation for all companies to improve their own models. In the case of Citrosuco, implementation started at the end of 2016 and one of its first developments was a partnership between the company and Legado das Águas - Reserva Votorantim, aimed at researching orange components for use in other products with high added value.

## Connecting with the world

Throughout 2016, four editions of VotoTalks were held, an event that promotes debates on topics related to innovation, such as interaction with startups, open innovation, and culture of innovation. Each edition includes the participation of an outside professional with an inspiring background, such as Adriano Silva, author of the book *O executivo sincero* (The Sincere Executive), and Maju Azambuja, executive mentor from Cubo Itaú.

Open to all employees of the holding company and of the investee companies, VotoTalks aims to inspire new ideas, connect people, and stimulate debate in order to strengthen the culture of innovation. The idea is to make the event more interactive and inspiring in 2017.

Another highlight of the period was the participation of the holding company, VC, VM, Citrosuco, and Fibria in the program 100 Open Startups, whose purpose is to connect large companies with

technology-based companies in the developmental stage. The establishment of this network allows for the identification and selection of entrepreneurs with great potential for collaboration in developing innovation with a high impact on society and the market.

In 2016, over 40 companies met to define the major challenges facing society in the future, including "Innovative Cities," "Industry of the Future," "Information Society," and "Agribusiness." Afterwards, startups from Brazil and abroad were invited to present projects related to these challenges. The end of the process, in February 2017, elected the 100 best startups according to the evaluation of the participating companies.

Votorantim S.A. encouraged all its employees to participate in the online evaluation process. As a result, the company ranked third among the evaluators, demonstrating its potential for interaction with this ecosystem. ▼



## INNOVATION AT THE INVESTEE COMPANIES

## VOTORANTIM CIMENTOS

A new business area was created in 2016, with the goal of enabling and accelerating the use of alternative fuels, to replace fossil fuels, in cement production. This is being done by bringing together industrial waste generators, municipalities, and companies

that generate biomass and other materials that may be used as source of energy. Co-processing does not cause any change in the quality of the cement and meets the specific quality standards of the Brazilian Association of Technical Standards (ABNT).



## VOTORANTIM METAIS

The "Zero Waste" project at the Morro Agudo unit, located in Paracatu, MG, eliminated the need for a tailings dam through a new technology route in process. In addition, a new product, Agricultural calcareous, was generated, whose high

nutritional potential acts as corrector of soil acidity in coffee, corn, and soybean crops. The next step will be to eliminate the two existing dams, returning the material settled to processing.



## COMPANHIA BRASILEIRA DE ALUMÍNIO

Since 2015, CBA has been studying the use of red mud, a byproduct from the processing of bauxite, in the production of pozzolan, a raw material in the

cement industry. In the future, this technology will create the possibility of eliminating tailings dams in aluminum production.



## FIBRIA

Over the past 40 years, with cloning of eucalyptus, the company has doubled its pulp productivity per hectare per year. Also, the bio-oil made

from forest biomass will have the potential to transform the oil and gas industry when it achieves a lower production cost.





# FOCUS ON DEVELOPMENT

After completing 10 years of operation, Academia Votorantim is preparing for a new operating model



The corporate university Votorantim Academy, of Votorantim S.A. and its investee companies, recently underwent a comprehensive review, aiming to strengthen and support the organization's high performance culture. Throughout 2016, this work involved planning, reviewing governance, and programming, as well as implementing new tools and pilot tests, among other actions.

In line with Program 18.18 (see more on page 16), the changes in Academia Votorantim are also a part of a set of initiatives aimed toward developing people who will help build the Votorantim of the future.

In this way, as of 2017, development actions promoted by the Academia Votorantim will function as a hub, connecting people, information, and

trends in order to catalyze the development of professionals and prepare them for long-term challenges. The management topics, therefore, begin to be worked individually by companies, which will further enhance the content according to the reality of each business. Thus, the Academia Votorantim starts to work with knowledge that is cross-sectional to all business models, focused on the debate and the evolution of this attitude and on the preservation of Votorantim's DNA.

In the new model, there is no room for the physical limitations of the classroom. In addition to courses and in person activities, Academia Votorantim has digital content platforms, such as the portal of the 18.18 Program, as well as webcast transmissions, increasing the scope of the development actions.



# People and Culture



EDUCATION  
AND TRAINING97 groups  
in the Academy1,000 +  
leaders trained7 mentors  
graduated13 mentors  
supervised37,000 +  
training hours

## Knowledge management

In 2017, the Academy will offer qualifications and training that will empower professionals and companies to broaden their critical vision and their competence in pursuit of results.

To this end, the Mentor Training Program was one of the Academia Votorantim's novelties in 2016. In addition to bringing different generations closer together and being an important tool for retaining and disseminating internal knowledge, the initiative offers those involved - mentors and mentees - opportunities to take initiative toward their own growth. Participation is voluntary, but it assumes the professionals' firm commitment to various stages of development.

For future mentors, Academia Votorantim offers training in topics related to knowledge transmission, communication, goal setting, and feedback. The work pairs are defined by

crossing the specific skills of the trained mentors and the interests of the mentee applicants. Mentoring sessions take place over eight months, and are individually managed by the companies.

The idea is for training to be cascaded to the various levels of the companies. In the pilot project at Votorantim S.A., all directors were trained and worked on the development of 13 mentees. A new group of mentors has already been trained, of general managers, and training for managers is scheduled for 2017.

Another example is training of managers and DHO professionals in self-knowledge tools such as MBTI (Myers-Briggs Type Indicator) and Emotional Intelligence, which were previously only applied at Academia Votorantim and the companies by external consultants. Now, they will now be disseminated through professionals in the DHO business areas. ▼

## YOUNG TALENT

Talent Attraction initiatives and partnerships with universities and junior companies already fill 12% of the new job openings at Votorantim S.A.

In 2016, Votorantim S.A. strengthened its relationship with young professionals and people preparing to enter the job market. The actions focused on partnerships with universities and junior companies, and representatives of the holding company attended major career fairs. The results are already beginning to appear, with gains in the accuracy of selection and recruitment processes. On average, about 12% of new

openings during the year were filled through these initiatives.

One of the main initiatives in this sense was the partnership with Brasil Júnior, an association that brings together almost 400 university companies and 11,000 junior businesspeople in Brazil. This partnership results in a relationship with this audience, supported by the dissemination of programs in order to attract new talent and focus on young entrepreneurs who are innovative

and have high potential for engagement. Brasil Júnior also acts as a consulting company in order to strengthen the company's ties with former juniors.

In the same direction with the recruitment actions, the holding company also invests in developing the professionals who already work for the company. Trainees and young talents within the organization participate jointly in the *Potenciar* program, which provides training on topics of self-knowledge, communication, project management, in addition to the development of a multidisciplinary group project. Additionally, they have the opportunity to work in several areas, in a job rotation system. ▼

PREPARING FOR THE  
FUTURE

In an initiative coordinated by the Remuneration and Personnel Committee, linked to the Board of Directors of Votorantim S.A., all companies participated in a project to systematize internal initiatives and ensure structured succession plans for CEO positions.

Each company has created its internal succession map, identifying the people with the potential to assume top leadership positions, diagnosing the current level of development, and defining action plans - short, medium, and long term - to support professional maturing. Discussed by Board members and CEOs, these maps have been refined and are being put into practice and monitored in 2017.

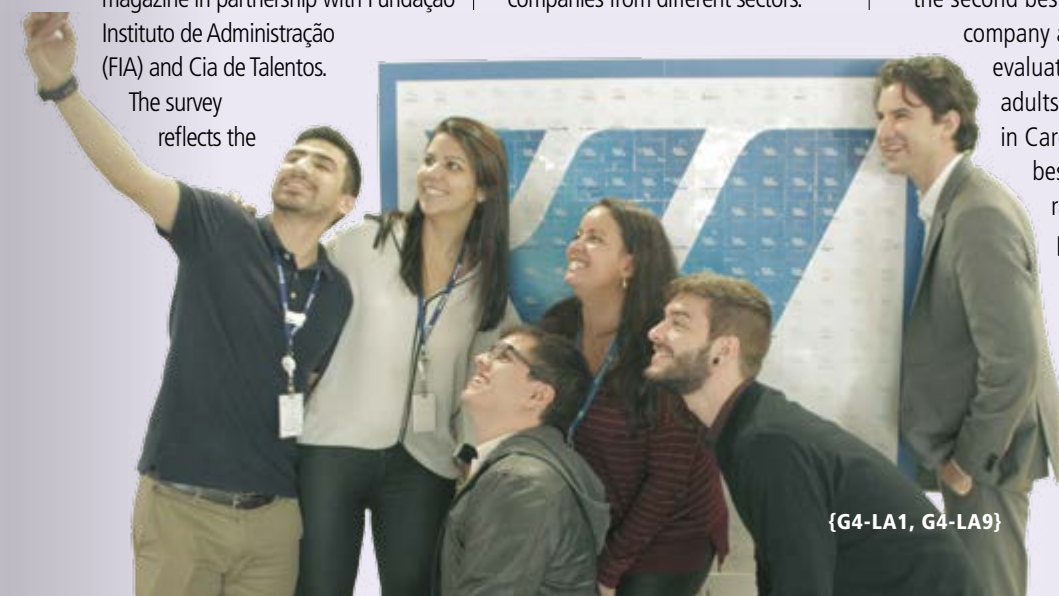
## RECOGNITION

Votorantim was part of the 2016 edition of *The Best Companies to Start a Career*, an initiative by the *Você S/A* magazine in partnership with Fundação Instituto de Administração (FIA) and Cia de Talentos.

The survey reflects the

satisfaction of 18 to 26 year olds - interns and employees - with their jobs, and was conducted in almost 130 companies from different sectors.

In a survey conducted by the 99jobs website, Votorantim's trainee program was considered the second best in Brazil. The company also featured in the evaluation of the young adults who participated in Career Week with the best recommendation rate: 97%. The event promotes visits of university students to companies.







## THE IMPORTANCE OF WORK ENVIRONMENT

Employee satisfaction, measured in the annual engagement survey, reflects the improvement of personnel management within Votorantim S.A. and guides action and improvement plans

All aspects monitored by the 2016 edition of Votorantim S.A.'s annual climate survey showed positive evolution compared with 2015. The favorability index, reflecting overall employee satisfaction, rose from 80% to 83%. The market benchmark called P90 (90 percentile),

which brings together the top 10% of companies that apply the Korn Ferry - Hay Group methodology, rose from 76% to 79%. This was also the best index recorded by the company since the survey began in 2003. A total of 159 employees (99.5% of the total) voluntarily participated in the survey.

The holding company achieved the P90 regarding the leadership index, which rose from 75% to 77%. In addition, the quest for excellence, based on a high-performance culture and teamwork, remains a key factor in the organization, since 93% of employees acknowledge that there is a great commitment to delivery of their work.

The evolution of the internal climate was built systematically and marks the consolidation of the new governance model announced in 2013, when the holding company

ceased to be a corporate and operational center in order to assume the role of portfolio manager. The work involved structured employee engagement actions, revising the work dynamics, and aligning with the holding company's vision for the future. This new governance profile reflects the employees' perception of clarity and direction, since 85% say they clearly understand their contribution to Votorantim S.A. and feel confident about the future prospects of the business.

Annual monitoring of engagement reflects the results of refining personnel management and helps drive improvements. Each aspect of the diagnosis has an action plan, defined jointly with multidisciplinary groups. Progress is monitored by the executive office of Votorantim S.A., and is annually shared with all employees in a transparent manner.

At other Votorantim companies, the evolution of the internal climate is monitored every two years. ▼

### AMONG THE BEST

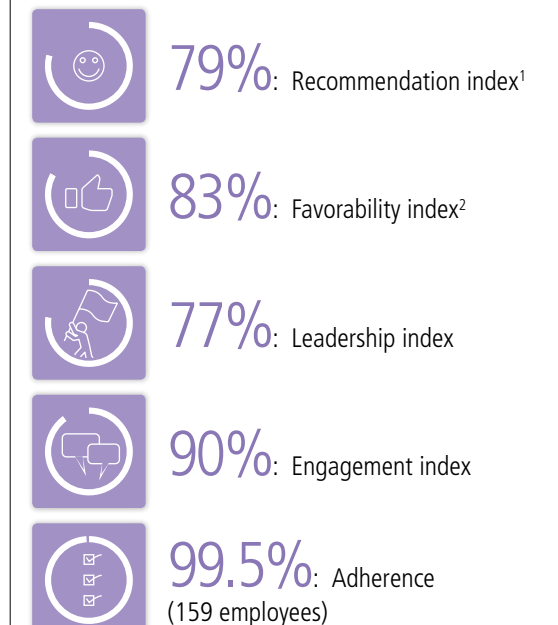
Personnel management practices have led Votorantim S.A. to hold a prominent position in *Você S/A* magazine's Best Companies To Work For guide. The company ranked second in the Miscellaneous Services category, with 74.8 points in the Work Happiness Index, calculated based on the online survey conducted with employees, interviews with employees and managers, and the evaluation of personnel management practices.

The ranking is prepared annually by the magazine, in partnership with Fundação Instituto de Administração (FIA) of the University of São Paulo (USP). The 2016 edition was attended by over 100,000 professionals from 345 companies.

In another acknowledgment in this area, Votorantim S.A. was included, for the first time, in the ranking of the "Best Loved Companies in Brazil" by the electronic platform LoveMondays!, which consolidated the assessments made daily by employees of the holding company



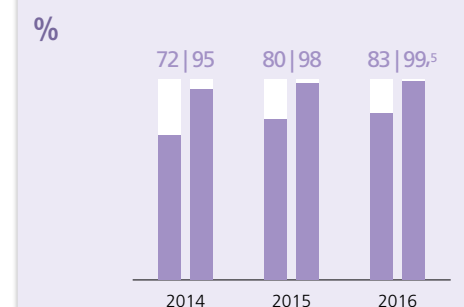
### CLIMATE SURVEY



<sup>1</sup> Employees who would recommend the company to friends and family.

<sup>2</sup> Reflects the overall level of satisfaction, calculated based on the percentage of employees who score 4 or 5 - on a scale of 1 to 5 - to the aspects surveyed.

#### FAVORABILITY | ADHERENCE





# Financial Performance

## STRENGTH OF THE PORTFOLIO

The political scenario and economic downturn in Brazil influenced the consolidated results of Votorantim S.A. and its investee companies, but portfolio diversity and financial discipline mitigated the negative effects

The Brazilian economic downturn and political instability in Brazil, and the world, had a major impact on the business environment in 2016. In Europe, the UK's decision to exit the European Union (Brexit) adversely affected a cycle of political and trade integration in the euro zone. In economic terms, the decision weakens the block, resulting in uncertainties in the short- and middle-term.

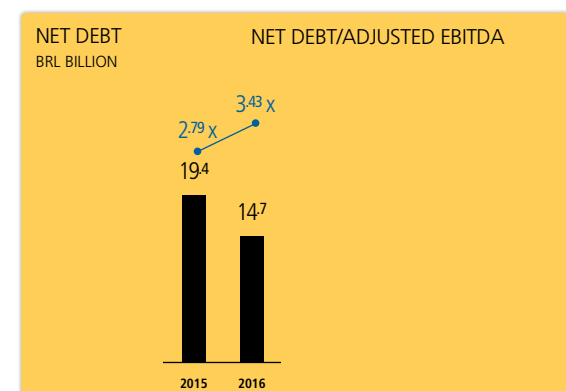
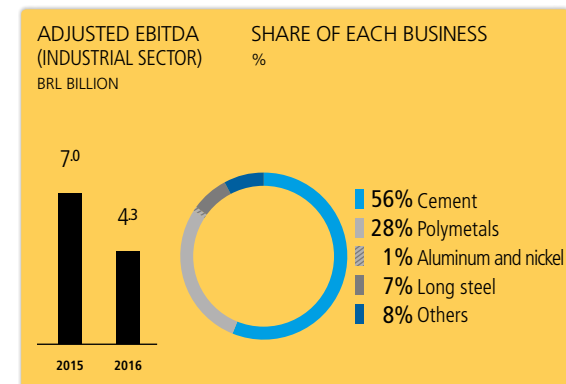
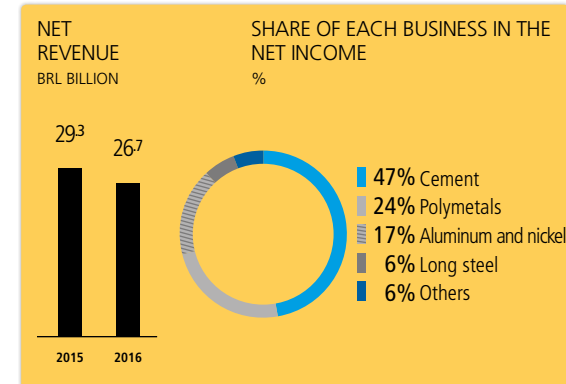
The results of the presidential elections in the United States and the protectionist policies announced resulted in changes in the outlook in terms of the flow of business on a global scale.

In Brazil, the scenario turned out to be even more complex and challenging in 2016. The impeachment process of President Dilma Rousseff created turbulence in the market which, coupled with deterioration of public accounts, profoundly affected the government's investment capacity, compromising demand in various sectors where Votorantim operates - such as cement, aluminum, and long steel.

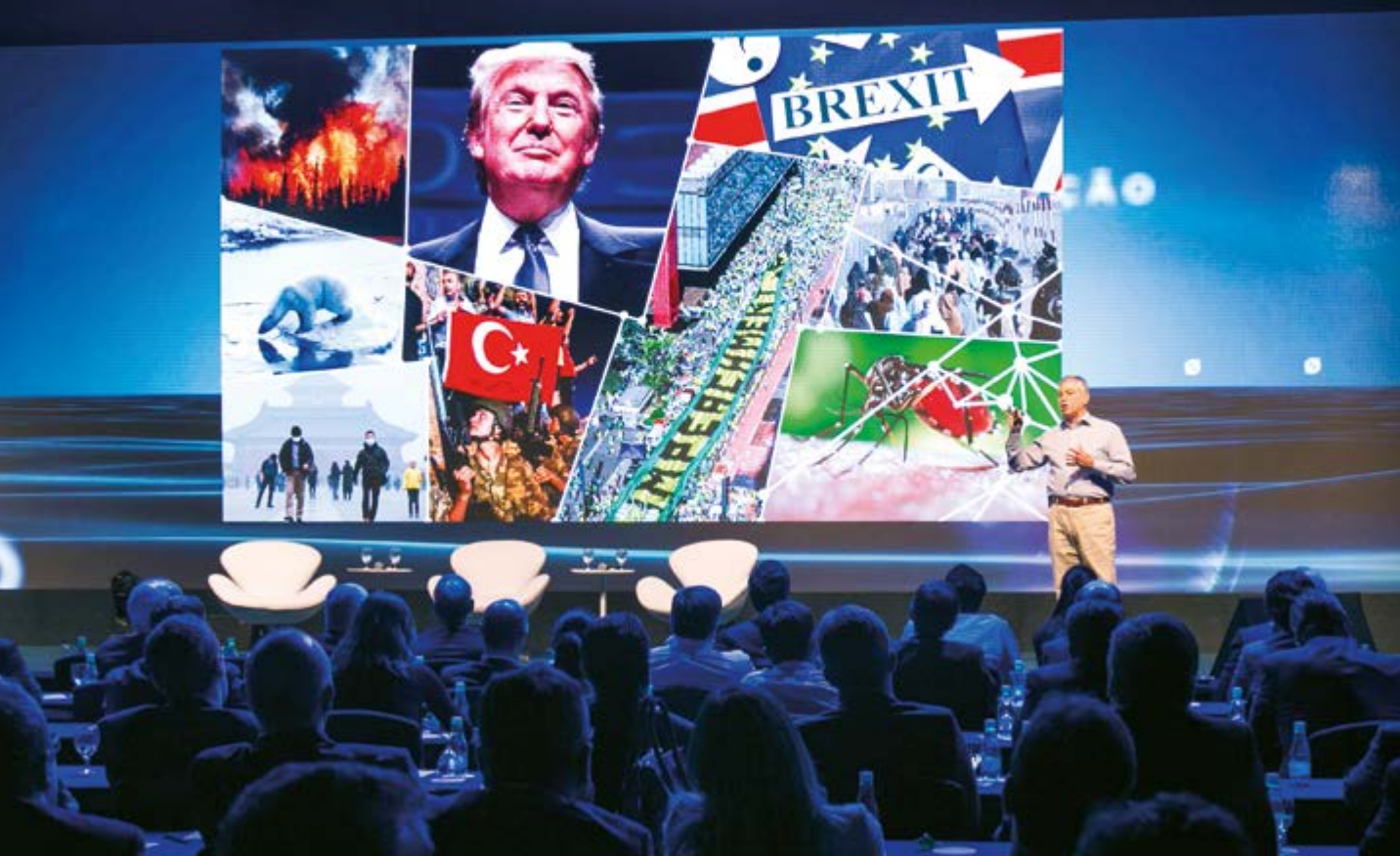
The approval of the Proposed Amendment to the Constitution that determined a cap for public spending, in December, and the infrastructure program proposed by the federal government are factors that can contribute positively to the end of the economic recession. Despite some positive signs, the country still has challenges to be resolved, such as pension reform, for example.

Some figures show the size of the impact of these factors on the production sector. The industry confidence index (ICI), measured by the Getúlio Vargas Foundation (FGV), reached its lowest level since June 2015 and ended 2016 at 84.8 points. According to the Brazilian National Confederation of Industry (CNI), the actual income for the industrial sector dropped 12% in the year, compared with 2015. Additionally, according to Brazilian Institute of Geography and Statistics (IBGE), unemployment in Brazil reached 12% in 4Q/16, the highest rate ever recorded in the series that was initiated in 2012.

In this extremely challenging







scenario, Votorantim S.A. recorded a decrease in consolidated revenue and EBITDA for the period. The effects of political and economic instability in Brazil were mitigated by the portfolio's geographical and business diversification, with international operations offsetting part of the losses in the Brazilian market - notably for the operations with zinc and better results for the cement operations in the United States.

### Responsible management

In response to the adverse scenario in recent years, all investee companies have focused their efforts on pursuit of efficiency in operations by reducing fixed costs and operating expenses, as well as improving production processes. In addition, there is a continuous effort to keep fixed costs and operating expenses below inflation.

In the last three years, the investment plans have been maintained and new business and operating units are already beginning to get off the ground. In 2016, Votorantim Cimentos inaugurated the Primavera unit in Pará and continued its projects to expand capacity in the United States, Turkey and Bolivia, which will contribute to increase regional diversification. In the energy business, the year also marked the start of the construction of seven wind farms in Piauí, with investments of BRL 1.1 billion and completion scheduled for 2018.

It is worth mentioning that this was the last approved expansion project, in April 2015, and that no new projects were approved in 2016. Votorantim S.A.'s consolidated CAPEX reached BRL 3.0 billion in 2016, 6% below the total invested in the previous year.

At Fibria, a company consolidated via equity method, the pulp

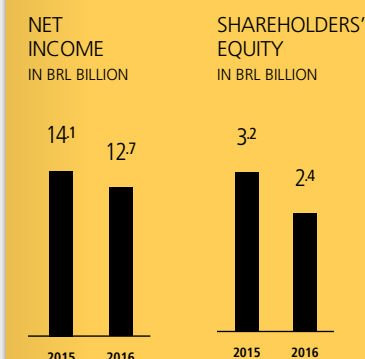
production line in Três Lagoas, in Mato Grosso do Sul, totals BRL 7.5 billion in investments and is expected to begin operating at the end of 2017.

In 2016, a conservative financial strategy was maintained through a comfortable liquidity position, with a solid cash position and an adequate debt amortization profile.

Votorantim S.A.'s consolidated cash position at the end of the year was USD 10.2 billion. In addition, Votorantim S.A. and its investee companies have USD 1.2 billion in two revolving credit lines (Revolving Credit Facilities) with 14 banks and maturing in 2020.

In the year, Votorantim S.A. and its investee companies performed liabilities management initiatives focused on reducing refinancing risks for the coming years. The average maturity of loans and financing ended the year in 7.5 years. ▼

## VOTORANTIM CIMENTOS



In the past two years, the home-building market was strongly affected by the economic recession and political uncertainties in Brazil. According to the Brazilian Cement Association (SNIC), cement sales in the Brazilian market dropped 11.7% in 2016.

Attentive to this scenario, Votorantim Cimentos proceeded with its strategy of geographic diversification through expansion in regions with potential for

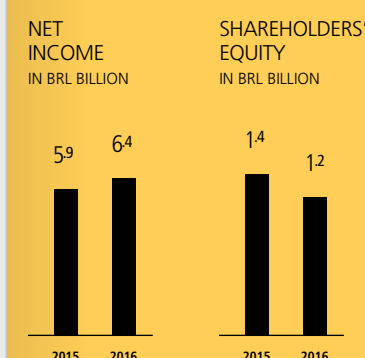
growth - mature and emerging markets, in addition to investing in initiatives to manage costs, operational efficiency, and productivity, without losing its focus on customers. This strategy has proven to be efficient and yielded positive results in the main regions outside Brazil. In the United States, the increase in the launch of new real estate projects, the expected recovery of investments in infrastructure and a milder winter positively contributed to an increase in prices and sales volumes of cement and concrete in the region where the company operates. This, along with cost initiatives in the region, resulted in an EBITDA 13% better than 2015. In Europe, Africa and Asia, the results recorded by Votorantim Cimentos yielded an EBITDA 14% better, with highlights for Morocco and Tunisia, which reported the highest sales volume and greater operational efficiency.

Also in 2016, as part of its business

strategy, Votorantim Cimentos Implemented measures to reinforce financial liquidity and long-term indebtedness, successfully issuing the first bond of St. Marys, in the US, totaling USD 500 million due in 2027. Through this operation, Votorantim Cimentos reinforced its solid credit profile, in addition to better balancing the capital structure in the regions where it operates. Furthermore, liability management made it possible to extend the debt amortization schedule, reaching an average debt maturity of 10 years, thereby mitigating risks of refinancing and liquidity.

In the aggregate for the year, Votorantim Cimentos's net income was BRL 12.7 billion, 10% lower than in 2015., while the Adjusted EBITDA amounted to BRL 2.4 million, representing a 25% reduction compared with 2015.

## VOTORANTIM METAIS

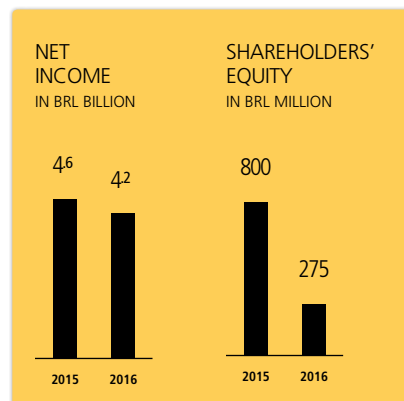


In the zinc & by-products segment, the 8% increase in revenue was driven by the increase in sales volume, reflecting the increased production of concentrates in the mines of Vazante (Brazil), Atacocha (Peru), and Cerro Lindo (Peru), and the increase in the metals prices, in dollars, in the London Metal Exchange (LME), mainly zinc, totaling BRL 6.4 billion in the period.

Despite the favorable scenario, there was a 15% reduction in the Adjusted EBITDA in 2016, due to increase provision for environmental liabilities, to the impact of derivatives and to the expenses associated with the mineral exploration in projects in their initial phases, such as Aripuanã and Caçapava do Sul.



## COMPANHIA BRASILEIRA DE ALUMÍNIO



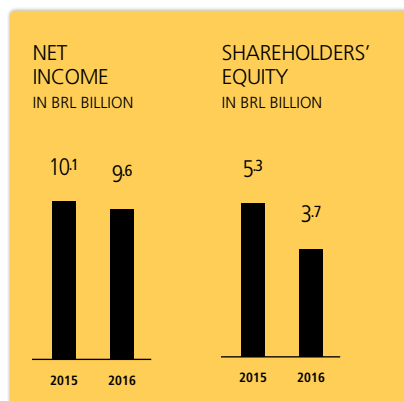
In the aluminum business, the 17% drop in production of trucks and buses in 2016 when compared to 2015, as reported by the Brazilian association of vehicle manufacturers (ANFAVEA), and the retraction in the civil construction sector led Companhia Brasileira de Alumínio (CBA) to increase the production and export of primary products, to the detriment of transformed products, with higher added value.

In June 2016, CBA also incorporated nickel production operations, which were temporarily suspended because

of the low prices of this metal in the commodities market. However, nickel plants in São Miguel Paulista and Niquelândia remained in care maintenance, generating additional expenses for the company.

The difficulties in the aluminum market, the reduction in the energy price and the suspension of nickel, together, led CBA to show a 9% decrease in revenue and a 66% decrease in the adjusted EBITDA in 2016, compared with the previous year.

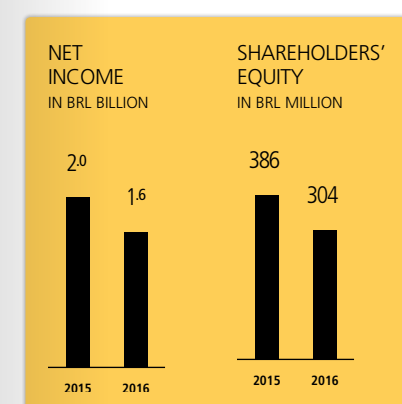
## FIBRIA



The growth in the global demand for eucalyptus pulp, coupled with low inventory levels and a more balanced short-term perspective than expected, in terms of entrance of new capacity, allowed Fibria to announce price increases for China and other markets at the end of 2016. The company closed the year with a sales volume of approximately 5.5 million tons (8% above 2015) and net revenue of BRL 9.61 billion, down 5% compared with the previous year. Adjusted EBITDA totaled BRL 3.742 billion in the period, with a 43% margin.

The cash position of BRL 4.717 billion, along with the undrawn lines of credit for financing the expansion of the Três Lagoas unit (Horizonte 2 Project), is sufficient to cover the remaining investments needed to complete the new unit as well as amortization of debt until the end of 2018. Project Horizonte 2 closed 2016 with 77% completion of the physical execution and 57% of the financial investments.

## LONG STEEL



In steel production, countries where the company operates had lower demand than expected in 2016. In Argentina, the review of infrastructure projects and the fiscal adjustment taken by the new federal government affected demand. In Colombia, revenue was negatively impacted by a 45-day truck-driver strike that impacted the distribution of the products. As a result, the company closed the year with revenue of BRL 1.6 billion and adjusted EBITDA of BRL

304 million, respectively 20% and 21% below 2015. Revenue and adjusted Ebitda do not consider the results of the In Brazil, classified as available for sale in the 2016 financial statements.

### AGREEMENT INVOLVING OPERATIONS IN BRAZIL

Votorantim S.A. and ArcelorMittal Brasil S.A. signed an agreement on February 23, 2017, under which Votorantim Siderurgia will become a subsidiary of ArcelorMittal Brasil and Votorantim will hold minority interest in the capital of ArcelorMittal Brasil. Votorantim's long steel operations in Argentina (Acerbrag) and Colombia (PazdelRío) were not included in the transaction.

The combination of the businesses will result in a long steel producer with annual production capacity of 5.6 million tons of crude steel and 5.4

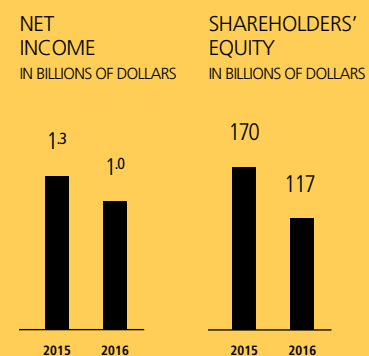
million tons of laminated products. The agreement includes ArcelorMittal Brasil's plants in Monlevade, Cariacica, Juiz de Fora, Piracicaba and Itaúna, and Votorantim Siderurgia's plants in Barra Mansa, Resende, as well as the equity interest in Sitrel, in Três Lagoas. The transaction should generate cost, logistics and operational synergies. The production facilities of the combined companies are geographically complementary, allowing greater proximity and improved service levels to their customer base.

The transaction is subject to regulatory approvals in Brazil, including the approval by the Brazilian anti-trust authority (CADE).

Until closing, ArcelorMittal Brasil and Votorantim Siderurgia will continue to operate separately and independently.



## CITROSUCO

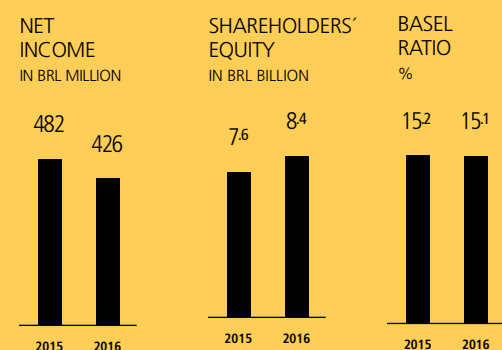


The 2015/2016 harvest (fiscal year July/June) was negatively impacted by the decline in the fruit yield and the average brix (sugar content) caused by unfavorable weather conditions, which impacted the cost of the product. In response to projections of lower stock and reduced production in the United States, the global market showed increased juice prices in the last quarter of the 2015-2016 harvest, while Citrosuco quickly re-evaluated its commercial strategy. As a result, the company recorded a decrease in net revenue USD 1.041 billion and also in

EBITDA USD 117 million compared with the previous harvest.

Despite the unfavorable economic scenario in Brazil, the Citrosuco remained attentive to market opportunities and continued to invest in improving processes and new projects. In the harvest, total investments exceeded USD 53 million. Of this total, USD 18 million was invested in increasing production capacity and research.

## BANCO VOTORANTIM



The Brazilian outlook in 2016 lead Banco Votorantim to adopt a more conservative posture in relation to loan concession, reflecting a drop of 7.1% in the expanded credit portfolio when compared with the previous year, focusing

on the profitability of the business by increasing operational efficiency and diversification of revenue. These measures allowed the institution to end 2016 with net income of BRL 426 million and shareholders' equity of BRL

8.4 billion, pursuant to the BRGAAP accounting standard. Furthermore, delinquency above 90 days ended 2016 at a level below 2015. The Basel ratio ended 2016 at 15.1%, with Level I Capital at 11.2%, higher than the minimum set out by the Brazilian Central Bank.

The Bank has a diversified portfolio of businesses in its Retail (Consumer Financing), Corporate Bank and Wealth Management. It should be noted that the retail segment operates mainly in auto finance loans (multi-brand dealers), where the bank has historically held a market leadership position.



# Portfolio



# Balancing the scale

With geographical diversification and operational efficiency, the company partially mitigates the crisis of unprecedented proportions in the Brazilian Market

Votorantim Cimentos (VC) has operations in 14 countries and is one of the 10 largest in the world in this sector, with total production capacity of 57.6 million tons of cement per year. In 2016, VC was directly affected by the drop in demand in the Brazilian market, which accounted for 50% of its revenue. In order to minimize the effects of the economic downturn, the company took measures toward cost optimization and operational efficiency. These initiatives involved adjustments in its organizational structure, a robust internal control process, and developing a zero-based budget in order to ensure that production adjusts to market conditions. Coupled with initiatives to improve working capital, disposal of nonstrategic assets and active management of liabilities, the company managed to retain its level of excellence and ensure its competitiveness.

Difficulties in the Brazilian business environment were partially offset by the company's international operations, with highlights for the North American market, which registered higher prices and volumes sold, reflecting the recovery of the US economy and a milder winter. Combined with the efforts to optimize costs and obtain greater operational efficiency, the results in the region were boosted, accounting for 35% of the company's consolidated EBITDA. VCEAA operations (Europe, Africa, and Asia), despite political instability in some locations, recorded improvements in the results and in profitability in almost every country in the region, with highlights for Morocco, Spain, and Tunisia.

In 2016, the company introduced to the retail market the most innovative product portfolio in its 83-year history. As the result of a survey that involved

more than 400 professionals in the entire construction chain (construction workers, retailers, store clerks, construction companies, consumers and associations, among others), the new portfolio offers different products for each type of construction work, according to the specific needs and demands of customers. In this way, retail sales and buying decisions by construction professionals and consumers became more assertive, ensuring better productivity at the worksite and of the products.

Throughout this period, another important milestone was the inauguration of two new cement production units: the first in the city of Primavera, in the state of Pará, with annual production capacity of 1.2 million tons; and the other in Yacuces, in Bolivia, with production capacity of 1 million tons per year. Despite the economic scenario in Brazil, the company maintained its expansion projects

in the US, Turkey, and Argentina, as part of the investment plan to be completed in 2018.

Other relevant initiatives in 2016 include the increase in the co-processing rate (which replaces the use of fossil fuels) from 16% to 21%, and consolidated a new business unit, created in order to develop new uses for raw materials and alternative fuels (AFR). The initiative already allowed for the advance in the use of waste from other industries and is part of an investment plan that aims to achieve, by 2020, a level of 40% in the use of non-fossil fuels in its Brazilian units. Furthermore, by 2016, the company continued generating energy using residual heat from cement production process, by means of a technology that yielded savings of 38% in energy consumption at the plant in China and 18% at the plant in India. ▼

## Highlights

- Increased use of alternative fuels in Brazil (17% to 21%);
- Focus on the client demonstrated by the improvement in NPS (Net Promoter Score) results;
- Reinforced corporate governance by formalizing the Executive Committee and including two new independent members in the Board of Directors;
- Reinforced the anti-corruption and compliance program. Launched the Guide to Best Environmental Practices in Mining in Karstic Areas;
- First company in the industry in Brazil to obtain environmental statements through The International EPD System, which assesses environmental impacts throughout the product life cycle;
- VC received 33 national and international awards and recognitions in 2016, among them, the inclusion of the company as the highlight in the "Building Materials" sector in the 2016 Exame Sustainability Guide.



27.3 mi  
Capex

27,7 mi  
Opex



5,3 mi  
Own Resources

7,0 mi  
Institute and Others



13.733  
Employees

87%  
men

13%  
women



352 operating  
units



33,8 million tons  
of cement sold



9,2 million m<sup>3</sup>  
of concrete sold



1,6 million tons  
of mortar sold



24,7 million tons  
of aggregates sold



# Growth with competitiveness

Benefited by the global demand for zinc and driven by greater efficiency in the operation, the company records positive results and continues to expand assets

With nine industrial operations in Brazil and Peru, in addition to projects and mine exploration activities concentrated in these two countries, the strategy of Votorantim Metais (VM) is to grow in mining by extending the useful life of the current assets and developing new projects.

With the favorable price scenario for metals such as zinc, which accounts for over 70% of its revenues, the company is investing in expanding its business and broadening its current activities. The goal is to ensure that the operations are even more competitive in the international market, in addition to remaining in operation

for a longer period of time.

In this sense, in June 2016, VM promoted a change in its organizational structure to ensure focus on the mining and metallurgy activities of zinc, copper and other co-products. Because of this measure, the assets of aluminum and nickel are now managed by Companhia Brasileira de Alumínio.

Also last year, Votorantim Metais increased its shareholding interest in Milpo from 60% to 80% and advanced in the financial feasibility studies of the projects Aripuanã in Mato Grosso, and Caçapava do Sul, in Rio Grande do Sul.

In Brazil, the company's most important market, sales of zinc were positively impacted by the

increase in Brazilian exports of galvanized steel by the steel mills and by the direct share of the company in international markets, taking advantage of its trading infrastructure, with offices in the US and Austria.

In addition to favorable prices and increased sales, the results were also driven by greater use of ore concentrates produced in own units, in comparison with imported raw materials. With this, it was possible to obtain a 2% reduction in the cost of products sold, compared with 2015.

Considering these external and internal factors, in 2016 the company showed improvement in main financial indicators compared with the previous year. ▼



## Highlights

- ▶ New organizational structure, with the creation of Mining and Metallurgy departments, aiming to promote integration of the company's two main activities in Brazil and Peru;
- ▶ Creation of the Project Development and Execution Department, to guarantee the implementation of the growth strategy;
- ▶ Identification and evaluation of Strategic Risks, which may affect the continuity and strategy of VM, and the beginning the of development of mitigation plans for these risks;
- ▶ Consolidation of governance, with the establishment of the Board of Directors at the company's headquarters in Luxembourg;
- ▶ Characterization of the main social indicators of the locations in which it operates, the first step towards meeting the goal of 90% effectiveness in community relations and development plans by 2025.


Environmental  
Management

95,3 mi  
Capex

89.7 mi  
Opex


Social  
Investment

4,6 mi  
Own  
Resources

34,6 mi  
Institute  
and Others


5.561  
Employees

89%  
men

11%  
women



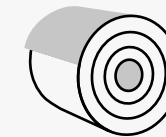
16 operating  
units



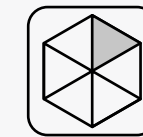
416,900 tons  
of contained zinc produced



58,300 tons  
of lead produced



41,600 tons  
of copper produced



18 startups in the  
Open Innovation Program





# Ready for the future

CBA implements new strategies in order to become a national industry benchmark in aluminium solutions and services.

The focus of Companhia Brasileira de Alumínio (CBA) in 2016 was transformation. CBA started the year with the mission of implementing its new business strategies, approved by the Board of Directors of Votorantim S.A. at the end of 2015. In July, its separation from Votorantim Metais was announced, which will now focus on the international market, while CBA will concentrate its efforts in the production in Brazil and in the development of new markets for aluminum.

After these changes, CBA began working in two business areas, each with its own specific strategy and individually calculated results. With this, the company focuses greatly on taking

advantage of the opportunities of the two distinct markets.

Primary products include bauxite mining and alumina production (raw materials for glass, refractories, and thermal ceramics industries, among others) and primary aluminum, sold in the form of ingots, billets, castor rolls, slabs, and rebar. Since these products have prices defined in the London Metal Exchange, characterizing them as commodities, the focus of this area is the quest for operational excellence, through cost control, efficiency in consumption of inputs, growing adoption of technology, and process stability.

In transformed products with higher added value, CBA's strategy is to increase market share in the

transportation and packaging segments and continue to serve strategic clients in construction and consumer goods. In this market, the capacity for innovation and proximity to the client is critical. Therefore, in 2016, the company restructured the commercial area, which included incorporating the concept of key account management, and creating a research and development department that works with clients to create customized solutions and new applications for aluminum.

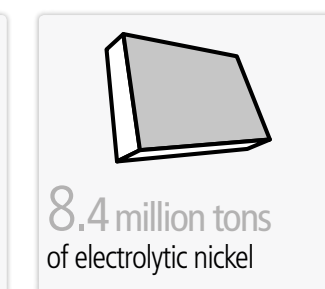
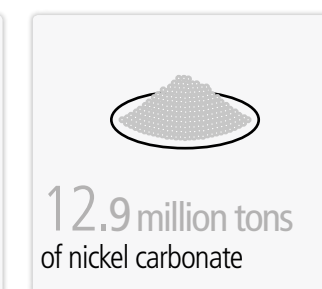
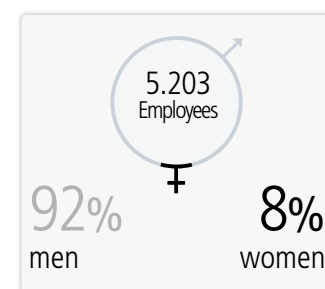
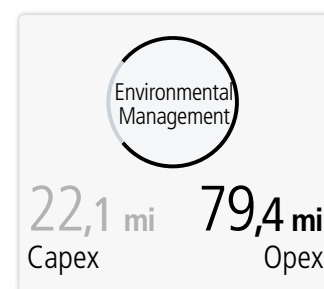
Following this new way of operating, CBA began dozens of new product development projects, one of which is already in full operation: the production of aluminum frame kits for solar energy panels.

In 2016, despite measures toward re-adjusting cost and production capacity, the retraction in the Brazilian market led to financial results below those expected by CBA. Compared with 2015, there was a reduction in the volume traded in the market for transformed products, which forced the company to increase production of primary products, which are less profitable. ▼



## Highlights

- Creation of CBA's Board of Directors and other administration and governance structures, such as supply chain and a finance committee;
- Incorporation of the nickel business, with production operations temporarily suspended, and upholding social and environmental commitments with stakeholders;
- Organizational restructuring of the entire CBA starting with the implementation of new strategies and separation from Votorantim Metais;
- Evolution of the Operational Excellence in all areas of the primary products business;
- Mapping of critical competencies for the new business model for transformed products;
- Implementation of the Votorantim Development System (SDV) at 100% of the company's operational level.





# Factory of ideas

Employees generate 10,000 ideas for reducing costs and improving the company's efficiency through the implementation of measures to ensure process operational stability in 2016.

Votorantim Siderurgia (VS) is one of the three largest producers of long steel in Brazil, and also controls PazdelRío, Colombia's only integrated steelworks, and AcerBrag, Argentina's second largest producer of long steel products.

Long steel is mainly used in civil construction and mechanical engineering, in the form of rebar, wire, screens, profiles, bars, wire rods, and other products.

In the three countries where it operates, market demand was lower than expected in 2016,

mainly in Brazil. As a result of this scenario, the business emphasis was on cost management and operational stability. In Brazil, one of the strategies was to make the productions at the Resende and Barra Mansa units in the southern region of Rio de Janeiro more flexible, by rotating the staff to avoid loss in productivity and skilled labor.

These aspects were the object of a campaign to foster idea generation, which invited all VS Brasil employees to come up with ideas for efficiency and cost reduction projects. In all, approximately 10,000 ideas were generated, of which 4,000 were selected by the company, which estimates a potential impact of BRL 20 million

in the 2017 EBITDA through their implementation.

In February 2017, Votorantim Siderurgia announced the implementation of a contract with ArcelorMittal, still subject to regulatory approvals (see more details on page 55).

For the year 2017, VS projects that the challenging scenario in Brazil will continue, which will require maintaining strict cost control of costs and conservative financial management. In the long term, projections point to a gradual recovery in demand, in order to meet the needs of the infrastructure deficit in the countries where it operates. ▼

www.vsiderurgia.com.br



## Highlights

- ▶ Achieving the production goal of at least 80,000 tons at Resende steelworks contributed to reducing production costs and improving operational stability;
- ▶ The matrix management model, based on the "Process Owners" concept, has led the three countries to perform synergy and standardize quality, sustainability, safety, and maintenance management systems;
- ▶ The VS+ Segurança (More Safety) Project has helped raise awareness and best safety practices through three action pillars: infrastructure, management, and people.
- ▶ The Youth in Action Program, in its first edition, provided an opportunity to develop 18 of the company's young talents, who received training in several skills, executive mentoring, and team project development;
- ▶ The Sistema de Capacitação Conecte (Connect Training System) has been extended to the entire company, making it part of the corporate education structure;
- ▶ Implementing the VS Audit Committee;
- ▶ Structuring the VS Volunteer Program in Brazil and AcerBrag.

Environmental  
Management

14,9 mi  
Capex

25,3 mi  
Opex

Social  
Investment

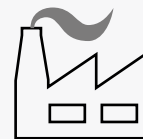
900 k  
Own  
Resources

2,7 mi  
Institute  
and Others

4.908  
Employees

89%  
men

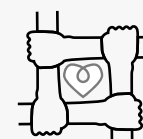
11%  
women



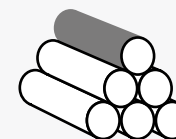
9 operating  
units



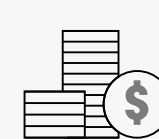
21% reduction  
in water consumption



+240 participants  
in the Volunteering Program



1.64 million tons  
of long steel produced



10.2% reduction  
in specific consumption (BRL/t)  
in the waste disposal process



# Energy to grow

In a year marked by the first investment in wind energy, the company has consolidated its position as one of the largest suppliers in Brazil

**C**reated in 1996 to provide the energy supply for Votorantim companies, Votorantim Energia (VE) began supplying external clients in 2013, and since then has established itself as one of the main electric utilities companies in Brazil. Regardless of the client profile - currently nearly 200 - VE seeks to provide supply stability at a competitive price.

VE also works in energy assets management, which includes Votorantim's 32 hydroelectric plants and five cogeneration plants. In this area, the company works to improve processes and adopts modern environmental control technologies, providing an efficient, low cost operation.

In addition to beginning

construction of a wind farm in Piauí ([see table below](#)), the year 2016 was highlighted by the search

for competitiveness in Votorantim's energy assets management, including managing energy surplus

in steel and cement production operations. The intelligent marketing of this surplus generated significant financial gains.

In 2016, VE also began implementing the Our Steps Program, which reviews and standardizes plant management processes, based on best internal and external practices. It is estimated that this initiative will ensure greater availability of the plants, allowing for an additional generation of 0.5% of energy.

VE has an increasingly important role in Votorantim's portfolio. The company manages 2.6 GW, which corresponds to approximately 2% of the energy generated in Brazil. Consequently, the future holds many opportunities for growth.. ▼

## VE BEGINS CONSTRUCTION OF SEVEN WIND FARMS

In 2016, Votorantim Energia announced its entry into the field of wind generation, which uses the force of the wind as an energy source, representing an energy source with low environmental impact.

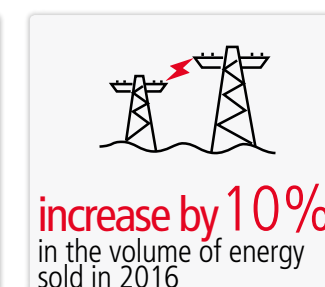
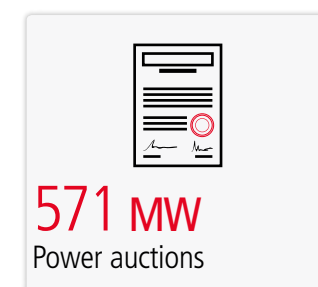
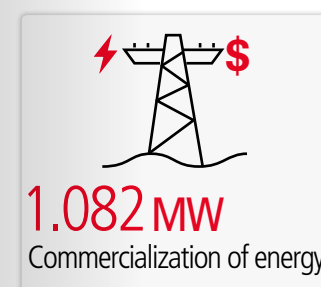
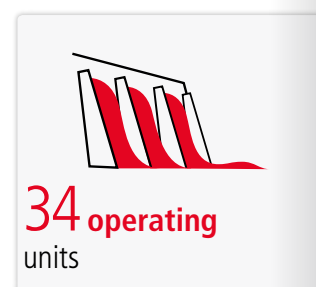
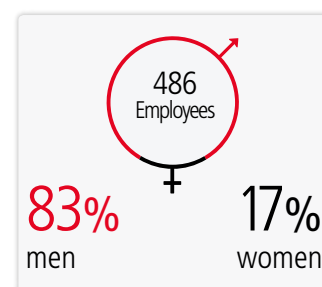
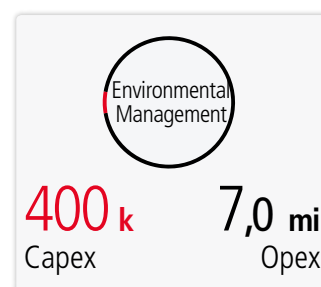
The seven wind farms in Piauí, with total investments at BRL 1.13 billion, installed capacity of 206 MW, and 98 wind turbines, are already under construction and are expected to start operating in 2018.

The energy to be produced in this park has already been sold, at the 22nd New Energy Auction, promoted by the Energy Trading Chamber (CCEE), and will be allocated to the regulated market beginning January 2018, under a 20-year contract. Approximately 10% of this energy may be used to attract new clients to self-production of wind power.



## Highlights

- ▶ Improvement of the company's compliance and risk management programs, which resulted in the mapping of 13 strategic risks and 48 events to be managed
- ▶ Training and integration activities of 39 company leaders through the VE Leader program.
- ▶ Environmental licensing of the Ventos do Piauí project in record time, complying with all regulatory requirements for securing the permits and licenses required for the start of the work
- ▶ Launching of the Nossos Passos (Our Steps) Program, with the objective of structuring the plant's management model and reaching the maximum level of operational excellence and maintenance.
- ▶ Review of the company's strategy for the coming years, with emphasis on the product portfolio and the conception of a plan to modernize the technological platforms
- ▶ Expansion of projects focused on environmental education and preservation of water resources, aiming at the reduction of solid waste in the rivers in which the plant's dams are located.
- ▶ Completion of the Digital Transformation project, which promoted debates about the incorporation and influence of new technologies in the VE business.





# Innovation Applied to the Business

Developing non-forest products and services opens new prospects for action and has already begun to bring positive results

**I**nnovation, sustainability and the search for new businesses are strategic fronts for Fibria to continue growing and maintaining its global leadership position in the pulp industry. The company follows a diversification route that includes

the development of bioproducts, biocomposites and biofuels from forest biomass, among other initiatives that begin promoting structural changes in its mode of production.

Pioneering development of eucalyptus cloning, for example, has

allowed Fibria to double its annual pulp productivity per hectare over the past 40 years - a benchmark for any company or country in the world. Landscape management and cultivation in a mosaic system help ensure the balance of the ecosystems in which the company operates. The eucalyptus plantation, combined with agriculture, helped Fibria distribute and generate income among small producers and forestry partners, benefiting over 6,000 families - a social commitment that also involves beekeeping and the production of handicrafts, among other actions. And, finally, new wood transportation technologies were created, with a reduction in the structure and weight of the trucks and a gain in volume of nearly 18%.

Other processes and products in the implementation phase follow the same trend, and some studies in progress are already showing great potential to significantly impact the company (see box with highlights). These initiatives led Fibria to be recognized in the second edition of the Brazilian ranking of innovative companies, prepared by the Valor Econômico journal - the company ranked 31st in the top 100 and was the only one in the forestry sector to appear on the list. Another important recognition was the achievement of 14th place in Fortune's "Change the World" ranking, as well as remaining on the list of companies included in the Dow Jones Global Sustainability Index (DJSI) - also the only one in the sector to be included on the list. ▼



  
Environmental  
Management

**89,3 mi**  
Capex

**84,9 mi**  
Opex


  
Social  
Investment

**18,7 mi**  
Own  
Resources

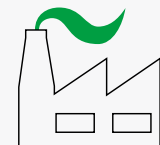
**6,3 mi**  
Institute  
and Others\*

\*Does not include external captured value


  
4.309  
Employees

**85%**  
men

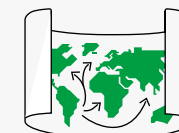
**15%**  
women



**17 operating**  
units



**5,02 million tons**  
of pulp produced



**38 countries**  
Exports in 2016



**35% of native forests**  
intended for preservation



**8,3% interest**  
in the CelluForce



## Highlights

- Fibria's investment in 2016 amounted to BRL 72 million
- In December 2016, a total of 8,283 professionals worked simultaneously at the peak of the Horizons 2 project. In all, 77% of the physical execution of construction was completed in the period
- Issue of a USD 700 million Green Bond for projects focused on forest management, restoration of native areas, and water and waste management at the company's facilities and global operations.
- The Colmeias project, a Fibria initiative in partnership with 67 associations of beekeepers, produced 1,600 tons of honey, of which 500 tons were exported to other countries
- Fibria acquires stake in Canadian CelluForce, world leader in the production of nanocrystalline cellulose
- With a lighter body frame, Fibria's new trucks consume less fuel, produce less air emissions, and have a 10% higher wood transporting capacity than the rest of the fleet
- In an unprecedented contract for creation of value, executed by companies in the same sector, Fibria sold a volume of 478,000 tons of Klabin pulp in 2016



# Record production

We posted record sales of NFC (Not-From- Concentrate Orange Juice) juice in the 2015-2016 harvest, 10% more than in the previous period

Citrosuco ended the 2015-2016 harvest with a new record in production and sales of NFC juice, 10% above the previous period. Continuous efforts to improve efficiency in the production chain also led to a 20% gain in productivity in land

transportation of juice and a 36% reduction in the amount of water used to spray orchards.

In corporate governance and organizational culture, Citrosuco has been strengthened by improvement of the compliance and risk management programs which, together with the internal audit process, support management in conducting business and in the long-term planning for the company.

In the field of research and innovation, studies focus on the search for new applications and orange products, mainly in solutions for the greater added value market. Another important front is developing solutions that include sustainability principles and the search for synergies with partner

companies. In 2016, this front gave rise to a project with Legado das Águas - Reserva Votorantim that led to the use of bioengineering to obtain renewable products.

Also in the area of innovation, the company continues to excel in controlling greening, a disease that affects orchards all over the world, including producers like the United States - Citrosuco's infection rate is less than 1%, far below the rates for plantations in Florida, for example.

In the last harvest, Citrosuco also achieved the silver level in the Sustainable Agriculture Initiative (SAI) Platform standards for 100% of its agricultural production and the Rainforest Alliance Certified seal for three of its farms ▼



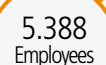
  
Environmental  
Management

3,8 mi  
Capex

8,3 mi  
Opex


  
Social  
Investment

1,1 mi  
Own Resources


  
5.388  
Employees

75%  
men

25%  
women



47 operating  
units

\* In operations outside Brazil there are  
213 other permanent employees

{G4-9, EN8, G4-EN31, G4-S01}



## Highlights

- Investments of USD 53 million, of which USD 18 million were geared towards increasing production capacity and research.
- Launch of and training in the New Code of Conduct for 100% of employees;
- Implementation of the Citrosuco Development System (SDC), a program that guides professional development and promotes recognition, in a fair way, contributing to the high performance of the organization.
- Use of the *Tamarixia Radiata*, a species of wasp, a natural enemy of the insect that transmits greening - a disease that affects orange orchards worldwide, helping to maintain the infection rate below 1%.
- 100% of the agricultural production is certified by the Sustainable Agriculture Initiative (SAI) Platform;
- A 36% reduction in the volume of water used for the application of pesticides;
- Renewable sources accounted for 51% of the total energy consumed;


  
7.384  
seasonal  
employees

69%  
men

31%  
women



+100 countries  
Exports in 2016



5 ships  
(4 own and 1 multi-cargo)



45 own  
trucks

{G4-9, G4-EN3, G4-EN31, G4-S01}



# Strict controls

To minimize macroeconomic scenario, Banco Votorantim prioritizes profitability and is more conservative in granting credit

One of the ten largest Brazilian banks, with a total of BRL 103 billion in assets at the end of 2016, Banco Votorantim continues its strategy of consolidating itself as one of the country's leading financial institutions, based on the profitability of current and new businesses, increasing operational efficiency, and strengthening synergies with Banco do Brasil, which acquired 50% of its capital stock in 2009 - the other 50% are held by Votorantim Finanças S.A.

To continue growing, in recent years, Banco Votorantim has been seeking to increase the diversification of its businesses, in both Wholesale and Retail.

In the first line of business,

the bank has corporate operations, service to large companies, investment management, securities brokerage, asset management, and private banking services to high net worth individuals.

In retail, the institution operates in the areas of credit cards, insurance brokerage, and payroll loans, as well as financing used vehicles, a niche in which it has market leadership.

In 2016, considering the Brazilian scenario of unemployment and drop in income, Banco Votorantim prioritized the profitability of its client portfolio, instead of growth.

While executing a conservative credit concession policy, the default rates of its portfolio

remained at an acceptable level. Other measures that brought positive returns were strengthening of insurance brokerage, efficient cost management, treasury operations, and the relentless search for an increase in revenues from services that generated results without capital investments.

The year was also highlighted by the change of the company's CEO, as a result of the structured process for succession of the presidency at the Bank and by the application of commercial efficiency technology, adopting geolocation tools and applications that increased the productivity of service managers, increasing the time available for prospecting.

In 2016, Banco Votorantim also adhered to the Equator Principles, an international voluntary commitment that gathers criteria for the social and environmental analysis of granting credit. By adhering to this commitment, the institution reinforces its practices in this area, collaborating for the social and environmental sustainability of projects it finances ▼

## Highlights

- Implementing social and environmental guidelines when selecting suppliers, intensifying research about bonded and child labor, environmental crime, and legal compliance;
- Offsetting greenhouse gas emissions from the FIA Sustainability Fund, the first zero carbon fund in Brazil;
- Training of 753 retail managers to replicate financial education with employees and clients; Establishment of new commercial partnerships, for the creation of a new loyalty card and for financing lines for students and startups.
- Establishing new commercial partnerships, in order to create a new loyalty card and lines of credit for students and startups.
- Growth of revenue by 16% from services that do not compromise capital (Basel), compared with the previous year.
- Launching of the Internal Multiplier Program in 2016, which involved the definition by senior management of several strategic aspects (Credit, Derivatives, Risks, etc.) and relied on employees to carry out internal training.



**Adherence**  
to the Equator Principles



**150k** Own Resources  
**5.1 mi** Incentivized



**53%** men  
**47%** women



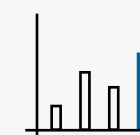
**81 units**



**R\$8,4 billion**  
in net equity



**R\$103 billion**  
in assets



**426 million**  
million in net income



**15,1%**  
Basel Index



# CONTENT GUIDELINES

An American consulting firm analyzes the reports and communication channels of the holding company in order to assess the relevance of the reported indicators

The 2016 Votorantim S.A. Report contains Votorantim S.A.'s performance and main strategic actions in the period, including financial and non-financial data and consolidated information of the eight companies that are part of the Votorantim conglomerate (Votorantim Cimentos, Votorantim Metais, Companhia Brasileira de Alumínio, Votorantim Siderurgia, Votorantim Energia,

Citrosuco, Fibria and Banco Votorantim).

The publication covers the period from January 1st to December 31st, 2016, with the exception of information from Citrosuco, which refers to the 2014/2015 harvest, which ended in June 2016.

The report was drafted according to the guidelines of the Global Reporting Initiative (GRI), G4 version, core option,

and the International Integrated Reporting Council (IIRC), an international organization created to set forth a reporting standard for financial and non-financial information. The assumptions of the UN Global Compact and the Organization for Economic Co-operation and Development (OECD) were also considered.

The content of this report was also based on the document DNA Votorantim, which systematized the company's practices and processes, standardized its governance principles and established five management pillars for investee companies (see table). These

pillars address strategic issues for Votorantim and present macro-guidelines for conducting business, observing relevant issues from a financial, social and environmental standpoint.

The information disclosed in this report also addresses the relevant issues identified in the latest materiality process, from 2012, through consultations of various stakeholders, institutional investors, the financial sector, experts, the media, NGOs and public agencies. The material aspects are correlated with the management practices defined in DNA Votorantim, to ensure that important issues for strategic audiences are in line with the company's management.

The financial data in the 2016 Votorantim S.A. Report was audited by PwC, and the non-financial data by Limited Assurance. The publication is available in Portuguese, English and Spanish.

the Organization for Economic Co-operation and Development (OECD).

The purpose of the study was also to evaluate the effectiveness of this communication to external audiences, including investors, as well as to identify the connections between the sustainability indicators and the business strategy of Votorantim S.A.. Finally, the Cornerstone Capital study also mapped the correlations of the indicators with UN's Sustainable Development Goals (SDGs) and suggested the inclusion of a new set of indicators that considered material aspects for the company and its investee companies.

The consultation materials used included the Integrated Report for 2014, the Management Report of the same year, quarterly financial reports, and online platforms that address corporate and sustainability information (such as the [www.votorantim.com.br](http://www.votorantim.com.br) portal), among other channels and internal documents. The assessment also considered DNA Votorantim, a document consolidated in 2014 that systematized the company's practices and processes, standardized its governance principles and established five management pillars for the holding company and for the investee companies.

Although it is part of a preliminary and initial process for defining the materiality of VSA, the work of Cornerstone Capital had important contributions

to the definition of the content in the company's communication channels, including this 2016 Integrated Report. The consulting company made general and specific recommendations and identified some indicators that deserve special attention from the portfolio manager, since they are also considered by investors: greenhouse gas emissions; air quality; energy management; water management; and health, safety and well-being of employees.

In this sense, a section of the study reads: "The inclusion of these indicators, with the reporting of detailed metrics, would allow investors to understand the company's progress on material sustainability issues through its subsidiaries." Cornerstone Capital's work was based on a tool called the Sustainability Accounting Standards Board (SASB), commonly used to identify material aspects for companies in many industries and widely accessed by US investors because of its focus on sustainability aspects.

In the study, the consulting company also included a list of additional indicators that should be reported in the next editions of VSA's integrated reports, associated with the material aspects of the operation sectors of the subsidiaries. It should be noted, however, that there were important changes in the scope of the annual reports of the portfolio managers and of the investee companies,

## THE 5 MANAGEMENT PILLARS

Guidelines that represent the managing models of the holding company and of the Votorantim investee companies



**FINANCIAL MANAGEMENT –**  
Guarantees the financial discipline that enables the desired risk-return profile;



**VALUE GENERATION –**  
Establishes the vision, identifies the potential value of the business and translates it into concrete plans that align and mobilize the organization;



**OPERATIONAL EXCELLENCE –**  
Pursues constant improvement of the procedures through relevant practices and synergies among the Companies;



**PEOPLE AND ORGANIZATION –**  
Preserves the Votorantim culture through leaders who embody their values and beliefs;



**IMAGE AND REPUTATION –**  
Preserves and promotes the image and reputation of Votorantim with its various stakeholders.

## A study on indicators

In 2016, Votorantim S.A. commissioned a study from US asset management consulting firm Cornerstone Capital to assess the alignment of sustainability indicators published in its communications with key international standards that guide corporate reporting – such as the Global Reporting Initiative (GRI), the International Integrated Reporting Council (IIRC), the assumptions of the UN Global Compact and



especially after 2014, in a way that the publications would reflect the management and governance changes then undertaken throughout the organization.

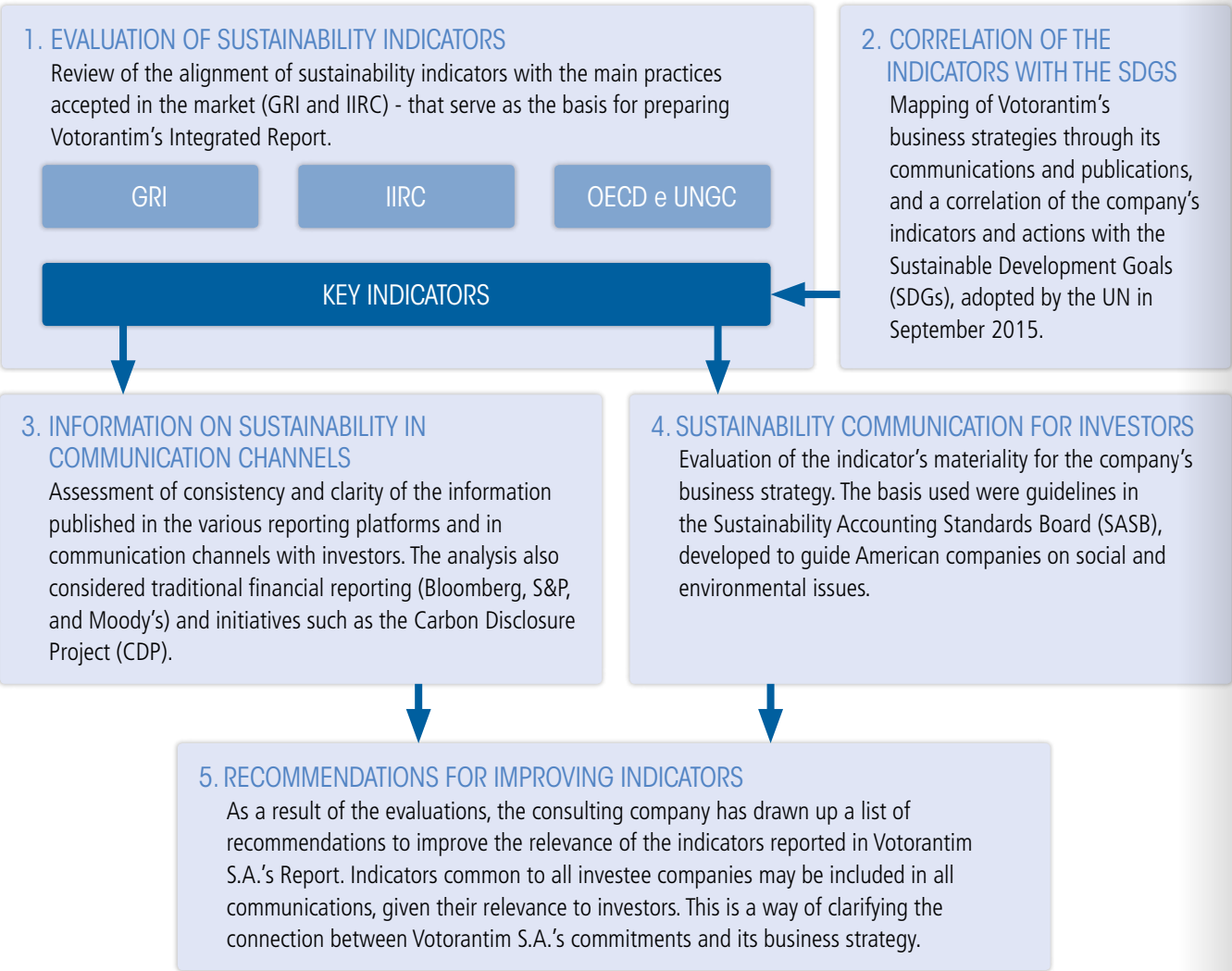
In this context, the VSA report no longer discloses the operational information and indicators of the subsidiaries, since they began to produce their own annual reports. The

holding company, in turn, began to prioritize actions and information associated with the nature of its portfolio management activity, focusing on strategic issues, governance and risk management, among other matters relevant to the business as a whole.

Nonetheless, some Cornerstone Capital recommendations were already considered

in this Integrated Report 2016, such as the inclusion of water, waste, and air quality indicators (G4 EN8, G4 EN21, G4 EN22, and G4 EN23) and greater detailing of emissions and energy indicators (G3 EN3 and G4 EN15). ▼

HOW WAS THE STUDY CONDUCTED



GRI INDICATORS

GRI Description	Page(s)	External Assurance (p. 77,78)
<b>1. Strategy and Analysis</b>		
G4-1 Statement from the most senior decision-maker of the organization	4,5	
<b>2. Organizational Profile</b>		
G4-3 Name of the organization	Votorantim S.A. 1,8	
G4-4 Primary brands, products and/or services	In 2016, important movements took place in order to adapt the governance structure to the reality of the companies' portfolio manager and operations. In April, Votorantim S.A. sold part of its interest in the subsidiary VMH. In July, Companhia Brasileira de Alumínio ("CBA") incorporated the net accounting assets corresponding to the net equity of VM Holding SA (VMSA), which until then was controlled by Votorantim S.A.. This corporate restructuring is part of the strategy defined by the holding company, which includes CBA and VMSA, which aims to reduce administrative and financial costs, as well as optimize business management. As such, the following indicators contain information broken down by: Votorantim Cimentos, Votorantim Metais Holding (formerly Votorantim Metais), Companhia Brasileira de Alumínio, Votorantim Siderurgia, Votorantim Energia, Fibria, Citrosuco, and Banco Votorantim.	
G4-5 Location of organization's headquarters	São Paulo, SP, Brazil	
G4-6 Number and names of countries where the organization operates	12,13	
G4-7 Nature of ownership and legal form	Votorantim S.A. is a private equity company, the holding company of the Votorantim companies. It operates in the areas of cement, polymetals, aluminum, long steel, energy, pulp, orange juice. 15, 63	
G4-8 Markets served	12,13	
G4-9 Scale of the organization	12, 13, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73	
G4-10 Total number of employees	9	
G4-11 Percentage of total employees covered by collective bargaining agreements	88% of our own employees are covered by collective bargaining agreements.	
G4-12 Organization's supply chain		
G4-13 Significant changes during the reporting period regarding the organization's size, structure, ownership, or its supply chain	21,55	



GRI Description	Page(s)	External Assurance (p. 77,78)
<b>3. Commitment to External Initiatives</b>		
G4-14 Whether and how the precautionary approach or principle is addressed by the organization	<p>We have a structured risk management platform, which encompasses the risks of processes, compliance and products, always aiming to mitigate the environmental impacts caused by our activities.</p> <p>All operations follow internal protocols and the applicable legislation for environmental controls, and the controls of the licensing of our operations are held in a centralized system (GLM). New production processes or completely new operations undergo a strict risk assessment protocol, including not only the impacts and their mitigation, but also the assessment of available technologies with their levels of resource consumption and emissions per metric ton produced.</p> <p>In addition, we always carry out studies and debates with the communities surrounding our operations to evaluate the risks and effectiveness of the measures implemented.</p> <p>Regarding our products, they are all in accordance with the established legal standards and in line with the best market practices, and whose material data sheets are available on our companies' websites.</p>	
G4-15 Externally developed economic, environmental and social charters, principles, or other initiatives to which the organization subscribes or which it endorses	<p>Since 2011, we have been signatories of the Global Compact, an initiative of the United Nations (UN) to mobilize the corporate community for the adoption of internationally accepted fundamental values and practices in human rights, labor relations, environment, and fight against corruption.</p> <p>In 2011, the Internal Controls Project was initiated, and in 2014, Votorantim S.A. was certified under Sarbanes-Oxley (SOx) by independent auditors.</p>	
G4-16 Memberships of associations (such as industry associations) and national or international advocacy organizations	<p>ANA PAULA DE MEDEIROS CARRACEDO - Vice President of the Amcham Compliance and Risk Management Committee; Member of the Advisory Committee of the Anti-Corruption Working Group of the Global Compact; Member of the Committee of the IBGC Corporate Governance Congress</p> <p>DAVID CANASSA - Vice President of the Theme Sub-committee on Energy and Climate Change of CEBDS (Brazilian Business Council for Sustainable Development) and Council Member of COSEMA (Higher Council for the Environment) of FIESP</p>	
<b>4. Material Aspects and Boundaries</b>		
G4-17 Entities included in the organization's consolidated financial statements or equivalent documents	9,74	
G4-18 Process for defining the report content and the Aspect Boundaries	74, 75, 76	
G4-19 Material Aspects identified in the process for defining report content	74, 75, 76	*
G4-20 For each material Aspect, report the Aspect Boundary within the organization	74, 75, 76	*
G4-21 For each material Aspect, report the Aspect Boundary outside the organization	74, 75, 76	*
G4-22 Effect of any restatements of information provided in previous reports	External Assurance 77	*
G4-23 Significant changes from previous reporting periods in the Scope and Aspect Boundaries	Significant changes in scope and boundaries are indicated in the content index comments referring to the indicators associated with each aspect. 74, 75, 76	

GRI Description	Page(s)	External Assurance (p. 77,78)
<b>5. Stakeholder Engagement</b>		
G4-24 List of stakeholder groups engaged by the organization		
G4-25 Basis for identification and selection of stakeholders with whom to engage		
G4-26 Organization's approach to stakeholder engagement		
G4-27 Key topics and concerns that have been raised through stakeholder engagement, and how the organization has responded		
<b>6. Report Profile</b>		
G4-28 Reporting period	This report contains information for 2016, with the exception of information from Citrosuco, which refers to the 2015/2016 harvest.	
G4-29 Date of most recent previous report	Year of 2015	
G4-30 Reporting cycle	Annual	
G4-31 Contact point for questions regarding the report or its contents	80	
G4-32 Report the 'in accordance' option the organization has chosen, the GRI Content Index for the chosen option, and the reference to the External Assurance Report	Core option and Limited Assurance Report.	
G4-33 Organization's policy and current practice with regard to seeking external assurance for the report	When Votorantim's Board approved the adoption of the GRI guidelines in 2008, one of the conditions set by the Board was that all externally published reports should undergo external audits, and that figures should only be reported if a corresponding management control process was in place.	
<b>6. Governance</b>		
G4-34 Governance structure of the organization	21, 22, 34	
<b>7. Ethics and Integrity</b>		
G4-56 Organization's values, principles, standards and norms of behavior	6, 11, 25, 29	



# ECONOMIC PERFORMANCE

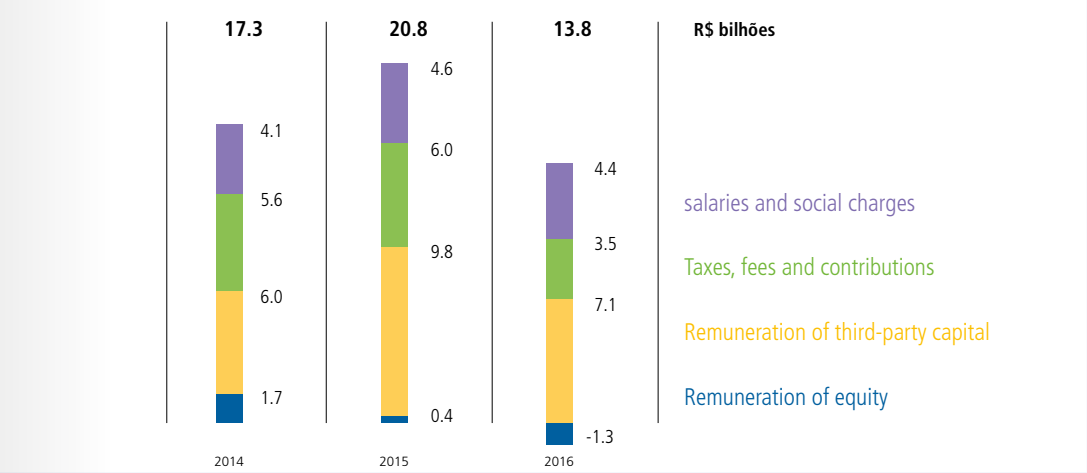
## ASPECT: ECONOMIC PERFORMANCE

### EC1 DIRECT ECONOMIC VALUE GENERATED AND DISTRIBUTED

Additional data and/or DMA **p. 6, 51, 52, 53, 54, 55, 56**

Breakdown of value added (R\$ million)	2014	2015	2016
<b>DIRECT ECONOMIC VALUE GENERATED</b>			
<b>Revenue</b>			
Sales of products and services	33,192	37,006	31,156
Other operating income (expenses), net	1,013	-159	585
Reversal (complement) of the provision for doubtful accounts	-56	-74	-70
<b>Total revenues</b>	34,149	36,773	31,671
<b>Inputs acquired from third parties</b>			
Cost of goods and services sold	-17,605	-20,233	-18,915
Impairment of assets	-621	-658	-2151
<b>Gross value added</b>	15,923	15,882	10,605
Depreciation, amortization and depletion	-2,302	-2,754	-2,664
<b>Net value added generated by the Company</b>	13,621	13,128	7,941
<b>Value added received through transfers</b>			
Equity accounting	258	311	781
Finance income and foreign exchange gains	3,464	7,392	5,083
<b>Total value added received through transfers</b>	3,722	7,703	5,864
<b>Total value added to distribute</b>	17,343	20,831	13,805

Breakdown of value added (R\$ million)	2014	2015	2016
<b>Distribution of value added</b>			
<b>Personnel and payroll charges</b>	4,087	4,644	4380
Direct remuneration	2579	2,939	2,704
Benefits	492	602	629
Social charges	1016	1,103	3533
<b>Taxes, fees and contributions</b>	5,600	5,984	3,533
Federal	2,632	2,750	2,085
State	3,085	2,951	2,298
Municipal	32	25	18
Deferred taxes	(149)	258	-868
<b>Third-party capital remuneration</b>	5,983	9,821	7142
Financial expenses	5,760	9,404	6,814
Rentals	223	417	328
<b>Own capital remuneration</b>	1,673	382	-1250
Dividends	850	159	89
Non-controlling interest	85	(5)	45
Retained earnings (losses)	742	238	-1116
Loss on discontinued operations	17,343	20,831	-268
<b>Value added distributed</b>	17,343	20,831	13,805
<b>Valor econômico retido – Economic value withheld</b>	16,806	15,942	



**Omissions:** Indicator not reported by Citrosuco.  
**Reasons for omission:** Confidential information.  
**Explanation for omission:** Confidential information.



Comments:

1. The Votorantim S.A. system did not allow for a breakdown of investments in the community, since they are contained in the operating costs

Production primary products				
Company (products)	2014	2015	2016	Unit
Votorantim Metais (aluminum, nickel, zinc)*	0.9	1.3	0.52*	Million tons
Votorantim Siderurgia (long steel)	1.8	1.7	1.64	Million tons
Votorantim Cimentos (cement, mortar, aggregates)	68.0	65.8	60.1	Million tons
Fibria (pulp)	5.27	5.2	5.02	Million tons
Companhia Brasileira de Alumínio (bauxite, molten aluminum, nickel carbonate, electrolytic nickel)			1.71	Million tons


\* Starting in 2016, the production of Votorantim Metais, includes zinc, lead and copper

**Omissions:** Indicator not reported by Citrosuco.  
**Reasons for omission:** Confidential information.  
**Explanation for omission:** Confidential information.

ENVIRONMENTAL PERFORMANCE

ASPECT: ENERGY

EN3 ENERGY CONSUMPTION WITHIN THE ORGANIZATION

Additional data and/or DMA **p. 38, 39, 43, 58, 71**  
External assurance (p. 77,78) 

Description	2016	
Total fuel consumption from non-renewable sources	134,550,550	Gj
Total fuel consumption from renewable sources	119,505,892	Gj
Total energy consumption within the organization	270,227,060	Gj

Comments:

1. First year reporting this indicator



EN5 ENERGY INTENSITY

Additional data and/or DMA  
External assurance (p. 77,78)

p. 6  
✓

Company	Primary Product	Rate	Taxa 2015	Taxa 2016	Métrica	Tipos de energia	Escopo
Fibra	Pulp	20.67	21.98	20.76	GJ/t	Renewable/ Non-Renewable	Within the organization
Votorantim Cimentos	Cement	2.660	3.41	3.170	GJ/t	Renewable/ Non-Renewable	Within/ Outside the organization
	Aggregates	0.0301	0.04	0.028	GJ/t	Renewable/ Non-Renewable	Within/ Outside the organization
	Concrete	0.00003	0.07	0.145	GJ/t	Renewable/ Non-Renewable	Within/ Outside the organization
	Mortar			0.070	GJ/t	Renewable/ Non-Renewable	Within/ Outside the organization
Votorantim Metais	Aluminum	16.63	12.30	*	GJ/t	Renewable/ Non-Renewable	Within/ Outside the organization
	Zinc	13.21	12.63	13.61	GJ/t	Renewable/ Non-Renewable	Within/ Outside the organization
	Nickel	375.50	300.47	*	GJ/t	Renewable/ Non-Renewable	Within/ Outside the organization
Votorantim Siderurgia	Steel (Billet)	2.88	2.87	2.92	GJ/t	Renewable/ Non-Renewable	Within the organization
	Steel (Rolled Billet)	1.88	1.81	1.84	GJ/t	Renewable/ Non-Renewable	Within the organization
Companhia Brasileira de Alumínio	Aluminum			78.62	GJ/t	Renewable/ Non-Renewable	Within the organization
	Processed bauxite (Mirai)			0.048	GJ/t	Renewable/ Non-Renewable	Within the organization
	Nickel Carbonate			26.72	GJ/t	Renewable/ Non-Renewable	Within the organization
	Electrolytic Nickel (production up to May/16)			29.27	GJ/t	Renewable/ Non-Renewable	Within the organization

Comments:

1. Citrosuco does not report this indicator, since the intensity of the company's GHG emissions is significantly influenced by climate issues. Thus, for a constant scenario in consumption of inputs, emissions can vary according to climate impacts upon productivity on farms, fruit size and brix. As such, the intensity of GHG emissions would not reflect management of GHG emissions.
2. Indicator not applicable to Votorantim Energia.
3. In order to calculate energy intensity, we considered sales of primary products in 2016
4. The table considers the corporate restructuring described at the beginning of this content index

ASPECT: WATER

EN8 TOTAL WATER WITHDRAWAL BY SOURCE

Additional data and/or DMA  
External assurance (p. 77,78)

p. 65, 69, 70, 71  
✓

Description	2016	
Surface water (rivers, lakes, wet lands, oceans)	64,603,511.9	m³
Ground water	116,992,500.9	m³
Rainwater harvested	11,913,401.9	m³
Effluents from other organizations	0.0	m³
Utility/water supply company	524,132.3	m³
Total	194,033,546.75	m³

Comments:

1. First year reporting this indicator
2. Indicator not reported by Banco Votorantim
3. Data reported by Votorantim Cimentos consider only the cement business



ASPECT: BIODIVERSITY

EN13 HABITATS PROTECTED OR RESTORED

Additional data and/or DMA p. 6, 38, 39

Total Area by Company	2014	2015	2016
Votorantim Siderurgia	1825	1542.3	1,796.84
Fibria	29	184.3	3,102.60
Citrosuco	92	134.8	175.35
Votorantim Metais	419	271.7	14,056.09
Reservas Votorantim	310	310	299.36
Companhia Brasileira de Alumínio			236.49
Votorantim Cimentos			11,722.31
Votorantim Energia			43.46
TOTAL	2,674	2,443.1	31,432.50

Biome	2016 (Total Area)	Area whose restoration measures have been approved by external specialists or follow external parameters / protocols
Amazon	2,872.8	2,872.8
Caatinga	336.4	336.4
Cerrado	18,807.2	17,565.8
Atlantic Rainforest	7,704.6	5,701.3
Pantanal	168.5	168.5
Pampa	470.3	422.2
Other	1,072.8	1,072.8
Total Area	31,432.5	28,139.7

Comments:

- 1. Citrosuco did not report data from abroad.
- 2. The protected or restored habitats are located in Brazil, in the states of BA, CE, DF, ES, GO, MG, MS, MT, PA, PE, PR, RJ, RO, RS, SC, SE, SP and T, and Colombia, in the province de Boyacá.
- 3. Indicator not reported by Banco Votorantim

ASPECT: EMISSIONS

EN15 DIRECT GREENHOUSE GAS (GHG) EMISSIONS (SCOPE 1)

Additional data and/or DMA p. 69, 73

External assurance (p. 77,78) ✓

Gross direct GHG emissions (Scope 1) in metric tons of CO2 equivalent by Company	Gases included in the calculation	2016
Votorantim Siderurgia	CO <sub>2</sub> - CH <sub>4</sub> - N <sub>2</sub> O	1,501,904
Fibria	CO <sub>2</sub> - CH <sub>4</sub> - N <sub>2</sub> O	1,036,182
Citrosuco	CO <sub>2</sub> - CH <sub>4</sub> - N <sub>2</sub> O	457,053
Votorantim Metais	CO <sub>2</sub> - CH <sub>4</sub> - N <sub>2</sub> O	189,143
Votorantim Cimentos	CO <sub>2</sub> - CH <sub>4</sub> - N <sub>2</sub> O	22,679,560
Companhia Brasileira de Alumínio	CO <sub>2</sub> - CH <sub>4</sub> - N <sub>2</sub> O - PFCs	1,524,979
TOTAL		27,388,821

Comments:

- 1. Indicator not reported by Banco Votorantim



EN18 INTENSITY OF GREENHOUSE GAS (GHG) EMISSIONS

Additional data and/or DMA p. 43  
External assurance (p. 77,78) ✓

Company	Primary Product	Rate 2014	Rate 2015	Rate 2016	Metric	Types of Energy	Gases included
Fibria	Pulp	0.240	0.34	0.34	tCO <sub>2</sub> eq/t	Renewable/ Non-Renewable	Within/ Outside the organization
Votorantim Cimentos	Cement	0.653	0.63	0.6329	tCO <sub>2</sub> eq/t	Renewable/ Non-Renewable	Within/ Outside the organization
	Aggregates	0.0020	0.0018	0.00142	tCO <sub>2</sub> eq/t	Renewable/ Non-Renewable	Within/ Outside the organization
	Concrete	0.0000021	0.0053	0.01030	tCO <sub>2</sub> eq/t	Renewable/ Non-Renewable	Within/ Outside the organization
	Mortar			0.00228	tCO <sub>2</sub> eq/t	Renewable/ Non-Renewable	Within/ Outside the organization
Votorantim Metais	Aluminum	1.14	0.90	*	tCO <sub>2</sub> eq/t	Renewable/ Non-Renewable	Within/ Outside the organization
	Zinc	0.83	0.77	0.779	tCO <sub>2</sub> eq/t	Renewable/ Non-Renewable	Within/ Outside the organization
	Nickel	30.24	23.27	*	tCO <sub>2</sub> eq/t	Renewable/ Non-Renewable	Within/ Outside the organization
Votorantim Siderurgia	Billet (Palanquilla)	0.970	0.91	1.0936	tCO <sub>2</sub> eq/t	Renewable/ Non-Renewable	Within/ Outside the organization
	Finished Products	1.017	0.96		tCO <sub>2</sub> eq/t	Renewable/ Non-Renewable	Within/ Outside the organization
Companhia Brasileira de Alumínio	Processed bauxite			0.0027	tCO <sub>2</sub> eq/t	Renewable/ Non-Renewable	Within/ Outside the organization
	Molten aluminum			4.9912	tCO <sub>2</sub> eq/t	Renewable/ Non-Renewable	Within/ Outside the organization
	Nickel carbonate			8.4779	tCO <sub>2</sub> eq/t	Renewable/ Non-Renewable	Within/ Outside the organization
	Electrolytic nickel			2.5846	tCO <sub>2</sub> eq/t	Renewable/ Non-Renewable	Within/ Outside the organization

Comments:

- 1. Citrosuco does not report this indicator, since the intensity of the company's GHG emissions is significantly influenced by climate issues. Thus, for a constant scenario in consumption of inputs, emissions can vary according to climate impacts upon productivity on farms, fruit size and brix. As such, the intensity of GHG emissions would not reflect management of GHG emissions.
- 2. Indicator not applicable to Votorantim Energia.
- 3. VS does not include in its calculation its mining activity in Colombia
- 4. Indicator not reported by Banco Votorantim

EN21 NO<sub>x</sub>, SO<sub>x</sub> AND OTHER SIGNIFICANT AIR EMISSIONS

Additional data and/or DMA p. 43  
External assurance (p. 77,78) ✓

Volume of significant air emissions by category	2016	
NO <sub>x</sub>	64,009	t
SO <sub>x</sub>	39,573	t
Persistent Organic Pollutants (POP)	0	t
Volatile Organic Compounds (VOC)	2,071	t
Hazardous Air Pollutants (HAP)	17	t
Particulate Matter (PM)	6,255	t
Other standard categories for air emissions identified in regulations	2,177	t

Comments:

- 1. First year reporting this indicator
- 2. Citrosuco did not report SO<sub>x</sub>, POP or HAP, since this parameter was not established for heat generation processes fueled by natural gas and sugarcane bagasse
- 3. Companhia Brasileira de Alumínio: The Niquelândia and SMP units were not considered in the calculation
- 4. VS: did not report POP, COV, HAP, since there is no significant database for reporting emissions of these parameters.
- 5. Indicator not reported by Banco Votorantim



ASPECT: EFFLUENTS AND WASTE

EN22 TOTAL WATER DISCHARGE BY QUALITY AND DESTINATION

Additional data and/or DMA **p. 67**  
External assurance (p. 77,78) ✓

	2016	
Total water discharge	321,117,049	m³

Comments:

- 1. Indicator not reported by Banco Votorantim
- 2. First year reporting this indicator

EN23 TOTAL WEIGHT OF WASTE BY TYPE AND DISPOSAL METHOD

Additional data and/or DMA **p. 34, 43, 58, 65, 67, 69**  
External assurance (p. 77,78) ✓

	Non-hazardous waste	Hazardous waste	
Composting	58,264	0	t
Reuse	543,179	2,191	t
Recycling	205,652	23,183	t
Recovery (including energy recovery)	16,210	416	t
Incineration (burning of mass)	30	443	t
Sanitary landfill	25,302	10,407	t
Underground injection of waste	0	0	t
On-site storage	191,464	805	t
Other	722,467	23,704	t
Total	1,762,569	61,149	t

Comments:

- 1. First year reporting this indicator
- 2. Indicator not reported by Banco Votorantim

ASPECT: COMPLIANCE

EN29 MONETARY VALUE OF SIGNIFICANT FINES AND TOTAL NUMBER OF NON-MONETARY SANCTIONS FOR NON-COMPLIANCE WITH ENVIRONMENTAL LAWS AND REGULATIONS

Additional data and/or DMA -

Monetary value of provision (R\$ million)	2013	2014	2015	2016
Environmental	381	484	539	487

Comments:

- 1. The monetary value of reported cases is in line with the consolidated financial statements of December 31st of each year, and corresponds to the value of the legal actions where the probability of a loss was assessed as possible, in which Votorantim and its controlled companies are involved.



## ASPECT: OVERALL

**EN31** TOTAL INVESTMENTS AND EXPENDITURES IN ENVIRONMENTAL PROTECTION, BY TYPE

Additional data and/or DMA

p. 38, 39, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73,

External assurance (p. 77,78)



Environmental investments and expenditures (BRL)	2013	2014	2015	2016
<b>CAPEX (Investments)</b>	<b>296,511,430</b>	<b>217,773,550.29</b>	<b>275,353,309.91</b>	<b>256,861,032.18</b>
Environmental education	454,961.82	0	263,223.59	8,600.00
Environmental management	13,843,246.30	13,435,748.06	8,720,601.77	29,241,751.59
Conservation, reforestation and biodiversity	6,907,553.30	7,813,079.29	1,676,676.05	18,132,748.64
Environmental protection	52,719,100.39	57,628,408.65	7,573,605.66	7,042,076.10
Treatment of air emissions	42,023,177.92	45,916,880.03	68,595,146.46	70,289,701.80
Waste treatment	107,315,897.27	12,174,795.34	96,880,820.93	43,937,070.48
Effluent treatment	47,245,779.62	35,564,307.08	67,998,524.55	68,758,692.33
HOD - Environmental Area	880,425.16	447,384.00	95,913.39	138,662.52
Decommissioning/remediation of contaminated areas (soil and water)	4,445,883.12	7,009,872.36	2,069,563.93	4,137,328.07
Environmental insurance	0.00	0	0	464,000.00
Other environmental expenses	20,675,405.39	37,783,075.48	21,479,233.58	14,710,400.65
<b>OPEX (Expenses)</b>	<b>330,124,657</b>	<b>345,210,776.34</b>	<b>353,082,230.44</b>	<b>326,731,302.83</b>
Environmental education	1,818,623.54	1,515,954.65	899,404.63	826,083.16
Environmental management	44,867,098.50	40,051,008.71	26,350,477.82	31,392,085.22
Conservation, reforestation and biodiversity	30,359,849.57	54,468,443.68	49,192,056.07	41,510,752.90
Environmental protection	33,452,085.87	9,123,675.25	7,450,068.17	3,726,062.21
Treatment of air emissions	36,643,914.08	84,877,528.83	71,883,762.90	60,954,873.33
Waste treatment	114,665,096.05	70,937,859.76	102,880,614.39	88,251,605.80
Effluent treatment	35,282,090.88	50,017,942.58	63,204,424.66	57,428,912.63
HOD - Environmental Area	12,902,500.02	13,428,302.97	12,624,653.07	11,573,568.52
Decommissioning/remediation of contaminated areas (soil and water)	7,544,406.53	9,516,287.49	12,470,162.78	21,716,628.30
Environmental insurance	173,763.02	61,007.00	119,364.00	1,575,652.35
Other environmental expenses	12,415,228.79	11,212,765.40	6,007,241.95	7,775,078.42
<b>Total</b>	<b>626,636,087</b>	<b>562,984,326.62</b>	<b>628,435,540.35</b>	<b>583,592,335.01</b>

Environmental investments and expenditures (BRL)	2013	2014	2015	2016
Environmental education	2,273,585.36	1,515,954.65	1,162,628.22	834,683.16
Environmental management	58,710,344.81	53,486,756.77	35,071,079.58	60,633,836.81
Conservation, reforestation and biodiversity	37,267,402.87	62,281,522.97	50,868,732.12	59,643,501.54
Environmental protection	86,171,186.26	66,752,083.91	15,023,673.83	10,768,138.31
Treatment of air emissions	78,667,092.00	130,794,408.86	140,478,909.36	131,244,575.13
Waste treatment	221,980,993.32	83,112,655.10	199,761,435.32	132,188,676.28
Effluent treatment	82,527,870.49	85,582,249.66	131,202,949.21	126,187,604.96
HOD - Environmental Area	13,782,925.19	13,875,686.97	12,720,566.46	11,712,231.04
Decommissioning/remediation of contaminated areas (soil and water)	11,990,289.65	16,526,159.85	14,539,726.71	25,853,956.37
Environmental insurance	173,763.02	61,007.00	119,364.00	2,039,652.35
Other environmental expenses	33,090,634.18	48,995,840.88	27,486,475.53	22,485,479.07



ASPECT: SUPPLIER ENVIRONMENTAL ASSESSMENT

EN32 PERCENTAGE OF NEW SUPPLIERS THAT WERE SCREENED USING ENVIRONMENTAL CRITERIA

Additional data and/or DMA p. 73  
External assurance (p. 77,78) ✓

Number of new suppliers that were screened using environmental criteria	2014	2015	2016
Total number of new suppliers	3,222	5,245	4,559
Total Number of new suppliers that were screened using environmental criteria	1,043	790	669
Percentage of new suppliers screened	32.37%	15.1%	14.67%

Comentário:

1. In 2016, Votorantim Cimentos underwent a revision process of its entire supplier data management system and for this reason the company did not report the indicators related to the supply chain.

EN33 SIGNIFICANT ACTUAL AND POTENTIAL NEGATIVE ENVIRONMENTAL IMPACTS IN THE SUPPLY CHAIN AND ACTIONS TAKEN

Additional data and/or DMA p. 47, 48, 49

Description	2014	2015	2016
Total number of suppliers	83,184	140,769	78,990
Number of suppliers subjected to environmental impact assessments	1,164	4,653	4,299
Percentage of suppliers subjected to assessments	1.4%	3.3%	5.44%

Comentário:

1. In 2016, Votorantim Cimentos underwent a revision process of its entire supplier data management system and for this reason the company did not report the indicators related to the supply chain.

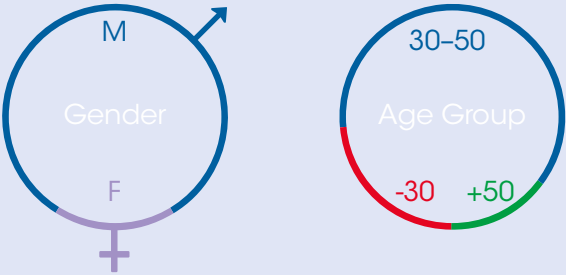
LABOR PRACTICES AND DECENT WORK

ASPECT: EMPLOYMENT

LA1 TOTAL NUMBER AND RATES OF NEW EMPLOYEE HIRES AND EMPLOYEE TURNOVER BY AGE GROUP, GENDER AND REGION

Additional data and/or DMA -

	Gender		Age Group		
	Male	Female	under 30	Between 30 and 50	Over 50
2016					
Employees hired	4,138	1,314	2,737	2,447	256
Employees*	36,662	7,872	10,478	27,395	6,661
Terminations	6,876	1,926	2,526	5,049	1,218
Rate of new hires	11.3%	16.7%	26.1%	8.9%	3.8%
Turnover	18.8%	24.5%	24.1%	18.4%	18.3%



Comments:

1. Data for employees used for the calculations of the 2016 rates include trainees, interns and apprentices.

## ASPECT: OCCUPATIONAL HEALTH AND SAFETY

**LA6** TYPES AND RATES OF INJURIES, OCCUPATIONAL DISEASES, LOST DAYS, ABSENTEEISM AND NUMBER OF WORK-RELATED FATALITIES, BY REGION AND GENDER

Additional data and/or DMA **p. 61**  
 External assurance (p. 77,78) ✓

Occupational health and safety indicators (Own employees and permanent third-party workers)	2014		2015	
	Abroad	Brazil	Abroad	Brazil
Fatalities	4	10	0	1
Man-hours worked (own and third-party)	40,359,327	150,588,175	44,140,004	124,779,042
Total no. of injuries (Level 1)	179	864	289	756
Total no. of injuries (Levels 2 and 3)	352	488	245	312
Total no. of injuries with lost days (Levels 4 to 6)	59	211	60	100

Occupational health and safety indicators	2016			
	Own employees		Outsourced	
	Abroad	Brazil	Abroad	Brazil
Man-hours worked	21,160,298	79,147,034		
No. of injuries	283	442		
No. of fatalities	0	4	5	3
No. of lost days	2,426	11,478		

**Omissions:** Breakdown by employee category

**Reasons for omission:** Not Available

**Comments:**

1. Except for Votorantim Metais, which uses working days in calculation of "lost days," all other Companies use calendar days
2. Indicator not reported by Banco Votorantim
3. New reporting model adopted in 2016 For contractors, the report includes only the number of fatalities.

## ASPECT: TRAINING AND EDUCATION

**LA9** AVERAGE HOURS OF TRAINING PER YEAR, PER EMPLOYEE BROKEN DOWN BY GENDER AND EMPLOYEE CATEGORY

Additional data and/or DMA **p. 45, 46, 47**  
 External assurance (p. 77,78) ✓

Period		2014	2015	2016
Employee category	Gender	Average number of training hours		
President/Director	Female	26.9	27.3	6.24
	Male	21.0	31.1	9.00
Manager	Female	34.5	43.7	5.52
	Male	44.7	37.8	8.46
Coordinator/Consultant	Female	47.5	31.8	5.11
	Male	42.7	28.1	7.42
Technician/Analyst/Supervisor	Female	60.0	30.6	0.73
	Male	46.0	20.5	2.30
Trainee	Female	90.5	111.1	
	Male	189.0	151.7	
Operational	Female	21.1	19.2	0.06
	Male	14.7	13.7	0.20
Intern	Female	32.1	13.9	
	Male	89.5	13.3	
Apprentice	Female	120.2	71.1	
	Male	37.2	20.8	

**Comments:**

1. This indicator considers training carried out by the Academy of Excellence
2. In 2016, in the "Operational" category, the values are considering all employees of wage groups equal to or lower than GS-27, that is, this category also includes trainees, apprentices and interns.



## ASPECTO DIVERSIDADE E IGUALDADE E OPORTUNIDADES

**LA12** BREAKDOWN OF GOVERNANCE BODIES AND BREAKDOWN OF EMPLOYEES BY EMPLOYEE CATEGORY ACCORDING TO GENDER, AGE GROUP, MINORITY GROUP MEMBERSHIP, AND OTHER INDICATORS OF DIVERSITYAdditional data and/or DMA **p. 19, 36**

Breakdown of minority groups in the organization	2013	2014	2015	2016
Employees over 50 years old	5,141	2,890	6,651	6,660
Female	5,914	6,200	6,158	7,872

Breakdown of governance body by gender	2013	2014	2015	2016
Male	66	89	92	112
Female	3	5	5	6

Breakdown of governance body by age group	2013	2014	2015	2016
Under 30	0	0	0	0
Between 30 and 50	33	73	38	50
Over 50	36	21	59	68

Breakdown of employees per employee category according to gender and age group					
Positions	Age group (%)			MEN %	WOMEN %
	Under 30	30 to 50	Over 50		
Director / President	0.0	42.4	57.6	94.9	5.1
Manager	1.0	77.9	21.1	83.5	16.5
Coordinator / Consultant	12.0	74.2	13.7	74.6	25.4
Technician/Analyst/Supervisor	21.6	66.5	11.9	74.7	25.3
Trainee	98.2	1.8	0.0	66.1	33.9
Operational	21.9	61.5	16.7	87.6	12.4
Intern	97.8	2.2	0.0	45.3	54.7
Apprentice	98.7	1.3	0.0	60.0	40.0
TOTAL	0.0	42.4	57.6	82.3	17.7

## Comments:

1. Does not include employees of Citrosuco's units abroad.
2. Does not include Citrosuco's temporary workers (seasonal and harvest workers).

## ASPECT: SUPPLIER ASSESSMENT FOR LABOR PRACTICES

**LA14** PERCENTAGE OF NEW SUPPLIERS THAT WERE SCREENED USING LABOR PRACTICES CRITERIA

Additional data and/or DMA -

External assurance (p. 77,78) ✓

Number of new suppliers that were screened using labor practices criteria	2013	2014	2015	2016
Total number of new suppliers	3,131	3,222	5,245	4,559
Total number of new suppliers that were screened using labor practices criteria	1,158	2,233	2,832	1,653
Percentage of new suppliers screened	36.98%	69.30%	54%	36.26%

## Comentário:

1. In 2016, Votorantim Cimentos underwent a revision process of its entire supplier data management system and for this reason the company did not report the indicators related to the supply chain.

**LA15** SIGNIFICANT ACTUAL AND POTENTIAL NEGATIVE IMPACTS FOR LABOR PRACTICES IN THE SUPPLY CHAIN AND ACTIONS TAKENAdditional data and/or DMA **p.**

Description	2014	2015	2016
Total number of suppliers	83,184	140,769	78,990
Number of suppliers subjected to impact assessments for labor practices	1,205	11,163	4,065
Percentage of suppliers subjected to assessments	1.4%	7.9%	5.15%

## Comentário:

1. In 2016, Votorantim Cimentos underwent a revision process of its entire supplier data management system and for this reason the company did not report the indicators related to the supply chain.

# HUMAN RIGHTS

## ASPECT: NON-DISCRIMINATION

### HR3 TOTAL NUMBER OF INCIDENTS OF DISCRIMINATION AND CORRECTIVE ACTIONS TAKEN

Additional data and/or DMA **p. 25**  
External assurance (p. 77,78)

Discrimination incidents	2014	2015	2016
Harassment and abuse of power	34	14	15
Other incidents (discrimination)	14	16	12
Other incidents (discrimination and retaliation)	45	43	49
Total number of discrimination incidents	93	73	76

Total number of discrimination incidents	2014	2015	2016
Complaints received by the Ombudsman's office	93	73	76
Incidents considered valid	59	54	64

### Comments:

1. In order to resolve cases of discrimination, appropriate measures were taken, including guidance, warnings, transfers, relocations and/or terminations.

## ASPECT: CHILD LABOR

### HR5 OPERATIONS AND SUPPLIERS IDENTIFIED AS HAVING SIGNIFICANT RISK FOR INCIDENTS OF CHILD LABOR, AND MEASURES TAKEN TO CONTRIBUTE TO THE EFFECTIVE ABOLITION OF CHILD LABOR

Additional data and/or DMA -  
External assurance (p. 77,78)

Number of operations and suppliers with risk of having child labor and/or young workers exposed to hazardous work	2013	2014	2015	2016
Votorantim S.A. (VC, Votorantim Metais, VS, VE, Banco Votorantim, Companhia Brasileira de Alumínio, Citrosuco e Fibria)	0	0	0	0

### Comments:

1. Citrosuco is part of the Child Friendly Company Program, developed by the non-profit organization Abrinq Foundation. Since its founding 25 years ago, the program has benefited more than eight million boys and girls in Brazil.

## ASPECT: FORCED OR COMPULSORY LABOR

### HR6 OPERATIONS AND SUPPLIERS IDENTIFIED AS HAVING SIGNIFICANT RISK FOR INCIDENTS OF FORCED OR COMPULSORY LABOR, AND MEASURES TO CONTRIBUTE TO THE ELIMINATION OF ALL FORMS OF FORCED OR COMPULSORY LABOR

Additional data and/or DMA -

Number of operations or suppliers at risk of incurring in forced or compulsory labor	2013	2014	2015	2016
Votorantim S.A. (VC, Votorantim Metais, VS, VE, Banco Votorantim, Companhia Brasileira de Alumínio, Citrosuco e Fibria)	0	0	0	0

### Comments:

1. Annual audit plans are prepared, which include suppliers, in order to evaluate the main risks for each business unit. These plans are discussed and approved by the business unit's senior management to ensure that there is a reasonable level of coverage considering the number of units in each business area and also the rotation of emphasis. Additionally, the existence of an Ombudsman area, supported by a consolidated systemic tool, facilitates access by employees and other stakeholders should they observe violations of the Code.



ASPECT: ASSESSMENT

HR9 TOTAL NUMBER AND PERCENTAGE OF OPERATIONS THAT WERE SUBJECTED TO HUMAN RIGHTS REVIEWS

Additional data and/or DMA -

Country	2013	2014	2015
Brazil	36	19	32
			2016
Total number of operations (Brazil and abroad)			565
Total number of operations that were subjected to human rights assessments or impact assessments for human rights			74
Percentage of operations that were subjected to human rights assessments or impact assessments for human rights			13%

Comments:

1. In addition to audit work, the company has in place a reporting channel and a code of conduct, and any stakeholders can file complaints. The cases are investigated and responded to the complainants.
2. Starting in 2016 this indicator includes operations outside Brazil.

ASPECT: SUPPLIER HUMAN RIGHTS ASSESSMENT

HR10 PERCENTAGE OF NEW SUPPLIERS THAT WERE SCREENED USING HUMAN RIGHTS CRITERIA

Additional data and/or DMA -

External assurance (p. 77,78) ✓

Number of new suppliers that were screened using human rights criteria	2013	2014	2015	2016
Total number of new suppliers	3,120	3,222	5,245	4,559
Total number of new suppliers that were screened using human rights criteria	411	1,172	2,096	1,490
Percentage of new suppliers screened	14.00%	36.37%	40%	32.68%

Comentário:

1. In 2016, Votorantim Cimentos underwent a revision process of its entire supplier data management system and for this reason the company did not report the indicators related to the supply chain.

HR11 SIGNIFICANT ACTUAL AND POTENTIAL NEGATIVE HUMAN RIGHTS IMPACTS IN THE SUPPLY CHAIN AND CORRESPONDING ACTIONS TAKEN

Additional data and/or DMA -

Number of new suppliers that were screened using human rights criteria	2014	2015	2016
Total number of suppliers	83,184	140,769	78,990
Total number of suppliers that were screened using human rights criteria	1230	11,792	5,582
Percentage of new suppliers screened	0,9%	8.40%	7.07%

Comentário:


1. In 2016, Votorantim Cimentos underwent a revision process of its entire supplier data management system and for this reason the company did not report the indicators related to the supply chain.

# SOCIETY

## ASPECT: LOCAL COMMUNITIES

### SO1 PERCENTAGE OF OPERATIONS WITH IMPLEMENTED LOCAL COMMUNITY ENGAGEMENT, IMPACT ASSESSMENTS, AND DEVELOPMENT PROGRAMS

Additional data and/or DMA [p. 32, 33, 34, 35, 36, 37, 58, 59, 60, 61, 62, 63, 64, 65, 66, 67, 68, 69, 70, 71, 72, 73](#)

External assurance (p. 77,78) 

Operations/Units that have implemented community engagement programs and impact and development evaluations in the whole organization	2013	2014	2015	2016
Total number of operations	512	650	728	565
Total number of operations with local community engagement	70	72	111	93
Percentage of operations with local community engagement	13.7%	11.1%	15%	16%

### Comentário:

1. Indicator not reported by Banco Votorantim

## ASPECT: ANTI-CORRUPTION

### SO5 CONFIRMED INCIDENTS OF CORRUPTION AND ACTIONS TAKEN

Additional data and/or DMA [p. 26](#)

	2014	2015	2016
Total number of confirmed cases of corruption	5	0	8
Employees who were punished or dismissed	5	0	3
Dismissals or non-renewal of contracts with partners	4	0	4

### Comments:

1. The data for 2016 have been reported according to the definition of anti-corruption in the Anti-corruption Law No. 12,846/2013, which punishes companies for acts of corruption involving the public administration.
2. Fibria, however, considers for the indicator, both cases involving public instances, and those occurring in a strictly private environment. Of the eight cases identified in 2016, none involved public instances. It is also worth mentioning that among the eight cases, three were regarded as partially valid, but were considered as “valid” in this report.
3. Indicator not reported by Banco Votorantim

## ASPECT: PUBLIC POLICY

### SO6 TOTAL VALUE OF POLITICAL CONTRIBUTIONS BY COUNTRY AND RECIPIENT / BENEFICIARY

Additional data and/or DMA [p.](#)

Year	2013	2014	2015	2016
Total monetary value of direct and indirect political contributions	None	R\$ 20,080,445*	None	None

### Comentário:

1. There was no political contribution based on Resolution 23.463 / 2015 - which provides for collection and expenditure of resources by political parties and candidates and on accountability in elections 2016.



## ASPECT: ANTI-COMPETITIVE BEHAVIOR

**SO7** TOTAL NUMBER OF LEGAL ACTIONS FOR ANTI-COMPETITIVE BEHAVIOR, ANTI-TRUST, AND MONOPOLY PRACTICES AND THEIR OUTCOMES

Additional data and/or DMA -

External assurance (p. 77,78) ✓

Total number of legal actions for anti-competitive behavior, anti-trust, and monopoly practices	2014	2015	2016
Citrosuco	0	0	0
Votorantim Energia	0	0	0
Votorantim Cimentos	0	0	0
Votorantim Metais	0	0	0
Votorantim Siderurgia	0	0	0
Fibria	0	0	0

## Comentário:

1. Indicator not reported by Banco Votorantim

## ASPECT: COMPLIANCE

**SO8** MONETARY VALUE OF SIGNIFICANT FINES AND TOTAL NUMBER OF NON-MONETARY SANCTIONS FOR NON-COMPLIANCE WITH ENVIRONMENTAL LAWS AND REGULATIONS

Additional data and/or DMA -

Monetary value of provision (R\$ million)	2013	2014	2015	2016
Tax	3,564	4,230	4,983	7500
Labor and social security	278	244	429	355
Civil	4,736	6,067	6,766	7227

## Comments:

1. The monetary value of reported cases is in line with the consolidated financial statements of December 31st of each year, and corresponds to the value of the legal actions where the probability of a loss was assessed as possible, in which Votorantim and its controlled companies were involved.

## SUPPLIER ASSESSMENT FOR IMPACTS ON SOCIETY

**SO9** PERCENTAGE OF NEW SUPPLIERS THAT WERE SCREENED USING CRITERIA FOR IMPACTS ON SOCIETY

Additional data and/or DMA p. 73

Number of new suppliers that were screened using criteria for impacts on society	2013	2014	2015	2016
Total number of new suppliers	3,131	3,222	5,245	4,559
Total number of new suppliers that were screened using criteria for impacts on society	1,158	693	795	728
Percentage of new suppliers screened	36.98%	21.51%	15%	15.97%

## Comentário:

1. In 2016, Votorantim Cimentos underwent a revision process of its entire supplier data management system and for this reason the company did not report the indicators related to the supply chain.

2.

**SO10** SIGNIFICANT ACTUAL AND POTENTIAL NEGATIVE IMPACTS ON SOCIETY IN THE SUPPLY CHAIN AND ACTIONS TAKEN

Additional data and/or DMA p. 24

Description	2014	2015	2016
Total number of suppliers	83,184	140,769	78,990
Number of suppliers subjected to impact assessments on society	164	3,296	3,963
Percentage of suppliers subjected to environmental impact assessments	0.2%	2%	5.02%

## Comentário:

1. In 2016, Votorantim Cimentos underwent a revision process of its entire supplier data management system and for this reason the company did not report the indicators related to the supply chain.

# OTHER COMMITMENTS

## CORRELATION WITH THE “TEN PRINCIPLES” OF THE UNITED NATIONS GLOBAL COMPACT

The UN Global Compact is the world’s most important business initiative focused on sustainability issues. Since 2005, through the United Nations, the Global Compact has brought together companies in a global alliance to observe its 10 universal principles related to human rights, labor relations, the environment and the fight against corruption.

The table below demonstrates the correlations between the United Nations Global Compact principles and the Global Reporting Initiative (GRI) indicators which were used as the parameters for the preparation of this report. In this way, it is possible to locate throughout our report all actions and initiatives that reinforce our commitment to the Global Compact.

It is important to point out that our commitment to the Global Compact is in line with our beliefs and sustainability practices. In this context, the normative guidelines of the Global Compact on human rights, environment, labor relations, anti-corruption and other points are also guiding our business performance.

Principles of the United Nations Global Compact	GRI Guidelines in this Report
Principle 1. Companies must support and uphold the protection of internationally accepted human rights	HR3, HR5, HR6, HR9, HR10, HR11 SO1
Principle 2. make sure that they are not complicit in human rights abuses	HR3, HR5, HR6, HR9, HR10, HR11
Principle 3. Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining	G4-11 LA1, LA6, LA9, LA12, LA14, LA15
Principle 4. the elimination of all forms of forced and compulsory labor	HR6
Principle 5. the effective abolition of child labor	HR5
Principle 6. the elimination of discrimination in respect of employment and occupation	G4-10 LA1, LA6, LA9, LA12, LA14, LA15 HR3
Principle 7. Businesses should support a precautionary approach to environmental challenges	EN5, EN13, EN18, EN29, EN31, EN32, EN33
Principle 8. undertake initiatives to promote greater environmental responsibility;	EN5, EN13, EN18, EN29, EN31, EN32, EN33
Principle 9. encourage the development and diffusion of environmentally friendly technologies	EN5, EN13, EN18, EN29, EN31, EN32, EN33
Principle 10. Businesses should work against all forms of corruption, including extortion and bribery	SO5, SO6

## CORRELATIONS WITH THE OECD GUIDELINES FOR MULTINATIONAL ENTERPRISES

In this table, we make a correlation between the OECD Guidelines for Multinational Enterprises, according to the table in the GRI Guidelines, and according to the GRI G4 indicators that were used as support for the preparation of this Report.

OECD Guidelines	GRI Guidelines in this Report
IV. Human Resources	HR3, HR5, HR6, HR9, HR10, HR11, SO1, SO9, SO10
V. Employment and industrial relations	G4-11, EC1, LA1, LA6, LA9, LA12, LA14, LA15, HR3, HR5, HR6, SO1
VI. Environment	EN5, EN13, EN18, EN29, EN31, EN32, EN33, LA6, LA9, SO1, SO9, SO10
VII. Combating bribery, bribe solicitation and extortion	SO5, SO6, SO9, SO10
X.Competition	SO7, SO8, SO9, SO10
XI.Taxation	EC1, SO7, SO8

Comments:  
1. This table includes only those OECD Guidelines that have GRI indicators in this report

## CORRELATIONS WITH THE IIRC METHODOLOGY

We have followed in our report the IIRC integrated reporting guidelines, presenting a concise document on how Votorantim SA’s strategy, governance, performance and prospects, in the context of its external environment, lead to the generation of value in the short, medium and long term.

We analyzed capitals (financial, manufactured, intellectual, human, social and relationship, and natural) and their relationship with our management pillars. In this way, the IIRC Capitals can be found in the following Sections:

IIRC Capitals	Section
Financial	Portfolio Management, Strength of the Portfolio
Manufactured	Benchmark operation, Invitation to innovate
Intellectual	Focus on development, Young Talent
Human	The importance of corporate climate, Education as a legacy
Social and Relationship	Social strategies, Urban planning
Natural	Biodiversity as a legacy



CORRELATION WITH THE SDGS

The Sustainable Development Goals (SDGs), established by the United Nations, represent a set of internationally agreed upon goals, adopted in 2015.

They are long-term goals (2030) and are intended to promote the well-being of all, protect the environment and fight climate change.

SDG	GRI Guidelines in this Report
Goal 1. End poverty in all its forms, everywhere	
Goal 2. End hunger, achieve food safety and improve nutrition, and promote sustainable agriculture	EC1
Goal 3. Ensure a healthy life and promote well-being for all, in all ages	EN15, EN21, EN22, EN23, LA6
Goal 4. Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all	LA9
Goal 5. Achieve gender equality and empower all women and girls	EC1, HR3, LA9, LA12, LA14, LA15
Goal 6. Ensure the availability and sustainable management of water and sanitation for all	EN8, EN13, EN22, EN23
Goal 7. Ensure reliable, sustainable, modern and affordable access to energy for all	EC1, EN3, EN5
Goal 8. Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all	HR5, EC1, LA12, HR6, LA9, LA1, EN3, EN5, G4-11, LA14, LA15
Goal 9. Build resilient infrastructures, promote inclusive and sustainable industrialization and foster innovation	EC1
Goal 10. Reduce inequality within and between countries	
Goal 11. Make cities and human settlements inclusive, safe, resilient and sustainable	
Goal 12. Ensure sustainable production and consumption standards	EN3, EN15, EN22, EN23
Goal 13. Take urgent action to fight climate change and its impacts (*)	EN3, EN13, EN15, EN18, EN21
Goal 14. Conservation and sustainable use of oceans, seas and marine resources for sustainable development	EN3, EN13, EN15, EN18, EN21
Goal 15. Protect, restore and promote the sustainable use of terrestrial ecosystems, sustainably manage forests, fight desertification, halt and reverse land degradation and halt biodiversity loss	EN3, EN13, EN15, EN18, EN21
Goal 16. Promoting peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels	G4-56, HR3, HR5, EN29, SO7, SO8, LA14, LA15
Goal 17. Strengthen the means of implementation and revitalize the global partnership for sustainable development	
* Recognizing that the United Nations Framework Convention on Climate Change (UNFCCC) is the primary international intergovernmental forum for negotiating the global response to climate change.	

INDEPENDENT AUDITOR’S LIMITED ASSURANCE  
REPORT ON INFORMATION RELATED TO SUSTAINABILITY  
INCLUDED IN THE 2016 VOTORANTIM REPORT

To the Board of Directors  
Votorantim S.A.  
São Paulo - SP

INTRODUCTION

We were contracted by Votorantim S.A. (“VSA” or “Company”) to present our limited assurance report on the compilation of the information related to sustainability included in VSA’s 2016 Votorantim Report for the year ended December 31, 2016.

RESPONSIBILITIES OF THE  
COMPANY’S MANAGEMENT

The management of VSA is responsible for the preparation and fair presentation of the information included in the 2016 Votorantim Report, in accordance with the guidelines of the Global Reporting Initiative (GRI-G4), and for such internal control as it determines is necessary to enable the preparation of information free from material misstatement, whether due to fraud or error.

INDEPENDENT AUDITORS’  
RESPONSIBILITY

Our responsibility is to express a conclusion on the information related to the 2016 Votorantim Report, based on our limited assurance engagement carried out in accordance with

the Technical Communication CTO 01, “Issuance of an Assurance Report related to Sustainability and Social Responsibility”, issued by the Brazilian Federal Accounting Council (CFC), based on the Brazilian standard NBC TO 3000, “Assurance Engagements Other than Audit and Review”, also issued by the CFC, which is equivalent to the international standard ISAE 3000, “Assurance engagements other than audits or reviews of historical financial information”, issued by the International Auditing and Assurance Standards Board (IAASB). Those standards require that we comply with ethical requirements, including independence requirements, and perform our engagement to obtain limited assurance that the information included in the 2016 Votorantim Report, taken as a whole, is free from material misstatement.

A limited assurance engagement conducted in accordance with the Brazilian standard NBC TO 3000 and ISAE 3000 mainly consists of making inquiries of management and other professionals of the entity involved in the preparation of the information, as well as applying analytical procedures to obtain evidence that allows

us to issue a limited assurance conclusion on the information taken as a whole. A limited assurance engagement also requires the performance of additional procedures when the independent auditor becomes aware of matters that lead the auditor to believe that the information taken as a whole might present significant misstatements.

The procedures selected were based on our understanding of the aspects related to the compilation and presentation of the information included in the 2016 Votorantim Report, other circumstances of the engagement and our analysis of the areas in which significant misstatements might exist. The following procedures were adopted:

- a. planning the work, taking into consideration the materiality and the volume of quantitative and qualitative information and the operating and internal control systems that were used to prepare the information included in the 2016 Votorantim Report of VSA;
- b. understanding the calculation methodology and the procedures adopted for the compilation of indicators through interviews with the managers

responsible for the preparation of the information;

- c. applying analytical procedures to quantitative information and making inquiries regarding the qualitative information and its correlation with the indicators disclosed in the information included in the 2016 Votorantim Report; and
- d. comparing the financial indicators with the financial statements and/or accounting records.

The limited assurance engagement also included tests to assess compliance with the guidelines of the Global Reporting Initiative (GRI-G4) applied in the compilation of the information related to sustainability included in the 2016 Votorantim Report.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our limited assurance conclusion.

#### SCOPE AND LIMITATIONS

The procedures applied in a limited assurance engagement

are substantially less detailed than those applied in a reasonable assurance engagement, the objective of which is the issuance of an opinion on the information presented in the 2016 Votorantim Report. Consequently, we were not able to obtain reasonable assurance that we would become aware of all significant matters that might be identified in an assurance engagement, the objective of which is the issue of an opinion. Had we performed an engagement with the objective of issuing an opinion, we might have identified other matters and possible misstatements in the information included in the 2016 Votorantim Report. Accordingly, we do not express an opinion on this information.

Non-financial data is subject to more inherent limitations than financial data, due to the nature and diversity of the methods used to determine, calculate and estimate this data. Qualitative interpretations of the relevance, materiality, and accuracy of the data are subject

to individual assumptions and judgments. Furthermore, we did not consider in our engagement the data reported for prior periods, nor future projections and goals.

#### CONCLUSION

Based on the procedures performed, described herein, no matter came to our attention that causes us to believe that the information included in the 2016 Votorantim Report of Votorantim S.A. has not been compiled, in all material respects, in accordance with the guidelines of the Global Reporting Initiative (GRI-G4).

São Paulo, March 15, 2017



**PRICEWATERHOUSECOOPERS**

Contadores Públicos Ltda.

CRC 2SP023173/O-4

**Luciano Jorge Moreira Sampaio Jr**

Contador CRC 1BA018245/O-1

"S" SP



## CREDITS

### GENERAL COORDINATION AND PRODUCTION:

MANAGERS RESPONSIBLE: David Canassa and Mariana Mayumi Oyakawa

COORDINATION: Renata Vinhas Oliveira

REPORT PRODUCTION TEAM: Angelino Maneskul and Debora Vargas Leal Oliveira

SUPPORT TEAM: Renato Delmanto

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### Pictures

Votorantim Image Library

### EXTERNAL SUPPORT TEAM

EDITORIAL CONSULTING, REPORT WRITING AND EDITING: Beto Gomes, Gustavo Magaldi and Kátia Shimabukuro (Miolo Editorial)

MANAGEMENT, GRI CONSULTING, CONTENT AND DATA: Melissa Rizzo Battistella (Gaido Consultoria e Conhecimento)

For more information on the GRI indicators please access the PDF version of the report on Votorantim's website

GRAPHIC DESIGN, LAYOUT AND INFOGRAPHICS: Pierre-Louis A. Ferrandis (Pierre Design Marketing)

ICONS: inspired by <https://thenounproject.com>

AUDITORS OF THE GRI INDICATORS AND FINANCIAL INFORMATION: Pricewaterhouse Coopers (PwC)

### Translation

ENGLISH: Gotcha Idiomas

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### CONTACT:

Votorantim S.A.

Rua Amauri, 255

Itaim Bibi – São Paulo – SP

CEP 01448-000

C/O Investor Relations

Email: [contato@votorantim.com](mailto:contato@votorantim.com)



[www.votorantim.com](http://www.votorantim.com)