cba

Annual Report **2017**

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Our manifest

We believe that the best of Aluminum is more than just Aluminum itself.

We are proud of our past and of where it can lead us. Our history reflects the commitment of a company that has always had faith in the development of the industry and above all, of Brazil.

With a unique approach, we have created valuable partnerships with the people around us: our customers, our employees, our suppliers, and the communities where we operate.

We are always nearby and always ready to meet all kinds of demands, including the most challenging ones, as our work involves thinking about the right response to the most difficult questions.

We are present everywhere: in the windows of your home, in your car, at work... We seek to inspire new paths, spark new ideas, and discover new forms, solutions, and applications.

It is a cycle that is renewed on a daily basis.

CBA

From the city of Alumínio,
to the Aluminum of all cities.

Message from the Board of Directors

In recent years, we have accomplished significant transformation initiatives at CBA that range from the definition of a new business strategy and all of its ramifications to the development of a cultural evolution program that has strengthened internal relations.

We have begun to focus our operations on three key business areas: Energy, focused on capturing market opportunities; Upstream, whose main drivers are operational excellence and cost competitiveness; and Downstream, seeking, in addition to operational excellence, to position the company as an aluminum solutions and services provider.

In 2016, CBA' spin-off from the ownership structure of Votorantim Metais, currently Nexa Resources, required adaptations to the organizational structure and the building of an identity that would reflect the personality of the new CBA: more efficient, modern, closer, and always ready for challenges.

All this took place in a macroeconomic climate and a market unfavorable to aluminum. We had the courage, competence, and sense of urgency to make the decisions needed to maintain the company's competitiveness, while believing and investing in the future.

Consequently, each of these changes was also extended to the external dimension, made tangible by our repositioning in the market and the consolidation of valuable partnerships with our customers, our suppliers, and the communities where we are present.

The time has come to go further: we want to be the best aluminum company in Brazil, honoring our legacy and evolving towards a prosperous tomorrow with infinite possibilities.

Luis Ermírio de Moraes
Chairman of CBA's
Board of Directors

Message from the CEO

2017 will go down in the history of CBA as a year of great transformations and achievements - a year in which the "CBA of the Future" strategy was embodied in the present, demonstrating our ability to reinvent ourselves.

Despite the uncertainties of the Brazilian economy – our main consumer market – and the instability of the global macroeconomic scenario, the implementation of our defined strategies has evolved and we have initiated a structured transformation process to accelerate the initiatives and actions aimed at greater business competitiveness. Around 380 people in the organization are directly involved in this process.

In the Upstream business, we developed a series of actions focused on operational excellence and improving the competitiveness of CBA. In terms of the market, we also made several advances: we achieved the position of principal supplier of billet in the country; we began to supply the two-wheel market; and we entered into a partnership with Nexans S.A. for the production of aluminum rods.

In the Downstream business, we are increasingly strengthening relationships to our customers, focusing on timely responses and co-creation, supported by the KAM (Key Account Management) management model, by the area of joint development and lean innovation governance.

In order to implement our strategy with excellence, we also made great strides in the evolution of our culture, reinforcing the practice in the pillars of teamwork, constructive divergence, sense of ownership, and ambition for competitiveness.

Another step forward was the consolidation of the Governance and Compliance units, which took CBA to a higher level of reliability and compliance, and in the area of Finance and Strategic Planning, which was consolidated even further with the incorporation of the Risk and Treasury areas into its management portfolio.

All this organizational evolution was fundamental for CBA to achieve its full potential as a company invested in by Votorantim, both in terms of management and financial results.

We invested effort and resources in the quality of life, health, and safety of our employees, demonstrating that safety is a non-negotiable value for us.

We closed the year with net revenue of R$ 4,673 million (8% increase) and EBITDA of R$ 449 million (7% reduction). Considering only the aluminum business, we had a 9% increase in revenue and 52% in EBITDA.

In 2017, we celebrated investments and recognition in environmental protection, such as the inauguration of the Legado Verdes do Cerrado (Green Legacy of the Cerrado), a private 32,000-hectare environmental reserve that conserves the Cerrado biome. There are three natural springs in the Legado, one of which is the source of the Traíras River, which supplies water to the municipality of Niquelândia (GO).

Our Rehabilitation of Mined Areas program, developed in partnership with the Universidade Federal de Viçosa, gained national and international recognition, both for project methodology and the quality of the results generated.

In the social sector, we have maintained our investments in the areas of Education, Public Management Support, and Income Generation, reinforcing our commitment to the development of the communities where we are present.

We are issuing our first GRI-compliant sustainability report as an independent company and I am pleased to invite you to read this report, which tells a little more about this story of transformation.

Welcome to the CBA of the Future and happy reading!

Ricardo Carvalho
CEO of Companhia Brasileira de Alumínio (CBA)

GRI 102-14

1

cba

CBA

Transformation is part of our history and is at our core. More than 60 years ago, we began transforming bauxite, one of the most abundant minerals on Earth, into innovative solutions that add value and sustainability to our customers' products. In partnership with these customers, we discovered new uses and applications for aluminum that extend the environmental benefits to the whole of society.

Our products contribute, for example, to the increased use of solar panels to generate energy (find out more on page 17). In the automotive industry, they facilitate the construction of buses, trucks and lighter passenger vehicles, emitting less CO_2 during trips. In civil construction, aluminum helps creating resistant, attractive and durable structures, reducing the impacts of the building process. In the packaging market, aluminum guarantees a longer product shelf life, without the need for preservatives, and in some cases, without the need for refrigeration.

We are part of Votorantim S.A., a Brazilian holding company that seeks to generate positive impacts on society and wealth in strategic sectors through its businesses. Up until 2016, our operations were part of the administrative structure of Nexa Resources, formerly Votorantim Metais. That year, we split up the businesses and made CBA an independent company, focused on providing solutions to customers in the domestic and international markets.

GRI 102-2 | 102-5 | 102-6

Our aluminum is present in **almost everyone's daily lives;** it is used in the packaging, civil construction, automotive, machinery and equipment and consumer goods industries, among others.

Primary products

- Alumina
- Ingots
- Alloy ingot
- Billets
- Rods
- Caster rolls
- Plates

Transformed products

- Plates and coils
- Aluminum sheets
- Extruded profiles
- Anodized profiles
- Customized solutions

1. Mining
Bauxite is extracted in our mining units with the most advanced methodologies with a focus on mitigation of socio-environmental impacts

2. Processing area
Bauxite goes through a grinding and washing process, which improves its quality and reduces the volume transported by trains and trucks to our factory in Alumínio (SP)

3. Bauxite receival
At the factory, bauxite is received and separated in the yards according to its physical and chemical properties

4. Alumina
At the refinery, aluminum oxide (or alumina) is extracted from bauxite by the Bayer chemical process. The red mud, the main residue of this stage, is destined in liquid form to the dam

5. Furnace rooms
In the electrolytic reduction step, primary aluminum is obtained in liquid form using mainly electric energy

6. Foundry
Molten aluminum gives rise to a number of primary products, such as ingots, billets, coils and plates

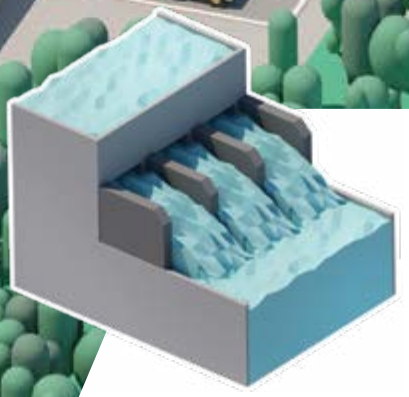
7. Downstream
We develop customized solutions and services, such as sheets, sheets, anodized and painted profiles, for markets and strategic clients

Electricity transmission station

Filter press
The use of filter presses that will enable the waste to be stored in dry cake form and increase the useful life expectancy of the dam of CBA's factory

Field **research**

In partnership with the Federal University of Viçosa, we developed studies to improve the soil recovery process in the mined areas. The land returns to the owners in even better conditions for agricultural activities or for forest restoration



Clean and renewable energy

Most of the electricity we use for the manufacture of aluminum is generated in our own hydroelectric plants or in which we have a stake

Where we are

With a business model that respects people and the environment, we operate in all stages of the aluminum production chain, from bauxite mining and refining to the production of a complete portfolio of primary and transformed products. The installed capacity of our own hydroelectric power plants and those in which we hold a stake can meet up to 100% of the energy demand of our plant in the city of Alumínio (SP), prioritizing a clean and renewable source in our business model.

In the mining units, we have helped transform the lives of rural landowners by applying best practices to the extraction of bauxite, which is the main raw material for the production of aluminum. In partnership with local academic institutions, we apply advanced techniques to restore and return the soil to farmers in ideal conditions for planting or livestock after the ore removal.

The bauxite that we process in our plant comes from three of our own mining units, located in Minas Gerais, and is also acquired from a mine in Barro Alto (GO). In the same municipality, we have our own mine that is currently in the licensing process.

The ore is transported by road and railroad to our integrated plant in the municipality of Alumínio (SP), where we have a total installed production capacity of 440 thousand tons of primary aluminum per year. As part of our industrial process is temporarily suspended, we have a capacity of 71 thousand tons on standby. At the same plant, we produce both alumina – or aluminum oxide (Al_2O_3) – and molten aluminum. We also perform casting, the stage in which the aluminum is solidified into primary products (ingots, billets, and caster rolls) used by other industries, and plastic transformation, which creates the different products designed for companies in the packaging, automotive and civil construction industries, among others.

Our plant is also able to receive aluminum scrap, which is reused in the production process, helping to reduce the consumption of energy and natural resources. This activity is also carried out at Metalex, our specialized industrial scrap recycling unit with installed capacity of 75 thousand tons per year. We also have two distribution centers, a central office in São Paulo, and a milling and sheet metal production branch in Sorocaba (SP).

We are also developing the Alumina Rondon project in Pará, whose preliminary license was issued by the environmental agency in 2014 and is currently carrying out feasibility studies.

Management of the Nickel Business

In 2016, after a thorough analysis of scenarios, we return to the period of hibernation in productive activities of nickel at the Niquelândia (GO) and São Paulo (SP) units, in the neighborhood of São Miguel Paulista, due to the lack of competitiveness of operations and the unfavorable macroeconomic and market conditions in the short and medium term.

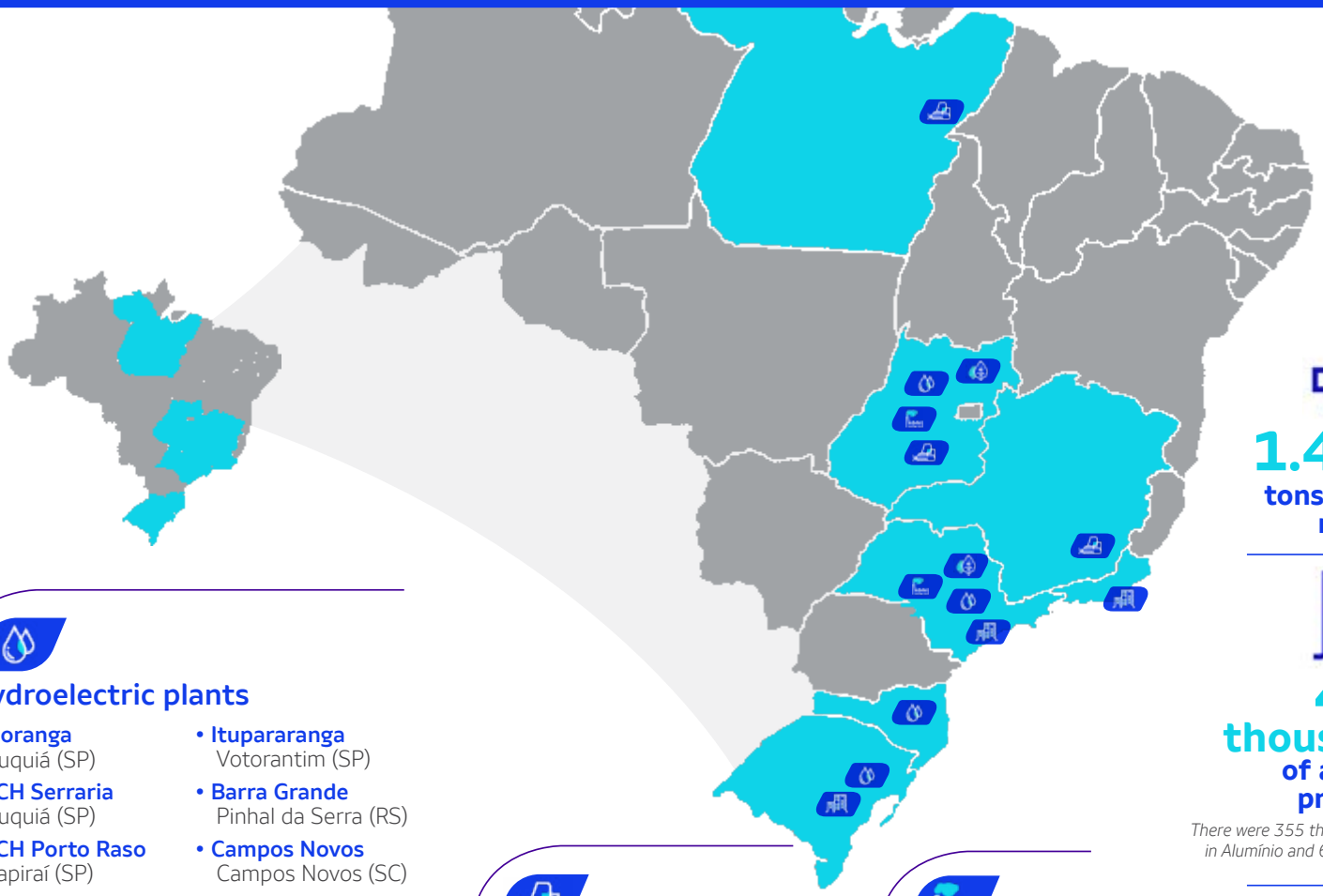
Since then, CBA, which is in charge of the management of the Nickel Business, has handled asset maintenance and honored all its current legal and socio-environmental commitments. During this period, we also analyzed alternatives in an attempt to facilitate the resumption of production, including the development of a technological route in Niquelândia, but until now this initiative did not prove economically viable.

CBA maintains social and environmental investments: in the social area, R$ 2.18 million was invested in 2017, in promoting income generation, public administration modernization, and initiatives to improve the quality of education. In the environmental area, we signed a protocol of intent with the state government for the creation of the Legado Verdes do Cerrado (Green Legacy of the Cerrado), a sustainable development unit model that combines environmental protection, the use of natural resources, and the development of new production chains. Last year we invested R$ 13.2 million to pave the way for this project (find out more on page 57).

In 2017, we produced 2.1 thousand tons of nickel carbonate and 1.2 thousand tons of electrolytic nickel.

GRI 102-2 | 102-6

Our units and operations



Administrative units

- **Office**
  São Paulo (SP)
- **Distribution Center**
  Rio de Janeiro (RJ)
  Caxias do Sul (RS)

Legacies

- **Legado das Águas**
  Miracatu (SP)
- **Legado Verdes do Cerrado**
  Niquelândia (GO)

Hydroelectric plants

- **Iporanga**
  Juquiá (SP)
- **PCH Serraria**
  Juquiá (SP)
- **PCH Porto Raso**
  Tapiraí (SP)
- **Barra**
  Tapiraí (SP)
- **Alecrim**
  Miracatu (SP)
- **Fumaça**
  Ibiúna (SP)
- **PCH França**
  Juquitiba (SP)
- **PCH Jurupará**
  Piedade (SP)
- **PCH Santa Helena**
  Votorantim (SP)
- **PCH Votorantim**
  Votorantim (SP)
- **Itupararanga**
  Votorantim (SP)
- **Barra Grande**
  Pinhal da Serra (RS)
- **Campos Novos**
  Campos Novos (SC)
- **Canoas I**
  Cândido Mota (SP)
- **Canoas II**
  Palmital (SP)
- **Machadinho**
  Piratuba (SC)
- **Piraju**
  Piraju (SP)
- **Salto Pilão**
  Apiúna (SC)
- **Salto do Rio Verdinho**
  Caçu (GO)
- **Ourinhos**
  Ourinhos (SP)

Mining

- **Mineração Itamarati de Minas**
  Itamarati de Minas (MG)
- **Mineração Miraí**
  Miraí (MG)
- **Mineração Poços de Caldas**
  Poços de Caldas (MG)
- **Mineração Barro Alto***
  Barro Alto (GO)
- **Alumina Rondon***
  Rondon (PA)

**In licensing.*

Industrial units

- **CBA Factory**
  Alumínio (SP)
- **Branch Sorocaba**
  Sorocaba (SP)
- **Metalex**
  Araçariguama (SP)
- **Niquelândia**
  Niquelândia (GO)
- **São Miguel Paulista**
  São Paulo (SP)

1.4 million
tons of bauxite refined

417 thousand tons
of aluminum produced*

There were 355 thousand tons at the CBA's plant in Alumínio and 62 thousand tons at Metalex.

R$ 4.7 billion
in net revenue

R$ 449 million
in adjusted EBITDA

GRI 102-4 | 102-7

about the **report**

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About the report

This first Annual Report of CBA as an independent company presents our performance in 2017 and the key perspectives for our business. The publication was written in accordance with GRI Standards, Core option, and submitted for external verification.

To define the material issues of the report, we conducted a materiality study with our key stakeholders in 2017. This study focused on our aluminum operations and engaged around fifty people from within and outside the organization, through interviews and two discussion panels with the internal public. The work was organized in four stages, described on the right of this text.

This process resulted in the identification of eight material issues, which guided the screening of data and information to create the Report and also directed our strategic performance for sustainability management. The material issues are described on page 13.

To facilitate understanding among our publics, the material issues are grouped into three dimensions: Environment, People, and Future. The purpose is to group the subjects and topics of greatest relevance to our business, and for the decision-making of our stakeholders.

1 Preliminary survey

Mapping of topics in the main business sustainability reporting benchmarks, in the national and sector-specific press, in national and international sector-based studies and benchmarking activities, as well as analysis of company policies and guidelines, and of interviews with the senior executives of CBA. During this phase, we gained a clear overview of the context in which we operate, and of how sustainability is perceived in our strategy.

2 Identification of key publics

We analyzed CBA's relationship with each stakeholder, taking as a backdrop the creation of value and interaction between the six types of capital proposed by the International Integrated Reporting Council (IIRC): manufactured, natural, intellectual, human, social and relationship and financial. In this first materiality study, we prioritized the engagement of the following groups: customers, financial institutions, sector entities, employees and local communities.

3 Inquiries and analyses

We held interviews with representatives of the first three groups and two panels with the internal public, besides evaluating studies of the characteristics of the municipalities that are influenced by our units, in order to identify the main weaknesses and potential of the communities. We also listened to aluminum chain experts for a more comprehensive view of the risks and opportunities of our sector.

4 Consolidation

We prioritized the inputs of the previous stages in terms of their impact on CBA's strategy and on stakeholder decision-making, thereby identifying the eight material issues that drive this report and helps us improve strategic sustainability management at the company. These issues were grouped into three dimensions, to facilitate the understanding and engagement of all the stakeholders in the value chain.

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Material issues

Environment

Sustainable mining
Under this heading we address the environmental impacts arising from our bauxite mining operations. The section covers initiatives for monitoring and mapping impacts on biodiversity, rehabilitation of mined areas and relationships with landowners in areas where we operate.

Dam safety and waste management
The topic covers the management of aspects such as red mud deposition, disposal of residues from mining and industrial operations, and the treatment of hazardous waste. It also includes the company's mechanisms for monitoring dam safety.

Eco-efficiency in production
Under this heading, we cover the processes and investments made to reduce the consumption of water and energy in the aluminum production process and to make this consumption more efficient. We also address initiatives aimed at reducing emissions of greenhouse gases and other pollutants that could impact communities close to our operations.

People

Ethics, compliance and business solidity
The topic addresses aspects of corporate governance and financial performance that, in a long-term perspective, demonstrate our ability to guarantee business continuity and value creation for our stakeholders.

Physical integrity and wellbeing of employees
This topic covers information related to our efforts to ensure the physical integrity of people working in our industrial and mining units. It also covers projects and initiatives to promote ever-improving quality of life for our employees.

Social license of the operation
Our sustainability management is geared towards promoting the engagement of local communities that are close to our mining and aluminum production operations. The topic describes the actions we take to contribute to the social and economic development of these populations and create reputational value for CBA.

Future

Strengthening of the aluminum industry
This topic covers CBA's relationship with trade associations and other civil society organizations aimed at contributing to the growth and strengthening of the aluminum chain. It also addresses how the company seeks to combine efforts to facilitate, together with other players, a model that will enable it to leverage the reverse logistics and aluminum recycling capacity.

Innovation and customer satisfaction
In this topic, we focus on innovations in processes and products targeting the supply of sustainable value and joint creation with our customers.

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3

cba **of the future**

CBA of the Future

Our corporate strategy aims to place CBA at an even higher level of competitiveness in the Brazilian aluminum market, creating value for our customers, suppliers, employees, and communities in which we are present. This movement started back in 2015 with the Horizontes (Horizons) Project, which established an institutional architecture with three different businesses that complement each other and create competitive advantages, through the vertical integration of the aluminum production chain.

Energy

The electricity we use to produce aluminum comes from our own eleven hydroelectric power plants that are directly linked to the CBA plant in Alumínio (SP), located in the Juquiá and Sorocaba river basin complex, and from other nine company-owned plants or plants in which we hold a stake, which are connected to the national grid (Sistema Interligado Nacional – SIN). These units are currently operated by Votorantim Energia, which is also part of Votorantim S.A.

Upstream

This includes our bauxite mining units, refining for the production of aluminum oxide, production of molten aluminum and casting. These activities are carried out at our mining units and at our plants in the municipalities of Alumínio and Araçariguama and are aimed at continuous operational excellence and cost competitiveness.

Downstream

This is an area that operates with operational excellence geared towards offering aluminum products with solutions and services tailored to strategic markets and customers.

This is how we built CBA of the **Future**

2015

- Projeto Horizontes establishes a strategic vision with three different and complementary businesses for CBA

2016

- Corporate spin-off separates the operations of CBA from Votorantim Metais' ownership structure (now renamed Nexa Resources). Aluminum and nickel businesses are consolidated in our company, which is now independent
- Engagement of CBA leaders in the 18.18 Program of Votorantim S.A. leads to reflection on the high-performance culture in our company

2017

- Evolution of Projeto Horizontes into CBA of the Future strategy
- Creation of our new brand aligned with CBA of the Future
- Project for advancement and strengthening of the culture promotes a review of competencies, training for leaders and team engagement in the established drivers
- Creation of the Center for Solutions and Services, which repositions the Downstream business

Our **aspirations** for CBA of the Future

1
Our shareholders receive a higher than expected return on the capital invested through a sustainable business with a strategy that creates value for our customers, suppliers, employees, and communities.

2
Our customers see us as a reliable company, which creates valuable partnerships, offering differentiated products and services and innovative solutions.

3
Our employees are proud to belong and are recognized and valued by inspiring leaders.

Our **driving forces**

Operational excellence and sustainability

We want to be recognized for our health, safety and environment, people management and community relationship practices. We also continually strive for cost efficiency and productivity.

Innovation and growth

We want to build up the joint creation of solutions with our customers, achieving levels of profitability that serve as a benchmark in the sector, and developing alternative sustainable solutions in transformed products.

Innovation and customer satisfaction

Our organizational restructuring had important consequences last year. In the Upstream business, we improved our production processes and began to implement the Value Stream, a methodology based on the Lean Manufacturing System, to achieve greater operational efficiency and cost reduction. We also formed partnerships with customers for the continuous supply of products, signing long-term commercial contracts that will increase customer loyalty and reduce our exposure to the volatility of the commodity on the international market. As part of this strategy, we chose to prioritize sales of primary products in the domestic market.

In 2017, we formed a partnership with Nexans Brasil S.A., which creates synergies in the production of aluminum wire rods. The new partner will produce wire rods inside our plant using the molten aluminum supplied by CBA, allowing production and costs to be shared by both companies.

In the Downstream business, we created strategic partnerships with our customers for the joint creation and development of solutions. In 2017, we implemented cutting-edge management with key account management, aiming to provide more individualized service to our main customers. Our strategic focus lies on the packaging and transportation segments, as well as on key companies in the areas of civil construction and consumer goods.

One of our main investments was the creation of the Center for Solutions and Services (CSS), an initiative that involved the expansion of the plastic processing plant. In this new space, we began producing aluminum frames for photovoltaic panels, which generate electricity from sunlight.

With the capacity to produce up to 1.2 million solar panel kits per year, the CSS can be expanded in modular form, to offer machined and profile finishing solutions for other applications – in the automotive and transportation industries, for example. The main advantages of the new area are the closer relationship with customers, the elimination of intermediaries in processes, and added value of the end products.

CSS was one of the many facilitators to innovate, jointly create and provide solutions of higher added value to our customers. Other projects were undertaken in 2017 at our units or in partnership with strategic suppliers. As a result, we have taken yet another step towards being recognized as leaders in innovation, diversifying our portfolio in a sustainable fashion and strengthening customer relationships.

In 2017, CBA was nominated in five categories of the Brazilian Brand Award (Prêmio Marca Brasil), considered one of the most important awards in the Brazilian industrial sector.

Frames
- Best anodizing and electrostatic painting company
- Best aluminum profile extruder
- Best sustainable company

Metalworking and Products
- Best brand of bars and profiles

Roofing and Exteriors
- Best sustainable company

GRI 103-1 | 103-2 | 103-3

Our culture

CBA of the Future goes beyond improvements in processes and transformations in the business model to add value and sustainability to the solutions we offer to our customers. To achieve our aspirations, our employees, who are satisfied and proud to be part of an innovative company, must be engaged and determined to achieve the strategic goals that we have set.

The preparation of our human capital for this new phase of the company is being conducted through a project to advance and strengthen the corporate culture, focused on the training and development of leaders.

On this front, in 2017 we held three workshops involving forty-six employees, where we discussed the strengths and opportunities for improvement in our culture, We identified, among other aspects, the need to set shared goals, capable of promoting the engagement of all the areas in search of improvements that generate sustainable performance and an even more open and transparent relationship with all our stakeholders.

While seeking to reinforce the corporate culture of the company, we also made concentrated efforts in the Transformation Program, aimed at accelerating actions to generate economic and financial value through opportunities for synergy, greater efficiency and cost reduction. Accordingly, we sought to increase our competitiveness and to be recognized by our customers, employees and shareholders as a company that is constantly evolving.

The new CBA brand

In 2017, we developed the new CBA brand, which was introduced to the market in early 2018. This reflects a new phase in the company's history, which has been transforming the way its people think and do business, focusing on overcoming major challenges with customers. This new way of positioning ourselves leverages the transformation of our modus operandi.

GRI 102-2

18.18 Program

The strategy for building the CBA of the Future coincides with a comprehensive process of reflection and review of the business of Votorantim S.A. which, at the time of its centenary in 2018, has already started to prepare for the next century. The 18.18 Program, initiated in 2016, invited employees from all the companies to assess profound issues in five areas, or movements: High-Performance Culture, Emerging Technologies and New Forms of Consumption, Business Re-design, Conscious Transformation, and Global Mindset.

In the first cycle (Movement 1), in 2016, CBA evaluated the guidelines and requirements for a high-performance culture. It defined and executed actions to develop an inspiring business leadership, an organizational structure that boosts efficiency in decision making, and an integrated process management system to achieve global standards of operational excellence and reliability of information.

Movement 2, executed in 2017, addressed the topic of new standards and emerging technologies. On this front, we dedicated efforts to understanding new concepts and exploring new areas of knowledge. This direction has led us to focus on the plan to bring our business in compliance with the Industry 4.0 concept and to introduce new digital tools.

The 18.18 Program will continue in the coming years, connecting our employees to trends that will have an impact on the future of the company and its business model. To achieve this, we rely on an exclusive portal in which participants have access to knowledge-building content, besides conferences, meetings, exploratory surveys and other tools to stimulate innovation and a new way of operating in the aluminum sector.

In 2017, we focused on bringing **new digital technologies** to our business

Strengthening the sector

Brazil is the third largest producer of bauxite and alumina in the world and the 11th largest producer of primary aluminum. Annual per capita consumption in the country is around 6 kilos, while in countries such as the United States, Germany and Japan, this consumption is over 20 kilos. The strenghtening of the domestic industry is, therefore, essential to enable Brazilian aluminum to compete with imports and to sustain the growth of consumption in the coming years.

CBA works in partnership with different associations and representatives of the aluminum industry with this objective. The Brazilian Aluminum Association (Abal), founded in 1970, is an important partner for bringing together primary aluminum producers and transformed aluminum manufacturers. The entity works to promote the benefits of aluminum applications and promotes cooperation with government agencies, demonstrating the value and importance of the industry for the creation of wealth in the country.

CBA's CEO is a member of Abal's Board, elected for the 2018-2019 biennium. The officers and other company professionals are also active on fourteen committees, subcommittees, and working groups of Abal, as well as taking part in several market forums for the exchange of experiences and studies to enhance the competitiveness of national aluminum.

In September 2017, we joined the Aluminum Stewardship Initiative (ASI), a global multi-stakeholder organization focused on the definition of parameters and on certification for sustainability and the traceability of custody in the aluminum chain. CBA is also a member of the International Aluminum Institute (IAI), which has representatives from the majority of aluminum producers in the world.

To add visibility to the benefits and possible applications of the metal, CBA sponsored the creation of the **Cultural Center of Aluminum**, in 2017, idealized by Abal. The space, which is located at the entity's headquarters in São Paulo, acts as an integrator between the industry and society. Its multifunctional structure enables it to hold exhibitions, lectures, workshops, film screenings, and other important activities to publicize the history of aluminum.

ethics, compliance and **business solidity**

4

Ethics, compliance and business solidity

We are a privately held company that manages and conducts its business in accordance with the highest standards of corporate governance, set out in the Votorantim DNA, and that aims to ensure the capacity to generate economic value in the short, medium and long terms.

Our governance structure encompasses the Board of Directors and the Executive Officers. There are also the Audit Committee and the Remuneration and Personnel Committees, which advise the Board of Directors in the analysis of strategic issues that could affect business.

Board of Directors

A deliberative governing body elected by the shareholders, whose main duties consist of monitoring the company's performance, besides providing direction and decision-making on strategic issues that have a major impact on business. It is composed of five members; an independent member, a shareholder, and three external members.

Audit Committee

This committee advises the Board of Directors in the monitoring of issues related to the integrity of the financial statements, adequacy and integrity of the internal control system, identification and monitoring of risk management, monitoring of rules and procedures relative to ethics and conduct, internal policies and CBA compliance program, follow-up and guidance on work carried out by the external and internal auditors. The Committee is composed of three members.

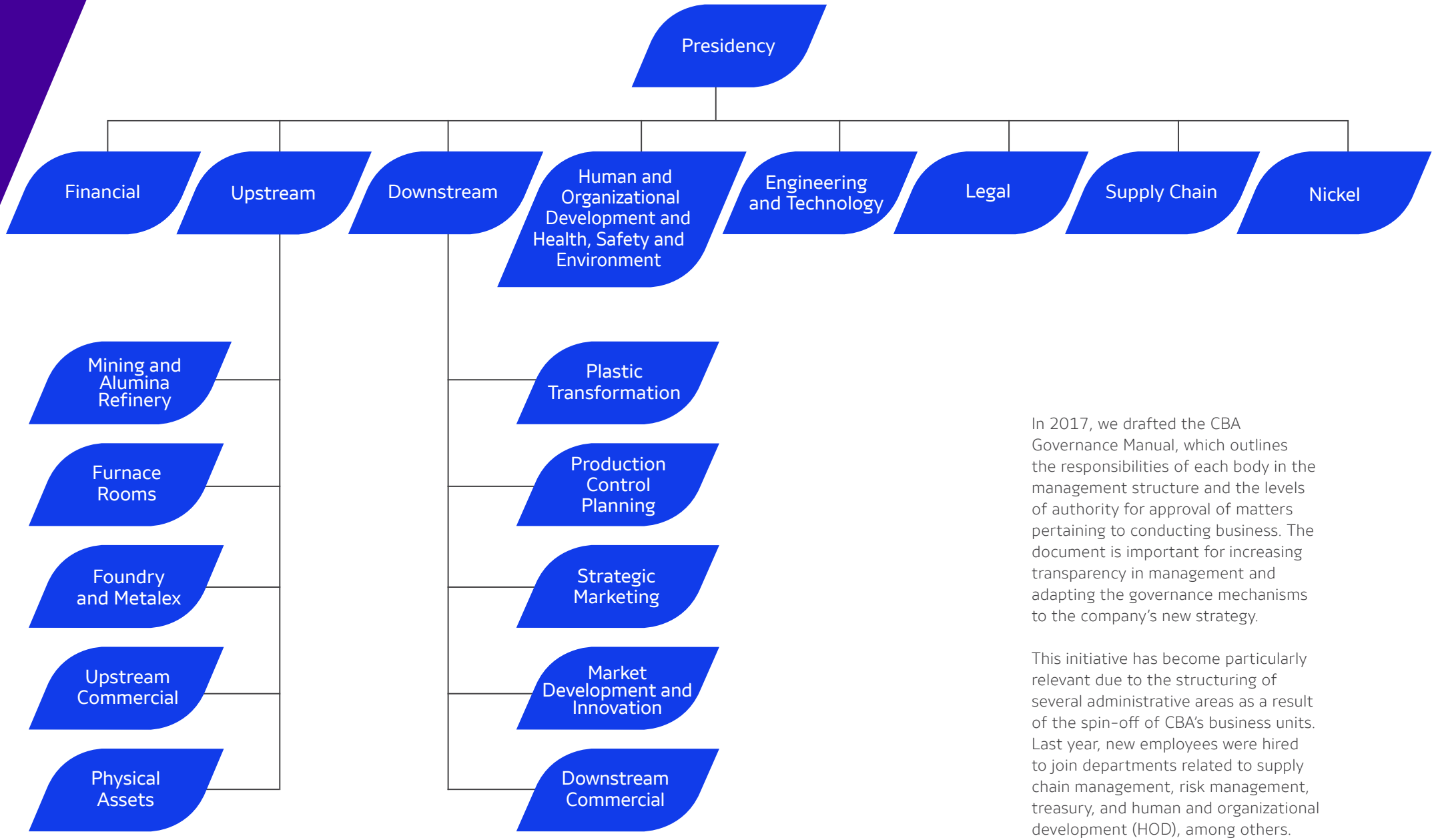
Remuneration and Personnel Committee

This committee assists the Board of Directors with people management models, aiming to safeguard the perpetuity of the corporate culture, values and beliefs, ethics and conduct recommended by the shareholders and their correct dissemination across CBA, as well as competitiveness in terms of the attraction and retention of employed talents. The Remuneration and Personnel Committee is composed of three members, one a shareholder and two external.

Executive Officers

Responsible for the management and representation of CBA in its relations with all stakeholders. It aims to ensure the development and execution of the strategic and budget plan, always acting with competence, efficiency, and honesty, within the limits of the Votorantim DNA and the guidelines received from the Board of Directors and General Meeting of Shareholders. Its members are elected by the Board of Directors.

GRI 102-18



In 2017, we drafted the CBA Governance Manual, which outlines the responsibilities of each body in the management structure and the levels of authority for approval of matters pertaining to conducting business. The document is important for increasing transparency in management and adapting the governance mechanisms to the company's new strategy.

This initiative has become particularly relevant due to the structuring of several administrative areas as a result of the spin-off of CBA's business units. Last year, new employees were hired to join departments related to supply chain management, risk management, treasury, and human and organizational development (HOD), among others.

GRI 102-18

Ethical conduct and Compliance Program

Integrity and transparency are the driving forces of our management and corporate governance. Since 2013, we have had a Compliance Program built on a basis of the Values and Beliefs of the Votorantim DNA. The program covers the policies and instruments that govern the high ethical work standards of our employees and leaders, with anticorruption practices forming one of its pillars.

CBA's Code of Conduct is one of the main tools used to ensure that our activities are in compliance with laws, regulations and best practice. At the end of 2016, the document was reviewed and distributed to all the employees. We also expect that the Code will serve as a source of reference to guide the conduct of our suppliers and business partners.

Following its review, practical examples of daily activities, a list of expected behaviors and references to the issues addressed were included in the Code of Conduct. It also covers current topics, such as the Anticorruption Law, and has a chapter dedicated to Conflicts of Interest.

We held training sessions on the Compliance Program and Code of Conduct in 2017, through the e-learning platform. We also held classroom training sessions for specific departments on the company's Anticorruption Policy. Topics related to ethical management and compliance are regularly addressed in the internal communication channels. In addition, we created a Compliance Booklet, which is distributed to all members of the internal public, and we approved new corporate policies.

We held Compliance Day at the end of last year, when leaders and employees met to discuss and expound on issues such as digital compliance, donations and sponsorships, and antitrust practices. The action is part of Compliance Week, organized by Votorantim with the purpose of engaging professionals from all the companies in the compliance culture and matters of relevance to the business.

The members of the Board of Directors and Executive Board were trained in the Code of Conduct and the CBA Compliance Program in 2017

GRI 102-16 | 103-1 | 103-2 | 103-3

Our risk management is based on **globally-recognized methods** and provides regular accounts to the Audit Committee

Ethics Line

The Ethics Line exists to receive complaints and reports of behaviors that do not display good moral conduct and integrity. This channel is open to employees and external publics. It is accessible by telephone or Internet and is managed by an external team that guarantees caller confidentiality. The information and records of actions taken in response to calls are kept within the Ethics Line channel itself.

The channel contributes to improving our management and conduct. Investigations of any accusations of fraud or corruption are conducted in-house, through the Conduct Committee, which is made up of the CEO and representatives of the Human and Organizational Development, Legal, Compliance, and Auditing departments. Anonymity and non-retaliation are guaranteed. In 2017, no cases of corruption were identified by the company, and there were no cases registered in previous years.

Risk management

The risk management for our businesses is based on the COSO and ISO 31000 (Risk Management) method, which starts by engaging the leaders, in order to map the events that could carry risk for CBA. At the end of this process, the risks mapped out are categorized by relevance, by the likelihood of their occurrence, and by the level of impact for the company's operations and strategy.

Every two months, the administrative and operational areas are consulted to evaluate the execution of the plans of action, the evolution of the level of exposure to the risks mapped out, and whether any new events have been identified that could trigger other risks. This monitoring work is presented to the Audit Committee at least twice a year.

This whole process is guided by CBA's Business Risk Management Policy, published in 2017. The area of Internal Controls and Risk Management is responsible for coordinating the process, and the Internal Auditing monitors the effectiveness of the controls adopted. Each year, we are audited by an independent company.

GRI 103-1 | 103-2 | 103-3 | 205-3

Compliance in the business chain

To ensure compliance of our operations with environmental and labor legislation and other rules and guidelines established by the regulatory authorities, we act in close conjunction and partnership with our supply chain.

Within the supply chain management structure, we have a supplier qualification area, which systemically evaluates the certifications, proofs of financial health and legal compliance of the companies that supply products and services to us. Based on this analysis, suppliers are approved to operate as part of our value chain.

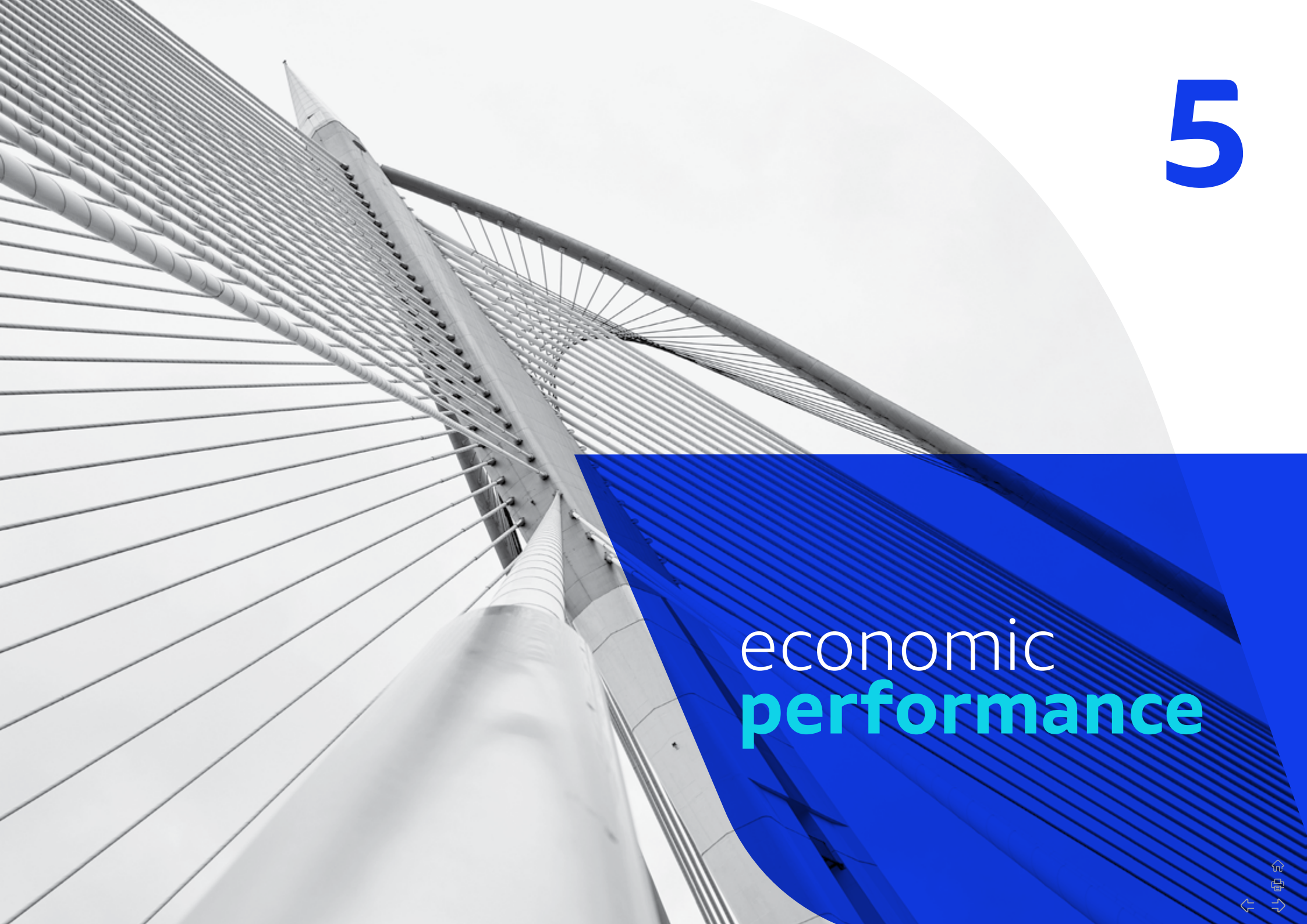
Last year, we improved this practice with a program to assess the compliance of suppliers considered critical. From a universe of approximately 3.9 thousand business partners in 2017, we selected, based on criteria defined by the company, those that represent greater risks for the operation and image of CBA. We sent compliance questionnaires, and also conducted an evaluation of their reputation and image, through research in the media and other public sources of information.

In 2018, we implemented a digital platform to monitor suppliers' performance. The system will enable us to check the operating licenses and reinforce the shared management of risks, a working methodology that is aligned with this new phase of CBA. We are also looking into the development of new mechanisms to evaluate and select suppliers based on socio-environmental performance criteria.

Most of our suppliers (86%) are located in the Southeast region of Brazil, close to our mining and Aluminum manufacturing units. Many of these companies supply part of the inputs necessary for our activities, such as chemical products, and provide services of maintenance and renovation of the manufacturing installations. Our total expenditure on suppliers in the last year was R$2.1 billion.

In 2017, we carried out a specific compliance assessment for suppliers considered critical

GRI 102-9 | 103-1 | 103-2 | 103-3



5

economic performance

Economic performance

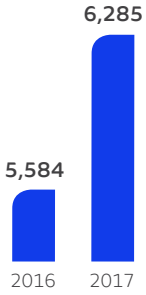
In 2017, the global aluminum market was impacted by supply reforms in China (the world's largest metal producer), which reduced overall installed capacity, and resulted in increased operating costs, mainly the cost of alumina and other raw material. Added to the aluminum inventory drop outside China, led to a 23% increase on the average aluminum price on the London Metal Exchange in 2017. In reais it represented a 13% growth.

In the Brazilian market, the main consumer segments of aluminum continued to be impacted by the economic crisis and the low GDP growth, with the exception of the transportation sector which displayed a 25% growth in production (Anfavea - National Association of Automotive Vehicles Manufacturers) and consumption of aluminum 18% higher than in the previous year, given the increase in exports, according to the Brazilian Aluminum Association (Abal). According to Abal, the aluminum consumption of the three main segments totaled 833 thousand tons in 2017.

Energy

The increase in energy cost,, one of the main inputs for the manufacture of aluminum, impacted the national market in 2017. The below-average rain led to a decrease in the level of the reservoirs of hydroelectric plants, which generated 21% less energy than in 2016, according to data from the Chamber of Electric Energy Commercialization (CEEC). This scenario led to an increase in thermal generation, which has higher costs, resulting in a 244% increase in the price of energy.

LME aluminum price (R$/ton)*



*Average daily closing prices of metals, as traded on the London Metal Exchange (LME).

Energy price (R$/MWh)*

*Average energy price in the Southeast and Midwest regions of Brazil, according to CEEC.

In 2017, the average **aluminum price** (London Metal Exchange) in Reais was **13% higher** than the previous year

Alumínio plant (SP)

Operating results

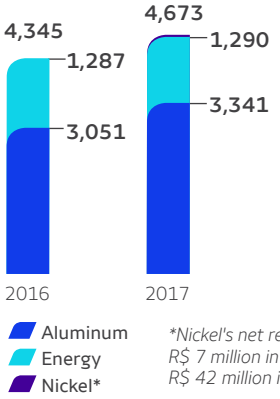
We are a company that promotes vertical integration in the aluminum production chain, with a competitive differential in the Upstream and Downstream businesses, which allows us to strengthen relationships with our customers and offer innovative solutions with greater added value. In 2017, we posted a 8% growth in revenue, while adjusted EBITDA dropped 7% compared to 2016. Despite the significant increase in the results of the aluminum business, the higher GFS* and mark-to-market of future energy surplus not yet sold contributed to this decline.

In the aluminum business, sales volume increased by 11% when compared to the previous year, mainly due to by the performance of the Upstream segment. In the Downstream business, the focus on profitability affected volumes. The increase in aluminum prices and volumes led to a 9% increase in net revenues, which together with the commercial strategy aiming to increase participation of higher value-added products and improved operational performance led to an increase in adjusted EBITDA of 52% in comparison with previous year.

The diversification of our portfolio, with solutions and services to meet customer demands, associated with a strategy of higher efficiency and lower costs, is fundamental for CBA to reach a new level of competitiveness. This will make us better prepared to take advantage of market opportunities and to expand our capacity of generating value for our shareholders and stakeholders.

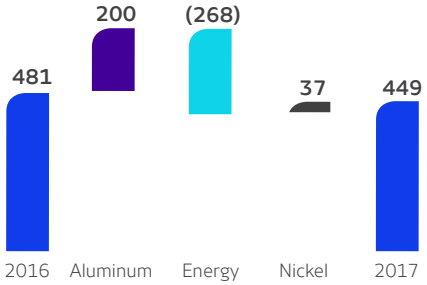
*GSF (Generation Scaling Factor) is the ratio between the energy produced by the set of generators and the sum of the their physical guarantees.

Net revenue
(R$ million)



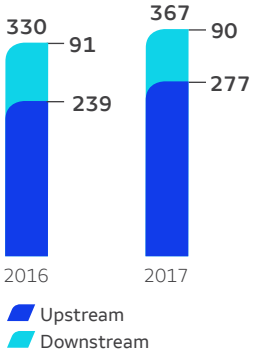
*Nickel's net revenue was R$ 7 million in 2016 and R$ 42 million in 2017.

Adjusted EBITDA
(R$ million)



Aluminum adjusted EBITDA
(R$ million)

Aluminum sales volume
(thousand tons)



The significant evolution of the **aluminum business** results in the year was related, among other factors, to the increase in LME prices, the higher participation of value-added products and the improved operational performance

GRI 102-7

environment

- Sustainable mining
- Dam safety and residue management
- Eco-efficiency in production

6

Sustainable mining

Bauxite mining is the first step to producing primary aluminum and delivering, to our customers, the best solutions in primary and transformed products. We have four mining units, in Minas Gerais and Goiás (see the location of our mines on page 10). At our unit in Barro Alto (GO), we have a 20 million tons bauxite reserve in the licensing process. Together, all the mining units ensure that we are self-sufficient in the supply of bauxite.

The mining activity, which is carried out using the most advanced methods, with a focus on mitigating environmental impacts, adds benefits and value for communities in the regions where we operate. After the bauxite extraction is complete, the mined areas are handed back to the rural property owners with the soil in even better conditions for agricultural activities or reforestation.

Our mining units **guarantee self-sufficiency** in the supply of bauxite. With the use of **best mining practices** and recovery of mined areas

Bauxite mining in Miraí (MG)

GRI 103-1 | 103-2 | 103-3 | 304-2 | MM2

Mining recovery in Miraí (MG)

After the cycle is complete, the mined areas undergo processes of environmental restoration and are fully reintegrated into the landscape. With innovative techniques and continuous research, our model of soil restoration has enabled the recomposition of native vegetation or the rehabilitation of areas for agricultural activities and pasture.

In 2017, the Miraí mine was elected for the second year running, in a survey conducted by the magazine *Minérios & Minerales*, as the mine that invests most in environmental preservation. The ranking was based on the funds spent on management of environmental programs, environmental licensing and rehabilitation of mined areas. In the same survey, the Poços de Caldas mine was ranked sixth safest in the country and tenth for investments on safety.

We also seek to demonstrate the benefits of bauxite mining, engaging the local communities through the Environmental Education Program (EEP). This initiative promotes environmental education and raises awareness of actions to reduce impacts and protect the environment carried out by CBA with employees and communities around the mining units. The EEP, which began in 2001, has reached 65.7 thousand people during its sixteen years in existence.

In the municipalities of Minas Gerais where we operate, bauxite extraction has unique characteristics: the ore is located on the tops of hills and slopes, where it is found in shallow layers, making it easy to extract by excavating small pits, without the need for tunneling. The mining cycle is completed in 3 to 6 months, depending on the size of the property.

3 to 6 months
is the average time of our mining cycle in Minas Gerais

Mining recovery in Miraí (MG)

GRI 103-1 | 103-2 | 103-3 | 304-2 | MM2 | MM7

Rehabilitation and recovery of mined areas

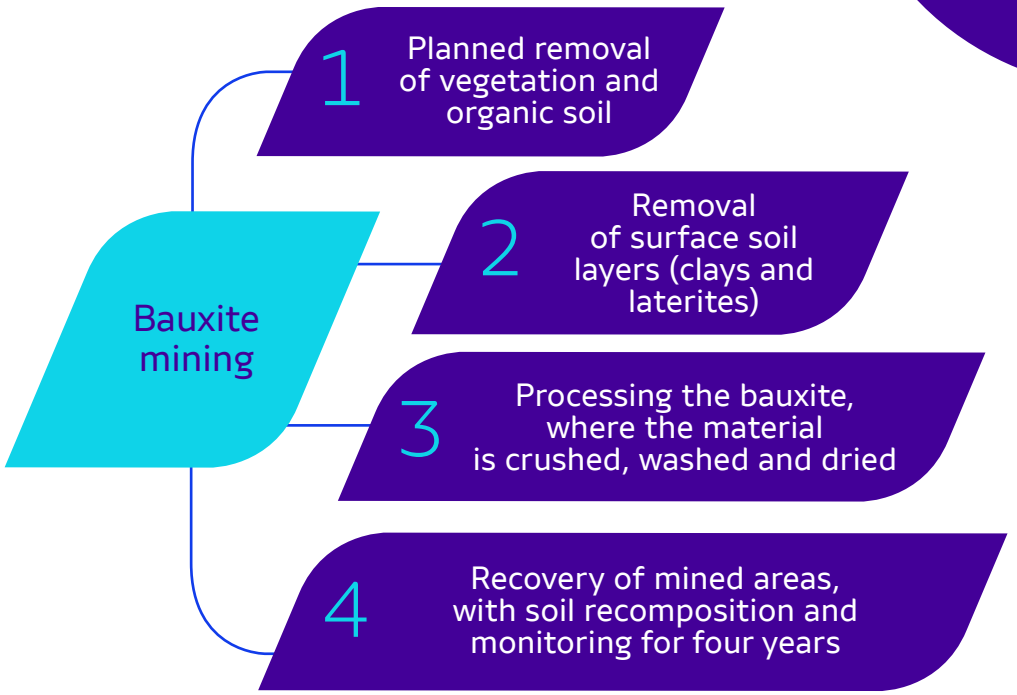
Once an area has been released by the environmental bodies, and all the necessary permits obtained, we begin the bauxite mining by constructing access routes and removing the vegetation and soil covering the mine. This soil layer, rich in organic matter, is stored. We also implement a drainage system to prevent erosion and prevent solid elements, such as rocks, from being carried by the rain. The mining process is totally mechanized, with hydraulic excavators, and no explosives are used.

As soon as a mine is closed, we begin the stage of restoring the original topography and smoothing out the landscape, so that the site is returned in a state as close as possible to the original. We also carry out soil decompacting, to promote the growth of the vegetation. We then put back the original soil, which is rich in organic matter, correcting its acidity and adding manure and phosphate to prepare it for planting native species of Mata Atlântica forest, or for agricultural activities or pasture. This rehabilitation takes between four and six years to complete.

In Poços de Caldas, there are so-called "altitude fields", one of the most common vegetal physiognomies in the region. The rehabilitation of mined areas in these environments is conducted using pioneering techniques, developed by CBA in partnership with the Universidade Federal de Lavras (UFLA). Around twenty mined hectares are now in the process of recovery using these new techniques. Besides contributing to the environmental preservation, the project also promotes sharing of knowledge and the adoption of good practices in the mining sector.

In Miraí and Itamarati de Minas, the rehabilitation of mined areas is conducted on land that is cultivated, basically for pasture, eucalyptus, and coffee. Over the years, the practice of rehabilitation has evolved, thanks to a partnership formed with the Universidade Federal de Viçosa (UFV). At the end of the mining process, the soil is recovered and handed back to the owners in better productive conditions than previously. In 2017, there were 27.5 hectares in the recovery process; of this total, 63% was designated for pasture and the rest for planting eucalyptus. The Itamarati de Minas unit currently has reduced operations, producing bauxite from recovered mineral in the dam.

The rehabilitation process of our mined areas is fully completed between three and four years



GRI 103-1 | 103-2 | 103-3 | 304-2 | MM2

Recognized **partnerships**

Through partnerships with the Federal Universities of Viçosa and Lavras (UFV and UFLA), we have developed new partnerships to qualify the rehabilitation processes, achieving shared results between CBA and academics – the projects have been the theme of master's and doctorate degree studies presented at national and international seminars and also to rural producers. We are conducting four main lines of research in partnership with these universities: soil, hydrology, flora, and fauna.

We are evaluating the impacts and benefits of the bauxite mining activities in the region of Zona da Mata, in Minas Gerais, in partnership with the Univerdade Federal de Viçosa (UFV). Researchers and students are conducting experiments and actions aimed at improving the rehabilitation and restoration methods adopted by the company, reducing costs and promoting the sustainability of the mined areas.

One of the projects carried out with the UFV is to evaluate the effectiveness of the rehabilitation and restoration of these areas, providing solutions for their qualification through the analysis of bioindicators, such as the soil seed bank, natural regeneration, seedling mortality, and production and decomposition of litter fall (a layer formed by the deposition and accumulation of dead organic matter). The initiative has concluded, so far, that the actions of rehabilitation and recovery adopted by CBA have enabled rapid recovery of the native vegetable cover and the natural enrichment of the mined areas over time, demonstrating the competitiveness of bauxite mining in the region.

Another activity initiative, initiated in 2011 in partnership with the Laboratório de Restauração Florestal (Forestry Restoration Laboratory) – LARF, uses bioindicators to monitor the areas restored by CBA. Its objective is to evaluate whether the techniques of forest restoration used are achieving the desired results. During its five years, the initiative has studied recuperated areas with different profiles, from recently planted areas to areas with twelve years of restoration.

Environmental
rehabilitation

6 doctoral
theses

7 master's
dissertations

11 undergraduate
course conclusion works

22 works
published at congresses

5 articles
published in scientific journals

GRI 103-1 | 103-2 | 103-3 | 304-2

Dam safety and residue management

The proper management and disposal of residues is one of the main environmental aspects that we manage in our activities. The processing and refining of bauxite generate residues that are deposited in our own dams and continuously monitored. This monitoring is performed using measurement instruments, interpretation of the measurements, field inspections, and monthly safety assessments of the dams, according to guidelines of the Sistema Integrado de Gestão da Segurança de Barragens (Integrated Dam Safety Management System) – SIGBAR®, adopted by CBA. Moreover, all our dams have a Dam Safety Plan, as required by the legislation.

Residue dam in Alumínio's plant (SP)

To guarantee the **safety of the dams** we have:

more than 100 verification instruments

Daily field inspections by the operating team

Fortnightly inspections by a qualified professional

Monthly report of safety conditions to the executive officers

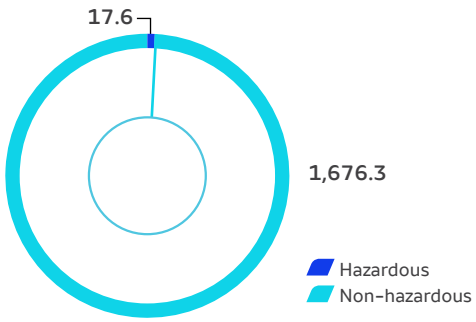
Independent and specialized geotechnical promotes monthly safety assessment and semiannual inspections

GRI 102-11 | 103-1 | 103-2 | 103-3

In the municipality of Alumínio (SP), the CBA factory residue dam is where we send the red mud, a non-hazardous waste generated in the conversion of bauxite to aluminum. The mud is transported directly from the factory, through pipes, and disposed of according to the plan outlined, in order to guarantee the stability and safety of the structures.

In the mining units, the dams contain only the residues from the bauxite processing and systematically follow the same management pattern.

Residue disposed by type in 2017
(thousand tons)



Co-processing of SPL

The production of primary aluminum (molten aluminum) is done in electrolytic cells (pots), where the alumina is reduced by the process of electrolysis (find out more on page 39). Each cell consists of a metallic basin lined with refractory blocks and other specific materials that facilitate energy conduction. Once the cells reach the end of their useful life, the lining is replaced and the old lining disposed of, generating a type of waste known as SPL (spent pot lining).

This waste, by definition, is classified as hazardous and therefore requires specific controls for its storage. In 2007, a Conduct Adjustment Agreement, or TAC (Termo de Ajustamento de Conduta) was signed with the environmental body of the state of São Paulo, establishing guidelines for the elimination of SPL stored in inappropriate places. CBA requested an extension of the TAC and full compliance with it is planned for 2019. At present, the SPL generated at the CBA Factory is stored in an appropriate place and sent for thermal destruction.

Residue destined for dams in 2017 (thousand tons)	Factory	Mining	Nickel	TOTAL
Tailings	111	0	0	**111**
Sludge	602	829	101	**1,532**
TOTAL	**713**	**829**	**101**	**1,643**

Innovation for the continuity of operations

The residue dam of the CBA Factory, which stores red mud resulting from the process of obtaining aluminum at our factory in the municipality of Alumínio (SP), has an estimated useful life of up to the year 2022. To ensure continuity of operations without having to build another dam, we have developed a project for the use of filter presses that will enable the waste to be stored in dry cake form. This will increase the useful life expectancy of the dam to at least the year 2042.

Another advantage of this initiative is that it enables the liquid part, which we currently have at the residue dam, to be reutilized in the actual production process. This material, rich in important materials for the production process, will result in reduced demand for the chemical inputs such as caustic soda, and cost savings in the process.

The technology is already used in the filtering of other types of ores, but the physical and chemical characteristics of the red mud make it difficult to use in the aluminum sector. However, there are already successful solutions in filter presses for this application in operation in the world. The solutions developed were studied and evaluated by specialists, in order to reduce the impacts and make the project feasible from an operational perspective.

Since 2012, technical studies have been conducted to ensure that that the disposal is done in a safe way. In 2017, a Preliminary License (Licença Prévia) was issued by the Cetesb, and the installation license was requested. The forecast is that by 2021, the filter presses will be fully installed and operational.

On another front, also still in the research phase, we have identified that the dry material can be reused by the cement industry. CBA owns the patent for this technology, which may further increase the useful life of the residue dam, if this project proves feasible.

GRI 103-1 | 103-2 | 103-3 | 306-2 | MM3

Aluminum recycling

Its high capacity to be endlessly recycled without losing its characteristics is one of the main attributes of sustainability of aluminum. Brazil is one of the countries with the highest annual levels of recycling of aluminum materials – around 46%, according to data of the Brazilian Aluminum Association (Abal); the worldwide average is 27%.

Approximately 75% of all the aluminum produced in the world is still in use (in vehicles and buildings, for example) and can be put back into the production cycle after recycling. In the case of packaging, for example, the life cycle is shorter – much of the recycled aluminum in the country comes from drink cans. But other materials, such as pans, automobile parts, and window frames, have also been reused.

At the factory in Alumínio, we receive scrap aluminum from some of our customers, internal processes, and the sector market for reuse in the process. Last year, 20.5 thousand tons of scrap were reprocessed at the industrial plant, reducing costs and environmental impacts related to energy consumption and raw material. Metalex, which also recycles aluminum at its plant in the municipality of Araçariguama, processed 38 thousand tons of scrap in 2017.

We have also implemented improvements in industrial processes in the metal processing business, in order to ensure that our internal scrap is classified appropriately, to increase its reuse in the manufacture of primary products. As a result, we have reduced the need for energy and inputs in the production process.

58.5 thousand tons of aluminum scrap were **reused** in our production processes in 2017

Metalex unit in Araçariguama (SP)

Recicled materials consumption (thousand tons)	2017	2016	2015
Scrap recycled	58.5	71.6	60.0
Total consumption of raw materials	440.0	444.6	385.5
PERCENTAGE OF RECYCLED MATERIALS	**13%**	**16%**	**16%**

GRI 103-1 | 103-2 | 103-3 | 301-2

Eco-efficiency in production

Electrical energy is an essential input for the production of aluminum. Its consumption is so high that the plant has placed the municipality of Alumínio, which has 18,000 inhabitants, as the second largest energy consumer in the state of São Paulo, behind only the capital itself, according to a report from the state Secretariat for Energy and Mining.

For CBA, energy generation is one of the central points of our business model. We have twenty hydroelectric plants within our energy matrix – eleven linked directly to the factory, which form the Juquiá-Sorocaba complex, and the other nine, either owned by CBA or in which we have a stake, interlinked with the national grid – the Sistema Integrado Nacional (SIN).

Hydroelectric plant Pirajú (SP)

The management of electrical energy consumption is strategic for minimizing the environmental impacts of the operations and reducing costs

GRI 103-1 | 103-2 | 103-3

Besides enabling us to obtain electrical energy at a competitive cost, the option for hydro-generation also brings benefits from the environmental point of view. Having a clean, renewable energy source gives us an advantage over aluminum producers located in countries where the energy network consists predominantly of fossil-fueled thermoelectric plants. This means we are able to deliver to our customers a product with a smaller environmental impact, adding sustainability to the entire value chain.

In 2017, the total consumption of electrical energy at the aluminum plant of CBA was 21.4 million GJ (5.9 million MWh). The installed capacity of our hydroelectric plants is sufficient enough to supply 100% of the demand at this industrial unit

CBA Factory (SP)

CBA's energy consumption in 2017 (thousand GJ)	
Generated from fuels	8,128
Electrical energy self-generated	6,645
Electrical energy adquired	14,961
TOTAL	**29,734**

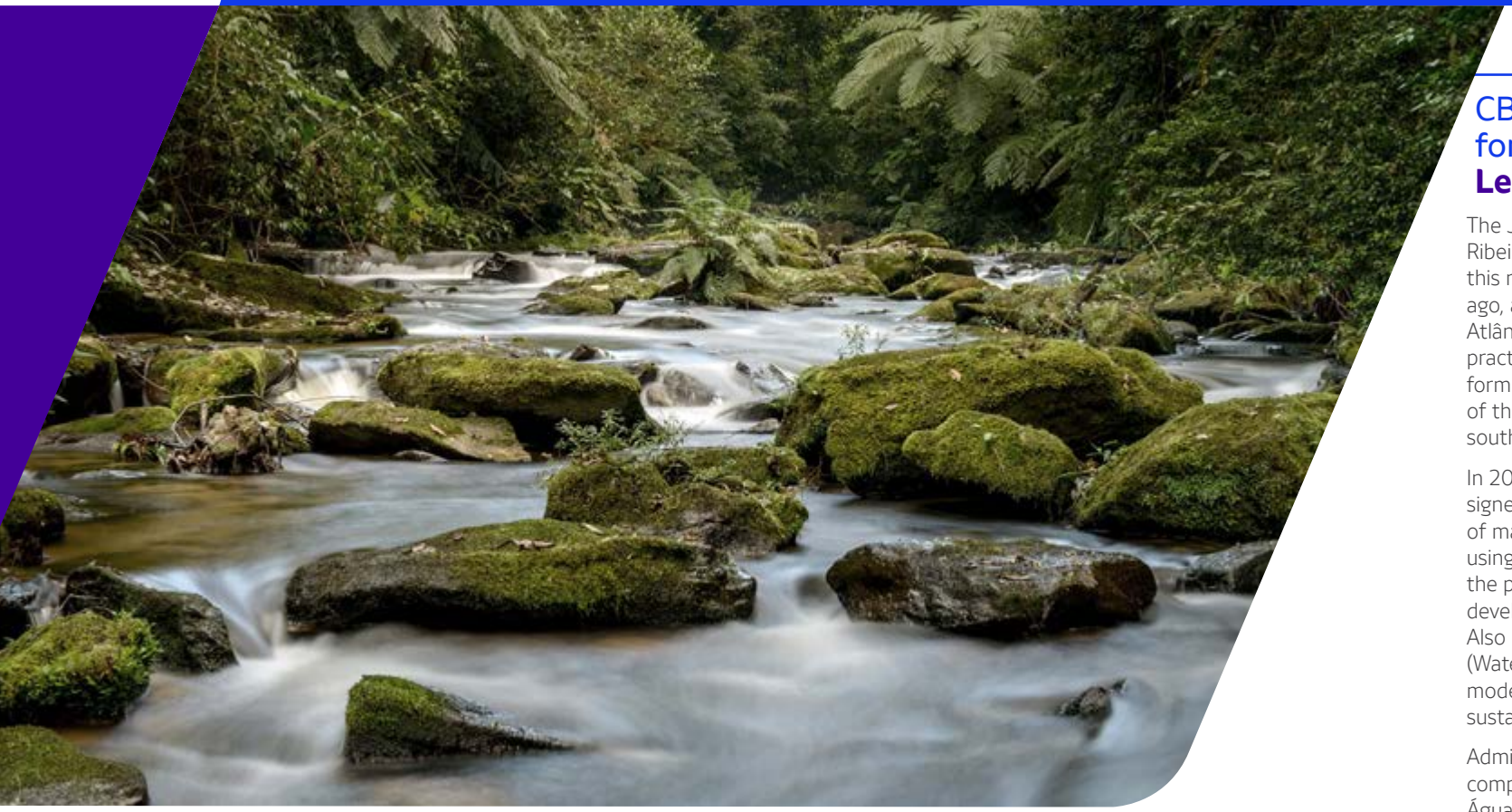
Energy intensity in 2017 (GJ/ton produced)	
Mining (bauxite)	0.072
CBA Factory (primary aluminum)	81.914
Metalex (aluminum)	4.192
Niquelândia (nickel carbonate)	113.477
São Miguel Paulista (electrolytic nickel)	57.377

How does electrolytic **reduction work?**

The industrial production of aluminum is based on the Hall-Heroult process, whereby alumina (Al_2O_3) is dissolved in an electrolytic bath of molten salts (cryolite and aluminum fluoride), through which an electrical current is passed. In this chemical process, the electrical current encounters aluminum ions in favorable conditions to be reduced, and the metallic (molten) aluminum is deposited at the bottom of the cell by density. CBA currently operates with currents at levels of up to 135 thousand amperes.

The aluminum, now in liquid state, is removed in metal crucibles and transported to the foundry, where it is formed into primary products, such as: billets, ingots, rods, plates and coils.

GRI 103-1 | 103-2 | 103-3 | 302-1 | 302-3



CBA contributes to the formation of the **Legado das Águas**

The Juquiá river is located in the Vale do Ribeira, and to protect the water resources in this region, CBA acquired, more than fifty years ago, an extensive area of preserved native Mata Atlântica forest. There are 31 thousand hectares, practically the size of the city of Curitiba (PR), forming what is the largest private reserve of this biome in the country, located to the south of the state of São Paulo.

In 2012, Votorantim and the state government signed a protocol of intentions for the purpose of maintaining the protection of the area and using it in a sustainable way. Three years later, the protocol was re-evaluated, following the development of a strategic management plan. Also in 2015, the Legado das Águas (Water heritage) was initiated, an innovative model of environmental conservation and sustainable development.

Administrated by Reservas Votorantim, a new company of Votorantim S.A., the Legado das Águas uses the asset of CBA's natural capital to develop products and services with the potential to generate value for all its publics – such as compensation for legal reserves, research in the area of biotechnology, and ecotourism activities. Scientific research is also being conducted on the flora and fauna, and investments have been made to promote the development of the municipalities of Juquiá, Miracatu and Tapiraí, where our areas of preserved Mata Atlântica forest are located.

For more information, go to the **Legado das Águas website.**

GRI 103-1 | 103-2 | 103-3

Carbon Emissions

Greenhouse gas (GHG) emissions are an environmental impact of the aluminum production process. Most of these emissions relate to the process of obtaining alumina and primary aluminum, which generate carbon gas (CO_2) and perfluorocarbon (PFC) emissions. To reduce emissions, we strive to implement operational improvements, innovations in the process, and more use of recycling.

A study conducted in 2010 by Abal on greenhouse gas emissions in the Brazilian aluminum value chain (from mining to recycling) indicated that the carbon footprint of Brazilian production is 60% lower than the worldwide average, mainly thanks to the predominance of electrical energy generation from water sources. The increase in the recycling index is also relevant in this sense, as the secondary production of aluminum consumes only 6% of the energy used in the traditional process.

In 2017, CBA conducted an in-depth impact analysis of its operations, linking them to GHG emissions in order to identify opportunities for performance improvement. In 2018, we subscribed to the Brazilian GHG (Greenhouse Gas) Protocol program, and we plan to carry out an inventory of emissions for the first time, according to these guidelines.

Emissions of other gases

CBA's industrial aluminum process also produces other atmospheric emissions. We are continually improving our controls and investing in better technologies, such as wet gas scrubbing, to control pollutants resulting from the production process. Through these investments, we seek to comply with the commitments made in the Term of Adjustment of Conduct that we have consolidated in 2006. Throughout 2018, we will define with the regulator the measures for its conclusion.

Besides improving the way these emissions are managed, we have begun a study to implement innovations in our primary aluminum production process. The project CBA do Futuro (CBA of the Future) also involves implementing new technology to supply the electrolytic cells with alumina automatically, which will reduce GHG emissions and increase the safety of operations. At the beginning of 2018, twelve pilot furnaces were set up using this technology, and initial tests will be carried out over the year.

GHG emissions inventory in 2017 (tCO_2e)	
Scope 1	
Emissions	1,343,701.7
Biogenic emissions	4,126.3
Scope 2	
Indirect emissions from energy consumption	9,871.7

GHG emission intensity in 2017 (tCO_2e/ton produced)	
Mining (bauxite)	0.004
CBA Factory (primary aluminum)	3.714
Metalex (aluminum)	0.229
Niquelândia (nickel carbonate)	6.515
São Miguel Paulista (electrolytic nickel)	1.688

Other atmospheric emissions in 2017 (tons)	
NO_X	649
SO_X	99
Volatile organic compounds (VOC)	1
Particulate matter (PM)	1,376
Fluoride gas	79

GRI 103-1 | 103-2 | 103-3 | 201-2 | 305-1 | 305-2 | 305-4 | 305-7

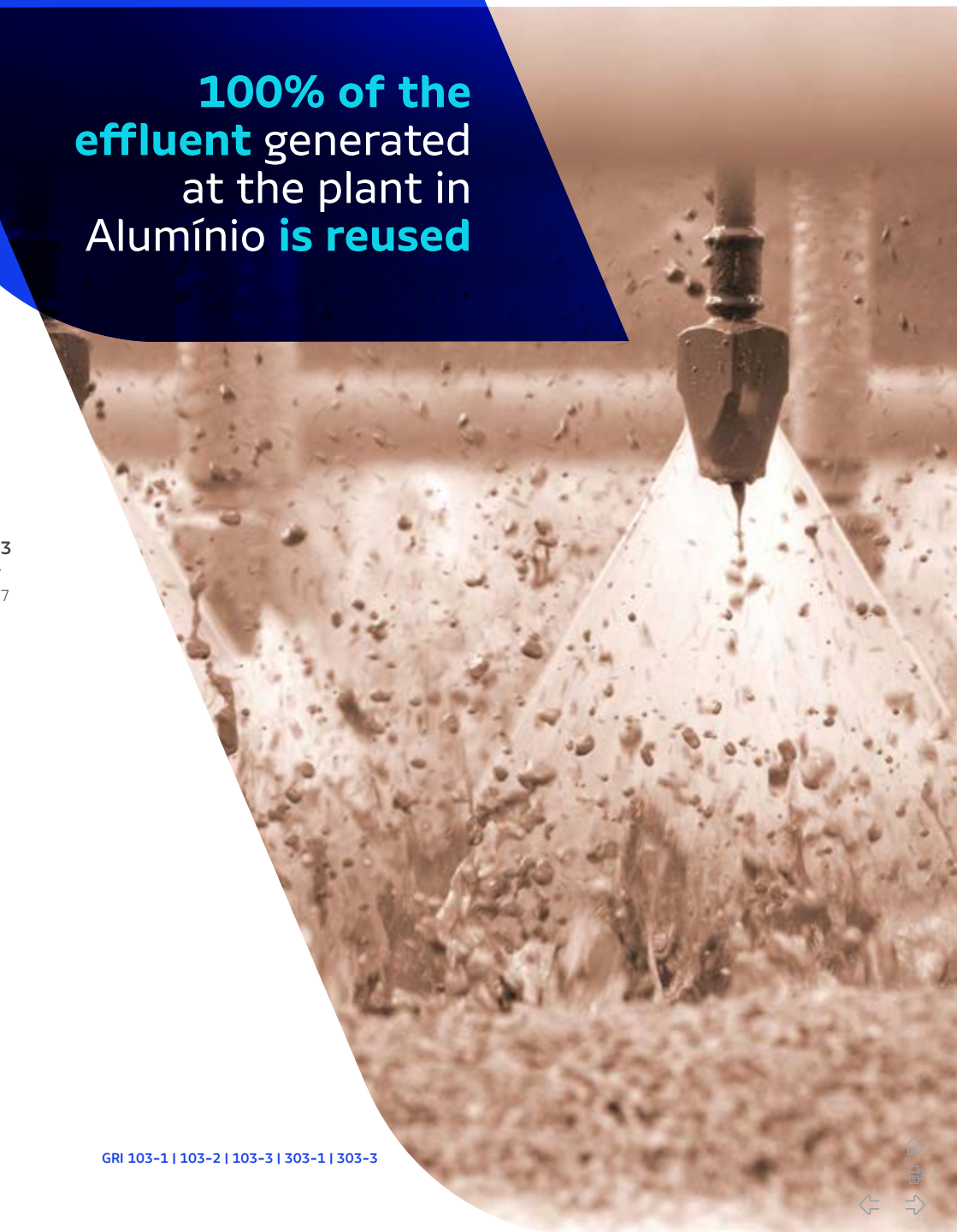
Water management

Water is a natural resource that is used in all phases of production. At the plant in Alumínio, water is obtained from water bodies located nearby, treated, and used in the refinery, casting, and other stages that require he water input in potable condition. After use, we direct the effluent to a exclusive lake for storage, with capacity of 75,000 cubic meters, and treat it in a industrial water treatment plant for reuse in other production processes, such as the treatment of gases. Thus, the effluent generated is reused in the industrial plant.

At the plant in Alumínio, through increased efficiency in production, treatment, and reuse, we significantly improved our water efficiency and reduced new water collection by 35% between 2015 and 2017. The main initiatives undertaken are improvements in the industrial water treatment process and optimization of the reuse of the effluents. Additionally, actions were taken in the alumina refinery to reduce water consumption and increase the reuse of the water deposited in the residue dam.

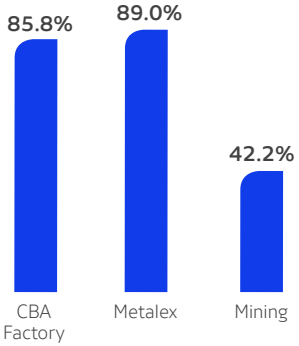
In our mining units, drinking water is used only for human consumption in the administrative facilities and dining rooms. The bauxite washing process at the Miraí plant is done by reusing the water stored in the residue dams.

100% of the effluent generated at the plant in Alumínio **is reused**

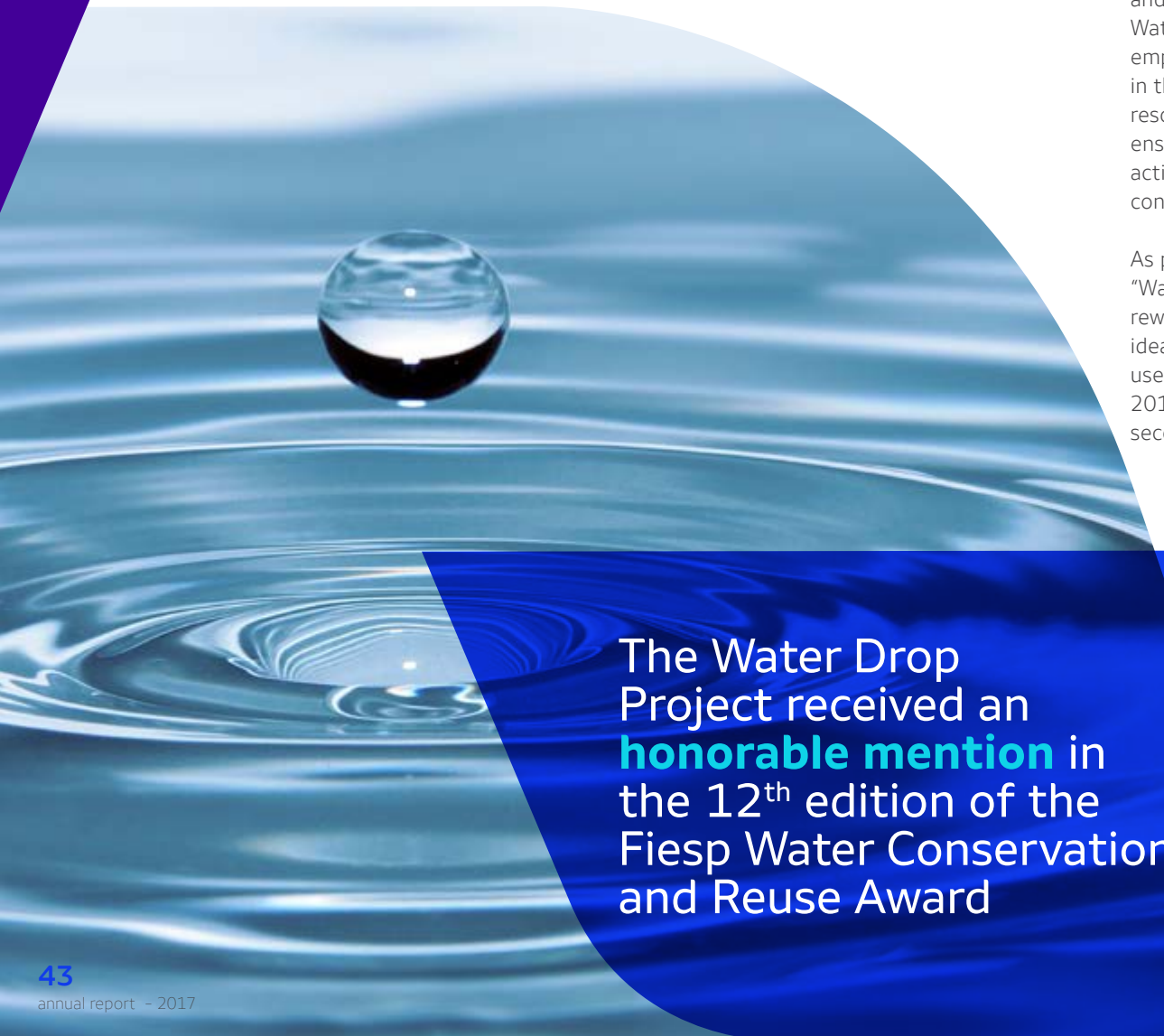


Water consumption in the plant per ton of aluminum produced (m^3/ton)

Water efficiency in 2017 (percent of water recycled in the process)



GRI 103-1 | 103-2 | 103-3 | 303-1 | 303-3



A Gota d'Água (The Water Drop)

As a way to further increase our water efficiency without relying on high investments, in 2016 we created the project "The Water Drop: Awareness and Management Strategies to Reduce Water Consumption", which transformed employees into agents for change in the way the company uses water resources. Since then, this initiative has ensured the implementation of new actions aimed at improving our water consumption.

As part of this project, we launched the "Water Drop Challenge" to select and reward the professionals who submitted ideas that promoted conscious water use or the elimination of waste. In 2017, we ran the Challenge for the second time running.

The winning project of the 2017 edition promoted changes to the cooling systems of the crucible cleaning machines that collect molten aluminum in the furnace rooms. The equipment switched to using radiators with forced ventilation to cool the temperature of the oil, eliminating the use of water in the process. This idea was also one of the CBA finalists participating in the Talent in Sustainability Award, sponsored by Instituto Votorantim (see more on page 52).

The Water Drop Project received an **honorable mention** in the 12th edition of the Fiesp Water Conservation and Reuse Award

7

people

Health and well-being of employees

For us, safety is not negotiable. Concern for the physical health of people is permanent, therefore we have various programs and protocols aimed at avoiding exposure to the different risks that we have mapped in the environments where we carry out our operations.

To reinforce a culture of safety among our employees, we conduct a Safe Behavior program that covers training, awareness activities, and tools aimed at identifying and addressing situations of risk. One of these tools is Work Risk Observation (WRO), which encourages the assessment of activities and their associated risks. With its efficient methodology, WRO promotes behavioral change and the maintenance of safe attitudes.

Preliminary Risk Analysis (PRA), in turn, trains employees to assess the existing risks and take steps to ensure their own safety and that of their work colleagues. Another tool available to all employees is Speak Easy (Fala Fácil), a channel for facilitating the communication process and addressing risk conditions.

13,200
Work Risk Observations (WRO) submitted

more than 100,000
Speak Easy communications received

R$ 9.3 million
invested in facility and equipment improvement

GRI 103-1 | 103-2 | 103-3

The Occupational Health Medical Control Program (OHMCP), the Environmental Risk Prevention Program (ERPP), and the Risk Management Program (RMP), developed in accordance with the Regulatory Norms of the Labor Ministry, are tools that we use to create a work environment with fewer risks of accidents or illnesses related to our activities.

In addition to these tools, we have specific protocols that define minimum parameters for performing activities and that, in many cases, go above and beyond the legal requirements.

These protocols are related to the following themes:

- Confined space
- Fall prevention
- Blocking and isolation of energies
- Light vehicles and mobile equipment
- Machine protection
- Hazardous substances
- Pressurized systems
- Melted material
- Manual tools
- Venomous animals
- Suspended loads
- Work with hot materials

If any item observed in these protocols does not comply with the defined parameters, our employees should exercise their Duty to Refuse (Dever de Recusa), through which they justify their refusal to fulfill a specific task by exposing the unsatisfactory conditions identified at that moment. The Duty to Refuse is a tool that empowers employees to avoid exposure to an accident risk. It use is encouraged and recognized by CBA.

GRI 103-1 | 103-2 | 103-3

In our operations, our employees may be exposed to noise at different stages of the production process. There are also ergonomic risks and risks related to contact with venomous animals and chemical products, such as lye, and with hot metal in activities related to transporting molten metal. There are also conditions that require work to be done at heights and in contact with electric energy.

All these conditions that expose the employees to risks are monitored daily and mitigated by means of engineering processes and collective and personal protective equipment – CPE and PPE.

In the furnace rooms, where alumina is transformed into molten aluminum, there are working conditions considered unhealthy according to Brazilian legislation. In addition to collecting fees imposed on this type of activity and complying with all the legal requirements, we invest continuously in creating a healthier working environment for our employees who are exposed to these conditions. For example, there are relaxation rooms equipped with air conditioning, for breaks and rest. All the equipment used in the operation has cabin cooling systems, which are essential security items. If the system is not functioning properly the employee should exercise the Duty to Refuse.

Our investments in improving the safety conditions of our employees are ongoing, and follow a long-term schedule. The initiatives to be implemented encompass equipment improvements, structural modifications, and the installation of new collective protection equipment, reducing even further the risk of accidents in our facilities. Over the last year, we invested R$ 9.3 million in equipment and facility improvements, as well as conducting several awareness programs.

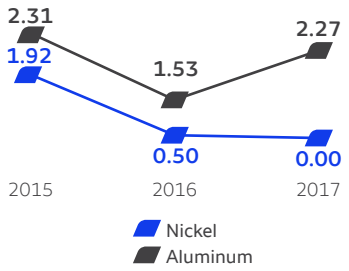
In 2017, we had an increase in the number of accidents not requiring leave, which led to an increase in the frequency rate of accidents with and without leave after a long period of performance improvement. This result is mainly a reflection of failures in risk perception and safe behavior.

Although this indicator increased compared to the year 2016 (from 1.53 to 2.27), we remained below the national (7.09) and international (4.30) frequency rates for the sector, according to the parameters of the Brazilian Aluminum Association (ABAL) and the International Aluminum Institute (IAI).

In response to this scenario, various corporate-level actions were conducted, applying our cultural axes, as well as innovations for industrial safety management. Among these initiatives, aligned with the Votorantim 18.18 Program, is the conducting of a safety workshop involving leadership from all units, to define the work strategy.

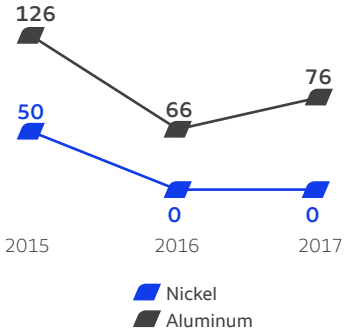
In 2018, these actions will continue with a focus on improving performance and protecting life.

Accidents frequency rate*



The consolidation follows the guidelines of NBR 14280, considering accidents with employees and third parties from level II to V.

Accidentes severity rate*



The consolidation follows the guidelines of NBR 14280, considering employees and third parties and the count of days running.

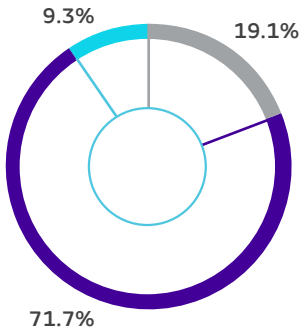
GRI 103-1 | 103-2 | 103-3 | 403-2 | 403-3

Organizational culture

The consolidation of CBA as an independent company, following the corporate spin-off in 2016, required a large-scale reconstruction of almost all the administrative and operational support areas. In addition, the adoption of a new strategy that positions CBA as a partner of customers in search of innovative solutions involved a review of the competencies expected of our employees.

This extensive process of reevaluation and revision of the forms of people management was conducted according to the Values and Beliefs of Votorantim DNA, and was aligned with the four axes of Cultural Evolution.

Composition of the staff by age group



4,833 employees

- **4,522** men
- **311** women

GRI 102-7 | 103-1 | 103-2 | 103-3

Votorantim DNA

Our values

- Soundness
- Ethics
- Respect
- Entrepreneurship
- Unity

Our beliefs

- Cultivating talents
- Meritocracy
- Excellence
- Pragmatism
- Open dialogue
- Alliance
- Sense of ownership

GRI 103-1 | 103-2 | 103-3

The Axes of **Cultural Evolution**

Teamwork

- Jointly defining common company objectives
- Example of company leaders to instigate teamwork, collaboration, cohesion, and partnership
- Not pointing the finger of blame, but identifying problems and proposing solutions together
- Commitment to results and co-responsibility for sustainable successes and failures in transformed products

Constructive divergence

- Openness to the diversity of ideas and opinions, with respect, broadening active listening towards the goal of the evolution and aspirations of the company
- Willingness to step outside of the comfort zone
- Establishing an environment of challenges aimed at co-creation, creativity, and constructive collaboration
- Open, transparent dialog to make the best decisions

Sense of ownership

- Prioritizing the most important and relevant items
- Sense of urgency and efficiency in making and executing decisions
- Autonomy of all to mobilize the organization and the resources necessary to take advantage of the opportunities

Ambition of competitiveness

- Productivity in the search for opportunities in any area of the company
- Excellence in cost and operational performance
- Continuously searching for best market practices
- Developing innovative solutions using state-of-the-art technology

GRI 103-1 | 103-2 | 103-3

We want our teams to be guided by inspiring leaders; managers who are open to dialog and results-focused, and who create a work environment of trust and collaboration. To ensure this, we implemented five engagement workshops that involved 148 CBA leaders, aligning our management with the strategy of building a CBA of the Future, and with the move towards a high-performance culture, sparked by Votorantim S.A.'s 18.18 Project (see more on page 19).

The employee management is based on the Votorantim Development System (VDS), a model that is shared by all Votorantim S.A. companies, and that establishes mechanisms to accelerate professional development in line with the goals and strategic objectives of the company. The VDS is applied annually using the Nine Box methodology, which establishes a matrix for assessing performance and talent potential. To complete the process, employees and their managers work together on an Individual Development Plan (IDP), which identifies the work focuses during the next cycle, key actions, timelines, and ways to achieve the desired development. In 2018, actions will be mapped out for the implementation of the VDS at Metalex.

We use the research methodology of organizational climate, which enables us to identify the employees' level of satisfaction, the work environment, and opportunities for improvement. These in turn are reflected in plans of engagements. The next climate research will be conducted in 2018.

Commitment to people

To encourage the development of its employees, CBA developed initiatives that promote the development and well-being of people.

Career path for the operational teams

We built a map so the employees in the operational areas can identify the opportunities and the competencies required for professional development within the organization. Professionals in the operational areas have access to a guide that outlines the opportunities for career progression within the organization, according to their technical knowledge and expected behavioral skills.

For You (Por Você) – a quality of life program

Initiatives conducted during the year to encourage employees to adopt a healthier lifestyle, with better eating habits and more involvement in physical activities. The company supports this program through incentives for the formation of jogging groups, arrangements with health clubs, and consultations with company doctors and nutritionists.

GRI 103-1 | 103-2 | 103-3

Employee engagement

Our employees are encouraged to develop a culture of innovation and continuous improvement through structured programs.

Talent in Sustainability Award

This Votorantim Initiative stimulates the development of innovation projects across all the companies in which Votorantim invests. Projects can be submitted under the categories of Environment, Efficiency and Productivity, Social Action, and Health and Safety. In 2017, CBA was the company with the highest number of projects enrolled in the Award program.

49 enrolled projects

4 finalist projects

- **Miraí Mining:** surface runoff in bauxite mining areas, pre- and post-mining, in the Zona da Mata of Minas Gerais
- **Asset management:** hand of value

2 winners

- **Furnace rooms:** modernization of metal transport
- **Foundry:** casting runoff channel cover

IdeAI – Ideas program

Development of a platform that encourages employees, individually or in groups, to suggest ways of improving processes and product ideas for CBA. The suggestions are considered by an evaluation committee and, if approved, the authors receive points that can be redeemed for prizes. At year-end, there is a special award for the three best ideas in each of four categories.

Cartegories:

- **Environment**
- **Cost Reduction**
- **Operational Excellence**
- **Product and Innovation**

Operational Excellence Program

Application of quality management tools and practices focused on improvements to processes, products, customer service, and customer satisfaction. Each employee, after receiving training in the management tools and methodologies (PDCA, Lean, Six Sigma, etc.), develops an improvement project with high impact for the business.

more than 100
employees were trained in 2017

GRI 103-1 | 103-2 | 103-3

Community relations

The objective of CBA, in terms of investments and the relationships that we maintain with the communities in the regions where we are present, is to build partnerships of value that contribute to the socioeconomic development of the municipalities in our area of activity.

In 2016, we defined a new Social Action Strategy that considers the specific impacts on the localities where we operate.

In the Upstream business, our social action guidelines seek to contribute to the autonomy of the territories where we are present, generating recognition and social license for our operations. For the Downstream business, our objective is to expand value generation in commercial relations and capture market opportunities from the perspective of social action.

This strategy is coordinated by a corporate office whose mission is to monitor global trends related to the social impact of organization, to seek certifications that add value to our way of acting, and to guide the activity of the units.

Square in Alumínio (SP)

We believe in social action as **a tool for generating perceived value** between the business, the partners, and society by means of genuine, **ongoing relationships where everybody wins**

GRI 103-1 | 103-2 | 103-3

Our strategic **focus of action**

The projects and initiatives developed by CBA in the communities are guided by tools and technologies structured by Instituto Votorantim, an important partner of the companies in which Votorantim invests. These initiatives take place within three priority axes.

Educational Development

- An initiative focused on improving public education through social mobilization of communities and the qualification of education and school management practices, contributing to the possibility of more training opportunities for young people, boosting their employability.

Public Management Support

- The formation of partnerships with municipal public authorities, through government departments, focused on contributions to the improvement of public management of financial resources and investments that benefit communities.

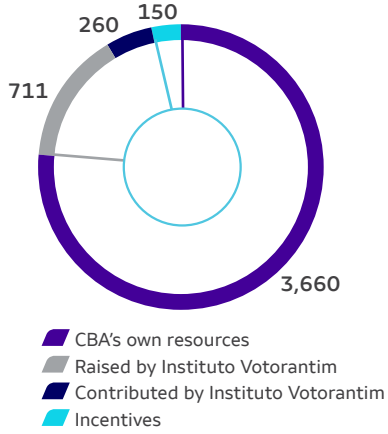
Economic Dynamism

- The promotion of structured mechanisms that foster the construction of inclusive business models aligned with the productive vocation of the municipalities and capable of promoting community income generation that contributes to reducing economic dependence in relation to the units of CBA.

The investments and projects we carry out in the local communities are aligned with the Sustainable Development Goals (SDG)

In 2017, we invested R$ 4.8 million on social initiatives, a 47% increase over 2016, mainly due to the greater volume of our own resources, which increased from R$ 1.8 million to R$ 3.7 million in the year-on-year comparison. The projects supported involved 78% of our operational units.

Social investment by origin of resources (R$ thousand)



GRI 102-12 | 103-1 | 103-2 | 103-3 | 413-1

Votorantim Partnership for Education

A Votorantim initiative than encompasses all the companies in which it invests, the Votorantim Partnership for Education (VPE) is focused on promoting improved public education in the municipalities where the businesses operate. Through its initiatives, it seeks to qualify both the demand, with social mobilization to recognize the value of education, and the supply, supporting local management to strengthen public policies.

CBA implemented the VPE in four municipalities in its area of activity – Alumínio, Araçariguama, and Divinolândia (São Paulo) and in Niquelândia (Goiás). In 2017, the main actions carried out within the VPE program were:

- Family engagement through the implementation of INDIQUE in three communities. INDIQUE (Indicators of Education Quality) is a Ministry of Education tool that enables parents to evaluate schools in a democratic way. These indicators will be extremely important in the preparation of education plans.
- Three forums for strengthening school councils, made up of parents, students, and educators
- Teacher training in Niquelândia
- 2017 student fairs held in Alumínio with the participation of CBA volunteers. The event put more than 300 students in touch with 10 technical education institutions and universities.

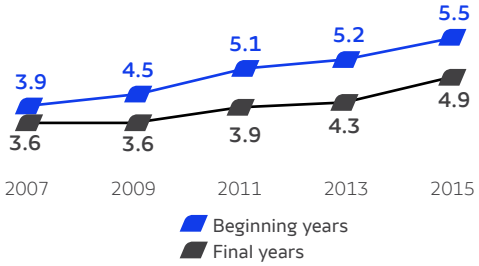
4 municipalities benefited

41 municipal schools involved

12,108 students impacted

To measure the impact of the investments made in the VPE, the main indicator of improvement is the Index of Basic Education Development (Índice de Desenvolvimento da Educação Básica – IDEB) of the municipalities. In Niquelândia, the VPE started ten years ago and has contributed, together with other local factors, to significant evolution of the IDEB of the municipality.

Niquelândia's IDEB (scale from 0 to 10)



In the municipalities of São Paulo, the VPE began in 2016. This is a short time period to assess the results of the application of the methodology. CBA will accompany this evolution over the years and measure the positive impacts.

GRI 103-1 | 103-2 | 103-3 | 413-1 | 203-1 | 203-2

Public Management Support

The Public Management Support Program (Apoio à Gestão Pública – AGP) is a proprietary technology of Instituto Votorantim in partnership with CBA and the National Bank for Economic and Social Development (BNDES) that focuses on broadening the capacity of the municipal public authorities and strengthening their role as agents of local development. The methodology operates on two fronts: Management Modernization and Territorial Planning. The project is conducted by a specialized, independent consultancy firm.

In 2017, we promoted the implementation of AGP in the city of Alumínio where our factory is located. The objective of the program is to support city hall in the development and execution of the Multi-year Plan and the Participative Master Plan.

The community of Alumínio engaged in the structuring of these plans through participation in public meetings. In addition, contributions and suggestions could be sent via the digital platform "Alumínio que Queremos" (Alumínio the way we want it). The site answers questions related to the future of the city over the next ten years and posts the schedule of meetings and information essential for understanding how the AGP works.

In the past year, we also agreed to implement the AGP in Muriaé (MG). In this municipality, work will be focused on territorial planning and management modernization.

ReDes Program

The ReDes Program is a partnership between CBA, Instituto Votorantim, the BNDES and the Inter-American Development Bank (IDB). Its objective is to stimulate the sustainable development of the municipalities, providing technical and financial support for the strengthening of inclusive production chains capable of generating income for the local community. Initiated in 2011 by a Votorantim initiative, ReDes is already present in 28 cities in 11 Brazilian states, as well as in the Federal District.

In Alumínio (SP), Niquelândia (GO), and Miraí (MG), municipalities where CBA operates, ReDes began to be implemented in 2017. In this first year, the program completed the initial phase, called Mobilization, which consists of inviting interested institutions to submit their proposals for evaluation. It is a time for all of the partners to assess the level of maturity of each registered institution.

In the subsequent phases of ReDes, all the projects are evaluated and some are selected to move on to the qualification and acceleration phases in which the evolution and execution plan is structured. Projects may be registered in four lines of action: food supply, trade and services, creative economy, and recycling.

Through our social investment programs, we strengthen the capacity of public agencies and entrepreneurs to generate local development

GRI 103-1 | 103-2 | 103-3 | 413-1 | 203-1 | 203-2

Social and environmental responsibility in **Niquelândia**

The CBA social action strategy and sustainability vision yielded positive results for the community of Niquelândia, in the state of Goiás. In 2017, we announced the structuring of the Legado Verdes do Cerrado, a natural reserve with 32,000 hectares, practically the same size as the Legado das Águas, in São Paulo.

Of this total area, 26,000 hectares will be dedicated to the conservation of species of the flora and fauna of the Cerrado, a Brazilian ecosystem that is no less threatened than the Atlantic Forest. Another 6000 hectares will be dedicated to sustainable production activities, such as ecotourism, soy and livestock production.

Classified as a Private Sustainable Development Reserve (PSDR), Legado Verdes do Cerrado was the result of a partnership with Instituto Votorantim, Reservas Votorantim, and the public authorities of Goiás.

Among the initiatives to be implemented on site are the complete mapping of the Traíras River, which has its source within the reserve. The work will be conducted in partnership with the Universidade Estadual de Goiás.

Legado Verdes do Cerrado is near Chapada dos Veadeiros National Park and also contributes to the preservation of the springs that feed the rivers that supply the municipality of Niquelândia.

The partners participating alongside CBA in this initiative are:

- Instituto Votorantim
- Confederação Nacional da Agricultura (National Confederation of Agriculture)
- Universidade Federal de Goiás
- Universidade Estadual de Goiás
- Serviço Florestal Brasileiro (Brazilian Forestry Service)
- Universidade de Brasília
- Fundação de Amparo à Pesquisa do Estado de Goiás (Research Support Foundation of the State of Goiás)
- Secretaria de Meio Ambiente, Recursos Hídricos, Infraestrutura, Cidades e Assuntos Metropolitanos (Secima) de Goiás (Secretariat of Environment, Water Resources, Infrastructure, Cities, and Metropolitan Issues of Goiás)

GRI 103-1 | 103-2 | 103-3 | 413-1

Volunteering Program

Our Volunteering Program promotes the involvement of the employees and third parties of CBA and their families in initiatives related to the theme of Education that address the challenges of the locations where we operate and promote positive social transformation.

Volunteer participation and activity development follow the guidelines and parameters established in the Volunteering Policy. In addition, the Program contemplates the connection between the activities performed and the Sustainable Development Goals (SDG) proposed by the UN.

One of the ways CBA volunteers participate is through the Volunteer Challenge, an Instituto Votorantim initiative that since 2015 has been promoting the involvement of its participants on teams that support social organizations and schools in conducting activities in the social sector. In 2017, the performance of our representatives was most prominent in initiatives related to SDO 7 – Clean and Accessible Energy. Campaigns and lectures on conscious energy use were conducted, and incandescent light bulbs were collected and replaced with more economical models.

CBA in the **Volunteer Challenge**

132 CBA volunteers

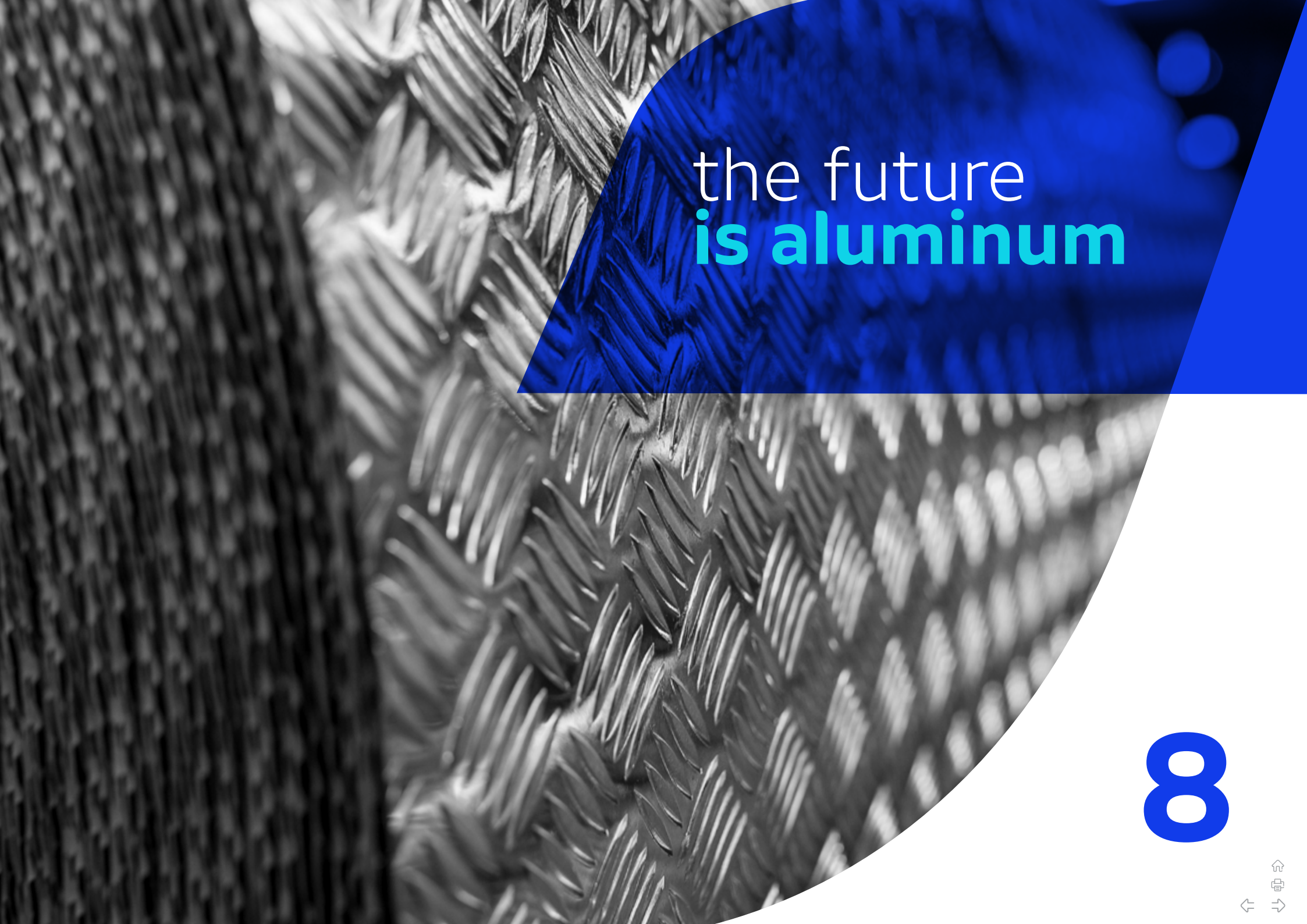
768 invited volunteers

473 people from the communities participating in the activities

3rd place with the project of Barro Alto (GO) unit

6th place with the project of Alumínio (SP) unit

GRI 103-1 | 103-2 | 103-3 | 413-1


the future
is aluminum

The future is aluminum

The global society has increasingly sought to migrate to a more sustainable lifestyle and consumption. This demand includes technological reorganization and the advancement of the production chains, focusing specifically on more circular and less extractive based business models.

This need suggests an optimistic future scenario for the aluminum industry. Our product combines resistance and geometric flexibility; it is lightweight and infinitely recyclable, without losing its properties. Due to these characteristics, aluminum can make a decisive contribution to reducing greenhouse gas emissions.

In the transport sector, for example, replacing steel components with aluminum generates significant environmental benefits, as it increases the performance of vehicles, trucks and buses and reduces energy consumption. Aluminum has gained space among manufacturers opting to develop electric vehicles. The body of the Tesla model S, for example, contains 190 kg of aluminum, which increases its autonomy and performance, as well as making the battery pack lighter and more watertight.

Trucks that carry fuel in aluminum tanks, for example, are able to transport up to an additional 5 thousand liters with three tons less tare weight, while retaining complete safety against contamination, explosions and fire (as aluminum does not emit sparks), leakages and ruptures.

For the packaging sector, the properties of aluminum are excellent for protecting foods and medicines. The material provides insulation against light and air, preserving the properties of the packaged products. For various other sectors – such as civil construction, aeronautics, consumer goods, and others – aluminum presents the best conditions of flexibility, safety and weight for enabling innovative and more sustainable products to reach consumers and improve quality of life.

- For every 100 kg reduction in weight of an automobile, approximately 300 to 900 liters of fuel can be economized during the life-cycle of the vehicle.
- On average, each kilogram of aluminum that replaces heavier material can prevent the emission of up to 20 Kg of CO_2 during the life-cycle of an automobile.
- Each 10% reduction in weight of the automobile – by replacing steel with aluminum – represents an increase of 5% to 7% in fuel efficiency.

Source: Brazilian Aluminum Association (Abal)

GRI 103-1 | 103-2 | 103-3

Customized solutions

We partner with our customers in the development of solutions that enable increased use of aluminum and add more value and sustainability to the products offered to end consumers. In 2017, we structured our Downstream business, to promote and transform our relationship with strategic customers.

Our teams of professionals began to work closely or even inside the customer's facilities, focusing on an agenda of innovation and co-engineering. We also extended the operations of our process and sales teams to design better service solutions and technical assistance, both in relation to products and in terms of the best operations in the use of aluminum in our customer's own manufacturing lines.

Another investment made during the year was the immersion in the area of additive manufacturing, following the radical changes in technology and patterns of consumption of metals. This initiative aims at rapid prototyping with 3D printers, research and development (R&D) of parts and tools in plastic resins for future production in aluminum. The project counts on the joint action of technical partners and national and international research centers.

At the same time, we advanced in co-engineering with strategic national and international customers for local production of high-resistance alloys. We also advanced in solutions in the areas of packaging, food industry and medicines, strengthening our importance in this market. The first applications should be rolled out on the market in 2018.

Recognized **innovation**

We received the REI 2017 Award – raw materials category, awarded by the magazine *Automotive Business*, with the project "Use of high-resistance aluminum in shock-absorbing systems in passenger vehicles". With research and investment in new technologies, we have increased our portfolio to offer our customers high-resistance alloys, originally used only in the aeronautical industry and previously available only in other countries.

To achieve this result, we use solutions of codesign and co-engineering in crash management systems* for the automobile chain. The project is in line with the trend for the use of increased amounts of aluminum in passenger vehicles. The award is to recognize noteworthy initiatives in materials for the automobile industry, including other metals, plastics, rubbers, paints and other types of raw materials.

**Systems to absorb impact during collisions, protecting the health of the driver and/or passengers.*

9

prospects

Prospects

The projects carried out, and the advances we have achieved in 2007, embody our way of being, acting, and operating to generate value for our customers, suppliers, employees, local communities, shareholders and all the other publics with whom we relate. Protagonists in a movement of transformation that strengthens and increases our competitiveness, we seek to achieve new aspirations, based on the four axes of our Cultural Evolution.

Partnering with our customers, we have advanced with a new look and a different way of thinking and acting. The co-creation of innovative solutions has led to the offer of a portfolio of products with higher added value, expanding the range of uses of aluminum in different production sectors, such as transport and packaging.

Choosing aluminum brings benefits for the whole of society, as it strengthens the generation of jobs in the country, allied with environmental advantages. Our products are manufactured using renewable energy sources and contribute to reducing CO2 emissions because they are lighter than iron and steel, maintaining high safety standards in their applications. In our production chain, we are committed to respecting communities and preserving the environment.

Another important leverage for our capacity to generate value is the return to growth of the Brazilian economy. With the consolidation of a new cycle of expansion of economic activity, our customers will be motivated to make new investments and incorporate new innovations into their products.

Infinitely recyclable, without losing its original properties, aluminum symbolizes the maturation of a society that makes more sustainable use of the natural resources. This is our belief and our motivation, we welcome everyone to the CBA of the Future.

The efficiency of our production processes, and innovation, are essential for guaranteeing our competitiveness in the global aluminum market

complement to the **GRI disclosures**

10

Complement to the GRI disclosures

102-1 | Companhia Brasileira de Alumínio.

102-3 | The CBA headquarters is in the municipality of Alumínio (São Paulo).

102-8 and 102-41 | At the end of 2017 we had 4,833 employees, all working full time and covered by collective labor agreements. We have contracted and service providers, mainly in the areas of maintenance and works at the plant in Alumínio (CBA), who comply with the agreements made with the corporate teams responsible for these processes.

Number of employees by employment contract in 2017	Permanent	Temporary
By gender		
Men	4,406	116
Women	292	19
TOTAL	**4,698**	**135**
By region		
Midwest	192	28
Southeast	4,491	107
South	15	0
TOTAL	**4,698**	**135**

102-10 | There have been no significant changes in the size of the company, its shareholder structure, or its chain of suppliers.

102-13 | Besides our engagement with the Brazilian Aluminum Association (Abal) and our membership, in 2017, of the Aluminum Stewardship Initiative (ASI), we are also part of the following associations and sector entities:

- Associação Brasileira de Comunicação Empresarial (Brazilian Association for Business Communication – Aberje): training and exchange of practices in the areas of communication and engagement of employees
- Brazilian GHG Protocol Program: an initiative geared towards elaborating and disseminating inventories of greenhouse gases
- Sedex Information Exchange: a collaborative platform for sharing data on the responsible chain
- Associação dos Mineradores do Planalto de Poços de Caldas (Association of Miners of the Poços de Caldas plateau - ASMIPC): alignment of interests of the mining industries in the region
- Consultation Committee of the Parque Estadual Serra do Brigadeiro (Serra do Brigadeiro State Park): a forum for debate on the management plan of the Serra do Brigadeiro (MG) Environmental Protection Area, including the regulation of mining areas
- Comitê das Bacias Hidrográficas dos Afluentes Mineiros dos Rios Pomba e Muriaé (Committee for the Hydrographic Basins of the Minas Gerais Tributaries of the Pomba and Muriaé Rivers – Compé) and Comitê de Integração da Bacia Hidrográfica do Rio Paraíba do Sul (Integration Committee for the Hydrographic Basin of the Paraíba do Sul River – Ceivap): forums for debate on actions to protect the respective hydrographic basins and their tributaries

102-45 and 102-46 | The report covers the same entities considered in the financial demonstrations of the CBA. The process of materiality, however, focused on the aluminum operations. A more in-depth analysis of demands and interests of publics related to the nickel and energy generation units will be carried out in the coming years, improving the materiality matrix. For this purpose, the environmental and occupational safety indicators refer only to the aluminum operations (factory, mines, Metalex and administrative structures).

102-53 | Please send any questions or comments about the report to the email address: comunicacaocorpcba@cba.com.br.

102-54 | This report has been prepared in accordance with the GRI Standards: Core option.

202-1 | We adhere to the salary levels defined in the collective agreements of each locality in which we operate. In all the operations, this level is higher than the national minimum salary; the lowest starting salary paid by CBA in 2017 was 19.2% higher than the minimum national salary. There is no gender distinction in the definition of the company's salaries.

302-1 |

Energy consumed in 2017 (GJ)	
Generated from renewable fuels	
Ethanol	2,622
Biodiesel (% in diesel)	39,743
Charcoal	2,302
Wood or wood residue	8,488
TOTAL	**53,155**
Generated from non-renewable fuels	
Natural gas	7,281,617
BPF fuel oil	24,854
BTE fuel oil	188,943
Gasoline	5,578
Diesel	489,593
LPG	11,202
Petroleum coke	72,995
TOTAL	**8,074,782**
Electrical energy	
Energy self-generated and consumed by CBA	6,645,367
Acquired from third parties and consumed by CBA	14,960,840
TOTAL	**21,606,207**

303-1 |

Volume of water withdrawal (m^3)	2017	2016	2015
Surface water	4,022,794.3	3,859,067.0	4,054,248.4
Ground water	64,380.2	50,855.3	51,145.0
Rainwater collected directly	306,965.0	301,611.0	297,224.0
Public or specialized companies water supply	13,704.0	10,487.0	8,819.0
TOTAL	**4,407,843.5**	**4,222,020.3**	**4,411,436.4**

303-3 | In our operations, we recirculated 27.1 million cubic meters of water in 2017, minimizing the need to capture new water to only 4.4 million cubic meters, obtained directly from water bodies, artesian wells, the rainwater collection system, and water supply concession holders, as shown in indicator 303-1.

304-3 | In 2017, we had 35,000 protected hectares. Of this total, 88% was in Niquelândia, comprising the Legado Verdes do Cerrado. The other significant areas are the Mata Atlântica forest biome, and are distributed between our mining units, the factory in Alumínio (SP), and other assets of the company. In relation to recuperation of habitats, we restored 138.4 hectares in the area around our factory and 30.12 hectares in recuperation with native forest and 28 ha designated for the cultivation of eucalyptus and pasture in the mining units.

306-2 |

Residue by disposal method in 2017 (tons)	
Non-hazardous	
Reuse	12,445
Recycling	20,214
Composting	17
Recovery (including energy recovery)	81
Landfill	514
On-site storage	51
Others	1,642,997
TOTAL	**1,676,319**
Hazardous	
Reuse	1,171
Recycling	202
Recovery (including energy recovery)	14,794
Incineration (mass burn)	2
Others	1,435
TOTAL	**17,604**

306-4 | We transported and treated 138.937 tons of hazardous residues in 2017, 99% of this volume at the Alumínio Plant (SP).

307-1 | In 2014, the plant in Alumínio (SP) received a notice of infraction from the environmental body of the State of São Paulo, due to a leakage of caustic soda liquor (coming from the bauxite refining process), which reached the rainwater culverts and subsequently, the Córrego do Bugre stream, temporarily altering the pH value of its waters. At that time, CBA made a voluntary disclosure, informing the authorities of the leakage, identifying the cause of the event and taking corrective actions to avoid other similar occurrences. The fine, to the value of R$125,375.07, was paid in 2017.

403-1 | In all our units we have Internal Accident Prevention Committees (Comissões Internas de Prevenção de Acidentes - CIPA), whose members are elected by the employees, to monitor initiatives in health and safety.

403-2 |

Aluminum business | Occupational health and safety indicators*	2017		2016		2015	
	Employees	Contracted	Employees	Contracted	Employees	Contracted
Accidents' frequency rate	2.57	1.48	1.95	0.58	2.62	1.87
Accidents' severity rate	107.21	3.27	93.62	0.00	106.39	0.47
Occupational diseases' rate	0.00	na	4.00	na	10.00	na
Absenteeism rate	0.91	na	1.01	na	0.96	na
Number of fatalities	0	0	0	0	0	0

**The consolidation follows the guidelines of NBR 14280, considering level II and V accidents in the rate of frequency, and counting consecutive days in the severity level. Information by gender are not available, as the indicators are not calculated with this segmentation.*

Nickel business | Occupational health and safety indicators*	2017		2016		2015	
	Employees	Contracted	Employees	Contracted	Employees	Contracted
Accidents' frequency rate	0.00	0.00	0.86	0.00	3.35	0.65
Accidents' severity rate	0.00	0.00	22.00	0.00	93.00	0.00
Occupational diseases' rate	0.00	0.00	0.00	0.00	0.00	0.00
Absenteeism rate	0.13	0.00	0.24	0.00	0.20	0.00
Number of fatalities	0	0	0	0	0	0

**The consolidation follows the guidelines of NBR 14280, considering level II and V accidents in the rate of frequency, and counting consecutive days in the severity level. Information by gender are not available, as the indicators are not calculated with this segmentation.*

413-2 | Our industrial and mining operations are located in municipalities in the interior of the states of São Paulo (plant) and Minas Gerais. The identified socio-environmental and economic impacts on the local communities of these territories are distinct, due to the different activities that we conduct in each locality.

In the communities impacted by the mining activities, the main environmental impacts identified relate to deforestation to create space for the mining operation and dust caused by the movement of trucks transporting bauxite.

To mitigate the impacts of the removal of vegetation for the extraction of the ore, we have a program to rehabilitate and recover the mined areas, developed in partnership with local universities, which guarantees that the soil is returned in good physical and chemical conditions for planting coffee, eucalyptus or pasture, or for the recomposition of the native vegetation (find out more about how we operate, on page 33).

To mitigate dust levels, we have the practice of dampening the earth tracks used by the trucks loaded with bauxite and the mining machines. This dampening procedure is done using water tank trucks. Also, around the mines, we have equipment that control the air quality continually, enabling timely actions to be carried out in critical situations.

To inform the local populations about our good management practices, we have developed an Environmental Education Program (EEP), with educational actions for the internal and external publics (see more on page 32).

In the municipality of Alumínio, where our plant is located, we identified that one of the main impacts of our activities is the risk of economic dependence on the plant. To mitigate this risk, we invested in social projects that help to empower the local population. One such project is the ReDes Program, which promotes the strengthening of inclusive production chains capable of generating income for the community (see more on page 56).

In terms of environmental impacts, the main aspects highlighted by the communities relate to the pruning of trees and conservation of areas of native forest that exist around the factory. We have a team that seeks to carry out this work in preventative form, but we also seek to act promptly when we receive notices and alerts from local residents.

The communities impacted by our activities can access, via the institutional website of CBA, a communication channel where they can submit complaints. Other forms of learning about and evaluating the demands of society are reports received directly by the units, which are forwarded to the areas responsible, so that the necessary measures can be taken.

419-1 | Amounts paid out in fines, infractions and judicial decisions relating to socio-economic aspects totaled R$19.1 million; of this figure, 99.6% relates to agreements and compensations for labor-related lawsuits. The company monitors the lawsuits in progress via a computerized system.

MM1

Altered or rehabilitated areas in 2017 (hectares)	Miraí	Poços de Caldas	Total
Total mined area not yet rehabilitated by the company at the start of the period	10.12	18.34	**28.46**
New mined areas in the period	49.40	11.37	**60.77**
Areas where the restoration process was completed in the period	27.52	1.99	**29.51**
Total mined area not yet rehabilitated by the company at the end of the period	32.00	27.72	**59.72**

GRI content index

GRI Standard	Disclosure	Page/ Observations	Omissions	External verification
**GRI 101	Foundation 2016**			
General disclosures				
GRI 102	General Disclosures 2016	**Organizational profile**			
	102-1	Name of the organization	65	-	Yes, page 73.
	102-2	Activities, brands, products, and services	7, 9 and 18	-	Yes, page 73.
	102-3	Location of headquarters	65	-	Yes, page 73.
	102-4	Location of operations	10	-	Yes, page 73.
	102-5	Ownership and legal form	7	-	Yes, page 73.
	102-6	Markets served	7 and 9	-	Yes, page 73.
	102-7	Scale of the organization	10, 29 and 48	-	Yes, page 73.
	102-8	Information on employees and other workers	65	-	Yes, page 73.
	102-9	Supply chain	26	-	Yes, page 73.
	102-10	Significant changes to the organization and its supply chain	65	-	Yes, page 73.
	102-11	Precautionary principle or approach	35	-	Yes, page 73.
	102-12	External initiatives	54	-	Yes, page 73.
	102-13	Membership of associations	20 and 65	-	Yes, page 73.
	Strategy				
	102-14	Statement from senior decision-maker	5	-	Yes, page 73.
	Ethics and integrity			-	Yes, page 73.
	102-16	Values, principles, standards, and norms of behavior	24	-	Yes, page 73.
	Governance				
	102-18	Governance structure	22 and 23	-	Yes, page 73.
	Stakeholder engagement				
	102-40	List of stakeholder groups	12	-	Yes, page 73.
	102-41	Collective bargaining agreements	65	-	Yes, page 73.
	102-42	Identifying and selecting stakeholders	12	-	Yes, page 73.
	102-43	Approach to stakeholder engagement	12	-	Yes, page 73.
	102-44	Key topics and concerns raised	13	-	Yes, page 73.

GRI Standard	Disclosure	Page/ Observations	Omissions	External verification
General disclosures				
GRI 102 | General Disclosures 2016	**Reporting practice**			
	102-45 | Entities included in the consolidated financial statements	65	-	Yes, page 73.
	102-46 | Defining report content and topic Boundaries	12 and 65	-	Yes, page 73.
	102-47 | List of material topics	13	-	Yes, page 73.
	102-48 | Restatements of information	12	-	Yes, page 73.
	102-49 | Changes in reporting	12	-	Yes, page 73.
	102-50 | Reporting period	12	-	Yes, page 73.
	102-51 | Date of most recent report	12	-	Yes, page 73.
	102-52 | Reporting cycle	12	-	Yes, page 73.
	102-53 | Contact point for questions regarding the report	65	-	Yes, page 73.
	102-54 | Claims of reporting in accordance with the GRI Standards	65	-	Yes, page 73.
	102-55 | GRI content index	69, 70, 71 and 72	-	Yes, page 73.
	102-56 | External assurance	12, 73 and 74	-	Yes, page 73.
Material theme | Sustainable mining				
GRI 103 | Management approach 2016	103-1 | Explanation of the material topic and its Boundary	13, 31, 32, 33 and 34	-	Yes, page 73.
	103-2 | The management approach and its components	31, 32, 33 and 34	-	Yes, page 73.
	103-3 | Evaluation of the management approach	31, 32, 33 and 34	-	Yes, page 73.
GRI 304 | Biodiversity 2016	304-2 | Significant impacts of activities, products, and services on biodiversity	31, 32, 33 and 34	-	Yes, page 73.
	304-3 | Habitats protected or restored	66	-	Yes, page 73.
GRI G4 sector disclosures mining and metals	MM1 | Amount of land (owned or leased, and managed for production activities or extractive use) disturbed or rehabilitated	68	-	Yes, page 73.
	MM2 | The number and percentage of total sites identified as requiring biodiversity management plans according to stated criteria, and the number (percentage) of those sites with plans in place	31, 32 and 33	-	Yes, page 73.
Material theme | Dam safety and residue management				
GRI 103 | Management approach 2016	103-1 | Explanation of the material topic and its Boundary	13, 35 and 36	-	Yes, page 73.
	103-2 | The management approach and its components	35 and 36	-	Yes, page 73.
	103-3 | Evaluation of the management approach	35 and 36	-	Yes, page 73.
GRI 306 | Effluents and waste 2016	306-2 | Waste by type and disposal method	36 and 67	-	Yes, page 73.
	306-4 | Transport of hazardous waste	67	-	Yes, page 73.
GRI G4 sector disclosures mining and metals	MM3 | Total amounts of overburden, rock, tailings, and sludges and their associated risks	36	-	Yes, page 73.

GRI Standard	Disclosure	Page/ Observations	Omissions	External verification
Material theme | Eco-efficiency in production				
GRI 103 | Management approach 2016	103-1 | Explanation of the material topic and its Boundary	13, 38, 39, 40, 41 and 42	–	Yes, page 73.
	103-2 | The management approach and its components	38, 39, 40, 41 and 42	–	Yes, page 73.
	103-3 | Evaluation of the management approach	38, 39, 40, 41 and 42	–	Yes, page 73.
GRI 302 | Energy 2016	302-1 | Energy consumption within the organization	39 and 66	–	Yes, page 73.
	302-3 | Energy intensity	39	–	Yes, page 73.
GRI 303 | Water 2016	303-1 | Water withdrawal by source	42 and 66	–	Yes, page 73.
	303-3 | Water recycled and reused	42 and 66	–	Yes, page 73.
GRI 305 | Emissions 2016	305-1 | Direct (Scope 1) GHG emissions	41	–	Yes, page 73.
	305-2 | Energy indirect (Scope 2) GHG emissions	41	–	Yes, page 73.
	305-4 | GHG emissions intensity	41	–	Yes, page 73.
	305-7 | Nitrogen oxides (NO_x), sulfur oxides (SO_x), and other significant air emissions	41	–	Yes, page 73.
Material theme | Ethics, compliance and business solidity				
GRI 103 | Management approach 2016	103-1 | Explanation of the material topic and its Boundary	13, 24, 25, 26, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41 and 42	–	Yes, page 73.
	103-2 | The management approach and its components	24, 25, 26, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41 and 42	–	Yes, page 73.
	103-3 | Evaluation of the management approach	24, 25, 26, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41 and 42	–	Yes, page 73.
GRI 201 | Economic performance 2016	201-2 | Financial implications and other risks and opportunities due to climate change	41	–	Yes, page 73.
GRI 205 | Anti-corruption 2016	205-3 | Confirmed incidents of corruption and actions taken	25	–	Yes, page 73.
GRI 307 | Environmental compliance 2016	307-1 | Non-compliance with environmental laws and regulations	67	–	Yes, page 73.
GRI 419 | Socioeconomic compliance 2016	419-1 | Non-compliance with laws and regulations in the social and economic area	68	–	Yes, page 73.
Material theme | Health and well-being of employees				
GRI 103 | Management approach 2016	103-1 | Explanation of the material topic and its Boundary	13, 45, 46 and 47	–	Yes, page 73.
	103-2 | The management approach and its components	45, 46 and 47	–	Yes, page 73.
	103-3 | Evaluation of the management approach	45, 46 and 47	–	Yes, page 73.
GRI 403 | Occupational health and safety 2016	403-1 | Workers representation in formal joint management–worker health and safety committees	67	– –	Yes, page 73.
	403-2 | Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	47 and 67	–	Yes, page 73.
	403-3 | Workers with high incidence or high risk of diseases related to their occupation	47		Yes, page 73.

GRI Standard	Disclosure	Page/ Observations	Omissions	External verification
Material theme | Social license of the operation				
GRI 103 | Management approach 2016	103-1 | Explanation of the material topic and its Boundary	13, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57 and 58	-	Yes, page 73.
	103-2 | The management approach and its components	48, 49, 50, 51, 52, 53, 54, 55, 56, 57 and 58	-	Yes, page 73.
	103-3 | Evaluation of the management approach	48, 49, 50, 51, 52, 53, 54, 55, 56, 57 and 58	-	Yes, page 73.
GRI 202 | Market presence 2016	202-1 | Ratios of standard entry level wage by gender compared to local minimum wage	66	-	Yes, page 73.
GRI 203 |Indirect economic impacts 2016	203-1 | Infrastructure investments and services supported	55 and 56	-	Yes, page 73.
	203-2 | Significant indirect economic impacts	55 and 56	-	Yes, page 73.
GRI 413 | Local communities 2016	413-1 | Operations with local community engagement, impact assessments, and development programs	54, 55, 56, 57 and 58	-	Yes, page 73.
	413-2 | Operations with significant actual and potential negative impacts on local communities	68	-	Yes, page 73.
GRI G4 sector disclosures mining and metals	The extent to which grievance mechanisms were used to resolve disputes relating to land use, customary rights of local communities and i ndigenous peoples, and the outcomes	32	-	Yes, page 73.
Material theme | Strengthening of the aluminum industry				
GRI 103 | Management approach 2016	103-1 | Explanation of the material topic and its Boundary	13 and 37	-	Yes, page 73.
	103-2 | The management approach and its components	37	-	Yes, page 73.
	103-3 | Evaluation of the management approach	37	-	Yes, page 73.
GRI 301 | Materials 2016	301-2 | Recycled input materials used	37	-	Yes, page 73.
Material theme | Innovation and customer satisfaction				
GRI 103 | Management approach 2016	103-1 | Explanation of the material topic and its Boundary	13, 17, 60 and 61	-	Yes, page 73.
	103-2 | The management approach and its components	17, 60 and 61	-	Yes, page 73.
	103-3 | Evaluation of the management approach	17, 60 and 61	-	Yes, page 73.

CREDITS

General coordination
Andressa Rissato Brolacci Lamana | **Human and Organizational Development and Health, Safety and Environment General Management**
Luciano Francisco Alves | **Financial Directory**

Coordination
Juliana Zanguettin Pereira

Team
Alan Ferreira da Costa, Cristiane Aschkenasi Dantas, Daniele de Oliveira Pedrosa, Elson Cristiano da Silva, Fernanda Diniz Bolzan de Oliveira, Leandro Campos de Faria, Marcus Vinicius Vaz Moreno, Marina Westrupp Alacon Rayis and Priscila Damiana Dias Ferracini Garcia

GRI consulting, editorial coordination and design
usina82

Photos
CBA collection, Gilberto Marques, Luciano Candisani and Shutterstock

GRI disclosures external verirication
Bureau Veritas Certification Brasil

We thank the support and cooperation of the managers and other colleagues involved in the corporate and industrial areas of CBA, Votorantim and partners in gathering information and preparing this sustainability report.

Independent assurance statement Bureau Veritas

INTRODUCTION

Bureau Veritas Certification Brazil (Bureau Veritas) was engaged by Companhia Brasileira de Alumínio (CBA), to conduct an independent assurance of its Sustainability Report for the year 2017 (hereinafter referred to as the Report). This assessment was conducted by a multidisciplinary staff with expertise in non-financial data.

SCOPE OF WORK

The scope of this verification encompassed the Standard and Principles[1] of the Global Reporting InitiativeTMGRI for Sustainability Reports, for the period from 1 January to 31 December 2017.

CBA AND BUREAU VERITAS RESPONSIBILITIES

The collection, calculation and presentation of the data published in the report are CBA's management sole responsibility. Bureau Veritas is responsible for providing an independent opinion to the Stakeholders, pursuant to the scope of work defined in this statement.

METHODOLOGY

The assurance work covered the following activities:

1. Interviews with the personnel responsible for material issues and Report content;
2. Review of documentary evidence provided by CBA in relation to the reporting period (2017);
3. Verification of performance data relating to the principles that ensure the quality of the information, pursuant to the GRI Standards;
4. Visits to the following sites: Head office at São Paulo – SP, office and manufacturing at Alumínio – SP, manufacturing at Araçariguama – SP;
5. Desk review of CBA's stakeholder engagement activities;
6. Evaluation of the method used to define material issues included in the Report, taking into account the sustainability context and the scope of the information published.

The level of verification adopted was Limited, according to the requirements of the ISAE 3000 Standard[2], which were incorporated to the internal assessment protocols of Bureau Veritas.

LIMITATIONS AND EXCLUSIONS

Excluded from the scope of this work was any assessment of information related to:

- Activities outside the defined reporting period;
- Statements of position (expressions of opinion, beliefs, goals, or future intentions) on the part of CBA;
- Accuracy of economic and financial data contained in this Report which has been taken from financial statements verified by independent financial auditors;
- Inventory of Greenhouse Gas (GHG) emissions;

The following limitations apply for this assurance engagement:

- The principles of Accuracy and Reliability were limited to data samples related to material aspects published within the Report;
- Economic and financial data presented within the report were assessed against the GRI reporting principle of Balance.

TECHNICAL REPORT

- CBA carried out a materiality study in 2017 that comprised interviews and two panels with the internal public. In our opinion, the materiality test made it possible to issue a Report that comprehends, in a balanced manner, the major impacts of the activities of the Company;
- CBA addresses the eight material issues that resulted from the materiality study of this publication in a satisfactory manner. Nevertheless, we believe that the issues "Innovation and Clients Satisfaction" and "Operation Social License" can be improved with regard to their depth and presentation of the related GRI indicators;
- This is the first Report issued by CBA as an independent company. The presentation of most part of the indicators comprised only the year 2017, so that it is not possible to assess the performance of operations over time;
- In the course of our Assurance the inconsistencies found in the Report regarding one or more principles of the GRI Standards were satisfactorily corrected;

1 Materiality, Stakeholder Inclusiveness, Sustainability Context, Completeness, Balance, Comparability, Accuracy, Periodicity, Clarity, and Reliability
2International Standard on Assurance Engagements 3000 – Assurance Engagements other than Audits or Reviews of Historical Financial Information

RECOMMENDATIONS

- Adress the material issues "Innovation and Clients Satisfaction" and "Operation Social License" in the next publication in more depth, presenting the related GRI indicators;

- As far as possible, publish the quantitative indicators referring to a period of 3 years, so that the assessment of sustainability performance over time is made feasible.

CONCLUSION

As a result of our assurance nothing has come to our attention
that would indicate that:

- The information presented in the Report is not balanced, consistent and reliable;
- CBA has not established appropriate systems for the collection, aggregation and analysis of quantitative and qualitative data used in the Report;
- The Report does not adhere to the Principles for defining report content and quality of the GRI Standards and does not meet its Core level.

DECLARATION OF INDEPENDENCE AND IMPARTIALITY

Bureau Veritas Certification is an independent professional services firm specializing in Quality, Health, Safety, Socialand Environmental Management, with more than185 years' experience in independent assessment.
Bureau Veritas has a quality management system that is certified by a third party, according to which policies and documented procedures are maintained for the compliance with ethic, professional and legal requirements.
The assessment team has no links with CBA and the assessment is performed independently.
Bureau Veritas implemented and follows a Code of Ethics throughout its business, in order to assure that its staff preserve high ethical, integrity, objectivity, confidentiality and competence/ professional attitude standards in the performance of their activities. At the end of the assessment, a detailed report was drawn up, ensuring traceability of the process. This Report is kept as a Bureau Veritas management system record.

CONTACT

Bureau Veritas Certification is available for further clarification on www.bureauveritascertification.com.br/faleconosco.asp or by telephone (55 11) 2655-9000.
São Paulo, Brazil, March 2018.

Alexander Vervuurt
Lead Auditor; Assurance Sustainability Reports (ASR)
Bureau Veritas Certification – Brazil