





It's often said that nothing is forever. At a time when so many things are disposable and temporary, products become obsolete... opinions change... relationships are brief... And life? Life is short!

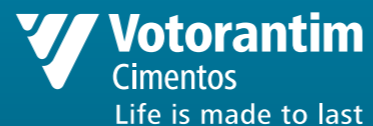
And what was meant to last, materialize, solidify... simply... evaporates. We at Votorantim Cimentos think differently. To us, everything that is worthwhile should last. And last for a long time!

Our products ensure the permanence of construction projects; our people make this vision a reality; our investments are for the long term; and, our actions reinforce our values. With our partners and customers, we are committed to ensuring relationships for life. We will leave a legacy that extends far beyond our own existence, bringing to life the dreams that make a difference today, tomorrow and for generations to come.

We are strategic in our actions – and not reactionary // We deliver personalized support – not indiscriminant products // we seek long-lasting relationships – not short-term ones // We think about our entire industry – and not only about ourselves // And, we work to understand customer requirements and deliver lasting solutions.

If you also believe in this purpose, we invite you to help us in this journey. More than that — to be a part of it.

Votorantim Cimentos. Life is made to last.



Watching our Salto de Pirapora plant (in São Paulo state, Brazil) through his window, Leandro Dias grew up dreaming of one day working at Votorantim Cimentos.

And that dream came true: Leandro joined Votorantim Cimentos in 2004. And not only that: at the Company he met his wife, Regiane Velozo.

Today, as they perform a small renovation in that same window, in Salto de Pirapora, we celebrate our Alliance together and dream of the future of their daughter, Sofia.

INDEX

2017 INTEGRATED REPORT VOTORANTIM CIMENTOS

INTRODUCTION	5	Commitment to Open Dialogue
A MESSAGE FROM THE BOARD	6	
A MESSAGE FROM THE CEO	8	
VOTORANTIM CIMENTOS	10	
LONG-TERM STRATEGY	14	Value Creation Trajectory
2017 HIGHLIGHTS	20	
CORPORATE GOVERNANCE	22	Solidity and Long-Term Vision
	24	Monitored Risks
	25	Ethics and Integrity
	27	Open channels
VALUE DRIVERS	28	Operating with Excellence
	32	Efficiency in Financial Management
	38	Increasingly Closer to Customers
INNOVATION	42	Innovate to Perpetuate
PEOPLE	50	The Team That Makes Our Business Last
SUSTAINABILITY	60	Improving our Legacy
	66	Safety as a Priority
	69	Environmental Responsibility
	80	Social Performance: Promoting Local Development
ABOUT THIS REPORT	86	
EXTERNAL READERS	90	
GRI SUPPLEMENT	92	
GRI CONTENT INDEX	106	
ASSURANCE LETTER	114	
CORPORATE INFORMATION	116	

Interactive Content

Navigation: Previous page < ≡ > Next Page
Menu

Buttons: Buttom Buttom
Directs for information available online | Directs for further information in the document itself

Pop-ups: Open Pop-ups Close Pop-ups

INTRODUCTION

COMMITMENT TO OPEN DIALOGUE



We present our 2017 Integrated Report, which demonstrates how we manage the themes that make up our vision of the future, and its connection to our Sustainability Commitments and the most relevant issues to our businesses and value chain.

Guided by ethics and transparency, we set out to report the main economic, social and environmental advances and challenges we experienced during the year, including the risks, impacts and opportunities identified in all our operations.

We used the guidelines of the International Integrated Reporting Council (IIRC) as our reference and prepared the report according to the standards of the Global Reporting Initiative (GRI) "core option". We also observed the principles of the Global Compact, the Sustainable Development Goals (SDGs) and the Cement Sustainability Initiative (CSI) guidelines, an initiative under the auspice of the World Business Council for Sustainable Development (WBCSD). The report was validated by the external auditing company Société Générale de Surveillance (SGS) and submitted to the GRI for alignment with the Materiality Disclosure Service. [GRI 102-54, 102-56](#)

This report is available in digital version (PDF), in English and Portuguese, and can be accessed at www.votorantimcimentos.com.

Financial Statements

The company's financial statements are based on criteria from the International Financial Reporting Standards (IFRS) and have been audited by PricewaterhouseCoopers (PwC). Details of Votorantim Cimentos consolidated companies are included in these statements.

Questions and Comments

As part of our accountability process and to reinforce Open Dialogue, we are committed to responding to questions about the data published in this report and to consider comments and suggestions that may enhance our reporting process. Questions or comments can be sent via email to ri@vcimentos.com. [GRI 102-53](#)

A MESSAGE FROM THE BOARD

OUR TRAJECTORY OF TRANSFORMATION

GRI 102-14



From left to right: Markus Akermann, Fábio Ermirio de Moraes, João Carvalho de Miranda, José Ermirio de Moraes and Alexandre Gonçalves Silva. Missing in the photo: Vinicius Prianti and Paulo Henrique de Oliveira Santos



Adversities and uncertainties have driven our transformation. We have followed the evolution of political, economic, social and climatic events in all regions of the globe where we operate to determine how to advance and fulfill our 2025 strategy, which is based on levers of value creation, geographic diversification, product and service diversification, as well as a strong presence in the Brazilian market. We closed 2017 with progress on all of these fronts.

The plan, designed in 2010 to propel our company to the level of a global company, was essential to ensure business continuity. With austere financial management, which is already part of our culture, and a commercial strategy 100% connected to the opportunities presented where we operate, especially in North America, where our operations recorded excellent results, and a consistent performance in Europe, Africa, Asia and Latin America, which contributed to balance the economic contraction seen in Brazil as a result of an environment of economic and political crisis.

Our belief in our strategy corroborated another major move in 2017: the sale of stakes in units in Chile, China, and the U.S. states of Florida and California. This step demonstrates how we are prioritizing markets in which we can be more efficient and competitive and, therefore, where we have a chance to increase value creation.

In North America, our focus on operations in the Great Lakes region, where our participation is more established,

is evidenced by the expansion project of the Charlevoix unit (in Michigan, USA), to be completed in 2018. We also have two new lines planned for the Olavarría and San Luis units in Argentina, to be completed in 2018 and 2019. Another example, which came to fruition in March 2017, was the new Sivas operation in Turkey, ending the year with high productivity.

We advanced our strategy with austere financial management, a commercial strategy linked to market opportunities and a priority to operate in the regions where we can be more competitive

The commitment of our shareholders was once again confirmed at the end of 2017, when we received a total investment of R\$ 1.7 billion from our holding company, Votorantim S.A. The resources obtained from the divestments and from our shareholders enabled us to face one of the worst years of our history and complete important expansion projects that will ensure even greater geographical diversification in the future – which is the central pillar of our strategy.

Our efforts continue in 2018. In order to be even more successful in this long trajectory, we have reiterated our commitment to the highest standards of ethics and transparency, to the Values and Beliefs of our company and to the respect and appreciation for our employees, with whom we share the results of the present and our plans for the future.

Finally, we highlight our commitment to sustainability: We seek even higher levels of environmental efficiency, which directly influence our operational and financial excellence, and the generation of positive impact in the locations where we operate. Through this comprehensive perspective, we will be able to become, year after year, a better company and, simultaneously, contribute positively to the transformation of the world around us.

Board of Directors of Votorantim Cimentos

A MESSAGE FROM THE CEO

AN
EVEN
STRONGER COMPANY GRI 102-14



Our commitment to permanence – which has always been part of our history and is reaffirmed by our Purpose, Life is made to last – proved essential for us to finish 2017 even stronger and more prepared.

Supported by management that prioritizes operational and financial excellence, the good results of our units in Europe, Asia and Africa, Latin America and, especially, North America, minimized the impact of the third consecutive year of declining sales in Brazil. As a result, we were able to maintain a consolidated adjusted Ebitda of R\$ 1,762 million, a 26% decrease against the R\$ 2,373 million achieved in 2016.

Operational and financial excellence and geographic and portfolio diversification were essential to ensure our results

Portfolio diversification was also essential to maintain our commitment to creating value over the long term. We expanded our product offerings in all regions, with new formulations of cement, concrete and mortar that meet specific demands of different types of customers and deliver a lower environmental impact. In addition, we grew our agricultural inputs business in Brazil, where we are market leaders and continue to work to serve a greater number of customers from all regions.



Despite the challenging environment, we continued to invest responsibly. In March, we started our new Sivas operation, in Turkey, where despite the short period of time we have been in operation, we have already reached optimum levels of productivity. Our new Yacuses plant, in Bolivia, completed its first full year of operation.

In the next two years, our focus will be on the expansion project of the Charlevoix unit (United States), scheduled to start in 2018, and the new lines at the Olavarría and San Luis plants, in Argentina, which will start operating in 2018 and 2019.

We sold our operations in Chile, China and the United States (states of Florida and California), thereby fulfilling our strategy of focusing on regions we identify as most promising in terms of value creation.

We work tirelessly to increase the efficiency of our manufacturing and logistics operations, which reduces costs and improves the environmental footprint of our business. We took measures that are aimed at the future, but already have a positive impact on the present. In Brazil, our initiatives on various sources of co-processing are growing, replacing petroleum coke with renewable biomass, such as babassu bagasse and wood chips, to feed cement kilns.

In Europe, Asia and Africa, in addition to co-processing, we have reactivated or installed in some of our plants Waste Heat Recovery systems, which recover heat from our production and turns it into electricity. With these initiatives, we ended the year with 14.6% of the energy we used coming from alternative fuels, in pursuit of our goal of 30% from renewable sources by 2020.

With regard to safety, unfortunately we had fatalities. We had one on-site fatality involving an employee in North America. In addition, we had another eight off-site fatalities (outside our industrial facilities) in Brazil – six with contractors and two with third parties. Safety is our main value and, therefore, we work to ensure a safe working environment for all and to achieve our goal of becoming a zero-injury company. In 2017, we launched the Global Safety Committee, hosted another Global Safety Day

and implemented other projects in different units across the Company.

Once again inspired by our Purpose, our interaction and connection with stakeholders also reached milestones in 2017. We started successful collaboration with startups, suppliers and other external players, who have become part of our ecosystem of innovation and are helping us to overcome the daily challenges we face in transforming the company.

We are closer to our customers, which has been made possible in large part by the implementation of our digital strategy, which breaks down physical barriers and makes operations more efficient. We developed smartphone apps that enable our customers to place their orders in a practical and quick way, help construction professionals to optimize their work, and allow drivers to quickly identify freight offerings in our units.

We also remained attentive to the communities around our operations. In 2018, the year when the Votorantim S.A. holding company celebrates 100 years, we will expand the initiatives that aim to leave a legacy to future generations by supporting projects to improve the quality of public education in 27 Brazilian cities in which we operate.

As part of our Empowered People strategic driver, we are also closer to our employees. We continued our professional development programs, encouraged entrepreneurship among our teams, promoted more internal movements and reinforced practices that bring leaders closer to employees and promote Open Dialogue.

We are sure that our permanence depends on the engagement and leadership of our teams, which must be increasingly united to put into practice our purpose, which is summarized by the message that Life is made to last.

Our digital strategy breaks down physical barriers, makes our operations more efficient and brings us closer to customers

Walter Dissinger
CEO of Votorantim Cimentos

VOTORANTIM CIMENTOS

VOTORANTIM CIMENTOS



We are Votorantim Cimentos S.A., the sixth largest cement company in the world*. In addition to Brazil, we operate in 11 countries and have a multicultural team made up of 11,912 employees, including 317 interns and 223 apprentices. [GRI 102-1, 102-7](#)

Our current production capacity totals 52.8 million tons of cement/year, a six-million-ton difference in comparison to last year, mostly as a result of the sales of our operations in Chile, China and the United States (states of Florida and California). At the same time, in 2017 we added 700,000 tons to our capacity with the conclusion of our expansion project in our Sivas unit, in Turkey, which started operating in March. In 2018, an additional 500,000 tons will be added to our capacity by this unit in Turkey (which will result in a total increase of 1.2 million tons), 600,000 tons by our unit in Charlevoix, United States, and 200,000 by a new line in Olavarría, Argentina. [GRI 102-7, 102-10](#)

We are determined to offer high-quality products and services to our customers in all segments in which we operate: cement, concrete, aggregates, mortar, agricultural lime, among others. We are committed to offering an increasingly differentiated and innovative portfolio. In 2017, we introduced the Hi-Mix concrete family to the Brazilian market – four concrete solutions that meet different demands and provide high durability. [GRI 102-6](#)

*In terms of production capacity – excluding companies in China

We operate in 12 countries, with an installed capacity of 52.8 million tons of cement per year



We invested R\$ 45.5 million to be more efficient and reduce our environmental footprint

Year after year, we also consolidate a service that provides for the adequate disposal of industrial waste from other companies through co-processing in our operations. To manage the use of these energy sources, we have maintained a dedicated business area called AFR (Alternative Fuel and Raw Materials) since 2016.

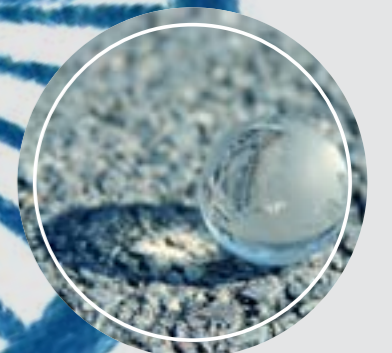
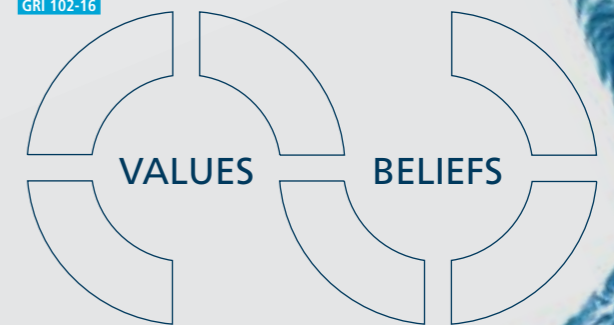
We closed the year with net revenue of R\$ 11.1 billion, below last year's results (R\$ 11.9 billion). Although we faced a difficult environment, particularly in the Brazilian market, we achieved good results in our operations in North America and in Europe, Asia and Africa, and advanced our medium- and long-term plan as demonstrated, for example, by the annual investments we made in our company to be more efficient and to continue to decrease our environmental footprint. These investments amounted to R\$ 45.5 million in 2017. To leave our legacy to our people and the communities we are part of, we also maintain social development initiatives, prioritizing the cities surrounding our operations. [GRI 102-7](#)

We are a private company, 100% controlled by Votorantim S.A., a portfolio management company controlled by the Ermirio de Moraes family, which also participates in other strategic economic sectors: metals and mining, aluminum, energy, steel, pulp, orange juice production and financial services. To learn about the history of Votorantim, which turns 100 in 2018, go to: [GRI 102-5](#)

To learn about our more than 80 years of history of Votorantim Cimentos, access:

VOTORANTIM DNA

[GRI 102-16](#)



VOTORANTIM CIMENTOS

GLOBAL COMPANY

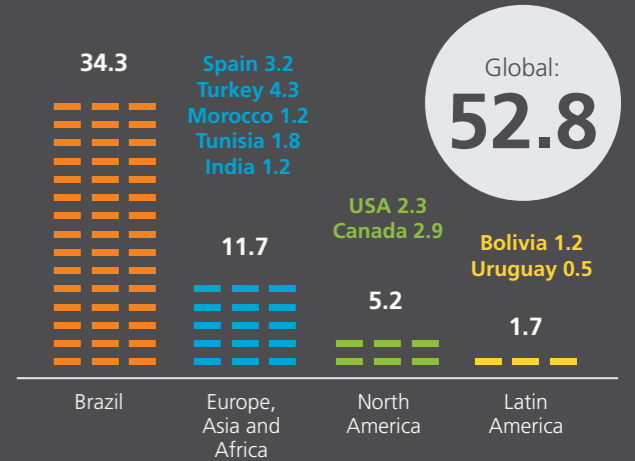
GRI 102-2, 102-4

VOTORANTIM CIMENTOS NORTH AMERICA (VCNA)

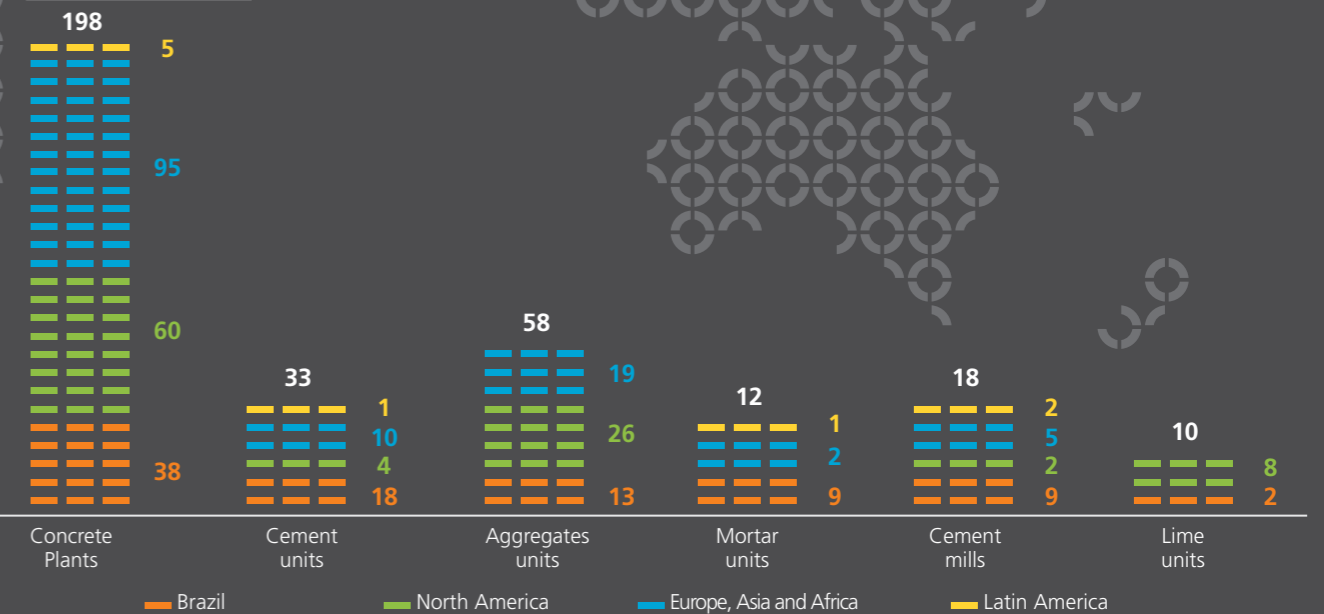


Installed capacity in million tons

Only consolidated countries (Dec 2017): Bolivia, Brazil, Canada, India, Morocco, Spain, Tunisia, Turkey, United States and Uruguay.



Our Facilities



¹Argentina: 49% stake in Cementos Avellaneda.
²Bolivia: 51% stake in Yacuses, which has 66.7% stake in Itacamba Cementos S.A.
³Peru: 29.5% stake in Cementos Portland and ownership of a limestone mine with no operational capacity.
⁴Uruguay: 51% stake in Cementos Artigas.

VALUE CREATION TRAJECTORY

GRI 103-1, 103-2, 103-3



As evidenced by our Purpose – Life is made to last – we are committed to building a lasting history of value creation for shareholders, customers, employees and other stakeholders. We are committed to making a long-term, positive impact on people and our planet, and, in this way, develop the sectors, countries and communities where we work and live. [GRI 102-1, 102-4, 102-10](#)

Our commitment to the continuity of our legacy as an organization has led us to chart a path that will lead us to the future – Our Vision – which takes into account trends, risks and opportunities, skills, differentiators and our own contributions and impacts.

Our commitment to the continuity of our legacy sets the path that leads us into the future

Our work culminated in the launch of Votorantim Cimentos' long-term strategy in 2016, which now also guides our short-term plan, which is revised annually by the company's leadership and establishes the goals and financial projections for a rolling 12-month cycle. All employees have targets related to the company's key financial goals. [GRI 103-2, 103-3](#)

To execute the plan outlined in our strategy we have four major strategic pillars that work as our drivers: Customer Focus, Empowered People, Best-in-Class Operations and Sustainable Practices.

OUR DRIVERS



Customer Focus

- We make decisions based on the needs of our customers.
- We have specific business models to serve customers with different purposes and needs.
- We strive to have the results of initiatives in all areas converge to deliver what the customer needs.



Empowered People

- We value leaders who succeed through their people, creating strong, diversified and engaged teams.
- We want people who take the initiative to act and have a flexible mindset.
- We work together to create solutions and make things happen.



Best-in-Class Operations

- We monitor our performance and are obsessed and committed to continuous improvement.
- We make decisions with speed, discipline and consistency.
- We maximize productivity in all areas.



Sustainable Practices

- Safety comes first, always.
- We act ethically and in accordance with local laws and regulations.
- We promote eco-efficiency by seeking to develop new products and innovative processes.
- We promote open dialogue and relationships with our communities to perpetuate Votorantim Cimentos' legacy and support local development.

LONG-TERM STRATEGY

BUSINESS MODEL

VOTORANTIM CIMENTOS

KEY ACTIVITIES

The value proposition is the factor that makes a customer choose between one company and another. Value Propositions are a set of products or services intended to solve a customer's problem or satisfy their need. Some value propositions may be innovative while others may be similar to existing offers in the market but including some differentiation or additional attribute.

The main resources are those which are directly linked to the functioning of the business model.

The key suppliers are all those who can contribute to the key-activities as well as with the supply of resources.

The Strategic Pillars that make up Our drivers represent the base for our business operation. They are reflected in our targets and in our materiality.

The material issues are determined through surveys conducted every two years with our main stakeholders. These issues guide the content of the report and influence company decision-making.



LONG-TERM STRATEGY

STRATEGIC LEVERS

As part of our strategy, we defined the key business levers to drive the fulfillment of our strategic pillars in the next ten years. They are:

Strategic planning is reviewed annually, with new projections and targets

Value creation for the company

We invest in strategic projects to increase the efficiency and sustainability of our operations and products, such as initiatives in co-processing and to reduce the clinker factor in our cement.

Adjacent products and services

Cement continues to be our core business, but we believe that portfolio diversification is important to create value with the resources invested in the company. Our goal is to take advantage of related opportunities, while also leveraging our installed capacity by using mine resources and capacities that had been idle. This strategy is validated by the positive market acceptance of the other items in our portfolio, such as mortars, grouts, limes and plaster, which enables us to increase the participation of Votorantim Cimentos in the construction materials segment in Brazil and other markets. Our performance in the segment of agricultural inputs in Brazil is also important: we invested in a 25% increase in our limestone production capacity and achieved the leading position in a fragmented and regionalized market, with a 10% market share.

Relevance of the Brazilian market

Our analysis indicates that Brazil will continue to be the most relevant market for the company over the next ten years. In 2017, even in the midst of a macroeconomic crisis, we implemented a series of measures to strengthen our presence in Brazil: we invested in the modernization of plants and in technology and digitization projects; we expanded our commercial teams; we launched innovative products, such as the Hi-Mix concrete family and new mortars; and we inaugurated three distribution centers – in Macapá (AP), Uberlândia (MG) and Três Corações (MG).

Internationalization

Geographic diversification helps us ensure business continuity and value generation over the years. We continue to invest in our operations outside Brazil, such as the inauguration of the Sivas plant (Turkey), the expansion of the Charlevoix unit (United States), scheduled to be completed in 2018, and two new production lines in Argentina, to be inaugurated in 2018 and 2019. In line with our strategy of concentrating operations in the markets in which we have significant participation and growth potential, we sold units and equity interest in China, Chile and the American states of Florida and California. Following this direction, we remain attentive to opportunities that might result in new acquisitions and further investment in expansions.

Deliverables in 2017

2017 advances are detailed in the *Operating with Excellence, Innovation and Sustainability* chapters.

Our 2017 advances are described in the *Efficiency in Financial Management, Increasingly Closer to Customers and Innovation* chapters.

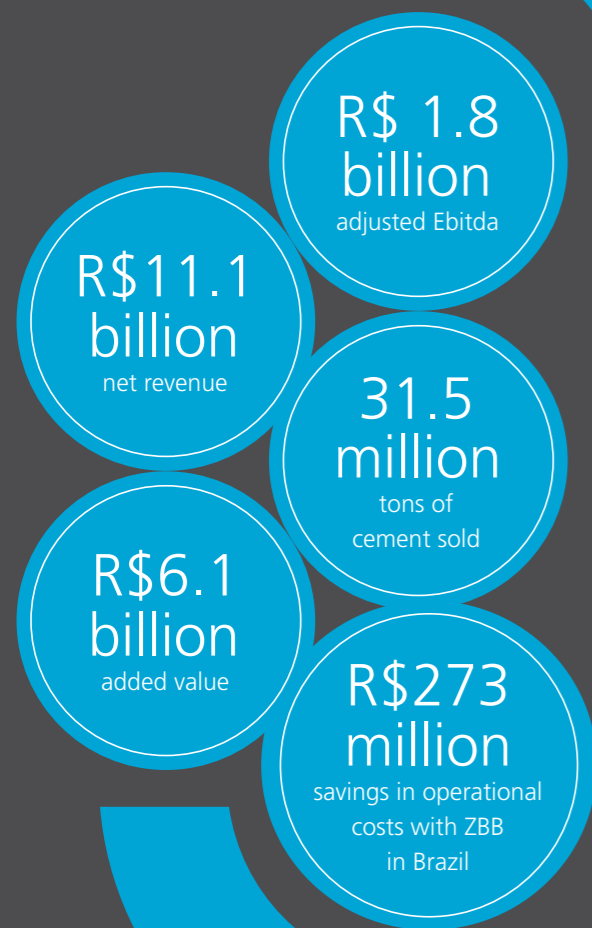
2017 advances are detailed in the *Operating with Excellence, Efficiency in Financial Management and Increasingly Closer to Customers* chapters.

The main 2017 results are presented and contextualized in the *Operating with Excellence and Efficiency in Financial Management* chapters.

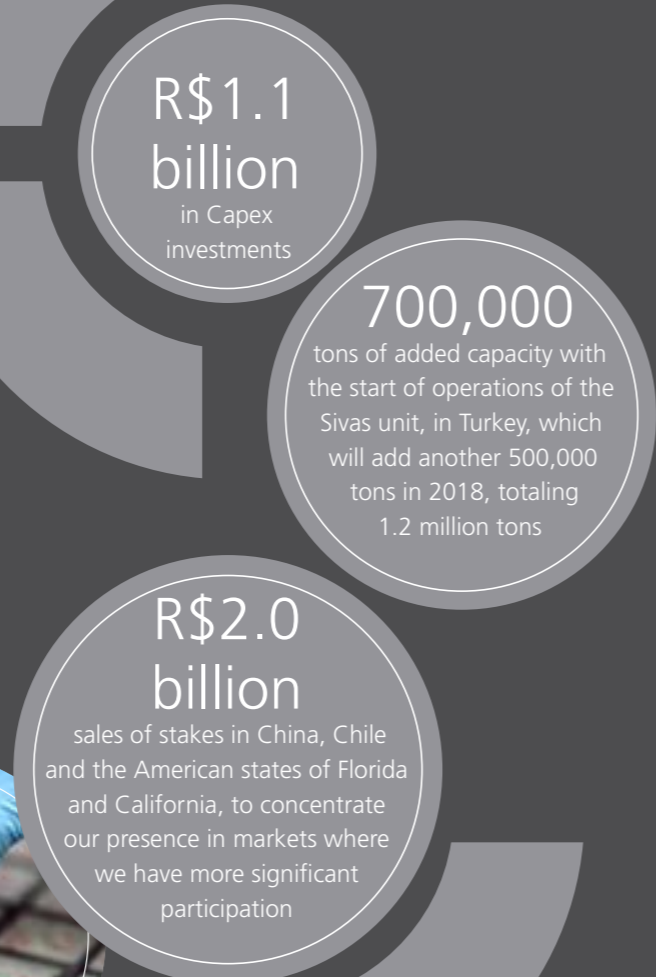


2017 HIGHLIGHTS

FINANCIAL CAPITAL GRI 102-7



MANUFACTURED CAPITAL



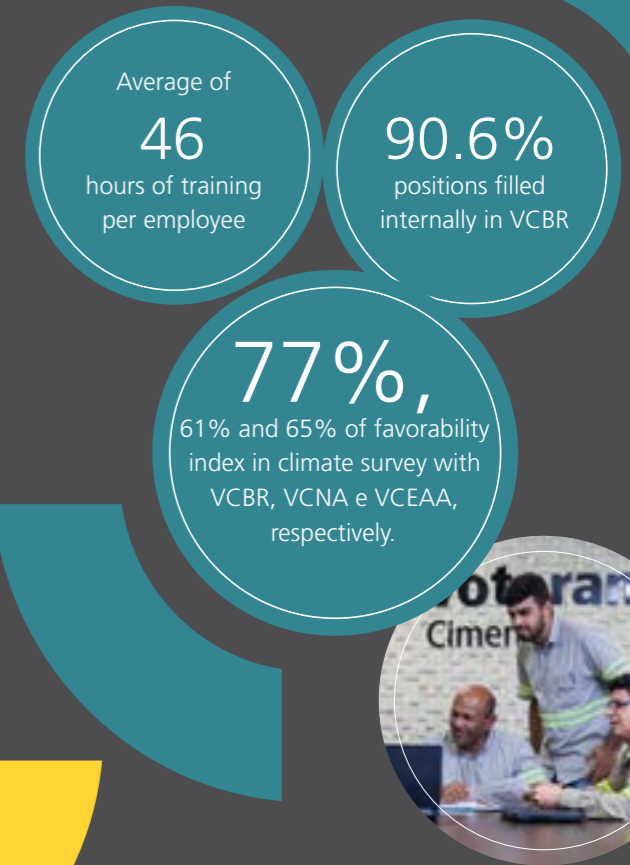
INTELLECTUAL CAPITAL



SOCIAL CAPITAL



HUMAN CAPITAL



NATURAL CAPITAL



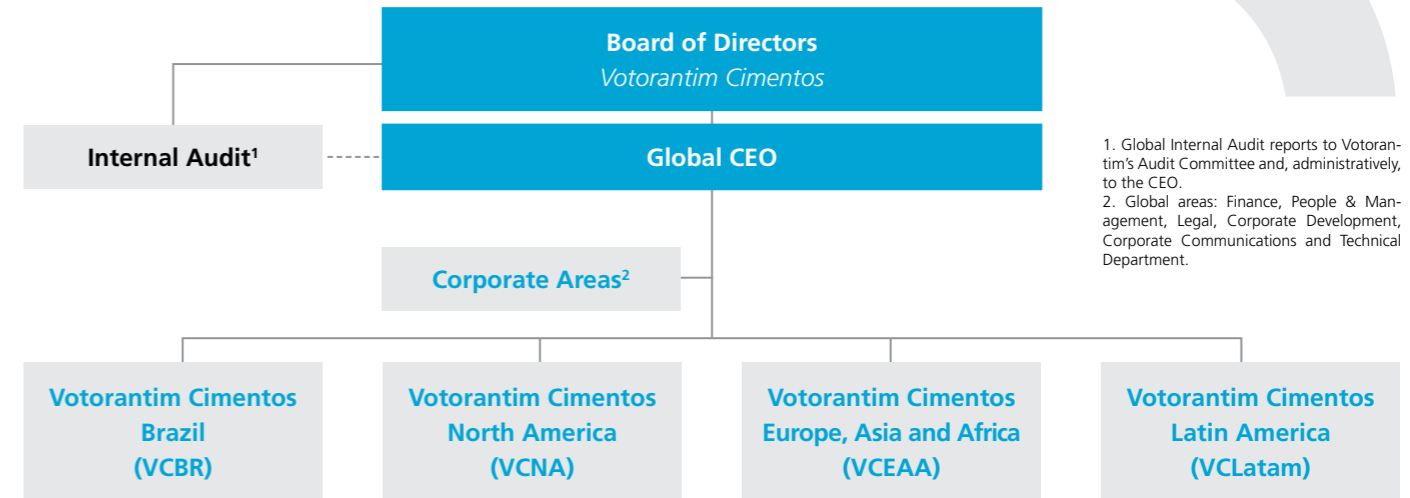
SOLIDITY AND LONG-TERM VISION



In line with our Values and Beliefs and strategic business drivers, our governance structure relies on best practices from publically-traded companies, even though we are a privately-held organization. This model highlights the strength of our company and our commitment to transparency and to the sustainable development of our business and stakeholders, in addition to ensuring speed and efficiency in decision making.

Our highest governance body is the Board of Directors, which sets our short-, medium- and long-term policies and strategies, and monitors their execution by executive teams. In the executive sphere, we are organized to enable the effective management of our business from a global perspective and the support from our international regional teams. [GRI 103-2, 103-3](#)

ORGANIZATIONAL STRUCTURE



ACTIVE BOARD [GRI 102-18](#)

Our Board of Directors is composed of seven members, three of whom are independent. Board members are elected in a general assembly and serve two-year terms, during which they undergo specific training and remain informed about the business, industry, and macroeconomic, social and political conditions. The Board is supported by four committees:



The everyday business is conducted by company executives, according to the following structure:

There are also functional global committees that assist the Global CEO and the Executive Steering Committee on short-, medium- and long-term functional issues such as People, Organizational Development, Corporate Communications, Legal and Audit.

At the end of 2017, 9.6% of the positions in the governance positions were filled by women, 53.4% by people over 50, and 46.6% by people between 30 and 50 years old. [GRI 405-1](#)

MONITORED RISKS

GRI 103-2, 103-3



With regard to risk management in all of our operations, we strive to instill a culture among VC managers of proactively identifying and mitigating risks. The objective is to preserve the value of the company, focusing on addressing operational risks (related to stability / continuity of operations) and business risks (which can affect company value more comprehensively).

We implemented a robust risk management system that is based on a globally standardized methodology, through a recurring process that involves the entire leadership of the company. We have a Corporate Risk Management area, with regional branches, that supports, provides guidance, monitors, and ensures quality management globally. This process follows the guidelines of the Committee of Sponsoring Organizations of the Treadway Commission (COSO) and ISO 31000 (international risk management standard).

The Risk area is under the same leadership as Compliance and Internal Controls, which enables a high level of synergy and coordination. In addition, the Legal and Internal Audit areas are constantly involved in the company's risk discussions.

Globally, since 2016 we have maintained the Guest Auditor program to promote cross-functional audits: qualified professionals and specialists participate in audits in other units or regions, as a way to encourage the exchange of experiences and learnings. Votorantim Cimentos' senior management encourages interregional audits since they enhance the knowledge of our professional experts and auditors.

We perform a follow up every two months with representatives of the Audit area in all of the countries, a process that is directly conducted by the regional president, the CFO and the Internal Audit manager. When opportunities are identified, improvement plans with implementation deadlines are defined.



ETHICS AND INTEGRITY

GRI 103-1, 103-2, 16



Ensuring that all of our activities are conducted ethically and in compliance with our Code of Conduct is part of our Values. Above all, maintaining high levels of integrity and transparency is a permanent ambition of Votorantim Cimentos. GRI 102-16

Our Code guides the conduct of all employees in their internal and external interactions, gathers practical examples of the conduct guidelines and includes additional content about our Compliance Program and anti-corruption. The latest version of our Code of Conduct was launched at the end of 2016 to all Brazilian units, and across our operations in North America, Europe, Asia, and Africa, and Latin America throughout 2017, in their respective local languages.

"We observed that employees better understood the Code of Conduct and the role that ethics play in managing our business, largely due to the work to promote the revised version and, particularly, because of the clear language, training and the practical examples that the new document provides," said John McCarthy, CFO VCNA and head of the compliance and internal controls functions in the region.

We value relationships that embody integrity and support the growth of our industry and society in an ethical manner. Therefore, transparency guides all of our relationships with the government and other public agencies at the municipal, state and federal levels and with associations and other entities. To ensure the transparency, clarity and appropriateness of our contacts, we maintain a dedicated Government Relations function.



Integrity is part of our Values, and we foster high levels of transparency through our Code of Conduct

A SCORE OF 10 IN TRANSPARENCY

Our work to ensure ethical conduct has a positive impact on our reputation. In 2017, we placed first in a ranking by Transparency International, a non-governmental organization based in Germany that evaluates the anticorruption efforts undertaken by the 100 largest Brazilian companies. The agency considers the level of transparency of companies in three dimensions: promotion of anti-corruption programs, reporting of information on corporate structure, and disclosure of financial results by country of operation. We achieved a positive evaluation in all areas and received a score of 10 in Anti-Corruption Program and Organizational Transparency.

CORPORATE GOVERNANCE

Compliance

As part of the Compliance Program, we reinforce our governance through specific initiatives that put our Values and Beliefs into practice. We recognize International Anti-Corruption Day (Compliance Week with VC leaders), promote forums and training on a regular basis, and enhance our internal communications through our internal communication channels. Since 2016, we have also been part of the Business Pact Against Corruption, led by the Ethos Institute.

The Risk and Compliance area reports directly to the Audit Committee to present nonconformities.

We advanced on other fronts, including the creation of critical Compliance policies with global guidelines and a review of certification, contracting and supplier management processes, to ensure the inclusion of compliance, integrity and anticorruption criteria. Among the critical policies is the Donations and Sponsorship policy, which governs political donations. In Brazil, according to local legislation, the financing of electoral campaigns by legal entities has been prohibited since 2015. In countries where donations are allowed, they are monitored by the Compliance and Legal areas. **GRI 415-1**



COMPLIANCE WEEK

In December we participated in Compliance Week, an event organized by Votorantim S.A. in observance of World Anti-Corruption Day, which brought together 500 leaders from all Votorantim companies and external experts. In addition, we organized a discussion on sustainable initiatives of compliance and integrity, in which we shared best practices from different areas and discussed, in partnership with the Ethos Institute, the guidelines for the future creation of a National Plan for Integrity and Social and Environmental Impacts, specific to the real estate segment. The event was recorded and made available to all employees via our internal social media.

PROMOTING THE CODE OF CONDUCT **GRI 205-2**

In 2017, we promoted our updated Code of Conduct and trained 100% of our employees in Brazil, in addition to communicating it to all of our suppliers. We also informed and trained 100% of our Board members on the updated Code. In the other regions, the training will be concluded throughout 2018.

- **Brazil:** Reinforcement of specific topics of the Code in communication channels throughout 2017. All VCBR active employees completed e-learning on Code-related content, which is also available on the corporate network.
- **North America, Europe, Asia and Africa and Latin America (Latam):** Launch strategy included letter from regional presidents to employees and communication campaigns tailored for the different countries, as well as the rollout of online training for salaried employees and face-to-face training for hourly employees in all regions.



OPEN CHANNELS

GRI 102-17, MM 7, GRI 103-2, 103-3



suspected violations of the Code of Conduct may be reported by internal and external stakeholders, without fear of retaliation, to a member of our leadership, to Business Ethics Officers (professionals who are trained to deal with the reports), to the Ombudsman's Office or to the Ethics Line. The Ethics Line is available 24 hours a day, seven days a week, via phone or internet, in all countries where we operate, and preserves anonymity. users can report, follow the status of a case and obtain Ethics Hotline numbers by country.

Regardless of the channel used, all reports are recorded in the Ombudsman's database. Users may report issues related to business integrity, labor, human rights, disrespect, environmental impacts, misuse of company assets, and other illegal or unethical behaviors.

The Ombudsman's office, comprised of the Ethics Line and specialized professionals, receives reports of suspicions of violations of the Code of Conduct

Linked to the Board of Directors, through the Internal Audit area, the Ombudsman's Office is responsible for coordinating the demands and closing the cases in the system, to ensure impartiality, confidentiality and integrity, as well as the protection of personally identifiable data. Whether a report is anonymous or not, the identity of the claimant and the secrecy of information are preserved, within the limits required by law. The remediation actions are overseen by the Business Ethics Committee, comprised of the CEO and global heads of Internal Audit, Legal, and People and Management. Depending on the agenda, other directors, managers or areas may be invited to participate in the meetings.

To help employees make ethical decisions, the Ombudsman's Office maintains on its intranet page a series of educational videos on the Code of Conduct, a frequently asked questions section and educational examples of cases, addressing the behaviors that are expected by the company.

In 2017, the Ombudsman's Office did not register any corruption cases involving the public sector. Of eight reports containing allegations of discrimination, seven were closed as unfounded and one is still being analyzed, as shown in the table on page 95.

GRI 205-3, 406-1

VALUE DRIVERS



OPERATING WITH EXCELLENCE



The recent economic crisis in Brazil has led us to undertake a set of initiatives to improve our operational efficiency in Brazil and all of the countries where we operate. Along with rigorous financial management, efficiency has become a watchword in all of our operations and has proven to be fundamental to preserving the competitiveness of our business.

In Brazil, the construction market maintained the downward trend of previous years, still impacted by an unfavorable macroeconomic environment. In addition to the significant drop in sales volume, as evidenced by the approximate 43% idle rate of the cement industry (according to data from the National Union of the Cement Industry – SNIC), the construction market suffered the impact of higher operating costs, which included higher electricity and fuel prices (with the majority of fuel being imported).

Facing this adversity, we sought to innovate by engaging our teams and directing investments to projects and initiatives to increase the efficiency and productivity of our plants. We explored, in particular, the possibilities presented by the so-called Industry 4.0, which relies on automation and intelligent data management. Some examples of what we are already doing using technological solutions and artificial intelligence systems are presented in more detail in the Innovation chapter of this report.

In 2017, our efforts resulted, for example, in a lower consumption of global energy for each ton of cement produced: 114.6 kWh/t in 2016 versus 111.5 kWh/t in 2017. Following an increasingly transversal management model, we also improved the environmental performance of our operations globally.

NEW OPERATIONS

Our most recent growth projects have taken place in Turkey, Bolivia and Brazil. They include the expansion of the Sivas plant in Turkey and new plants in Bolivia and Brazil, which were concluded in 2016 and completed their first full year of operation in 2017. Additionally, we completed the modernization of one of our concrete units in the United States.

- **Sivas (Turkey):** The startup occurred in March 2017, two weeks ahead of the schedule as outlined in our business plan, increasing the plant's capacity from 600,000 to 1.8 million ton of cement per year (The additional volume during the initial phase of operation was 700,000 tons – the total projected capacity will be reached during 2018). The advanced-technology unit, which was built based on operational efficiency principles, has a high-energy-efficiency index and has equipment and systems that control the level of emissions and water consumption. Not a single lost-time incident was registered during the construction of the new unit. Sivas is following the trend of the other units in the region. "In 2017, all plants in the region operated at an optimized pace. The index that measures the overall equipment efficiency reached 83%, translating into a reduced number of unscheduled maintenance stops and, consequently, lower costs," said Günther Smetana, Head of Operations of VC Europe, Asia and Africa.

- **Yacuses (Bolivia):** In December 2017, our Yacuses unit in Bolivia completed one year in operation. The plant is the company's first greenfield project outside Brazil and is the result of a partnership among Votorantim Cimentos, Cemento Camba (Cococa) and Cementos Molins. The unit was also designed around efficiency and assertive cost control guidelines and has an installed capacity of one million tons of cement/year. "We had the important challenge of fulfilling our capacity and establishing our brand in the market. In 2017, we sold 430,000 tons of cement in the domestic market and exported 160,000 tons of clinker", said Alexander Capela Andras, general manager of Itacamba Cementos. "We are achieving excellent environmental results, with low NOx and SO₂ emission levels, as well as particulate emissions well below the level required by legislation, mainly because we installed high-efficiency filters", said Laercio Andreato, plant manager.

- **Yard 8 (United States):** We modernized and increased capacity to approximately 700 yards per hour at our Prairie Material Yard 8 unit in Chicago. The modernized plant, located near one of the busiest airports in the United States,



holds up to 10 different cement types and 16 different aggregates, with three locations to load trucks. The configuration provides both speed and flexibility to support the wide variety of activities and projects in the area.

- **Primavera (Brazil):** The success of our strategy to maintain the last stage of the investment cycle planned for Brazil in 2010 was confirmed by the results of our Primavera (PA) unit, inaugurated in 2016. In 2017, the plant reaffirmed its role as an important production unit to serve the North and Northeast of Brazil, where we had lower market penetration due to the long distance from the company's other plants.

EXPANSION IN THE UNITED STATES

Our focus now is on completing the Charlevoix, Michigan (US) unit expansion project, with an investment of more than US\$ 180 million. The plant will increase its installed capacity by approximately 600,000 tons, strengthening our presence in the strategic region of the Great Lakes.

"Currently, we are the only building materials supplier in the state of Michigan to invest in an expansion project of this magnitude. Using advanced technology, we will be able to improve our environmental efficiency and operating costs, which will contribute significantly to our growth plans over the next years. We are working tirelessly to ensure that the transition and start of our operations will be a complete success," said Celso Martini, Vice President, VCNA.

Following the project startup, which is expected to occur in the first half of 2018, we will focus our efforts on implementing an energy efficiency program with the use of low-carbon fuels, as is already the case in other VCNA units that are approved to use lower-emission fuels. This work is in line with one of our Sustainability Commitments, which dictates a significant increase in clean and renewable fuels by our operations by 2020.

VALUE DRIVERS

NEW PRODUCTION LINES IN ARGENTINA

We are expanding our Olavarría and San Luis plants in Argentina, with investments of US\$ 227.2 million. These projects are scheduled to be completed in 2018 and 2019, respectively. With the 200,000-ton expansion in Olavarría and 700,000-ton expansion in San Luis, the annual production capacity of the two units will reach 3.7 million tons, enabling us to better serve the demand of the Argentinean market, which registered a 12% growth in 2017, according to data from the Portland Cement Association. To meet the increased demand during the year, we imported cement from Uruguay and increased our presence in the market.



ADVANCES IN SUPPLY CHAIN

The search for efficiency also guides our Supply Chain area, which is made up by the Logistics, Procurement and Ports departments. In Brazil, we already have automated processes that have improved logistics management in our sites, both to deliver inputs and to load our products, which are sent to the company's distribution centers and then shipped to our customers.

The result is a reduction in the time that delivery trucks remain at our plants, thus increasing safety and improving our efficiency, which, in turn, impacts the level of service provided to customers. In 2017, the average time of service provided to customers was 1h27min.

We use the same trucks that transport inputs to our plants to transport, on their way back, the agricultural lime we produce for delivery to our customers in the agricultural sector, thereby optimizing the use of vehicles, improving logistics efficiency and reducing the environmental impact of our operations.

Automated processes and new logistics solutions streamline product distribution

In the US, our distribution terminals allow customers to take our products at any time of the day, every day of the week. This strategy improves the level of service provided to customers, increasing the convenience we offer without increasing the costs of our operation.

TRANSPORTATION

In conjunction with the expansion of our Charlevoix plant in the United States, we invested in a new barge being developed to transport the additional volume that will be produced across the Great Lakes. Today, approximately 95% of this unit's production is transported via barges, which have the capacity to carry up to 12,000 tons of cement per trip. The new barge, due to start operating in October 2018, will have the capacity to transport 14,000 tons.

In our VCEAA region, at the Sivas unit in Turkey, we are investing in the rehabilitation of the railway system with the implementation of new lines, which will increase the volume transported per wagon.

At the Sika unit in India, we have changed the transportation model by introducing 22 dedicated trucks to improve our delivery time and consequently our service level. We have started to build a new web-based system to optimize cement order assignment and measure our transporters' response time.

In addition, we installed a new jumbo bag filling system in this same unit, to supply oil well cement (to the oil and gas industry) and OPC (a type of cement that is highly resistant to compression) to our customers in jumbo bags. Currently, jumbo bags are widely preferred over traditional 50-kg bags in domestic and international markets. The packing machine is an easy-to-operate, semi-automatic system, which can load 1-ton and 1.5-ton capacity jumbo bags.

EVALUATION OF SUPPLIERS

GRI 103-1, 103-2, 103-3

We maintain a structured process of certification, selection and evaluation of suppliers, through the Equipo software, which will be replaced by the SAP Ariba's Suppliers Management module in 2018. To become a VCBR supplier, all companies must undergo this approval process. Depending on the service provided or the product a vendor intends to commercialize, we evaluate documents such as environmental licenses, Federal Technical Registration at IBAMA, and mining concessions by the National Department of Mineral Production (DNPM, for its initials in Portuguese), among others. We also evaluate their financial situation to ensure their stability and supply capacity.

In 2017, 3,390 suppliers underwent the certification process. Of the total, 1,162 were evaluated for environmental risks, and 639 were approved and considered fit to work with us. The other candidates were not approved and, therefore, did not become part of the supplier base of VCBR. We did not identify negative environmental impacts of the contracted suppliers in the evaluated period. GRI 308-2

Once approved, suppliers can participate in purchasing processes. All VCBR negotiations are done digitally, in a transparent manner and with equality of conditions for the candidates. The negotiations are conducted by Procurement, and the technical aspects are evaluated by the respective operating areas or the Technical Department, depending on the characteristics of the product or service being purchased. All agreements are made in a way that always ensures that the decision provides the highest possible value for VCBR – which goes beyond simply choosing the lowest price.

Once hired, suppliers that provide services on a continuous basis are evaluated quarterly, against their performance, compliance to the scope of the agreement, and behavior in terms of safety. Evaluations are made by plant managers, and poor performers are called in for a review process that includes creation of an action plan. If the supplier continues to perform poorly in subsequent evaluations, it may be suspended and no longer be contracted for future work. In addition, the best-evaluated suppliers are certified as VC Partners. In 2017, we certified four suppliers as Gold (third consecutive year), six as Silver (second year) and nine as Bronze (first certification).

In managing social impacts, we identified the need to maintain qualified suppliers that meet specific demands, promote job creation and contribute to the growth of the regions where we operate. The Encadeamento Produtivo (Production Chain) program, which we execute in partnership with Sebrae, has the explicit objective of developing and increasing the competi-

tiveness of micro and small companies that operate in our value chain. In its first two years, completed in 2017, the project had the participation of 96 companies in the Federal District and in the states of Goiás, Rio de Janeiro and Mato Grosso; of those, 59% were already our suppliers. Another eight companies started to provide us with products and services. During this time, the revenues of the companies that participated in the program grew an average of 32.67%. GRI 414-2



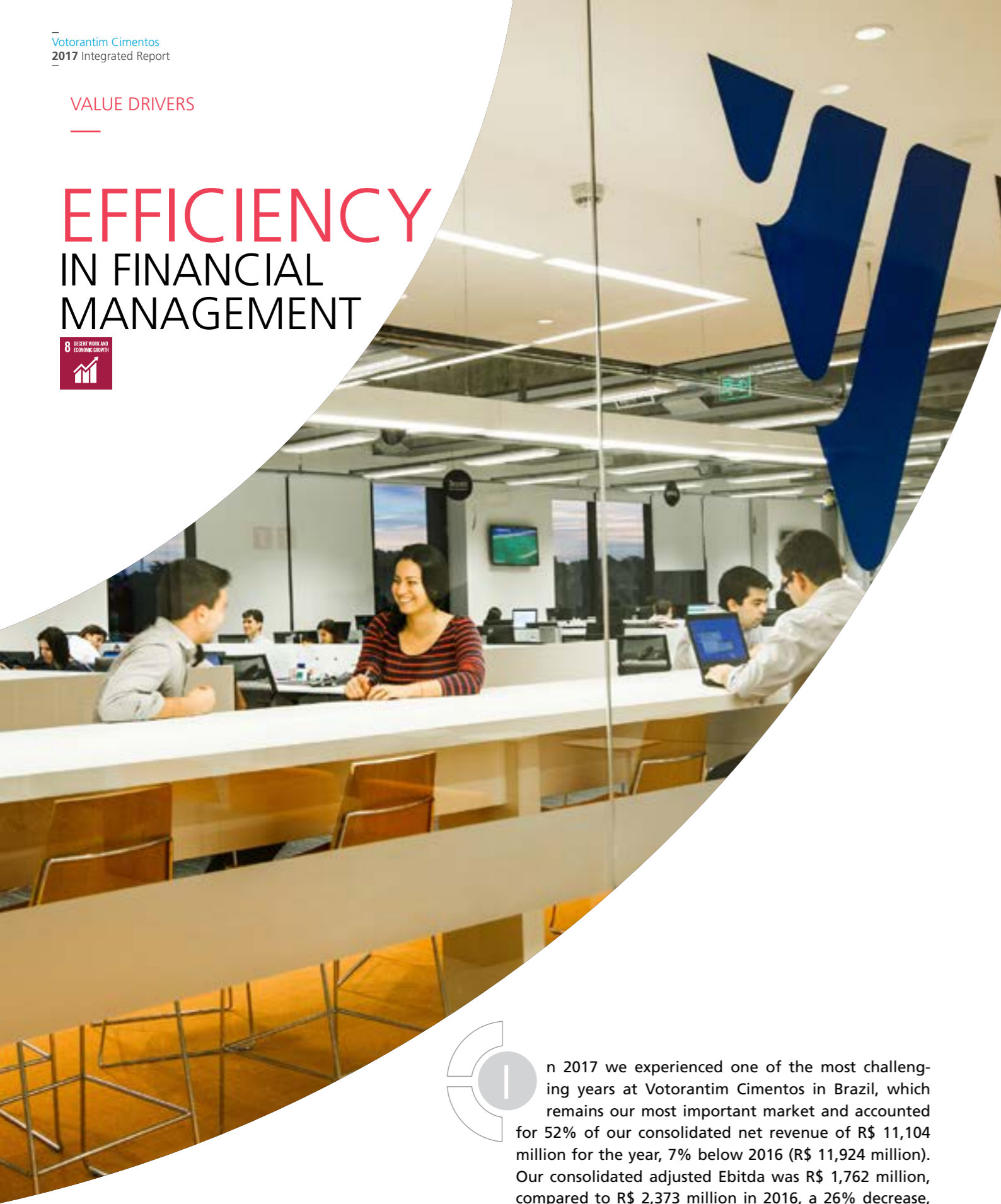
APP FOR DRIVERS

As part of our digital strategy, designed to break barriers in communication and access to technology, we created an app especially for professionals who work with freight transportation in Brazil. Through the app, we can preview freight availability in advance, which results in more effective management of the work. The app also offers other features such as real-time data on payment of contracted freights.

This technology also allows us to survey these professionals. The results of our surveys can be used to guide projects to continue improving our logistics competitiveness. In a quick survey, we assessed, for example, the idea of purchasing discarded truck tires for use by our co-processing areas. We are now validating this initiative and evaluating how to make it feasible.

VALUE DRIVERS

EFFICIENCY IN FINANCIAL MANAGEMENT



In 2017 we experienced one of the most challenging years at Votorantim Cimentos in Brazil, which remains our most important market and accounted for 52% of our consolidated net revenue of R\$ 11,104 million for the year, 7% below 2016 (R\$ 11,924 million). Our consolidated adjusted Ebitda was R\$ 1,762 million, compared to R\$ 2,373 million in 2016, a 26% decrease, and Ebitda margin of 16%.

The company was positively impacted by VC's results and sales growth in North America, Europe, Asia and Africa, and Latin America, confirming our strategy of geographic diversification and internationalization.

Brazil: Despite the slight recovery in economic indicators – the gross domestic product (GDP) grew by 1%, according to estimates by the Brazilian Institute of Geography and Statistics (IBGE) – cement sales closed the year with a retraction of approximately 6.4%, according to the National Union of Cement Industry (SNIC). The decrease was lower than in 2015 (9.5%) and 2016 (11.7%), but over the last three years the sales reduction totaled approximately 25%. This had an impact in VCBR's net revenue (R\$ 5,821 million, or a 9% reduction) and Ebitda (R\$ 344 million compared to R\$ 965 million in 2016). At the end of 2017, the sector began to see a slowdown in the rate of decrease of monthly sales. In the last trimester, the volume of cement sold fell 1.1% in comparison to the same period the previous year.

Factors that may impact the future of the market are the reduction of interest rates (from 13.65% at the end of 2016 to 6.9% at the end of 2017), the release of inactive accounts from the FGTS (the Brazilian workers protection fund) and new rules for the Minha Casa Minha Vida program, which finances housing for families with a total income of less than R\$ 4,000/month. As explained by Eduardo Costa de Almeida, financial director at Votorantim Cimentos Brazil, the macroeconomic effects are not felt in the construction sector immediately, but rather in the medium term. "In 2010, the Brazilian economy was doing well and the whole sector saw the opportunity to expand installed capacity. When the investments were completed, the country was already in crisis, with an average idle rate of 45%, which drove cement price reductions due to an oversupply in the market. All of this influenced the results of VC and other players," he said.

North America: In 2017, our North America operations had a record EBITDA, with 9% growth in relation to the previous year, and an EBITDA margin of 30%. "Our results benefited from the macroeconomic environment, with GDP growth in the United States (2.3%) and Canada (3.0%), mainly due to an increase in prices," said John McCarthy, Chief Financial Officer (CFO), VCNA. In the United States there was an increase in the number of construction projects and licenses, while in Canada we benefited from infrastructure investments and increased consumer demand. "Our financial management with a focus on cost control also influenced the region's positive performance," said McCarthy.

Results from North America and Europe, Asia and Africa confirm our strategy of geographic diversification

Despite the slight recovery of the economy, the cement market in Brazil saw a 6.4% decrease in overall sales

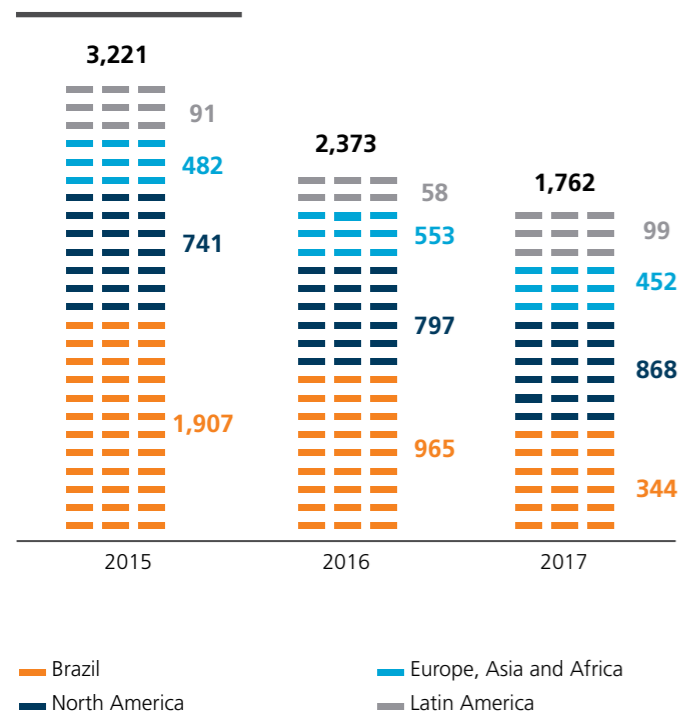
Europe, Asia and Africa: We had a 13% reduction in Ebitda in euros compared to 2016, as a result of the effects of currency depreciation in Turkey and Tunisia and higher fuel prices impacting all region countries. Our Ebitda margin was 25%. In Turkey, despite political instability, exchange rate fluctuations and higher inflation, we increased our capacity through the expansion of Sivas plant, which resulted in a 17% higher sales compared to 2016. Also the country announced investments in the infrastructure and housing segments, which continue to indicate favorable prospects for our business. Sales in domestic market in Spain increased by 7% driven by economy recovering from the crisis of 2008 and the political instability in 2016, resulting in higher growth rates. Spanish GDP grew by 3.1%, compared to a growth of 1.5% in Italy, 1.8% in France and 2.7% in Portugal. Morocco is still VCEAA's main cash generator, with the highest Ebitda margin within the region. Although Tunisia has been experiencing political-economic deterioration, our cost-focused management has also ensured our competitiveness and a significant market presence.

Latin America: Our results were also positive in the region, with a 69% increase in Ebitda from operations in Bolivia and Uruguay (Argentina is consolidated through equity equivalence method), reflecting the company's increased participation in the Bolivian market as a result of the startup of the Yacuses plant in 2016. We also benefited from high export volumes from our operations in Bolivia and Uruguay to serve the Paraguayan and Argentinean markets, respectively. In Argentina, sales were estimated to be 16% higher for the year, driven by the civil construction sector, especially by projects in the public sector. Despite more modest growth rates, the countries in the region still have a high demand for infrastructure, which may support positive projections for our company.

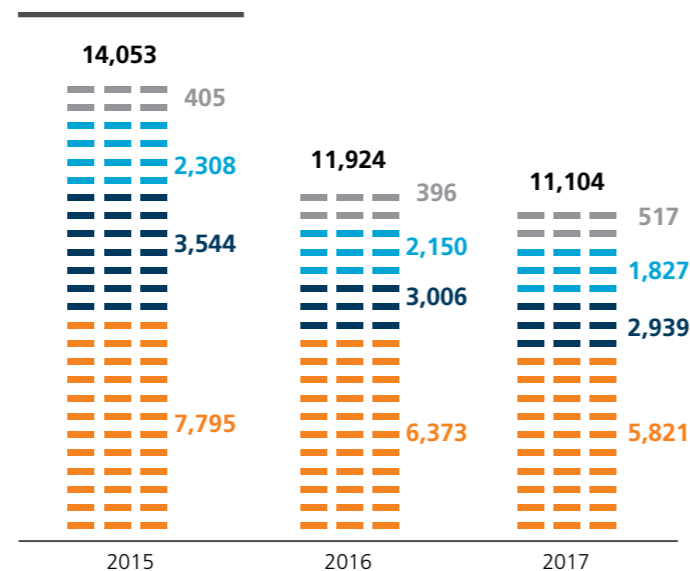
We worked globally on different fronts, which, added together, were essential to maintain the profitability of our business. We remain committed to the operational excellence of our plants for them to become increasingly more productive and energy efficient and have lower idle rates. Another important step is to maintain our financial management focused on cost excellence – which is already part of our company's culture – by optimizing resources and reducing inefficiencies in an intelligent way (*read more below*).

VALUE DRIVERS

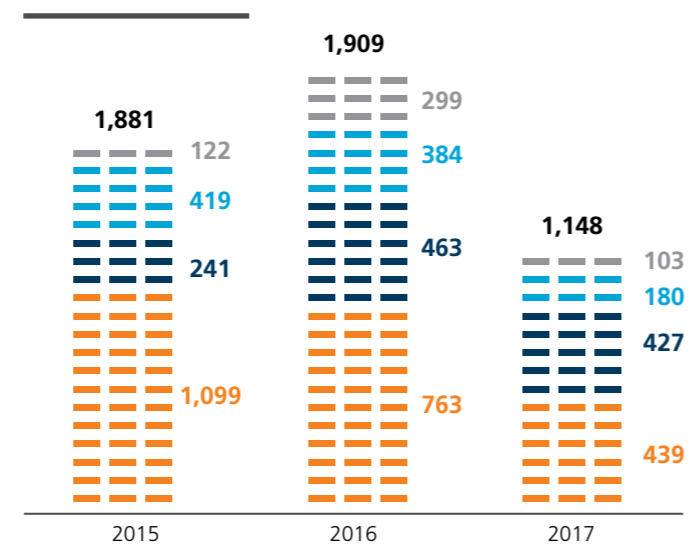
Ebitda (in million R\$) GRI 102-7



Net Revenue (in million R\$) GRI 102-7



Evolution of investments (in million R\$)* GRI 102-7



* Cash effects investments.

INVESTMENTS

Capex investments totaled R\$ 1,148 million in the company's consolidated results, which included expansions of our operations (in the total of R\$ 461 million) and the amount allocated for operational modernizations and projects related to health, safety and environment. We completed a cycle of expansion that increased our installed capacity in all operations to meet market demands. The combination of these efforts demonstrates our commitment to balancing short-term results with VC's long-term strategy.

LIQUIDITY AND INDEBTEDNESS

In 2017, we implemented a series of cash initiatives to reduce indebtedness and lengthen the maturity profile of our debt, with 10 years average at year-end. As a result of these initiatives, we received R\$ 2 billion, mostly from divestments in Chile, China and the United States and had capital contributions from the shareholders in the amount of R\$ 1.7 billion. All of these funds were used to pay gross debt maturing by 2022.

At the end of the year, our gross debt * was R\$ 13.6 billion (R\$ 15.5 billion in 2016). Net debt totaled R\$ 9.0 billion, signifying a reduction of R\$ 2.8 billion over the previous year (R\$ 11.8 billion). We closed the year with a net debt to EBITDA ratio of 5.12, basically the same level as 2016 (which stood at 4.97). This result reflects all the initiatives we took throughout the year to neutralize some of the effects of the worst crisis we have ever faced in our main market. We continue to work to gradually reduce this ratio and reach results that are even healthier and compatible with the metrics of our financial policy, to ensure consistent levels of return on investment. GRI 102-7

* Does not include mark-to-market of derivative financial instruments.



SALE OF NON-STRATEGIC ASSETS

In 2017, leveraging favorable market conditions, we completed the sale of our stakes and operations in Chile, China and the states of Florida and California in United States. Each divestment had its unique characteristics, but they all converged toward the same objective: to concentrate our operations in markets where we are important players and whose outlooks for VC are more positive in the medium and long terms. GRI 102-10

The sale of our 16.7% minority interest in Cementos Bío Bío in Chile is a good illustration of this decision. In addition to us not holding majority interests in the company, we do not consider this a strategic market for our operations.

In the United States, the divestment of our holdings in Suwanee American Cement (SAC) and Prestige Concrete Products – in the states of Florida and California – enabled us to focus our presence in the Great Lakes region where our installed capacity is already more robust and where we have a more significant market share.

In China, the sale of our operation – which had been planned several years ago – was driven by our small presence in the largest cement market in the world and the fact that our strategy does not contemplate growth in the region, which made it difficult to consolidate the operation. This enables us to focus our efforts in markets near the Mediterranean Sea, where four of VCEAA's five units are located: Morocco, Spain, Tunisia and Turkey.

INTELLIGENT COST CONTROL GRI 103-2, 103-3

One of our most important financial management initiatives is Zero-Based Budgeting (ZBB). This program is implemented globally and looks at our fixed costs to identify and implement control and efficiency measures.

The project is divided into different areas, each of them under the responsibility of a representative of our company's leadership. The initiatives involve and impact nearly all corporate and production activities. In Brazil, in 2017, they also included a review of our fleet of vehicles and the reduction of fuel expenses; a reevaluation of our reimbursement and travel policies, better use of travel reservation tools and more meetings held via videoconference; negotiations with technology service providers to obtain more attractive proposals; and an update of our policy on the use of corporate cell phones, among other examples.

One of the projects that resulted in financial gains and also improved our safety management was the use of a telemetry system in the vehicles that make up our fleets of light vehicles, trucks and concrete mixers in Brazil. We monitor the movement of our vehicles in real time, identifying fuel consumption, those that are idle or operating outside of their route or work hours, and those that exceed speed limits. We started using telemetry in the beginning of the year and by December 2017 we had seen a 99% reduction in excess speed cases.

In all of the regions, we also maintain the Global Performance Program (PPG, for its initials in Portuguese), through which we seek to identify opportunities to optimize our variable costs, prioritizing initiatives that increase our operational efficiency. An important VCBR initiative in 2017 was the cement portfolio cost optimization project. The use of new inputs not only resulted in savings of approximately R\$ 20 million in 2017 but also improved our environmental performance by reducing carbon emissions by more than 160,000 tons. Another noteworthy initiative was the development of new pozzolan additives in several Brazilian units, with excellent results in terms of quality and sustainability.

In the end of 2017, the success of these two programs led us to create, in our operations in Brazil, the Variable Cost Committee. Each participant within this group is responsible for an issue (e.g., energy consumption) and must manage it transversally, by identifying, for example, optimization initiatives that are carried out in one of our plants and can be replicated in others.

We concentrated our operations in regions with growth prospects where we have meaningful market share

VALUE DRIVERS

ZERO-BASED BUDGET

Between 2016 and 2017, we were able to reduce the fixed cost of our operations in Brazil by more than R\$ 273 million. Since 2014, the zero-based budget initiative resulted in savings of R\$ 850 million, including cost reductions in personnel and maintenance.

In North America in 2017, cost savings of 1.4% resulted from measures such as a review of the use of mobile phones, negotiation of better contracts with cell phone carriers, and internalization of several audit and legal tasks, which enabled us to reduce the number of external consultants. An Information Technology-supported process was also effective in assessing the nature of travel expenses on a monthly basis.

CONSISTENT MANAGEMENT AT VCNA

In North America, cost management has been part of the business since 2008, when the United States faced a severe economic crisis. As in Brazil and Europe, Asia and Africa, Zero-Based Budgeting is consistently implemented, and each unit has targets to control its fixed and variable costs (read more in Zero-Based Budget).

As a result, a culture of cost containment has emerged across the region's operations, contributing to its strong financial performance in 2017.

AGILITY, SIMPLICITY, AUTONOMY AND PERMANENCE (A\$AP)

The A\$AP project was carried out in Brazil and sought to revisit our internal processes and improve interaction between areas, thus generating more efficiency and fewer deviations. The project included 548 initiatives (completed or in progress) and translated into potential gains of R\$ 38.6 million through the opportunities identified.

They impacted, for example, the overtime management model used by the company, after a review of work schedules, and order-to-cash (OTC) and request to pay (RTP) processes. In OTC, for example, we reformulated sub-processes of orders, billing, receivables management, and product delivery, among others. In RTP, the focus was on late payments, formalization of contracts and registration of materials.

BEST RATED AMONG ALL WBCSD REPORTS

Our 2016 Integrated Report ranked the highest among all reports reviewed by the World Business Council for Sustainable Development (WBCSD) in partnership with Radley Yeldar.

Organized to provide readers with a comprehensive account of our performance, the report is a relevant source of information for investors and other players in the financial market. Reflecting our commitment to continuous improvement, our score went from 55.6% (2014) to 75% (2015) and reached 81.9% in 2016.

AGGRESSIVE COST CONTROL AT VCEAA

The performance achieved in 2017 in our Europe, Asia and Africa operations is a direct consequence of a lean operation and the aggressive control of costs, both fixed and variable. The results are monitored month by month, which ensures the redefinition of strategies whenever necessary.

Effective cost management helped offset the impact to the VCEEA results of an increase in pet coke prices and the devaluation of local currencies (Tunisia and Turkey) against the euro. That enabled us to maintain an Ebitda margin of 25% in euros. In 2012, the Ebitda margin in the region was 12%, with similar installed capacity and limited modernization of assets.

We also started a study to measure personnel expenses in all countries, to identify possible efficiency measures that are being implemented in one unit and have the potential to be extended to other operations. All of these initiatives combined enabled us to build the 2018 budget with values similar to the 2017 budget, despite inflation adjustments and higher productivity expectations in the period.



AGILE COMMUNICATION WITH THE MARKET

Even though we are not a publicly-traded company, we seek to adopt best market practices and, where possible, improve our reporting to investors, creditors, rating agencies, analysts and other stakeholders. This is our way to strengthen our reputation in the markets where we compete and ensure global access to the banking and capital markets, to help ensure the long-term sustainability of our business.

We maintain an Investor Relations area, which participates in several external events throughout the year and provides clarification on a permanent basis. At www.votorantimcimentos.com/ri, we provide comprehensive content on our financial performance, including debt repayment profile, maturities and information on our governance structure and compliance practices.

On the website, we also disclose the company's quarterly results, including cement sales volume, net revenue and Ebitda. Since 2016, our Chief Financial Officer (CFO) has participated in Votorantim S.A.'s quarterly results teleconferences, our holding company's annual performance review event, international conferences with investors and non-deal roadshows.



INCREASINGLY CLOSER TO CUSTOMERS

GRI 103-1, 103-2, 103-3



We believe that the success of our business is largely related to how close we are to and how genuinely focused we are on our customers. In all regions, our initiatives in 2017 reinforced this emphasis.

At VCEAA, we organized "Customer Day", mobilizing our commercial team to think about initiatives to improve our value proposition. To encourage participation, the project included a contest of ideas, which received 80 proposals, of which 42 were approved to be implemented. The winning idea, which will be implemented in 2018, was a smartphone app through which customers can place orders and access technical information, product catalogs, invoice information, contacts, etc.



Another example being implemented in Spain is the periodic distribution to our customers of the Construyendo Juntos newsletter, which includes information about the market and about our products and also provides technical guidance.

In our North American operations, the ongoing effort to improve the quality of our products and distribution channels, and consequently strengthen our relationships with our customers, has led to a 30% decline in complaints over the past year.

We have been working in partnership with leading developers in the Canadian and US markets, and our product are being used on the 94-story Vista Tower, a Chicago skyscraper under construction. Our previous experience in creating a mix that was capable of withstanding the impact caused by the force of wind on the structure of the buildings was essential for that.

At VCEAA, we host Customer Day to mobilize our sales team to think about initiatives that would allow us to evolve our value proposition

PAPO DE BALCÃO

In 2017, we launched in Brazil the Papo de Balcão program, which offers training and tips for professionals working in the retail segment. The program is integrated with the web platform of Juntos Somos+ (website and app launched in 2016) and also includes points for interactions that can be redeemed as prizes.

VALUE DRIVERS

VALUE PROPOSITION

We have a robust business strategy, driven by a broad portfolio offering, highly skilled commercial and customer service teams to act on the front lines with customers, and logistical proximity to ensure efficiency in deliveries across the country. In addition, we have a set of initiatives and tools to reinforce our connection with customers, strengthen our value proposition and ensure differentiation for Votorantim Cimentos," says Hugo Armelin, Sales director, Brazil.

For our customers in industrial segments (concrete companies, and artifacts and precast factories, among others), we developed the Votorantim Cimentos Business Development Program (PDE VC, for its initials in Portuguese), in partnership with Sebrae and the Brazilian Portland Cement Association. The objective is to boost productivity and commercial opportunities for these customers through consultancies led by external experts. Several groups of 30 to 40 people have been formed in six strategic locations in all regions of Brazil. For our company, we generate loyalty and have the opportunity to win new customers and provide more products to the existing clients.

Papo de Balcão
More than 30,000 user accesses through January 2018.

PDE VC
More than 50 VC partner companies completed the program in 2017.

CUSTOMER COUNCIL

Another successful initiative in Brazil that continued in 2017, was the Conselho de Clientes ("Customer Council"), through which we invite a select group of customers, which we call "counselors", to attend meetings that occur two to three times a year. The meetings are organized by region and profile, and divided into the real estate segment (large construction companies) and self-construction segment (small to large-sized retailers).

For these sessions, which bring together an average of 15 participants each, we put into practice open and transparent dialogue, listening to the unique needs of different customers, and garner suggestions to generate positive impacts to our customers' business, as well as our own. It was at one of these meetings that we identified the opportunity to extend our offering of the Matrix system – which provides ready and customized basic mortar – to the Northeast region.

OTHER INITIATIVES IN BRAZIL

TAC Day: A program for the commercial teams in Brazil that work directly with retail. In the meetings, the group discusses initiatives to improve our commercial strategy, updates our marketing tools, reviews technical information, provides updates on portfolio launches, and analyzes data on the company's performance and competitiveness in relation to other market players.

Sales Academy: This is a platform that centralizes different training modules for new professionals in the commercial area.

Mobile Labs: We have seven labs throughout Brazil, which enable us to offer a series of complementary services and technical reports to medium- and small-size customers in the industrial segment. In 2017, we visited more than 400 customers.

Participation in events: We take our brand to different events and meetings, such as the National Meeting of Civil Construction Industries (ENIC), and we maintain an active relationship with several stakeholders (researchers, industry groups, universities, etc.).



INITIATIVES AT VCNA AND VCEAA

United States and Canada

In our North American operations, an important initiative was our first sales convention with our entire regional commercial team, held in January 2017 in Orlando (Florida), United States. We took that opportunity to enhance our employees' expertise regarding customer relationships.

Our infrastructure is also an important differential, particularly during the winter months, when the lakes through which we distribute our cement production are frozen. The centralization of our transport operations and the existence of storage areas around the Great Lakes, in Canada and the United States, ensure consistent customer service.

Spain

At VC Spain, we have a Customer Committee, which was created to reinforce our Customer Focus pillar. Composed of professionals from all areas of the company, the Committee fosters different initiatives targeted to customers and sets targets, strategies and initiatives from a holistic perspective.

We organize an annual customer satisfaction survey to better understand the needs of our customers and their level of satisfaction. In addition, to follow the pulse of our customers' perception about the services we provide, we organize other brief surveys with our customers and drivers along the year.

Turkey

In Turkey, we have a Technical Services team that operates in four sales regions and is dedicated to helping optimize our customers' production processes, including creating new, more efficient formulations. In addition, we provide training for our customers' technical staff and help them set up their technical laboratories.

An internally-designed customer survey assesses their level of satisfaction with our products and services. Most customers are personally surveyed by members of the marketing and sales department, and action plans for all departments are defined based on these results.

We have an internally operated call center that receives and addresses customer complaints. After answering and resolving the complaint, the call center representatives conduct a survey to measure the level of satisfaction with our service.

SATISFACTION ON THE RISE¹

In Brazil, the Net Promoter Score (NPS), which measures customer loyalty and experience, reached 51% in 2017. The quality of our products and the strength of our brand continue to be perceived as strengths by customers of all segments. Maintaining an upward trend, we improved our score by 11 percentage points compared to 2016, when we had achieved our previous best score. We made progress in areas such as purchase, payment and after-sales processes, product delivery, and relationship with the seller. The score considers our performance in the self-construction, industrial and real estate segments.

In Spain, we received a score of 8.4 out of 10 points in a satisfaction survey. The survey, which took place in December 2016, had input from more than 30% of our unit's customers. **GRI 102-43**

¹ We have not measured the satisfaction of our customers globally. In North American operations, we apply recurring satisfaction surveys, which result in action plans.

INNOVATION

INNOVATE TO PERPETUATE



Our history proves that we have always been innovative but, as part of a process that has gained momentum in recent years, we want to solidify and disseminate our culture of innovation and entrepreneurship across Votorantim Cimentos. We are preparing our company for the coming years by managing the main risks that can impact our business.

The goal is to engage our entire team in this business transformation movement – so much so, that we do not have one specific area responsible for innovation, since we understand that innovation must be cross-functional and involve different departments and a variety of perspectives, in addition to a strong network of external stakeholders. We are confident that this is the way to gain and maintain competitiveness in the medium and long term and create value for shareholders, employees and, ultimately, society.

Strongly leveraged by information technology, our innovation strategy has made the Digital Cement program our digital transformation ecosystem, working in three areas – Relationship, Platform and Open Innovation – that seek to make our operations increasingly more connected and efficient, breaking down physical barriers.

DIGITAL RELATIONSHIPS

In the area of Digital Relationships, we want to increase our proximity to final consumers, stonemasons, owners of construction material stores, sales clerks, and architects, among other influencers. With that in mind, we are increasingly investing in digital channels. We have made great strides with these initiatives, which include the development of cell phone apps, such as Juntos Somos +, Obra Fácil, and an app for drivers, among others. These projects are detailed in the Increasingly Closer to Customers and Operating with Excellence chapters.

PLATFORMS

In the area of Digital Platforms, we are focused on developing new businesses and products with the potential to add value to our brand by meeting the unique needs of different customers and by being more sustainable from an environmental standpoint. Supported by technology, we sought to innovate in the way we relate to our customers, expanding contact points (e.g., web, telephone), and always striving to improve their experience with Votorantim Cimentos.

In 2017, our e-commerce portal, VC Online, accounted for 65.5% of all purchase orders in Brazil, proving the effectiveness of this channel in the process of facilitating the acquisition of our products. We also launched the VC Online app, which is even more functional and intuitive for use on smartphones and was very well received by the market. At the end of 2017, we also launched our Pague Flex solution, which offers unique conditions for payments in installments to increase our customers' working capital, especially small retailers.

Another development was the update of the Engemix website, which has new content and design and improved flow to enhance the processing of estimate requests.

We also continued to offer Mapa da Obra, our internet portal and YouTube channel dedicated to providing information about our products and services, as well as news from the construction market.

Since 2014, our sales team in Brazil has also been using tablets and apps to support our digital strategy and optimize their visits to points of sale, thus increasing team productivity and centralizing information in a single database.

Other new projects offered to the Brazilian market in 2017:

OUR DIGITAL TRANSFORMATION ECOSYSTEM

The Digital Cement		
Digital Relationship	Digital Platform	Digital Open Innovation
Our competitive differentiator in relationships	Our collaboration environment	Our opportunity to leverage our operations

- **Do It Yourself Strategy:** Videos to provide content on various applications of cement, mortar and other items in our portfolio for digital influencers and end consumers. Aired primarily on YouTube, Facebook and Instagram, the videos include tutorials on how to use our products in small renovations and repairs and in decorating projects.
- **Obra Fácil App ("Easy Construction App"):** App developed to support the work of construction workers. Through the app, they can calculate the amount of materials needed for the project, access the VC product catalog, ask questions about the application of each product, set up an automatic budget and manage the project schedule. The app is available for free download on Android and iOS platforms.

MARKETPLACE

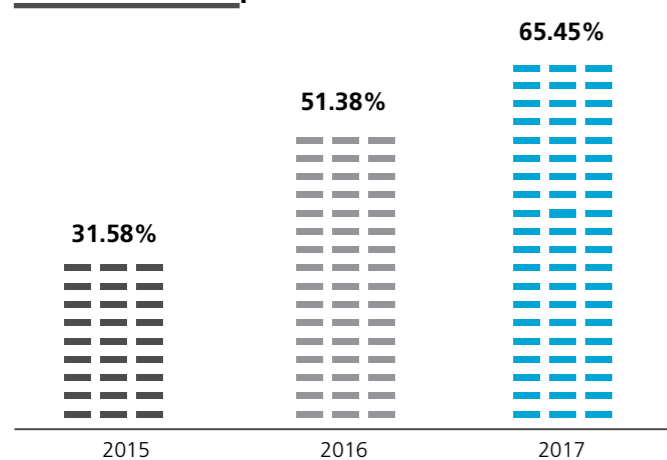
In 2017, we implemented a new marketplace for relationships with our suppliers within VC BR procurement. Through this digital space, all purchase requests made by users are publicized to invited suppliers who can submit their proposals directly through the system.

The buyer receives a comparative map detailing the offered price, tax issues, payment deadline, delivery conditions, etc. The modules in use facilitate transactions ranging from individual purchases of low-value items to major tenders and engineering contracts.

From a supplier standpoint, the system enables better management of relationships by concentrating all the necessary information in a single portal, including open proposals and purchase orders, information on pending deliveries, evaluation of performed services and follow-up of the payment process.

INNOVATION

MORE PURCHASES VIA VC ONLINE¹



¹ In relation to total number of orders.

THE NEXT 100 YEARS

New Standards and Emerging Technologies is the second thematic area of Program 18.18, Votorantim S.A.'s transformation movement to encourage professionals of all companies of the investment holding to reflect on the future of our businesses and how they are preparing to face the next 100 years – in 2018, Votorantim celebrates its centenary. The goal is to bring the technological advances of the future into everyday business, seeking new ways of thinking and working, both in relation to production and in interactions with customers, suppliers and society.

OMNICHANNEL AT VCNA AND BRAZIL

In 2017, we mapped our current customer-related processes, evaluated the existing solutions in the market and made the decision to migrate these systems to an Omnichannel platform, which will be deployed initially in North America and Brazil.

This represents an evolution of the multiplatform concept to expand the opportunities for interaction and provide a unique and continuous experience, enabling our customers to interact through various interfaces and at any time. This platform brings together the sales force, marketing and e-commerce and is expected to be operational between 2018 and 2019, focusing primarily on the sales force and Customer Relationship Management (CRM).

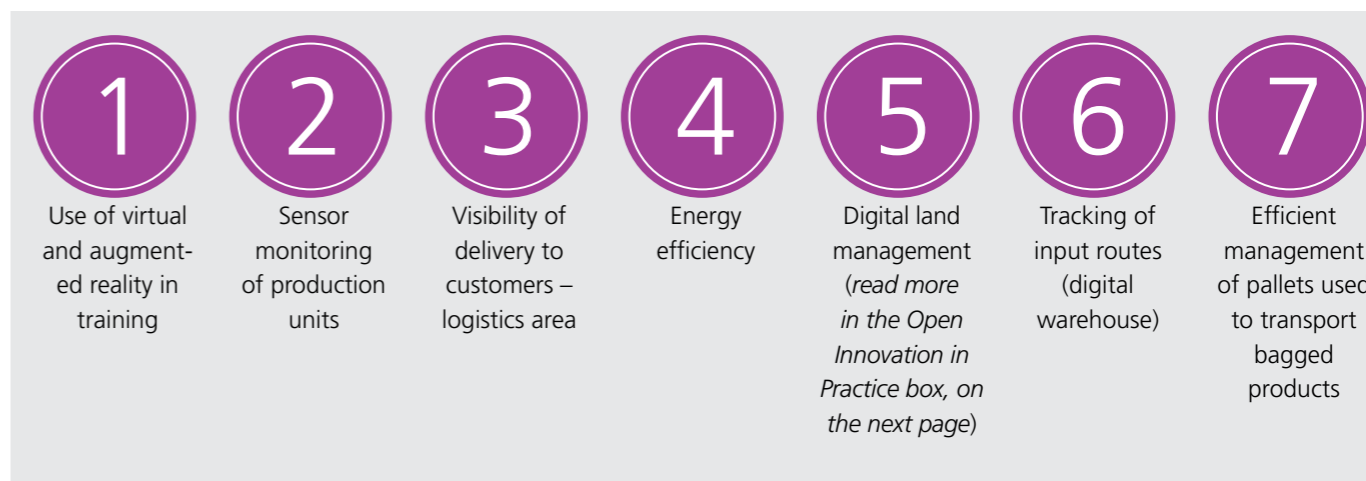
DIGITAL STRATEGY AT VCEAA

VCEAA is studying initiatives already implemented to build on its own digital strategy, which will cover all countries in the region and focus on the post-sale relationship. At present, in Morocco, we already have a feature on our website through which customers can access information about product delivery and invoices. In Spain, we have also started to develop a new app for customers that will allow them to access all product information and place new orders directly with our customer service center, as well as an app with a focus on post-sales.

OPEN INNOVATION PLATFORM

To complement our innovation ecosystem, we see the need to attract suppliers to help us find solutions to the current and future challenges of our business. More than a specific project, with a start and end date, our objective was to structure an open innovation model that could be applied as opportunities arise.

We designed this platform – named The Digital Cement Open Innovation – to connect employees, suppliers and other companies, government agencies, startups, investment funds, research centers and universities in search of targeted, agile and lower-cost proposals to meet the demands of our company. “We want to find solutions that we wouldn’t be able to find if we were to follow a traditional model. Our goal is to break down barriers to generate even more value to our business,” said Humberto Shida, general manager, Global IT. The first cycle was launched with seven needs linked to Industry 4.0.



In 2018, following the digitalization strategy of the procurement area, we will deploy two other marketplace modules. Supplier Information and Performance Management (SIPM) will replace the current supplier approval and management system. Contract Management (CM) will enable the creation, management, and signing of digital contracts, eliminating the need for printed contracts.

At VCNA, Marketplace was also deployed in 2017, with an emphasis on the Electronic Catalog module. Through this system, users can place their requests directly on the portal in an experience similar to B2C e-commerce on the internet.

In 2018, the VCBR, VCNA and VCEAA procurement areas will start deploying the plan for the implementation of the modules in the three regions, to be completed by 2020



Our digital strategy covers all countries and focuses on post-sales relationships

The cycle was announced on a partner platform (100 Open Startup). We also have the support of the Brazilian Industrial Development Agency (ABDI). The results were:

- **107** startups applied;
- **410** reviews performed by 64 Votorantim Cimentos professionals;
- **12 startups** were selected in the first phase. In the next phase, seven startups continued in the program, each working on a proposed challenge

Some of the projects have already been 100% developed and are being deployed within the company. Others are still in a pilot phase. We now want to promote new cycles, with new thematic areas, simultaneously. In 2018, the open innovation platform will be deployed at VCEAA and subsequently at VCNA.

INNOVATION



Process automation and intelligent management enhance stability and safety

OPEN INNOVATION IN PRACTICE

As a result of one of the open innovation challenges, we are finalizing a digital land management project to use artificial intelligence technologies as a solution to monitor and manage our mineral, real estate and environmental assets. The expected benefit is to have periodic access to high-definition aerial imagery (satellite, drone, or other equipment) to enable viewing and analysis, and provide alerts of changes in these areas.

On another front, the same initiative has the potential to enhance the level of services we provide, by enabling us to visualize and trace the delivery of our products to our customers. Both applications are currently in a pilot phase.

Another new project is the use of a system of intelligent cameras that, among other benefits, will improve the security management of our units.

Automation Plan

Specifically with regard to Industry 4.0, in 2017 we started to work on an Automation and Information Master Plan, which, in a pilot phase carried out at the Rio Branco do Sul (PR) unit, mapped the challenges that must be overcome in pursuit of our designed ideal Votorantim Cimentos plant, at a global level. Through process automation and intelligent data management, we will be able to increase the stability of our operations and our productivity, while also improving our safety standards.

In executing the master plan, in 2017 we advanced our work in our Operational Command Center pilot-project in the São Paulo Complex, in Votorantim (SP). This center enables centralized monitoring of the Santa Helena and the Salto de Pirapora plants, which make up the São Paulo industrial complex.

DIFFERENTIATED AND MORE SUSTAINABLE PORTFOLIO

Another innovation front focuses on the continuous improvement of our portfolio. We deliver new products, solutions and formulations to the market, increasing the added value of our brands and customer loyalty, while also optimizing our production costs and demonstrating our commitment to minimizing impacts to the environment. In Brazil alone, the Quality and Research & Development area led 68 projects in 2017.

We monitor our cement production in Brazil through two key quality indicators – the Product Performance Index (IDP) and the Product Regularity Index (IRP). These indicators allow us to identify possible deviations between the quality required for each type of product and the actual post-production quality. These indicators evaluate product regularity and the characteristics that have the greatest impact on performance (such as slag content, onset, fineness and compressive strength), which are key factors to ensure customer satisfaction. When critical points are identified, the production unit develops action plans to address the deviation.

Quality indicators highlight characteristics that have a greater impact on product performance



Diversification

Alongside geographic diversification, portfolio diversification is an important driver to ensure the sustainability of our business. In 2017 we launched differentiated products – which increase the creation of value for Votorantim Cimentos – in several countries where we operate. Highlight include:

- **Contempra Cement, Canada** – After several years of investing in research and development, the Canadian construction industry, including our company, approved the regulation of Contempra cement, which has a lower percentage of clinker in its composition, resulting in an average decrease of 10% in CO₂ emissions compared to traditional cement. The regulation is valid in several Canadian provinces, including Ontario, where the approval took place in November. We are now intensifying negotiations to provide concrete made with Contempra cement to infrastructure projects of the local government and we are also promoting this new type of cement among our other customers – currently, approximately 20% of our customers have adopted the use of Contempra cement.

- **Oil Well Cement, Tunisia** – In 2017 we received a certification from the American Petroleum Institute (API) to produce a special type of cement used in oil pipelines (oil well cement) in our operation in Tunisia, Jbel Oust. Thanks to its physical and chemical properties, this type of cement has the ideal composition for the construction of wells, pipelines and platform support bases. This achievement reflects VC's commitment to quality as a way to increase our competitiveness, satisfy our customers, and better position our company in the Tunisian market and in oil producing countries in the Persian Gulf.

- **Goldcem, Turkey** – As a result of our efforts in research and development, our Sivas plant, in Turkey, started to produce a special type of cement to meet the specific needs of customers in the gold and base metals mining sectors. "Cement and lime are the most common types of binders used in gold heap leaching," explained Çağan Alpas, Commercial Director, VC Turkey. "Goldcem is the result of an intense R&D effort that resulted in a cement that reduces leaching time and provides maximum recovery and significant cost advantages, due to reduced lime use."

INNOVATION

- **Special mortars, Spain** – Our two new types of mortar enhance the range of our solutions to meet the needs of our customers and complement our resins and synthetic additives catalog. **Pulmor Latex:** A synthetic emulsion that, when mixed with water, improves the adhesion and the properties of mortar, such as resistance, waterproofing, cracking, elasticity and workability. **Pulmor IMP AL:** A liquid additive that comes in a 5-kg container, is free of chlorides, and provides waterproofing qualities to mortars and concrete. This results in less cracking, allowing walls to breathe and providing greater adhesion on common surfaces.
- **Hi-Mix Concrete, Brazil** – This new family of products includes four types of high-durability Engemix concrete that meet specific market demands and follow the new Performance Standards (NBR 15575). They are: Gigamix (concrete for use in high structural projects); Pisomix (concrete for use on floors with special characteristics); Adensamix (high-fluidity concrete with superior finish); and Cristalmix (self-healing and high-durability concrete)
- **New Votomassa mortars, Brazil** – To meet the specific demands of our customers, we launched different types of mortar, such as Votomassa Termoisolante and Votomassa Porcelanato Interno.
- **Flexible grouts, Brazil** – To complement our portfolio, we launched the Votomassa Flexible Grouts line, which is produced at our main mortar plant in Brazil, in Barueri (SP).
- **Liga para Massa Itaú, Brazil** – An additive mineral binder, which completes our portfolio of plasticizers, along with Cal Hidratada and Cal para Pintura Itaú.
- **Cal Fértil, Brazil** – Line of high-performance lime for agriculture.

Agricultural Inputs on the Rise

As part of what we call adjacent areas, it is worth highlighting the performance of the agricultural inputs segment, which, year after year, increases its contribution to our net revenue. Our main product in this segment is agricultural lime, which is used by the agricultural sector to enhance the productivity of soil. With a positive environmental footprint, agricultural lime is produced from materials resulting from mining at our cement production operations.

In 2017, our installed capacity grew more than 25% with the startup of the dedicated Ponte Alta plant, which is part of the Salto de Pirapora-Santa Helena industrial complex in São Paulo, and receives ore resulting from its cement operation. We also adapted production lines in the Nobres (MT) unit, and the mills of the Rio Branco do Sul (PR) plant.

This diversification strategy is already yielding results. In 2017 our customers increased by approximately 20% in the most recent crop year (2016-2017), which contributed to the increase in our market share – currently estimated at 10% of the national market. Together with leading academic institutions, external experts and costumers, we are now investing in agricultural solutions to increase the productivity of oilseeds such as palm and babassu, an activity that has similarities to some of the earliest moments in the company's history.

ADVANCES IN AGRICULTURAL INPUTS

- 11 plants in all regions of Brazil. The new Ponte Alta (SP) unit produced more than 280,000 tons in its first year of operation.
- 4.5 million tons installed capacity.
- Our growth in the agricultural inputs market reached approximately 30% in the last crop year.
- We are leaders in the agricultural lime market, with more than 3,700 customers – ranging from small producers to leaders in the agricultural segment.
- In the last harvest, we supplied 100% of the agricultural lime used by Citrosuco, which is part of the Votorantim S.A. holding.
- We also market agricultural lime produced by Nexa Resources (formerly Votorantim Metais), which is also part of the holding company.



VOTOMASSA AT CasaE

At the end of 2017, our Votomassa line of adhesive and basic mortars became part of the CasaE project, a showroom that was created in São Paulo by BASF and other companies to showcase innovative and sustainable building solutions. The showroom displays efficient solutions to increase the durability and energy efficiency of construction projects and the thermal and acoustic comfort of residents and users. Replacing mortar mixed on site (a mix of cement, lime, sand and water) by industrialized mortar (ready-mix mortar that only requires the addition of water) means reducing energy consumption, CO₂ emissions and water use.



Entrepreneurial Spirit

We foster the entrepreneurial and innovative spirit of our employees while seeking to strengthen their skills and senses of ownership and belonging.

In 2017, we promoted a new edition of the I9 VC Faz program in all operations in Brazil. It works as a large idea bank through which any employee who doesn't hold a formal leadership position can voluntarily contribute suggestions to make our business more efficient, simple, competitive and sustainable. The projects qualify for different phases in which they participate in rallies that foster competition among the best ideas. The finalists go to VC headquarters in São Paulo to participate in the Final VCBR Rally and be recognized by our CEO and other leaders. To be selected, an idea must be financially executable and follow a "see and act" methodology, in addition to being aligned with the strategic drivers of our business.

Our operation in India also launched a bank of ideas, which collected suggestions from employees to increase the plant's operational efficiency, reduce costs and improve the cleanliness and organization within our facilities. Among the ideas selected, those focused on environmental awareness stood out. One example was the suggestion that resulted in the implementation of selective garbage collection in the unit, enabling improved waste disposal and recycling.

In Spain, we identified 80 customer-focused ideas with potential to improve our products and services.



I9 VC FAZ

In 2017, 239 ideas were received, involving the participation of 452 employees.

Of the total number of ideas, 219 have already been implemented. The units/areas that received the most suggestions were: Supply Chain and Logistics (92), Cement Business – South Regional Office (48) and Southeast Regional Cement Office (34).

PEOPLE



THE TEAM THAT MAKES OUR BUSINESS LAST

GRI 103-1, 103-2, 103-3



Our People and Management area works to establish a global model that ensures an increasingly broad and comprehensive vision of who our employees are – always respecting unique cultural and geographic characteristics – and what role they may play in the future of our company.

We are also more attentive to transformations in the work environment, especially those caused by the arrival in the job market of a new generation of professionals who seek to work on projects that add value to their lives, who wish to be constantly challenged to leave their comfort zone, and who favor less hierarchical models, while, as a business, maintaining our focus

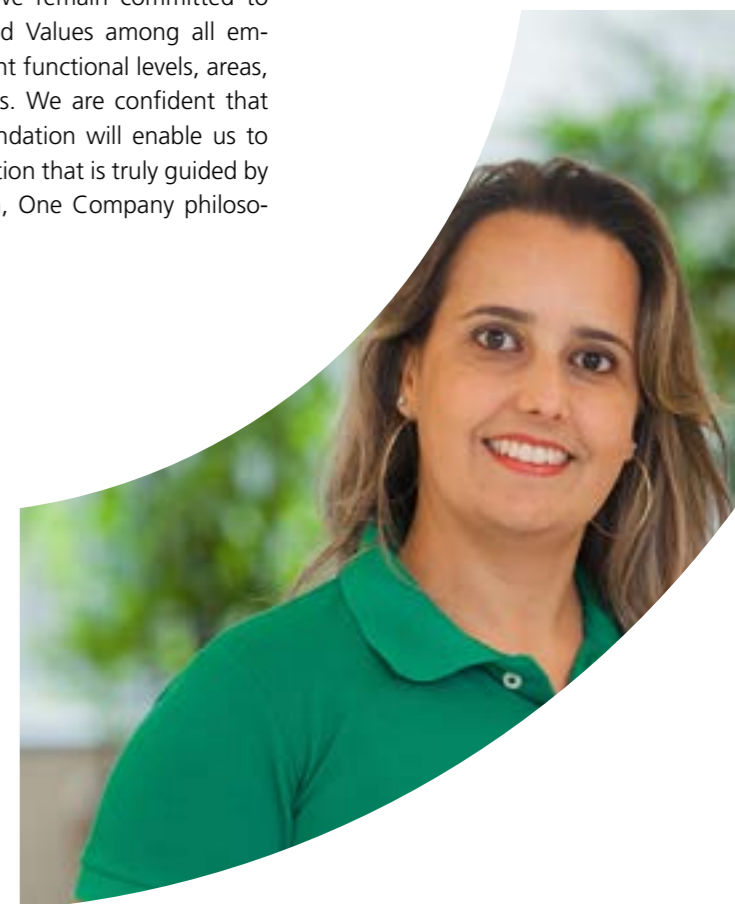


The solidification of our culture will enable us to achieve strategic differentiation and business continuity

on performance and operational excellence.

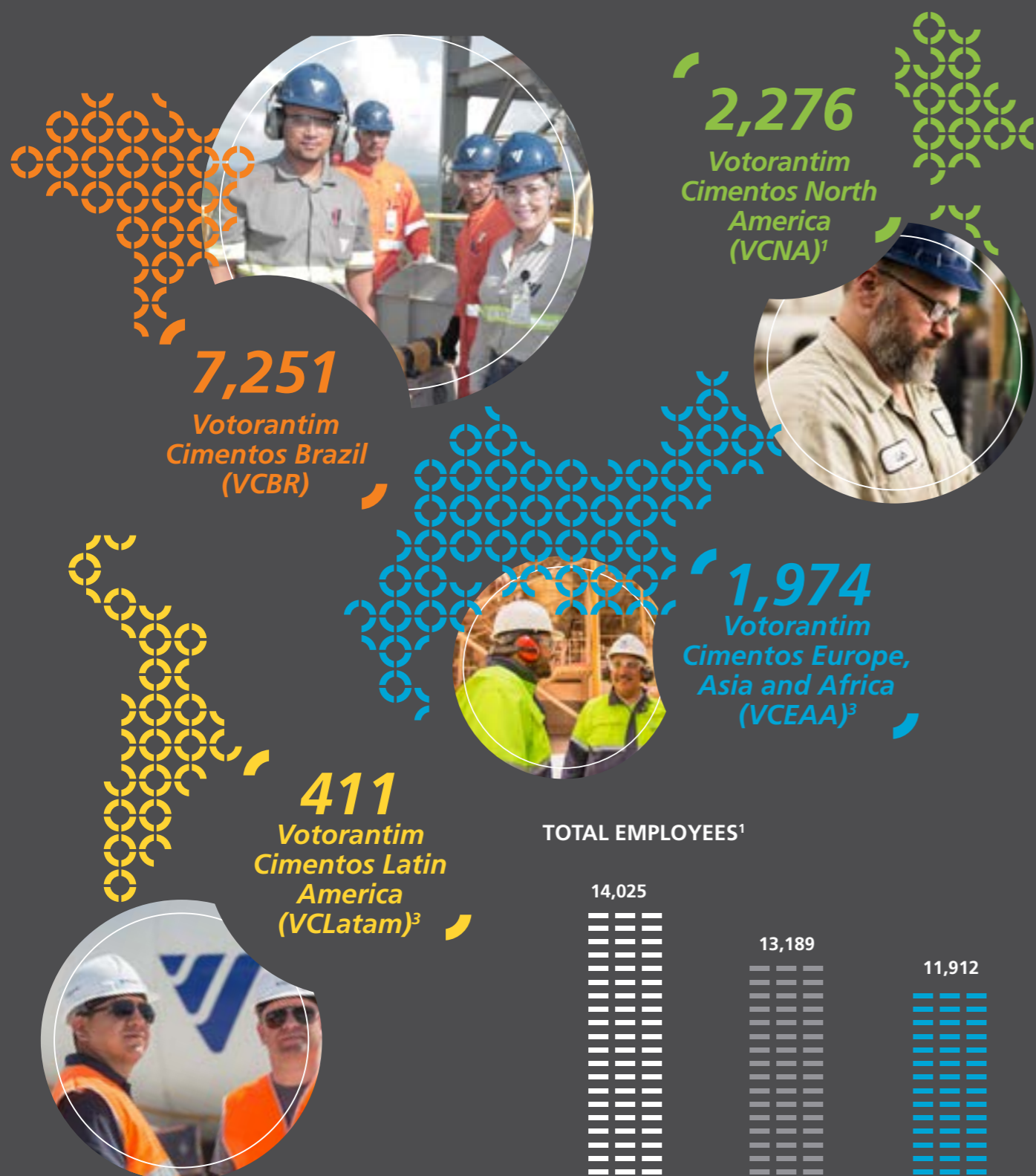
“We have begun to transform ourselves into a lighter and more agile company. We want to ensure different experiences to our employees. We increased Open Dialogue between leaders and their teams, the internal movement between areas, and the development of projects that involve multidisciplinary teams. We see this as a great way to increase and maintain the attractiveness of our company,” says Cristiano Brasil, global director, People and Management.

At the same time, we believe that the solidification of our culture is essential for achieving strategic differentiation and ensuring business continuity, so we remain committed to promoting our Beliefs and Values among all employees across different functional levels, areas, units and countries. We are confident that this cultural foundation will enable us to be an organization that is truly guided by our One Team, One Company philosophy.



PEOPLE

TOTAL EMPLOYEES BY REGION GRI 102-8



¹ Canada and United States.
² India, Morocco, Spain, Tunisia and Turkey. In 2017, we stopped operating in China.
³ Argentina, Bolivia, Peru and Uruguay. In 2017, we stopped operating in Chile.

¹ Considers only company employees. Before 2016, includes VC China employees

TALENT AND DEVELOPMENT

GRI 103-1, 103-2, 103-3

We are constantly cultivating the talents of our people by following a structured career development process. In 2017, we sought to standardize our new global approach to professional development, to better position employees as the drivers of their professional growth. Using the motto “VC dono da sua carreira” (“Owning your Career at VC”), we emphasized self-development and positioned the People and Management team, direct managers and professionals who act as mentors as a comprehensive support network to assist employees in determining their own development goals.

We want to evolve from a vision focused on professional growth through promotions to one that prioritizes the different experiences that employees can have access to at Votorantim Cimentos. This process is enhanced by moves between areas, international experiences and leadership in projects in different areas. The impact of this approach can be demonstrated by the high internal recruitment rate at VCBR, which was 90.6% in 2017, with 106 changes in leadership positions.



Internal recruitment at VCBR reached 90.6%, with 106 leadership positions filled internally

Evaluation

The development of our employees is enhanced by the process of our performance reviews, which include individual development plans (IDPs). As part of the Votorantim Development System (SDV, for its initials in Portuguese), our performance and career management process includes analysis performed in all countries where we operate and is divided into Leadership, Professional and Operational (technical and operational positions) levels.

In 2017, this analysis included 25% of our employees (of which 79% were men and 21% were women). GRI 404-3

The results, which include self-assessment and evaluation by the manager or team members (in the case of leaders) and are discussed by global and local executive committees, also guide decisions about position eliminations and promotions. At the conclusion of each SDV cycle, the People and Management area updates the company’s global succession map to help ensure business continuity over time.

Promoting Empowerment

Empowered People is one of the pillars of our strategy and defines how we are working to ensure that VC team stays motivated to go beyond and do things differently and better. In 2017, we continued to emphasize the development of leaders. Our objective is to ensure that employees in leadership positions are increasingly prepared to respond proactively and efficiently to the challenges of managing people and processes in the markets where we operate. We also want them to continuously contribute to the development of their teams, which include many of the future leaders of Votorantim Cimentos.

PEOPLE

Accelerated Careers

We offer young professionals different career development opportunities, through structured programs in all regions. The highlights of 2017 were:

Brazil – Two programs stood out in 2017: Jovem VC, for all of our trainees, and Potenciar, aimed at accelerating the development of trainees and young employees who have been with the company for more than a year. The 320 trainees who were part of Jovem VC experienced face-to-face and online training, performance evaluations with their managers, meetings with leadership and a final challenge where they were divided into groups and encouraged to design and implement a strategic project. Potenciar, which extends to all Votorantim S.A. holding companies, has an average duration of 14 months, includes face-to-face training, business games and a high-impact business project. In 2017, six VCBR trainees and six VCBR young employees were part of the program.

North America – Attracting the next generation of talent and succession planning are key priorities in the region, where a significant percentage of the workforce is aging. In 2017, employees over the age of 50 made up 15.3% of the total VCNA workforce. Two strategies we use to attract new talent are an internship program, which had 53 participants in 2017, and an initiative that offered scholarships to 10 young students. Among other initiatives to attract young professionals was showcasing the Votorantim Cimentos brand at the 2017 Engineers for a Sustainable World conference held in Austin, Texas, and at the NEW.Mech Workshop held by the Massachusetts Institute of Technology (MIT). By discussing how Votorantim Cimentos is committed to technological innovation and the sustainable development of the industry, we seek to strengthen our connection with a new generation of professionals, who will become future leaders. We also promote Short-Term and Long-Term International Assignment (STIA and LTIA) programs, hosting several employees from VCBR and VCEAA who work in different functions in the United States and Canada units for a period of time.

Morocco – To meet our demand for skilled labor in Morocco, in 2017 we created the Vivier project, through which we selected approximately eight recently graduated high school students and provided them with a trainee program, including mentoring sessions with our leadership and the opportunity to work in different areas of our company. By the end of the program, 80% of the young professionals were hired.

Focused Training

Throughout 2017, we invested R\$ 11.9 million in employee training and development projects. We achieved an average of 45 hours of training per employee.

In our operations in the United States and Canada, for example, we invested in online training and launched a program focused on financial management, offered to employees who did not work directly with finance but wanted to learn more about this aspect of managing a business.

At VCNA, certain high-potential employees are selected to participate in a “Corporate University” training program to strengthen their business skills and promote teamwork across different operating units. This activity complements online training aligned with the Votorantim Beliefs and the technical and safety-focused training provided to all workers.

In Turkey, we prioritized technical training to ensure that the startup of the new Sivas industrial unit, in March, was as successful as possible, including the visit of several Turkish employees to the Salto de Pirapora unit, which uses a similar operating system to that installed in Sivas.

In Spain, we launched a new online training platform with diversified e-learning content (oral and written communication, productive work meetings, English and computer skills, and other specific technical topics). To facilitate access, we use a flexible platform that can be accessed via tablets and smartphones.

In Brazil, we maintain our programs in three levels:

Young professionals are offered structured career development programs



THE CHALLENGE OF DIVERSITY

GRI 103-1, 103-2, 103-3

For us, diversity has a broad meaning and includes cultural, ethnic-racial and gender differences. Our focus is on understanding the unique aspects of each country where we operate and the different groups within those countries, so that we can better determine where and how we can best act. In addition to recognizing group differences, we also celebrate and encourage individual differences.

Our global employee base is dynamic and varied, as demonstrated by the number of employees of different nationalities who now work across different VC operations around the world. The number of employees temporarily moving to another country is also increasing. Employees are often selected to lead or be part of a specific project, gain valuable experience and then return to their country of origin to bring that knowledge back with them. In 2017 we had 28 employees working outside their home countries, including short-term assignments (up to 12 months), long-term assignments (12 to 36 months) and relocations. As in previous years, we continue to invest in international assignments.

Given that the construction industry is historically made up of a majority of male professionals, gender diversity remains one of our key challenges. We ended 2017 with a workforce composed of 13% women, including 13.0% in leadership positions. Women occupy 16.5% of our leadership positions in Brazil, 7.8% in North America, and 10.9% at VCEAA.

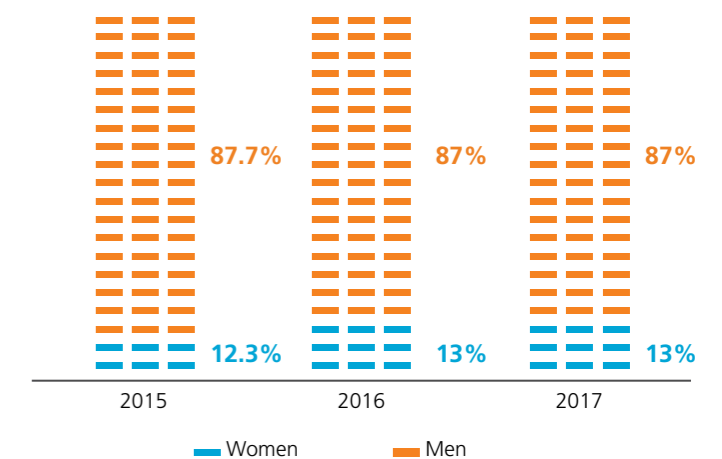
In Spain, we have a protocol to prevent and deal with situations of gender violence both inside and outside of work. The company is committed to promote a culture of equality, eliminating sociocultural stereotypes about women and men.

For the past six years VCNA has had a Diversity Council, which works on different fronts to promote diversity (race and gender) inside and outside the company. This initiative includes, for example, events organized by different ethnic groups and members of the LGBT community, and a newsletter that features stories of diversity at VC.

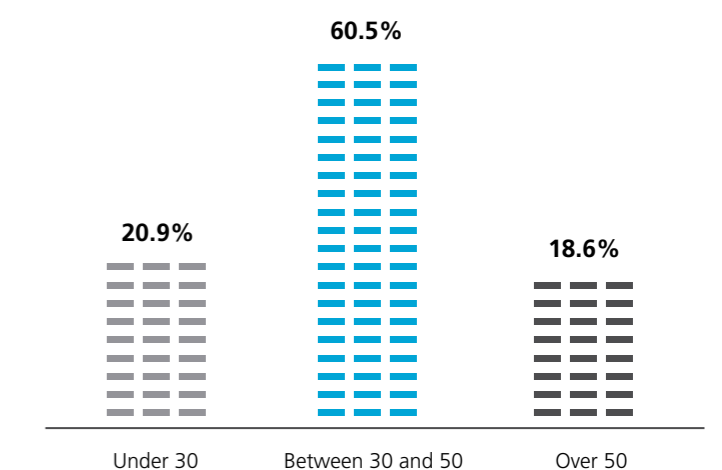
An initiative that resulted from the region’s Diversity Council was the Women’s Leadership Network, through which women employees at VCNA educate and support one another and come up with projects that support the goals of the network, including bringing information about our industry to young girls and women entering the job market.

The Network conducts lectures, training and mentoring sessions that are held at monthly meetings. The group is also active inside the company. In 2017, the Network conducted a seminar on women’s empowerment with the participation of approximately 80 female employees.

Employees by gender GRI 405-1



Employees by age group GRI 405-1



PEOPLE

**SEJA VC MESMO
("BE YOURSELF")**

In the Brazilian offices, we launched the Seja vc Mesmo na VC ("Be Yourself at VC") campaign, which relaxed the dress code for people working in corporate areas. The idea is simple: to ensure that employees are free to dress as they want and can choose to wear more comfortable clothes. The initiative is aligned with the goal of transforming us into a lighter company. Despite the short time that the campaign has been in place, informal feedback has shown that the new dress code has had a positive impact on the satisfaction and engagement of our employees.



DIVERSITY DAY AT VCNA

For the past three years, VCNA has organized Diversity Day, a date for employees to celebrate differences and share their own cultural perspectives, as well as personal interests and inspirations. The goal is to encourage them to be more open to differences – and to each other – promoting a dynamic, high-performance culture that will propel our business forward.

Include to Transform

We understand that inclusion is part of our effort to drive diversity in the company. In 2017, we continued the work of the internal multidisciplinary group formed in the previous year and launched the Include to Transform program in all Brazilian operations.

One of our first projects, aimed at facilitating access of professionals with disabilities into our company and promoting their development, was an internal survey to better understand the challenge within our own operations. The survey also aimed to measure our employees' understanding of related issues and help educate on sensitivity and build a more inclusive, high-performance culture.

We also promoted awareness through lectures in some of our units and supported the PCD Apprentice program, which recruits young professionals with disabilities to work in our operations. Through this program, we help to ensure that people with disabilities have the same growth and career advancement opportunities as other employees.

CLIMATE AND ENGAGEMENT GRI 102-44

We want to provide a safe and challenging environment where talented employees want to be part of our long-term success. To this end, we recognize the importance of periodically monitoring the levels of satisfaction and commitment of those who make this vision a reality, every day. Our climate survey is conducted globally every two years by an independent institute. In Brazil, the 2017 results showed a total favorability level of 77% – a three-percentage-point increase in comparison to our last survey, in 2015.

Despite the effects of the Brazilian macroeconomic crisis that forced us to reduce our headcount in 2016 and 2017, our engagement level went up three percentage points (from 76% to 79% in 2017) and we achieved record participation – 91% of our employees participated in the survey. Noticing interest in the work they perform, seeing the application of the Group's Values and Beliefs and believing in the future of Votorantim Cimentos were some of the areas that showed the most improvement in comparison to the previous survey. A more assertive communication process and the detailing of our strategy were initiatives that contributed to this evolution.

In our operations in the United States and Canada, our total favorability and engagement levels increased one percentage point compared to the previous survey, which is relevant when we consider that the sale of our assets in Florida and California was occurring simultaneously to the survey. The overall favorability index was 61%, but we saw a significant difference between our salaried (75%) and hourly (58%) employees, which make up approximately 70% of our workforce at VCNA. Hourly employees are governed by union agreements that do not always allow the implementation of programs that were referenced in the climate survey. On a positive note, we saw significant improvement in many areas where we have focused our action plans, such as Values, Ethics, Compensation and Diversity.

In our operations in Europe, Asia and Africa the participation rate achieved was 94%. We saw a three-point reduction in the level of total favorability, which was 65%, and a five-point reduction in the level of engagement – despite India and Tunisia presenting a seven percentage-point increase in engagement in comparison to the previous survey. Our operations in Morocco, Spain and Tunisia have the lowest turnover rates within the company, which also indicates employee satisfaction with regard to work environment, relationship with leadership, safety and compensation, among other issues. In the region, understanding the work contribution of employees to the Company and the awareness about safety rated the highest, while the application of the Company Values and receiving an honest information from the company had the most improvement.

Open Dialogue encourages the active participation of employees and improves the organizational climate.



PEOPLE

BROAD AND PURPOSEFUL COMMUNICATION GRI 102-43

Guided by our Purpose – Life is made to last – we view lasting relationships as a fundamental driver for the long-term success of our company and our entire value chain. And to really build relevant and transparent partnerships, we invest in and emphasize one of our core Beliefs, Open Dialogue, which must be put into practice by all of our employees on a daily basis, and also strengthens our connections with other stakeholders.

Because communications encompass everything from strategic alignment to routine interactions, we believe that it must be continually improved. That is why, in 2017, we continued our effort, started in the previous year, to emphasize direct communication between our leaders and their teams. “Our leaders are the main axis of trust between our company and employees, while our communication channels reinforce concepts that have been communicated by them,” explains Viviane Mansi, Global Corporate Communications and Institutional Brand manager. “Open and transparent communication is essential at all times, whether we have good news or bad news to share. This is how we make people understand more about our business and become even more committed to our strategic objectives,” she says.

Supporting Tools

More and more, the Corporate Communications area consolidates its role as a facilitator, supporting the different areas in their communication needs and their interaction with internal and external stakeholders, and especially, assisting company leaders in their efforts to stay close to their teams. In 2017, some of the tools that supported the leadership were:



We also maintain practices and host events that promote Open Dialogue:

Promoting Our Legacy

Throughout 2017, we worked to promote our purpose in all of our units, connecting to employees and encouraging them to become true ambassadors of our message to build lasting legacies outside of VC as well.

In North America, for example, we worked to promote the connection between our purpose and the various activities conducted in alignment with our strategic pillars, by soliciting inputs from the different business areas. The goal was to show how our purpose is connected to our strategies and reflected in the work that we perform on a daily basis and to further drive engagement. In all VCEAA countries, we collected several stories and shared them with our employees throughout the year.

In Brazil, stories are shared in-house and through our official social media accounts. The results of our climate survey reflect the effectiveness of this work: in Brazil, 83% of the respondents said that they agree or totally agree that our Purpose – Life is made to last – helps to generate awareness of our impact.

Listening Exercise

To validate our internal communications strategy, we conducted a listening exercise in the first half of 2017, covering 12 Brazilian units. We organized 23 focus groups with 195 employees and conducted individual interviews with 47 managers. From there, we created an action plan with initiatives to enhance our leadership communication and update our communication channels.

WORKPLACE

What is it? VC's internal corporate network

How does it work? Employees create profiles and can post, like, comment and share content related to the company. The interactions happen within thematic groups and enable communications across the organization, with no geographic boundaries. With the exception of only two groups, all others are open for participation and interaction of employees – without moderation or need for approval – ensuring freedom of expression and agility, and reinforcing our culture of Open Dialogue.

Objectives: Expedite the communication process, strengthen the relationship and dialogue between leaders and employees, and increase the sense of belonging, the collaboration, the process of innovation and the engagement of the teams.

Participation: The platform was launched in November 2017, and 3,000 profiles were created in the first week.

To encourage participation: Our global CEO recorded a welcome video, which was released at the launch of the platform and viewed by more than 2,500 employees. A safety campaign featuring videos produced by the employees themselves deserves part of the credit for the engagement we measured.

Reach: Workplace is available to all employees in Brazil who choose to join. Global implementation will start in the first half of 2018. The goal is to have 100% of the company using this tool as soon as possible.

We identified, for example, the need to enhance local communications. We took the opportunity to strengthen the network of employees who act as communication agents within the units. We also identified a perception that our communications via corporate TV were not being effective, which resulted in us eliminating this channel from our headquarters and some units, focusing on initiatives that were more relevant and beneficial to the company. The study was also used as a basis for structuring Workplace, VC's internal corporate network (see below).

We believe that Meritocracy is key to our long-term success as the way to ensure that employees are fairly compensated for the work they perform and the results they deliver. In 2017, VCNA organized Compensation Roadshows: face-to-face sessions to explain how total compensation is determined and how additional items – short-term incentives, health benefits, pensions, paid vacations and tuition reimbursement, among others – make up their total compensation. These

meetings and other informational programs were organized to address the areas of interest identified in our ongoing employee feedback process.

SUSTAINABILITY

IMPROVING OUR LEGACY



Health and safety, ethics and compliance, eco-efficiency and innovation, and community engagement are the four drivers of our 2020 Sustainability Commitments, which, in turn, are broken down into a series of targets. They attest to our commitment to the company's future and the ecosystem that surrounds us, including our different stakeholders and the environment. In 2017 we continued to work toward our targets, despite the recession and slow recovery of the economy in Brazil, which is still our largest market.

During the year, our sustainability governance model gained momentum. In May, we created the Sustainability area, a global structure that improves the integration of the initiatives that are already being carried out in the areas of Health and Safety, Environment, Social Responsibility, Eco-efficiency and Energy Management, in all regions where we operate.

In Brazil, we also created the Sustainability Committee, a forum through which the company's senior leadership can monitor the progress and challenges of all themes related to sustainability. The plan for 2018 is to expand the work of the committee, making it global. The committee reinforces the alignment of our sustainability model with our business strategy, which has sustainable practices as one of its pillars. Our Sustainability Commitments are also considered in the performance appraisals of our leaders and influence their variable compensation.

In addition to advancing sustainability management internally, we strive to exert a positive influence externally. Within the Cement Sustainability Initiative (CSI), we facilitated, together with other CSI member companies, discussions on local impact, encompassing three initiatives: social indicators, biodiversity and mercury emissions.

And, alongside industry peers, we are defining the material indicators that will help all member companies to more effectively measure their performance on issues related to the development of the communities of which we are part, diversity, and professional qualification, among others.

ALIGNMENT WITH THE SUSTAINABLE DEVELOPMENT GOALS

Through the CSI, we are enhancing our understanding of the Sustainable Development Goals (SDGs), which were launched by the United Nations as an agenda to be met by countries and companies by 2030. As we move forward, our objective is to identify which of the 17 goals, comprising 169 targets, are the most relevant for our industry.

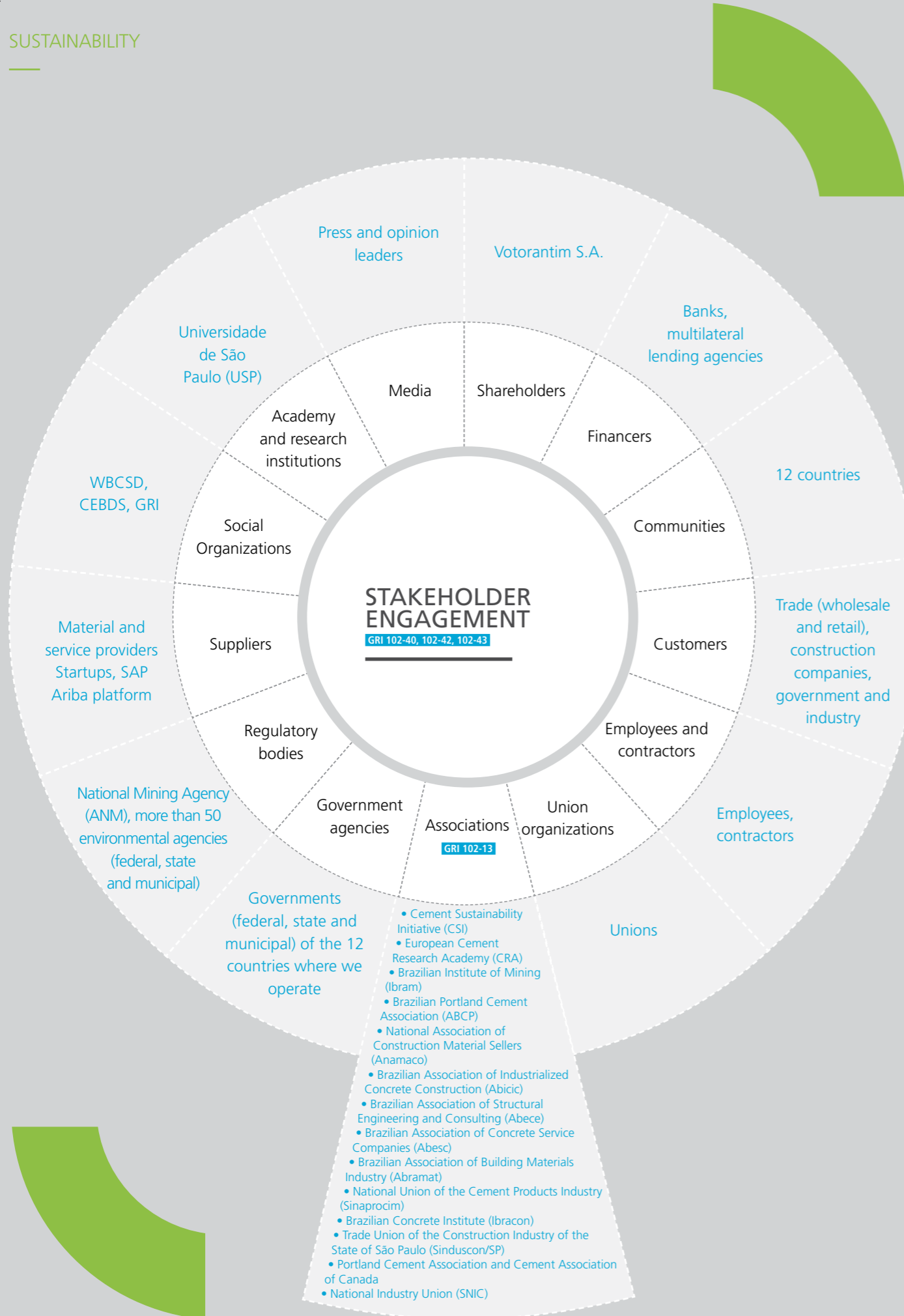
The goals and their respective targets were the theme of the 11th annual CSI meeting held in September in New Delhi, India. We participated in different panels and also had the opportunity to promote some of our initiatives in our booth.



Our global structure reinforces our governance model on sustainability in all of our regions

Together with the CSI, we are defining indicators that will help manage issues related to local impacts

SUSTAINABILITY



2020 SUSTAINABILITY COMMITMENTS

2020 Targets	Key achievements in 2017	Status/Progress
Health and Safety: • Ensure the effective adoption of the Global Health and Safety Policy and the Life Saving Rules.	Conduct internal audits and training for employees, with the engagement of the entire company leadership. Focus on learning from accidents and on support of awareness campaigns for safe behavior. Emphasis on safe driving, with guidance for both the company transportation departments and contracted transportation companies.	⊖
Health and Safety: • Promote healthy and safe working conditions for all employees.	The frequency rate among company employees was 1.09 in 2017 (1.06 in 2016). Reinforcement with new training on safe behavior and implementation and adaptation of safety measures, mainly related to critical risk activities and aligned with legislation.	⊖
Health and Safety: • Achieve lost-time accident rate lower than 0.4 among direct employees.	The total number of LTI accidents dropped from 39 in 2016 to 36 in 2017. However, due to the slower pace of activities and consequently the lower number of hours worked, the frequency rate increased from 0.94 in 2016 to 1.15 in 2017.	⊖
Logistics and Supply Chain: • Implement standards that ensure sustainability in our logistics and supply chain operations.	100% of suppliers registered and approved through negotiations conducted by Procurement in Brazil.	⊕
Supply Chain Standards: • Promote sustainable supply chain standards through our business units.	100% of suppliers registered and approved through negotiations conducted by Procurement in Brazil.	⊕
Ethical Business Practices: • Ensure that all our operations are run in an ethical manner and in accordance with our Votorantim Cimentos Code of Conduct.	The updated Code of Conduct was promoted globally, through communications from the regional CEOs. In March 2017, critical compliance policies (Conflict of Interest, Donations and Sponsorship, and Gifts, Entertainment and Hospitality) were approved in Brazil.	⊕
Environmental Policies: • Ensure the implementation of our Global Environmental Policy and Green Rules.	Votorantim Cimentos' global environmental policy has been implemented in all regions.	⊕
Sustainable Products and Services: • Promote the launch of new sustainable products, solutions, services and innovations. • Achieve a clinker/cement factor ¹ of 72%.	We reached a 76.6% ratio at the end of 2017.	⊖
Renewable Fuels: • Reach a 30% level of non-fossil fuels use in our cement plants.	We achieved a 14.6% rate in the use of alternative fuels in clinker kilns.	⊗
CO₂ Emissions: • Reduzir nossas emissões de CO ₂ por tonelada de cimento em 25% em comparação com os níveis de 1990.	We ended the year with a 17% reduction compared to 1990. This result is a reflection of our investments in co-processing and the increase in the use of additives in cement production.	⊖
Emissions: • Reduce emissions of particulate matter, NOx, and SOx, to 65g, 1,950g and 750g per ton of clinker, respectively.	In 2017, emissions of particulate matter, NOx and SOx were 64, 2,178 and 661 g/t clinker, respectively. To reduce emissions, the company has outlined an investment plan for the coming years that includes replacing electrostatic filters with sleeve filters and emission abatement systems. ²	⊕ MP ⊕ SOx ⊖ NOx
Water: • Implement a water management plan in our business units located in areas of scarcity.	We focused on Measure 1 of the Water Roadmap: Water flow mapping and measurement in all VCBR units. Based on this survey, we consolidated the indicators of total water consumption and effluents for all cement units in Brazil.	⊗
Biodiversity: • Ensure that all our mines have a plan for the rehabilitation and management of local biodiversity and for sensitive regions.	We decided on initiatives of the Biodiversity Management Plan, which was detailed in 10% of sites with a score higher than the average on overlapping areas of high biodiversity. The Nobres (MT) unit prepared a management plan for the Cachoeira do Tombador Natural Heritage Reserves, which is pending the deferral of the state environmental agency to be implemented.	⊗
Communities: • Ensure the implementation of community engagement plans in communities in which we operate that have a high degree of social vulnerability.	External social investment of R\$ 11.7 million (US\$ 3.5 million) in 435 initiatives in VCBR, VCNA and VCEAA. Engagement plans in all locations of high or very high social vulnerability in which we operate in Brazil. For this, we consider the Social Vulnerability Index (Ipea / Brazil), a local diagnosis, the strategic relevance of the operation, and the evaluation of social impacts and risks.	⊖

¹ Clinker/cement factor = ratio of total clinker consumed to total cement or cementitious product produced.

² Amounts consider only VCBR, VCNA and VCEAA (Brazil, North America, Europe, Asia and Africa)

⊕ Completed ⊖ On schedule ⊗ Behind schedule

SUSTAINABILITY

OUR POSITIVE AND NEGATIVE IMPACTS

We mapped out the impacts generated by the different products and services of Votorantim Cimentos. See the impacts related to each Company activity and how they fit into a broader context involving Company risks, trends, strategies and goals.

IMPACTS BY ACTIVITY



SUSTAINABILITY

SAFETY AS A PRIORITY

GRI 103-1, 103-2, 103-3

Safety is a value for us. In 2016, there were five fatalities involving outsourced employees (two in Brazil and three in operations in Europe, Asia and Africa). Despite all our efforts, in 2017 we recorded one on-site fatality with an employee in North America. In addition, we had another eight off-site fatalities (outside our industrial facilities) in Brazil – six with contractors and two with third parties.

Acting quickly to reinforce our management in this area, we created the Global Safety Committee, which brings together representatives from operations in Brazil, North America and Europe, Asia and Africa to monitor our safety performance and outline the principles of our global safety management system that will start to be deployed in 2018.

Our goal is to set specific targets for each region in which we operate, using the performance of industry peers that are part of the Cement Sustainability Initiative as a benchmark.

The global accident rate indicator increased slightly as a result of the Brazilian crisis, which once again caused a reduction in the total man-hours worked in our units in the country. However, we remain committed to achieving a global accident rate of less than 0.4 by 2020. According to the CSI, the cement industry average in 2016 was 1.18 for direct employees, representing a 12% reduction compared to 2015.

Indicators

In 2017, Votorantim Cimentos employees and contractors worked more than 49 million hours, with relatively few accidents (a total of 54 lost-time incidents globally). Our goal is zero accidents or injuries and for everyone to return home safely at the end of the day. Unfortunately, there was an increase in the number of fatalities in 2017, which occurred in the following situations:

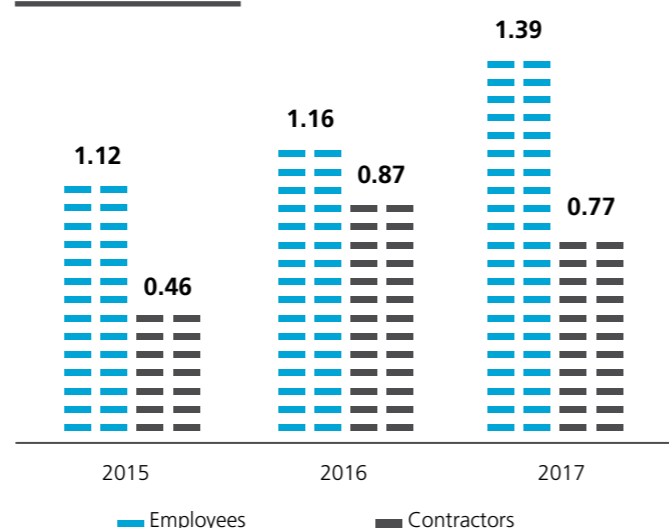
Employees: One accident resulting from the fall of a metal part (mechanical lock).

Contractors: All six incidents were consequences of traffic accidents that occurred outside of our facilities.

Third party: Two traffic accidents outside of our facilities.



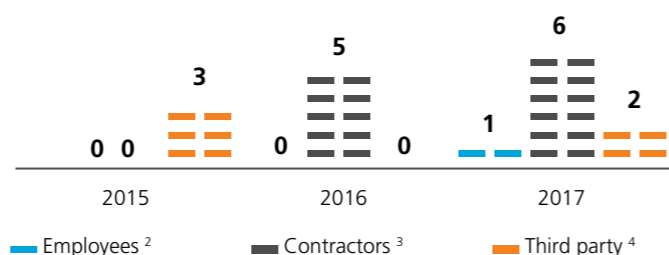
VC GLOBAL
(LTI FREQUENCY RATE)¹



¹LTI (Lost-time Injury) considers incidents that result from a lost-time accident (employee or third party). The LTI rate is calculated as follows:

$$\frac{\text{number of lost-time accidents in the accounting period}}{\text{total number of man-hours worked in the accounting period}} \times 1,000,000$$

NUMBER OF FATALITIES¹



¹Considers occurrences inside and outside cement, aggregates and concrete facilities.
²**Employees:** Workers hired directly by any company of which we have management control and those in which there are management technical agreements.
³**Contractors:** All independent professionals, from companies or associations, hired to perform a specific job.
⁴**Third parties:** Customers and visitors who travel to company facilities, and drivers or passengers involved in accidents with the general population occurring outside our facilities.



SAFETY DRIVERS



SUSTAINABILITY



compared to 2016 and some locations have achieved 10 consecutive years without a lost-time injury. Nevertheless, there was a fatal accident with an employee of our concrete unit in Chicago (United States). To help prevent major accidents or fatalities, safety has been closely monitored in the region and by our Executive Committee, which has the challenge of fostering a culture of safety and addressing this issue with all company employees and contractors. VCNA has stepped up the practice of reporting near misses (accidents that could have happened but didn't) to gain more understanding of potential hazards and implement preventative measures before an accident takes place.

We also have an automated alert system, promote communication initiatives and maintain an active Safety Committee. The committee promotes further empowerment of our employees, encouraging them to reflect on risks and think about prevention and control measures. In 2018, our focus will include safety awareness with contracted drivers. We also prioritized awareness amongst the employees who have been hired to work on the expansion project of the Charlevoix unit, in the United States.

Europe, Asia and Africa

In 2017, we continued to improve safety performance across all operations in Europe, Asia and Africa and saw a reduction in our accident frequency rate from 1.06 in 2016 to 0.63 among company employees, and from 0.87 to 0.47 among contractors. Our effort to solidify our safety culture and safe behavior was even recognized externally. In India, we received the 2017 Exceed Award in the Cement Industry category, which honors health and safety practices at work.

In Spain, in addition to investing in technology to increase the overall safety of employees in our different operations – including practical training in confined spaces and work at height, physical separation of vehicles and pedestrians and protection systems in operations with alternative fuels – we implemented the DocuCAE online platform, which centralized the management of documents from our service providers. The platform allows us to identify issues of compliance with legal requirements and with our health and safety standards, and to take the necessary corrective measures. Currently, in our operation in Spain, we maintain approximately 800 partner companies, including more than 3,500 workers and more than 1,300 vehicles.

Latin America

We have implemented several accident prevention programs in Bolivia, such as preliminary risk analysis for 100% of field activities. With this, our safety indicators have evolved positively.

FOCUS ON SAFE BEHAVIOR

In May, we held our fourth Global Safety Day, which was centered around the theme “Choose Safety”, to reinforce once again the importance of everyone adopting safe behaviors inside and outside the company. A few specific initiatives were implemented in our regions:

Brazil

We promoted a broad, multi-phase communication campaign, drawing attention to issues such as safe motorcycle riding, hand protection, ergonomics, and alcohol and drugs, among others.

We concluded the first cycle of the Safety Sponsors (“Padrinhos de Segurança”) program, which was created in 2016 and focuses on the effective involvement of leadership to inculcate a culture of safety among company employees and contractors. In 2017, five corporate directors and managers acted as safety ambassadors in units that are not directly under their responsibility.

In anticipation of the execution of our Compliance with Regulatory Norms Plan (NRs), we invested approximately R\$ 50 million in 2017 to update our facilities and train our employees. The plan covers the standards regarding work at heights and protection of equipment and electrical installations, among others.

North America

In 2017, we saw a 23% reduction in the number of accidents

Global Safety Day promoted activities to reinforce the adoption of safe behaviors

ENVIRONMENTAL RESPONSIBILITY

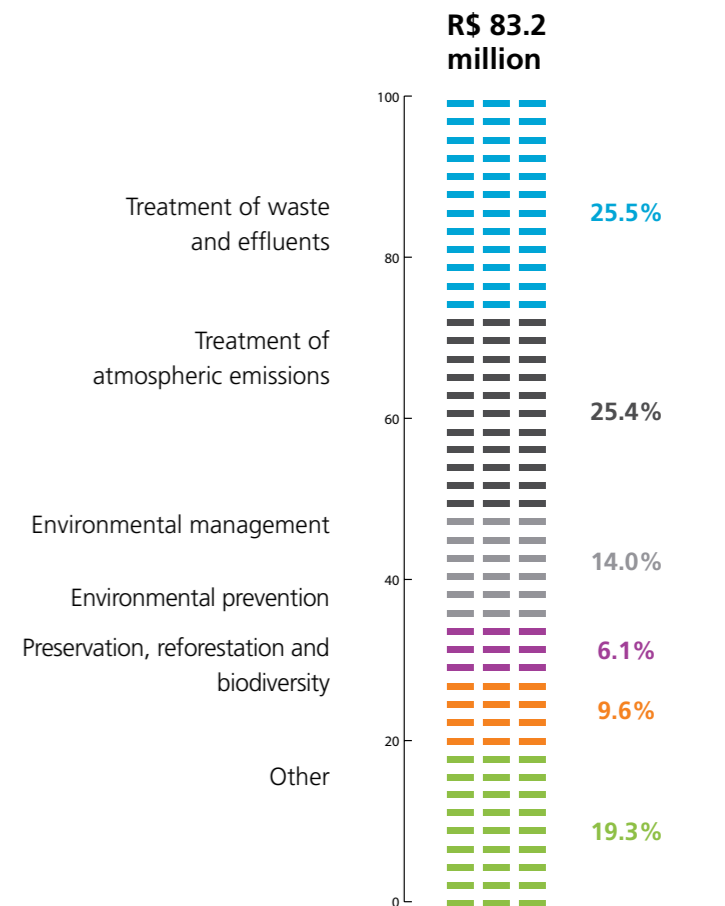
GRI 103-2, 103-3



Our environmental performance is guided by our Global Environment Policy, a document that drives our work on many of our 2020 Sustainability Commitments. We also have the Green Rules: ten standards that make this policy tangible and guide the performance of all areas and the behavior of all employees regarding environmental issues. GRI 102-11

In 2017, we allocated R\$ 83.2 million to environmental investments and expenses, most of it for the treatment of waste and effluents (25.5%) and atmospheric emissions (25.4%).

ENVIRONMENTAL INVESTMENTS AND EXPENSES



SUSTAINABILITY



CLIMATE CHANGE IN FOCUS

In 2017, we deepened the discussions on what should be our industry position with regard to greenhouse gas emissions (GHG). Cement is a mixture of several materials, including clinker, which results from burning ground limestone and clay, a process that requires significant amounts of electricity and thermal energy. [GRI 103-1](#)

Clinker production accounts for 90% of the energy used in our operations and for 90% of our CO₂ emissions, which means that clinker is at the core of our environmental impact. Therefore, we work to consistently reduce the percentage of clinker used in cement and carry out complementary initiatives to adopt clean and renewable energy in our plants, while optimizing consumption through more efficient systems.

CEMENT TECHNOLOGY ROADMAP BRAZIL

Together with the Cement Sustainability Initiative (CSI), in 2017 we engaged in discussions on the development of the Cement Technology Roadmap - Brazil, which, with technical support from the academy, will express our commitment to limit industry emissions. The document will be launched in 2018 and will detail the positioning of approximately 85% of the companies that operate in the Brazilian market.

PERFORMANCE IN EMISSIONS

Our greenhouse gas (GHG) emissions inventory uses the CSI methodology to measure emissions from our cement plants. In our concrete, aggregates, mortar and adjacent products units, we use the GHG Protocol methodology. Both inventories consider 1990 as the baseline year. [GRI 103-2, 103-3](#)

As a result of the different initiatives to improve our company's environmental footprint, our CO₂ emissions were 17% lower than the baseline year level of 763 kg of CO₂ per ton of cement, bringing us closer to our 2020 target, which requires an overall reduction of 25%. At VC Spain, which is already part of the European Union's commitment to reduce CO₂ emissions by 25% by 2020, we are raising our investments to increasingly replace petroleum coke for alternative fuels (read more in Eco-efficiency).

We also monitor our emissions of particulate matter, sulfur oxide (SOx) and nitrogen oxide (NOx), which corresponded respectively to 62 g, 638 and 2,166 g/ton of clinker, a 6.4%, 5.0% and -7.6% evolution compared to the levels of the previous year. From 2017 to 2018, we will invest more than R\$ 20 million to re-adjust the filters installed in our units in Brazil that control the emission of particulate matter.

In Spain, we are already complying with an industry regulation that limits NOx emissions per ton of clinker to 500 mg/Nm³ (equivalent to 1,100 g), thanks to a non-selective catalytic reduction system, a reaction that decreases NOx emissions. In Turkey, this new regulation enters into effect in 2018 and the new Sivas plant is already generating lower than expected nitrogen oxide levels.



MICROALGAE IN CARBON CAPTURE

In Canada, we continue to develop a carbon sequestration project using microalgae that transform captured carbon into biomass. Subsequently, the resulting biomass can be used as a source for essential oils, protein for animal feed or potentially even as fuel in the company's kilns. The project, run by Pond Technologies in partnership with Votorantim Cimentos, is being tested at our St Marys unit. At the end of 2017, the Ontario government reaffirmed its commitment to invest resources in the project, which may enable us to help scale the technology and extend it to other companies, enabling them to lower their carbon footprint.

Focus on Recycling

In 2017, three mortar units in Brazil started projects to increase recycling. In the Cajamar and Barueri units, in São Paulo, a new contractor began to use the waste collected from sweeping in the production of sand, pebbles and recycled paper, among other materials. In 2017, 471 tons of sweeping waste and another 76,9 tons of waste from mortar and non-hazardous additives were recycled. In the Limeira unit, also in São Paulo, we have been creating decorative pieces using the waste generated in laboratory analyses of our finished products. The pieces are donated to social institutions, which can later sell them to raise money.

Additives and Eco-efficiency [GRI 103-1, 103-2, 103-3](#)

Our efforts to increase the use of additives make our products more eco-efficient and ensure our progress toward our commitments to reduce clinker content in the cement we produce, thereby minimizing our emissions and other impacts of our production process. We use eco-efficiency as a metric to limit the environmental impacts from our activities, ensuring continuous improvement and our adaptation to the low-carbon economy, in which sustainability is an increasingly important competitiveness factor for our company.

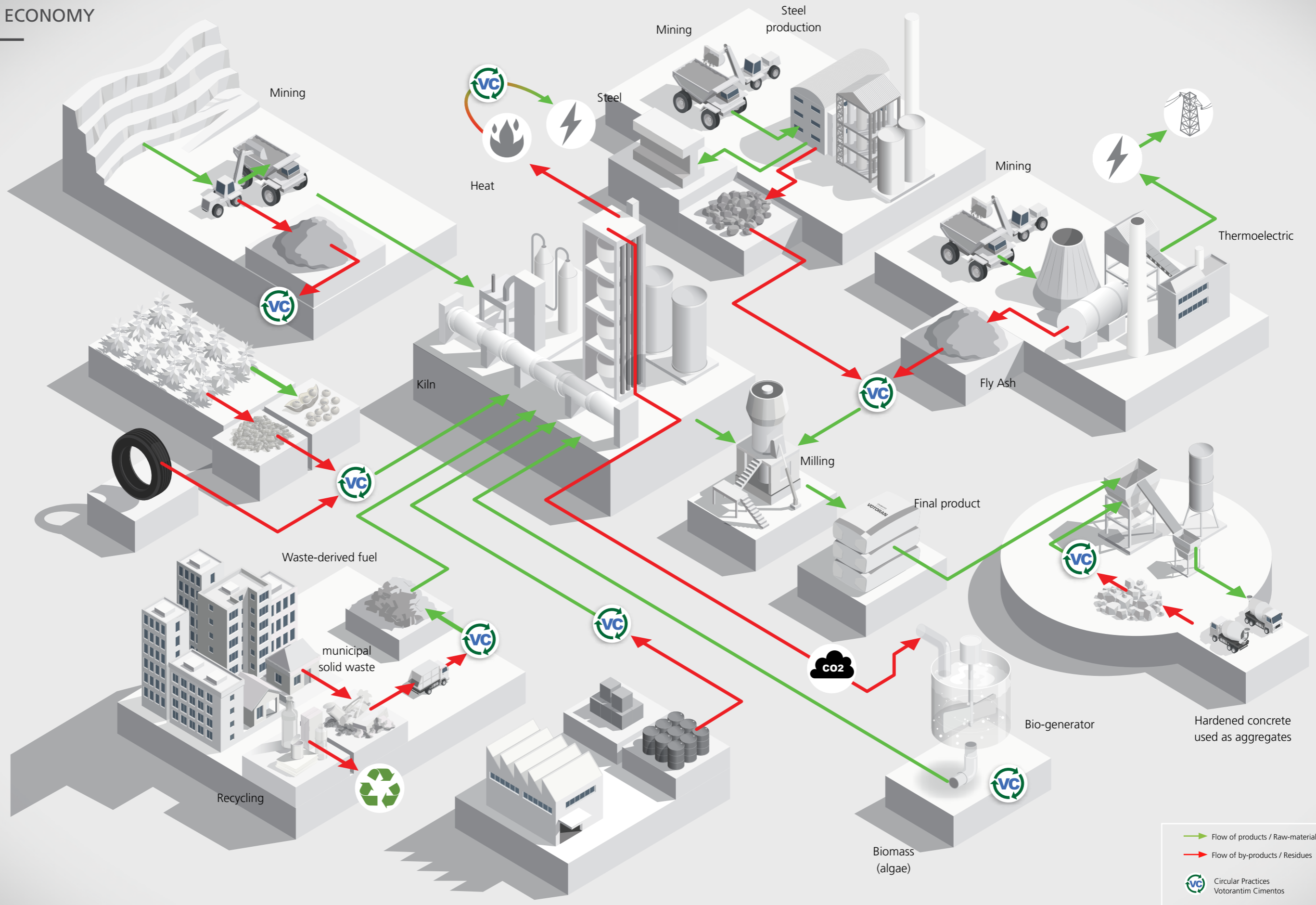
In 2017, we continued our strategy of launching products with an increasingly higher clinker substitution by cementitious materials, such as pozzolans and industrial slag and ashes. These cementitious materials maintain the quality of our portfolio and contribute to increase the life of our limestone mines. In addition, by using in our cement kilns alternative fuels generated from waste – including from other industries – that would otherwise become environmental liabilities, we foster circular economy and reduce the impact of our process.

The clinker/cement factor is still strongly influenced by the geographical location of our units and the proximity or distance to limestone mines or regions that are rich in cementitious. This is the case of Morocco, where our clinker/cement ratio is approximately 65%, lower than our target.



SUSTAINABILITY

CIRCULAR ECONOMY



SUSTAINABILITY



CLINKER/CEMENT FACTOR

Globally, we reduced our clinker/cement factor from 77.0% in 2016 to 76.6% in 2017, bringing us closer to our 2020 target, which sets the clinker/cement factor for our operations at 72%.

Expansion

Also in Spain, our Cour Córdoba unit currently has a 45% rate of co-processing of Refuse-Derived Fuel (RDF) generated at the plant. In Turkey, we resumed tire co-processing and also started using solid waste. In India, we adopted a technology that mixes tailings from the production cycle – such as TDI tar (toluene di-isocyanate, which is a residue from the fertilizer industry in the region) – to pet coke to feed our cement kilns. Starting in 2018, co-processing is expected to gain even more momentum in the three countries, with the potential to be expanded to our operations in Morocco, Turkey and Tunisia.

After receiving an environmental license in 2016 to co-process wood chips, we began processing plastics that would be otherwise sent to landfills in our cement kilns at our unit in Bowmanville, Ontario. The provincial government authorized us to carry out co-processing on a pilot basis and we are now seeking permanent certification. New equipment being incorporated into the modernization of our unit in Charlevoix, Michigan is also designed to better monitor and mitigate the emissions and environmental impacts of the plant. Our total co-processing volume in North America in 2017 was 1.1% (6.4 million ton).

Throughout the year, we also expanded our energy efficiency projects, especially in our operations in Europe, Asia and Africa. In Brazil, our investments totaled R\$ 10 million, including the installation of solar panels in all of our own distribution centers and also a few of our partners'. We also invested resources to replace the electric motors of some of our cement kilns with more efficient equipment.

We concluded the installation of a 9 MV-power Waste Heat Recovery (WHR) system at our unit in Tunisia, which started operating in October 2017 and has enough capacity to produce almost 30% of the electricity used in the unit. We also completed the retrofit of our WHR system in our unit in India, increasing its reliability and electricity production.

CO-PROCESSING AND ENERGY EFFICIENCY GRI 103-1, 103-2, 103-3

In 2017, we increased co-processing in Brazil's operations by approximately five percentage points, reaching a total annual rate of 25%. By using waste from other industries, we also foster a circular economy, providing adequate disposal of the tons of waste that would otherwise be sent to landfills.

Currently, the cement kilns of our Brazilian operations already use a variety of biomass materials as sources of fuel, such as rice hulls, wood chips, sawdust and açai pits. In addition to biomasses, we also utilize used tires and other types of industrial waste, always in accordance with safety and quality regulations and in compliance with legislation. We are evaluating the feasibility of processing refuse-derived fuel (RDF) as a source of thermal energy for our kilns.

Co-processing is already a priority in the other countries where we operate. "In March, with the reopening of our Oural plant in Spain, we obtained an environmental license that allowed us to resume clinker production in the unit using solid and liquid industrial waste. From March to December, our co-processing rate reached 12%, with a few peaks of 20%," said Ana G. Aledo, who is a Sustainability and Environment technician at VC Spain.

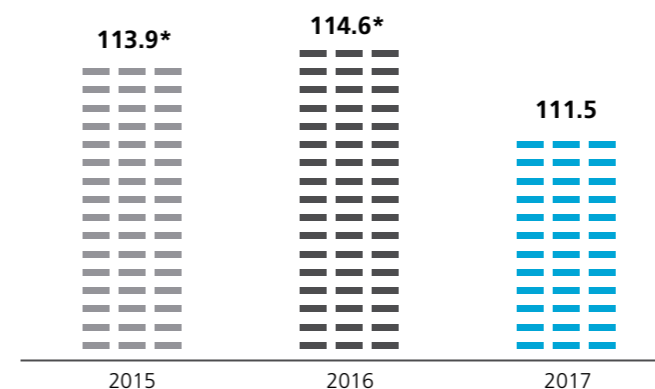
ENERGY CONSUMPTION

In 2017, our energy consumption in cement production was 88,668,333 GJ, which we count as within the organization, and 8,070,810 GJ in activities outside the organization, from sources over which we have no control (e.g., fuel from out-sourced trucks).

In 2017, 25% of the energy we consumed in Brazil came from renewable sources (e.g., hydroelectric), compared to 32% in the previous year. This amount corresponded to an energy intensity of 109,4 kWh/ton of cementitious product, compared with 114.1 kWh/t in 2016.

ENERGY INTENSITY (GLOBAL)

(kWh/t per cementitious product) GRI 302-3



* Adjusted data



In 2017, 25% of the fuels used in all of our global operations were alternative fuels.

We closed 2017 with co-processing operations in 29 cement kilns in the world. In total, we consumed 676,800 tons of biomass, tires and waste, resulting in a reduction of 554,800 tons of CO₂ emissions.

SUSTAINABILITY

TALENT IN SUSTAINABILITY AWARDS

Votorantim Cimentos was recognized in the Votorantim S.A. Talent in Sustainability Awards, which fosters a culture of sustainability by recognizing projects developed by Votorantim S.A. companies in four categories: Environment, Productivity and Efficiency, Social Engagement, and Health and Safety.

In 2017, our strategy to reduce energy consumption in our units in Europe, Asia and Africa was the winner in the Environment category. The strategy includes the adoption of Waste Heat Recovery (WHR) technology, which uses the heat released in our production processes to generate part of the electricity consumed in our units. In Tunisia, we built a new WHR facility with the prospect of reducing our energy consumption by 30%, and in India, the WHR technology was revamped to generate savings of 20%.

The strategy also includes the recently signed contract by VC Morocco to acquire wind energy. On average, 85% of the energy used in the unit now comes from this source. The results at our VCEAA operations include:

- 25% of the electricity needs in the region will be supplied by 100% renewable sources;
- Reduction of more than 455 tons of CO₂ emissions per day.



WATER MANAGEMENT GRI 103-1, 103-2, 103-3

The issue of water consumption and effluent generation is part of our latest materiality matrix. Although the volume of water consumed in our operations is not as high as in companies in other industries, we recognize the impact we generate, especially in the application of one of our products: concrete. We also consistently address this issue with our employees to encourage conscious water consumption.

This topic becomes more relevant when we consider that a few of the regions where we operate are located in areas of water scarcity. Given this situation, one of our Sustainability Commitments is the development of water management plans in such places.

Our water consumption reporting is supported by the following methodologies and tools developed by the CSI: the Protocol for Water Reporting, which guides the collection of necessary data in cement, aggregate and concrete plants; the Guidance on Good Practices for Water Accounting, which includes measurement methods, terminology and guidelines for water accounting; and the Global Water Tool for the cement sector, which serves as support for consumption reporting, as well as other information on measuring and recording water use data.

In 2017, our work was focused on the standardization of water measurement in our industrial units – 50% of our cement plants in Brazil have water measuring equipment. The goal is to obtain more precise figures regarding our impact, and subsequently advance the other initiatives included in our plan.

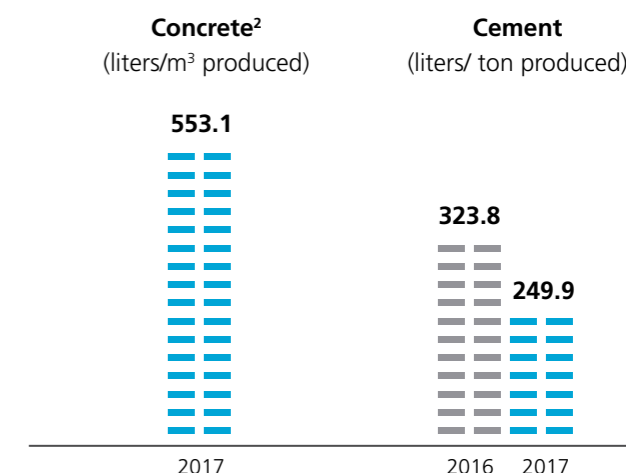
In our operations in Europe, Asia and Africa, our focus is on regions of water scarcity – six of our plants are located in areas

of water stress – where several initiatives to optimize water consumption are under way.

At VC Tunisia, for example, one of our projects was to identify water leakage points and work to restore pipelines, thus reducing consumption. We also implemented an initiative to improve the sanitation system and wastewater management.

Like all our newest plants, in the new Sivas unit, in Turkey, the cooling towers use an air cooling system, which also significantly reduces the water consumed during our operations.

SPECIFIC WATER CONSUMPTION¹



¹ Includes only Brazilian operations
² The increase in the amount of water used in 2017 was not a reality, but rather a reflection of the greater accuracy of reporting by the units.

GOOD PRACTICE IN CANTAGALO

Water efficiency initiatives have earned the Cantagalo plant (RJ, Brazil) recognition in the 2017 ANA Award, from the National Water Agency, for our contribution to good water management practices among medium and large companies. By reusing 100% of the effluents generated in its operation, in addition to rainwater, the unit reduced water collection for cement production. From 2013, when the system was implemented, to 2017, water collection went from 42,988 m³ to 4,653 m³, an 89.2% decrease. Specific water consumption reached an average of 92.7 l / t in 2017, compared to an industry average of 100 l / t.

SUSTAINABILITY



PRESERVATION OF BIODIVERSITY AND SOIL GRI 103-1, 103-2, 103-3

We remain committed to the conservation of biodiversity areas located in our properties. We adopted specific guidelines from the Cement Sustainability Initiative (CSI) and are aligned with the goals set out in the Convention on Biological Diversity in Nagoya (Japan).

In 2017, we identified that 20 of our 99 active mines – or 20% – were located in areas of high biodiversity: 12 out of 40 (30%) in Brazil, 6 out of 28 (21%) in North America and 2 out of 31 (6%) Europe, Asia and Africa. During the year, we revised the methodology to calculate this indicator, creating a score that varies according to three attributes of the high-biodiversity area: the importance of the area, the percentage of overlap (considering a radius of 5 kilometers from the center of the mine) and the distance of the area. GRI 304-1

Areas that score above average need a Biodiversity Management Plan (BMP). We have established plans for two out of our 20 overlapping areas (10%). In addition, we have set a standard for all units that require BMPs to develop and finalize projects by 2020. GRI MM2

Legacy

In addition to our initiatives to manage the impacts of our mining activity, we want to go further and effectively leave a legacy for future generations. Following the territorial mapping of our Laranjeiras (SE) unit, based on the methodology of the Sustainable Land Management Plan (SLMP), we identified the opportunity to create a 2.5 km ecological trail. We are now awaiting environmental approval to establish the trail. The goal is to promote tourism, share the management of the area with the community, and even generate income to improve the town's economy.

In Ribeirão Grande (SP), where we also conducted a natural heritage survey, we are waiting for the unit to resume its activities (which have been temporarily suspended) to develop a land management plan. In 2017, this methodology was taken to the Sobradinho (DF) unit, where we initiated a survey of the property's assets.

Cave Conservation

A land management plan was also developed for our Oural unit, in Spain, and will contribute to the conservation of Cova Eirós, a cave with high archaeological and paleontological value. The goal is to develop a more robust land management and biodiversity conservation plan, including initiatives to promote tourism and environmental awareness, one of VC Spain's priorities. We have been working to raise awareness among the population living near our units through the planting of seedlings and the collection of garbage in areas of high environmental value.

The development of the Sustainable Land Management Plans is the result of the technical partnership we have with the Brazilian Society of Speleology (SBE) and the Atlantic Forest Biosphere Reserve (RBMA). In 2017, we launched the description of the methodology in English. We also presented the methodology to the CSI working group on local impacts and on the meeting of the Brazilian Business Council for Sustainable Development.

Other results of this technical partnership include the Guide on Good Environmental Practices in Limestone Mining in Karstic Areas and the support given to the Pró-Cavernas project, which, in its first phase, identified a large diversity of caves, systems and karstic features in our units.



Management of Soil Impact

We currently have plans for mine closure and rehabilitation in 89.6% of our operations in all regions where Votorantim Cimentos operates. In North America, for several years we have been working on the rehabilitation of areas near our Aggregates units, going beyond our legal obligations. We have two main projects, one of which is focused on soil recovery through rotational cultivation of crops, such as corn and soybeans, covering a total area of about 9,000 hectares. The second initiative included the creation of a lake and a subsequent partnership with a local producer to farm and market trout. The fish farm also led to the recovery of nutrients in the lake, which enabled the regrowth of water vegetation. GRI 103-2, 103-3



PRESERVING THE ATLANTIC FOREST

In December, we received the "Empresa Amiga da Mata Atlântica" seal, granted by the Atlantic Forest Biosphere Reserve (RBMA), an organization that integrates our technical partnership with the Brazilian Society of Speleology. We were one of the first five companies to receive the certification, which will be granted to organizations that maintain projects and initiatives for the preservation of biodiversity, especially in the Atlantic Forest, and the development of local communities.

SUSTAINABILITY



SOCIAL PERFORMANCE: PROMOTING LOCAL DEVELOPMENT



One of the drivers of our Sustainability Strategy is community engagement, through which we aim to promote local dialogue and relationships with communities to perpetuate the positive legacy of Votorantim Cimentos in the regions where we operate.

The main focus of our social performance is to support local development and community empowerment. We look for opportunities in our value chain to generate long-term value for our stakeholders, while evaluating impacts and risks and promoting a culture of sustainability among all employees.

Our work is aligned with the model of the Votorantim Institute, the nucleus of social intelligence of Votorantim S.A. that deploys part of the amount we invest in the communities annually. One of our executives is a member of the Institute's Board of Directors. In 2017, we continued to perfect our social investment management model, enhancing the connection between our initiatives and the challenges, opportunities, evaluations and monitored impacts of our business.



We direct our external social investments to the support of initiatives in four areas: economic dynamism, human capital, social capital and institutional capital, each of them with well-defined objectives.

In 2017, we invested R\$ 11.7 million in 435 initiatives in 64 locations in Brazil, Canada, Morocco, Spain, Tunisia, Turkey and the United States. These initiatives include programs to promote local development, impact assessment, sponsorship and donations, covering 19.5% of our operations in the three regions (VCBR, VCNA and VCEAA). [GRI 413-1](#)

SOCIAL INVESTMENTS IN 2017		
Work areas	R\$ millions	% of the total
Human capital	2.6	21.9%
Institutional capital	1.0	8.6%
Social capital	3.6	30.5%
Economic dynamism	3.6	31.0%
Other	0.9	7.9%
Total	11.7	100%

Management

Our Social Responsibility department has a structured management model and now reports to our Sustainability area, which is part of the Technical department. Our initiatives are monitored through several mechanisms, including regular meetings with our local managers and annual reporting to the board directors and executives of our Global Executive Team (GET). [GRI 103-2, 103-3](#)

"In addition to our regional team dedicated to identifying challenges and opportunities, our social initiatives are driven by the commitment of more than 60 social responsibility facilitators. These are professionals from various areas of the company who also act as interlocutors between our units, partners, and the community and have the mission of transforming our social commitments and goals into reality," says Priscilla Alvarenga, global coordinator, Social Responsibility.

SUSTAINABILITY

Key Initiatives in Brazil

In 2017, we conducted 75 initiatives to promote local development and community engagement in 25 locations in Brazil – prioritizing cities with a high index of social vulnerability – which resulted in an investment of R\$ 8.4 million. The main projects developed during the year were.



Moradigna – São Paulo (SP): We started supporting this social program, which performs simple renovation projects at affordable prices in houses located in unhealthy, risky areas in São Paulo’s East Zone. In March 2017, we started to donate products from our portfolio (cement and mortar) to the initiative. In addition to improving the living conditions of a low-income population, the project develops skills that increase the qualification of the local workforce. In line with the company’s strategy, we drive brand recognition, which has an indirect and positive impact on our sales.



Babassu Project – Sobral (CE): We promote income generation and the creation of an inclusive business by using babassu as a source of energy in the cement kilns of our Sobral unit (CE). The project is fully aligned with our business strategy and our Sustainability Commitments, since it optimizes our plant’s efficiency, reduces our greenhouse gas emissions, increases the contracting of local suppliers, promotes the economic development of the region and increases the average income of the communities involved. In 2018, the initiative will be enhanced by joining ReDes, one of the programs developed with the support from the Votorantim Institute, the National Bank for Economic and Social Development (BNDES) and the Inter-American Development Bank (IDB).



Parceria Votorantim pela Educação (PVE) (“Partnership for Education”): In 2017, we supported seven projects within Parceria Votorantim pela Educação, an initiative of the Votorantim Institute to improve the quality of public education in Brazil. Of the total projects, two were implemented in the towns of Primavera and Capanema, in the state of Pará, as part of the Sustainable Primavera strategy, which promotes local socioeconomic development and was developed around the inauguration of our industrial unit, in 2016. As part of the initiatives that are planned to celebrate Votorantim’s centenary, in 2018 the PVE will reach 100 Brazilian towns where companies that are part of the Votorantim S.A. holding company operate. At Votorantim Cimentos, we will increase our efforts to take this program to other locations around Brazil.

Volunteering

We support volunteering initiatives among our employees, because we understand that volunteers are champions of social transformation in their communities. This practice strengthens trust and solidarity among citizens and creates opportunities to promote the development of society.

In 2017, we encouraged employee participation in the Volunteer Challenge, a healthy competition among employees and third parties of all Votorantim S.A. companies. Participants organize teams and select social organizations or schools in which to implement social initiatives that earn them points. In its third year, the Volunteer Challenge was aligned with the cause chosen to mark the centenary of Votorantim, to be celebrated in 2018: education.

In Votorantim Cimentos, we mobilized 500 volunteers and 1,089 guests from 21 Brazilian units, in addition to engaging 2,283 people in the communities – the largest number of participants among all of the Votorantim companies. We carried out 797 structural activities related to the Sustainable Development Goals (SDGs), which include the 2030 Global Agenda. SDG 7 – affordable and clean energy – was the theme of the largest number of initiatives, including the collection and replacement of incandescent light bulbs for energy efficient lamps, lectures and 45 campaigns on the conscious use of energy.

Our goal for 2018 is to establish our corporate volunteer strategy, engaging even more employees.



HIGHLIGHTS FROM THE VOLUNTEER CHALLENGE

- 1,589 employee and third-party volunteers
- 797 structural activities
- 2,804 interactive initiatives
- 84,531 items donated
- 5,837 hours of voluntary work
- 1,119 online volunteering initiatives



MOVOC

Another volunteering initiative created in 2017 brought together 12 trainees to contribute to the education of children and adolescents of the Coliseu Community, located near Votorantim Cimentos’ Corporate Center, in São Paulo. They are part of the MOVOC project, which seeks to build a legacy of support for education through after-school reinforcement classes in mathematics, benefiting children in situations of socioeconomic vulnerability.

The community has about 800 people, 160 of whom are children and adolescents. The project stands out mainly because of the collaboration among child guardians and community members in the decision-making process.

EXTERNAL RECOGNITION

The 23rd Fiesp Award for Environmental Merit, promoted by the Federation of Industries of the State of São Paulo (Fiesp) recognized the Community Council of Salto do Pirapora, in São Paulo, in the scope, penetration and mobilization potential category. The council was created in 2013 with the support of Votorantim Cimentos to promote local development through community engagement

In another recognition in 2017, the Vidal Ramos unit in Santa Catarina received the Social Responsibility certification granted by the Legislative Assembly of Santa Catarina.

SUSTAINABILITY

GLOBAL SOCIAL STRATEGY

We remain committed to the challenge of developing our Global Social Responsibility Strategy, which will be aligned with the 17 Sustainable Development Goals defined by the United Nations in 2015, as well as with the CSI indicators for local impact and the unique characteristics and challenges of each region where we operate.

Our commitment is to increase the positive impact of our operations, while respecting the local culture and ensuring the alignment of local community challenges and our business strategy. This led us, in 2016 and 2017, to map the initiatives that are already underway in the other regions where we operate, with the goal of making public all of the social initiatives of Votorantim Cimentos globally.

Another part of our process to design our global strategy is the identification and implementation of the social impact indicators of the Cement Sustainability Initiative (CSI), which brings together the 24 largest cement producers in the world. In 2018, Votorantim Cimentos will assume the vice-presidency of the CSI.

In 2017, we allocated R\$ 625,000 to 146 community-based initiatives, sponsorships and donations in our U.S. and Canadian operations, and R\$ 2.7 million towards 214 initiatives of community relations, government relations, donations and sponsorships in our operations in Europe, Asia and Africa.

In Spain, we have been supporting the Open Doors project for several years to welcome community members, including students, into our Toral unit. Divided into groups, visitors take a tour of our facilities and learn more about our production processes and our history. Approximately 600 people visited the unit in 2017. Similar initiatives are in place in our units in Tunisia and Morocco.

We have similar community engagement activities in North America, such as volunteering initiatives by our employees. One example was our participation in a bicycle marathon organized by a group of people in Toronto, Canada, including VCNA employees, to raised funds for cancer research.

Another relationship initiative to increase the community awareness of our operations is the presence of our trucks (concrete mixers) in local events. We participated in 27 events throughout the year, inviting participants, especially young people, to check out the inside of our trucks and learn about our processes and products. As part of our projects to promote health and well-being, we customized fleet trucks to display a message on cancer prevention. We also sponsored the expansion of a major hospital, in Charlevoix, Michigan, contributing to the quality of healthcare for the community surrounding one of our major locations.



LOCAL DEVELOPMENT IN YACUSES, BOLIVIA

The inauguration of our unit in Yacuses, Bolivia, was supported by a local development plan that included investments to improve the health and sanitation infrastructure, education, and local employability. In 2017, we created a Local Development committee to encourage community engagement and participation and enhance our social license to operate. We also improved our integrated social performance by involving government, community and local partners. With its inauguration scheduled for 2019, our new unit in San Luis, Argentina, has been using the Yacuses model to develop its local development plan.

EXTERNAL COMMUNICATIONS FRONTS

To showcase all the work that Votorantim Cimentos performs and our institutional and brand positioning, we have an external communications strategy that includes a platform of relationships with the media and influencers, a crisis management process and a training program for our key spokespeople (both at a corporate and operations level).

In December 2017, we launched the KeyMsg Votorantim app, which offers content and key messages for our leaders in Brazil, ensuring the alignment of our speech and effective and transparent communication with our different stakeholders, such as representatives of public agencies, the media and the community.

During the year, 2,068 positive news articles about our company appeared in the media. Out of this total, 358 addressed our commitment to sustainability, whether giving visibility to our advances in eco-efficiency and the environment or highlighting the impact of our social projects. In Spain, more than 900 news articles about Votorantim Cimentos were published – 82% positive, 8% neutral and 10% negative.

PRESENCE IN SOCIAL MEDIA

In 2017, we increased our institutional exposure in social media and explored our social narratives and environmental innovations, as well as the solutions and products we offer to our customers. We established consistent dialogue with our stakeholders, strengthening relationships with social media influencers.

On LinkedIn, we shared stories of our employees and engaged in dialogue about professional enhancement. By the end of 2017, we had 160,000 followers on the platform. On Facebook, we increased our number of followers from 2,100 at the beginning of the year to 47,000 in December 2017; our posts averaged 3 million views. On Instagram, we jumped from 6,000 to 11,000 followers, focusing mainly on construction and design ideas.

More than showing positive growth figures, our focus was on relationships and open dialogue. We talked about our advances, achievements, and commitments, but we were very attentive to hear the impact of our actions and how we can improve our performance.



ABOUT THIS REPORT

GRI 102-46

Following an integrated approach, 15 topics guided the selection of the content of our 2017 Integrated Report, as well as the selection of indicators that we monitored and reported in the document, according to the “core option” of the GRI Standards, of the Global Reporting Initiative (GRI). These topics were defined as a result of a materiality review that followed the guidelines of the International Integrated Reporting Council (IIRC) and the GRI. They are aligned with Votorantim Cimentos’ future strategy and our 2020 Sustainability Commitments, and therefore are part of our everyday business management.

This annual report covers the period between January 1 and December 31, 2017. The previous edition, relating to the year 2016, was published in March 2017. The financial information follows the International Financial Reporting Standards (IFRS) and the socio-environmental standards follow the guidelines of the Cement Sustainability Initiative (CSI) and quality standards and certifications. Comprehensive responses to the GRI standard content are included in the GRI Supplement, which is part of this publication. [GRI 102-52, 102-50, 102-51](#)

This document details how each material topic, highlighted according to its relevance, relates to the IIRC capitals, the Global Compact and the Sustainable Development Goals (SDGs), a global agenda launched in 2015 by the United Nations. There are 17 SDGs, covering 169 targets to be achieved by 2030, which should guide countries, companies and other actors in society toward building a more egalitarian and sustainable world.




PROCESS OF IDENTIFICATION OF THE MOST RELEVANT TOPICS






















- First materiality assessment conducted between 2013 and 2014.
- Update performed in 2016.
- Review included analysis of internal and sectoral documents; face-to-face interviews with senior leadership; individual interviews (by phone or e-mail) with external stakeholders (representatives of NGOs, communities, suppliers, government agencies, financial institutions, investors and sustainability specialists), and online surveys with employees and customers in the four regions in which the Company operates.
- Listening process included a total of 143 participants – 28 external and 115 internal.
- Final validation of the most relevant topics performed by the top leadership.



OUR MATERIAL TOPICS

GRI 102-44, 102-47, 103-1

Material topic	Related IIRC capital	Global Compact Principle	Related SDG
Occupational health and safety	Human capital	-	  
Business ethics and integrity	Social and relationship capital	10 - Businesses should work against corruption in all its forms, including extortion and bribery	
Climate change and GHG emissions	Natural capital	7 - Businesses should support a precautionary approach to environmental challenges 8 - Undertake initiatives to promote greater environmental responsibility	 
Customer relationship and recommendation	Social and relationship capital	-	
Economic performance	Financial capital	-	 
Relationship with the community	Social and relationship capital	1 - Businesses should support and respect the protection of internationally proclaimed human rights	     
Employee training and development	Human capital	6 - The elimination of discrimination in respect of employment and occupation.	 
Energy management	Natural capital	7 - Businesses should support a precautionary approach to environmental challenges 8 - Undertake initiatives to promote greater environmental responsibility 9 - Encourage the development and diffusion of environmentally friendly technologies	 
Innovation, research and development	Intellectual capital and manufactured capital	9 - Encourage the development and diffusion of environmentally friendly technologies	  

Material topic	Related IIRC capital	Global Compact Principle	Related SDG
Preservation of biodiversity	Capital natural	7 - Businesses should support a precautionary approach to environmental challenges 8 - Undertake initiatives to promote greater environmental responsibility	    
Air emissions (particulates, NOx and SOx)	Natural capital	7 - Businesses should support a precautionary approach to environmental challenges 8 - Undertake initiatives to promote greater environmental responsibility 9 - Encourage the development and diffusion of environmentally friendly technologies	 
Inclusive and sustainable construction	Intellectual capital and manufactured capital	9 - Encourage the development and diffusion of environmentally friendly technologies	  
Water and effluents management	Natural capital	7 - Businesses should support a precautionary approach to environmental challenges 8 - Undertake initiatives to promote greater environmental responsibility	   
Supply chain management	Social and relationship capital	2 - Make sure that they are not complicit in human rights abuses 8 - Undertake initiatives to promote greater environmental responsibility	 
Employment and labor relations	Human capital	3 - Businesses should uphold the freedom of association and the effective recognition of the right to collective bargaining 6 - The elimination of discrimination in respect of employment and occupation	    

EXTERNAL READERS

Judy is chief executive of Sancroft International, a London-based sustainable business consultancy. She has been involved with sustainability and corporate responsibility for over 25 years. Judy is also chair of the Global Sustainability Standards Board, the independent body responsible for setting sustainability reporting standards on behalf of the Global Reporting Initiative.

It is an honor to be invited to review and comment on Votorantim Cimentos' 2017 integrated report. The company has made significant efforts to be transparent, and to demonstrate the quality of its management and commitment to excellence – a fact which is all the more impressive given its status as a privately held company.

It is difficult to escape the extremely challenging economy in Brazil in the context of this report. The cement industry in general will perform in line with the local economic circumstances, and it is clear that the Brazilian portion of Votorantim Cimentos' business is no exception. How then does the company pursue its vision of sustainability while also delivering value for its customers, owners and employees alike?

Part of the answer lies in efficiency, which the company has pursued aggressively, part in innovation, which is also clearly in evidence in this integrated report. Both efficiency and innovation agendas, however, seem to lack a clear connection to the company's sustainability vision and strategy. I would like to see a stronger emphasis in the future on how sustainability adds value to the business – a notion at the very heart of integrated reporting.

The topic of safety is of very great importance for Votorantim Cimentos, and for the people who work for the company and its business partners. The high number of fatalities in 2017 is striking, as are the trends in accident frequency rate. This is well worth exploring further: what risks exist in the operations, and where do they arise? How has Votorantim Cimentos worked to understand and change behavior in ways that reduce risk and strengthen operational performance? A focus on process safety would add real value here, by identifying actions within the operating environment that support safety performance in the future, linking the workflow context with personal actions and behaviors. Leading companies in other sectors have made significant efforts to develop process safety management tools and indicators, which Votorantim Cimentos could benefit from.

Furthermore, the area of occupational health and safety has been undergoing a quiet revolution in the corporate world in

Judy Kuszewski



recent years. This transition has been characterized by a shift away from an exclusive focus on industrial diseases and accidents, relevant to certain jobs in high-risk situations. Employers increasingly recognize a far more holistic understanding of wellness, which encompasses not only the physical but also the mental, social and financial realms as well – and covering all jobs regardless of physical demands and hazardous conditions. I believe this shift is compelling for Votorantim Cimentos, all the more so because of the difficult trading conditions in Brazil. Life in general has become more precarious for many employees in Brazil, meaning the concept of holistic wellness is that much more urgent. The benefits to the company – in reduced risk, greater engagement and improved operational performance – can also be significant.

In a more general sense, I am keen to see more of Votorantim Cimentos' strategy for engaging employees – particularly in the current economic climate. While the company thankfully continues to enjoy high levels of employee commitment, this can be very difficult to maintain during periods of job losses. Employees often lose sight of what they value in a job, and how they can contribute to making it better, if they are worried about their job security.

The nature and scale of the company's sustainability risks presented in this report are, in general, clearer on the environmental side than on the social, economic and governance dimensions. I very much appreciate the detailed discussion of the company's anti-corruption management efforts, which have resulted in a favorable evaluation by the NGO Transparency International. The company should clearly be proud of this effort and continue to commit to running an ethical business. But readers would benefit from understanding better what sort of corruption risks may exist in the business – without which it is not possible to evaluate the company's response. It is worth noting that public confidence in the integrity of public procurement and business-government relations is never guaranteed, a fact that can have serious negative consequences for trust, reputation and business value.

In my view, Votorantim Cimentos has firmly established itself as a world leader in integrated reporting, demonstrating real expertise and commitment to accountability for sustainability performance. I have found reading this report to be highly informative and encouraging. I look forward to following the company's sustainability journey as it seeks to play an ever stronger role on the global stage.

Jim O'Brien



Jim O'Brien is an internationally-recognised sustainability consultant in building materials. Retired after a career of 39 years in a leading international group, besides consulting, he has since accumulated wide experience in leading European and global industry associations.

Anyone who spends a lifetime in building materials will know that the industry is highly cyclical. However those who survive will tell you that the downturns create a highly agile and leaner business model which re-invigorates and strengthens the company going forward. That is precisely where Votorantim Cimentos (VC) is just now, thanks to the economic crisis in its home base, Brazil.

The 2017 Integrated Report describes a remarkable strategic refocusing with divestment of peripheral activities in Chile, China and parts of the US, and aggressive re-booting of its activities in Brazil and 11 other potentially high-growth countries, all to yield a healthy EBITDA. Confident in future growth, it is investing in further capacity in Argentina, Bolivia, Turkey and the USA. VC is indeed a success story in line with McKinsey's thesis (International Cement Review, February 2018) that agile regional players can outperform their larger global rivals.

Operationally, it is doing exactly the right things that enhance performance with rapid payback. It is wooing its customers through innovating products attuned to their specific needs, providing better service from on-line ordering (65% in Brazil) to faster delivery, as evidenced by the significant increase in Net Promoter Score to 51%. VC is embracing total digitalisation even in pioneering its Brazilian cement production to "Industry 4.0". Its upstream supply chain is vetted to exacting criteria, and downstream transport is optimised through digital tracking.

VC provides comprehensive process reporting on 94% of its cement production and clinker grinding activities. Despite only 60% utilisation of its cement capacity due to recession in 2017, VC significantly increased use of alternative fuels to overall 14.6%, with up to 26% used in Brazil; the 30% 2020 target appears achievable and will add to profitability. The clinker/cement ratio improved slightly to 76.6%, though the 2020 target of 72% would require higher use of alternative materials, now about 10%. VC has achieved a commendable 17% reduction in net kgCO₂/tonne of cement, though its 25% reduction target by 2020 looks challenging. Neither should its ambitions stop there; data from peers and the CSI GNR (Getting the Numbers Right) database indicate further potential gains in the medium term.

VC is progressively investing in process waste heat recovery in its kilns, resulting in that 14.6% of its electrical energy needs were generated internally in 2017. VC has reduced specific energy use to 111.5 kWh/tonne of cement; more should be achievable. It is also prudently investing in reductions in air emissions, now with a comprehensive monitoring and reporting. Water usage efficiency has improved to 250 litres/tonne of cement. VC reported a record spend on overall environmental improvements in 2017.

VC stands out amongst its peers on the detail of environmental reporting on its aggregates, readymix, lime and mortar activities; however only 20% of those locations are covered, against an expectation of 100%. Quarry restoration plans have increased to 90% of locations. VC has identified that 20% of its quarries have high biodiversity value, and biodiversity action plans have logged a highly impressive 304 IUCN Red List species in 11,700 hectares of protected habitats. VC has significantly reduced generation of non-hazardous waste, though hazardous waste generation has increased, possibly due to reclassification.

Recession and consolidation have necessarily meant that employee numbers have reduced to 11,900, also with unusually high 2017 turnover rates of 22.7% in Brazil and 16.3% in its other countries of operation. VC is clearly cherishing its current employees with 94% being performance-evaluated each year. A recent opinion survey in Brazil enjoyed a 91% response with 79% positive engagement. VC gives an impressive average of 46 hours of training per employee per year. It is actively addressing diversity, currently with 13% female. Absenteeism, a good proxy for employee satisfaction, is low at only 0.6%. On wider community relations, it excelled in 435 social initiatives in 64 locations globally.

Safety has to remain a priority challenge for VC. Of the 9 fatalities in 2017, 6 were off-site transport contractors; closer implementation of the CSI guidelines on contractor and driving management may help. As a positive, VC has achieved success in improving driver behaviour through remote monitoring of vehicle movements. Accident rates for employees disimproved slightly, while those for contractors improved; for both fatalities and accidents the safety imperative dictates that the targets for both always have to be zero.

VC excels in corporate governance and is also very transparent in its "hotline" complaints analysis, all evidenced in its premier Transparency International rating. Its governance is further evidenced by its reporting under the CSI Charter, the UN Global Compact and Sustainable Development Goals, the IIRC and GRI Reporting Guidelines as well as achieving independent verification of this Integrated Report. In Brazil, North America and Europe, it is a leading light in further national voluntary reporting commitments.

Everything in the 2017 Integrated Report says that VC will emerge more agile, lean and profitable from the current recession in Brazil and will enjoy rapid growth there and beyond with the green shoots of economic recovery. VC is made to last.

GRI SUPPLEMENT

EXTERNAL INITIATIVES GRI 102-12

We voluntarily participate in a series of external initiatives that reflect our commitment to efficient and sustainable performance:

GLOBALLY

- **World Business Council for Sustainable Development (WBCSD):** a global organization led by the CEOs of more than 200 companies from all business sectors, working together to accelerate the transition to a sustainable world. Together, these companies have a total revenue of US\$ 8.5 trillion and employ 19 million people.
- **Global Compact:** an initiative of the United Nations (UN) to encourage private organizations to adopt appropriate practices on human rights, labor, anti-corruption and environmental conservation.
- **Cement Sustainability Initiative (CSI):** an international protocol that brings together the 24 largest producers of building materials in the world in support of the adoption of sustainable practices by the industry and the exchange of experiences and best practices. In 2018, we will occupy the vice-presidency position within the forum and in 2019 we will occupy the presidency.
- **Global Reporting Initiative (GRI):** an international organization focused on sustainability management and communication to help companies and other stakeholders better understand the impact of their operations.

BRAZIL

- **Brazilian Business Council for Sustainable Development (CEBDS):** organization that represents the World Business Council for Sustainable Development (WBCSD) in Brazil. It brings together approximately 60 of the country's largest business groups, which together account for approximately 40% of Brazilian GDP and are responsible for more than one million direct jobs.
- **Cooperação Técnica SBE VC RBMA (Technical Partnership):** a partnership among Votorantim Cimentos, the Brazilian Society of Speleology and the Atlantic Forest Biosphere Reserve to develop and disseminate good so-

cio-environmental practices in cave areas and the Atlantic Forest region.

- **Carta Aberta ao Brasil sobre Mudança do Clima (The Ethos Institute's open letter on climate change):** initiative of the business sector in Brazil to combat climate change.

SPAIN

- **Fundación Laboral del Cemento y el Medio Ambiente (CEMA Foundation):** a three-party organization composed of the cement employer's association OFICEMEN and the two main unions of the sector. Its activities focus on sustainability and CSR, communication and awareness, environment, waste valorization, occupational risk prevention and training.
- **Fundación Laboral Andaluza del Cemento y el Medio Ambiente (FLACEMA):** a three-party organization, composed of cement employers and the two main unions of the sector in Andalusia. Its goal is to promote the creation of a culture within Andalusia that makes economic and social progress compatible with respect for the environment and natural resources.
- **Oficemen:** Nonprofit, private and technical association of cement manufacturers in Spain. It represents an industry that has a mission to serve citizens, participates in civil society and, above all, shows deep respect for the environment. Currently, all companies dedicated to integral cement production with factories in Spain are part of Oficemen.

NORTH AMERICA

- **The Portland Cement Association (PCA):** The association that contributed to the creation of Product Category Rules (PCR) for North American cements, which help manage and mitigate the environmental impacts of materials and constructions projects using standardized metrics and lifecycle assessments. We participate as directors and voting members.

PERFORMANCE TABLE

ECONOMIC PERFORMANCE

	CSI	GRI	2015*	2016**	2017
ECONOMIC VALUE GENERATED AND DISTRIBUTED					
201-1					
Revenues - Gross sales revenues of products and services. other income and provision for credit (R\$ Thousands)			17,151,210	14,683,856	13,182,514
Inputs acquired from third parties			-8,595,160	-7,512,331	-7,276,962
Gross value added			8,556,050	7,171,525	5,905,552
Net value added produced			7,568,593	6,156,295	4,914,476
Total value added received in transfers			1,653,470	2,208,389	1,161,865
Total value added available for distribution			9,222,063	8,364,684	6,076,341
Distribution of value added					
201-1					
Net Revenue by product type (R\$ Thousands)					
Cement			9,727,985	8,463,592	7,971,446
Concrete			2,984,259	2,335,801	2,103,201
Aggregates			506,192	456,760	401,140
Complementary products			834,360	667,585	627,993
VALUE CREATION FOR VOTORANTIM AND KEY STAKEHOLDER GROUPS					
201-1					
Employee benefits (R\$ thousands)			2,395,383	2,152,183	2,041,428
Taxes and contributions paid to the government (R\$ thousands)			3,015,642	2,574,938	2,205,942
Remuneration of third-party capital (R\$ thousands)			3,010,195	3,213,534	2,448,570
Remuneration of own equity (R\$ thousands)			800,843	424	-619,599
Sales of cement (million metric tons)			37.2	32.5	31.5
Sales of aggregates (million metric tons)			26.7	24.7	23.4
Sales of concrete (million m³)			10.2	8.3	7.8
Sales of complementary products (million metric tons)			1.9	1.6	1.6

* Retrospective change in the Mining and Construction balances to continued operation due to non-completion of sale of assets
** Retrospective change in the China, Florida and California's assets and liabilities balances to discontinued operations.

	CSI	GRI	2015	2016	2017
SUPPLIERS					
Proportion of spending with local suppliers at significant operating locations		204-1	2,424,639,554	1,868,096,653	1,476,661,538
Total amount spent with suppliers (R\$)			48%	52%	53%
Percentage of purchases from local suppliers Locations					
Contracting of suppliers*					
Total number of new suppliers					13,685**
Total number of new suppliers selected according to environmental criteria					639
Total number of new suppliers selected according to social criteria					96
% of new suppliers that were screened using environmental criteria		308-1	97.0%	4.0%	4,7% **
% of new suppliers that were screened using social criteria		414-1	86.0%	80.0%	0,7 **
Total number of Negative environmental impacts in the supply chain and actions taken					0

* Results referring to VCBR operations. The definition of location considers the billing CNPJ (origin and destination) in the same state. All purchases of up to R\$ 3,000 are mandatorily made directly by the operating units, preferably from local suppliers. For higher values, the negotiation is conducted by the procurement department, considering the best total cost and quality for Votorantim Cimentos.

** We implemented improvements in the registration and certification platform, enabling the analysis of 100% of the suppliers contracted by procurement

RELATIONS WITH GOVERNMENT					
Political contributions (in R\$)*		415-1	0	0	0

* VCBR - With the creation of Law 13.165 of September 29, 2015, and the subsequent electoral reform made after the amendment of Laws 9,504/97 (Law on Elections), 9,096/95 (Law on Parties) and 4,737/65 (Electoral Code), the financing of electoral campaigns by legal entities has been prohibited. This means that election campaigns will be funded exclusively by party resources and donations from individuals (including via credit or debit cards). In view of the recent legislative amendment mentioned above, Votorantim Cimentos did not carry out or will carry out as a legal entity any financing of electoral or political campaigns, in compliance with current legislation.

CONSUMER RELATIONS					
Net Promoter Score (NPS) survey results		102-43 102-44	26%	40%	51%

* Weighted results of the industrial, real estate and self-construction segments

OPERATIONS AVALIATED BY CORRUPTION RISK*					
Percentage of operations evaluated		205-1			100%**
Significant corruption-related risks identified through this evaluation					Obtaining or renewing documents, Contracting of third parties, Payments to private third parties, Acquisition of products or services of public entities, Gifts, presents, travels, lodging and entertainment. Participation in commercial associations and / or sindicatos associations, Participation in licenses and consortia, Provision of public entities products.

	CSI	GRI	2015	2016	2017
**Structuring of the Process of Compliance Management in adherence of the Law 12.846 / 13 - Anti-Corruption) was carried out in 2015 and had the objective of evaluating 100% of Logistics, Ports, Supplies and Commercial operations. **VCBR scope*					
TOTAL NUMBER OF EMPLOYEES WHO RECEIVED ANTI-CORRUPTION TRAINING					
President/Director			5	20	21
Manager/General Manager			137	40	31
Coordinator/Consultant			167	40	74
Technician/Analyst/Supervisor			76	33	300
Trainee			1	0	7
Operator			60	0	0
Intern			12	0	1
Others			-	-	12
Total			458	133	446
TOTAL NUMBER OF LEGAL ACTIONS FOR UNFAIR COMPETITION, TRUST AND MONOPOLY PRACTICES AND THEIR OUTCOMES					
Total number of legal actions*		206-1	2	0	35
Value of legal actions (R\$)			1,565,646,000		invaluable
* From 2017, processes with values above 98 million reais were made, in line with the padrons applied for M & A and Due Diligence.					
MONETARY VALUE OF SIGNIFICANT FINES AND THE TOTAL NUMBER OF NON-MONETARY SANCTIONS FOR NON-COMPLIANCE WITH LAWS AND REGULATIONS					
Nº. tax legal actions			292	67	4*
Nº. of labor and social security legal actions			1,469	1,702	1,277
Value of tax legal actions (R\$)			582,283,333	40,228,101.47	1,295,894.2
Value of labor and social security legal actions (R\$)			301,971,612	261,524,564.51	127,869,116.01
* From 2017, processes with values above 98 million reais were made, in line with the padrons applied for M & A and Due Diligence.					
TOTAL NUMBER OF INCIDENTS OF DISCRIMINATION RECEIVED BY THE OMBUDSMAN AND THE CORRECTIVE ACTIONS TAKEN					
Race/color			8	5	3
Age group			0	0	2
Gender			1	0	0
Religion			1	2	2
Political opinion or other opinion			0	0	0
Nationality or social origin			1	5	1
Physical conditions			0	0	0
War veterans			0	0	0
Other incidents (discrimination)			1	0	0
Total number of incidents received			12	12	8
Analyzed and considered unfounded			11	7	7
Under analysis			0	3	1
Valid			1	2	0
Nº OF CASES OF CORRUPTION RECEIVED BY THE OMBUDSMAN					
			0	0	0

ENVIRONMENTAL PERFORMANCE

	CSI	GRI	2015	2016	2017
NUMBER OF UNITS INCLUDED IN THE ENVIRONMENTAL EVALUATION					
Cement			46	48	48
Aggregates			12	9	5
Concrete			70	56	45
Mortar			3*	4	4
Limes, sands e agricultural inputs			2*	2	2

ENVIRONMENTAL INVESTMENTS AND COMPLIANCE					
Total environmental Capex and Opex, by type*	103-2				
Environmental investments (Capex) (R\$)	93,081,451	27,326,245.91	45,512,682.74		
Environmental expenses (Opex) (R\$)	33,310,594	27,651,264.95	37,714,046.37		
Waste disposal, treatment of emissions and remediation costs	39,660,845	29,065,214.79	42,923,922.78		
Costs of environmental prevention and management	8,486,071	17,082,882.55	19,703,630.34		
Other environmental expenses	5,951,451	8,829,413.52	20,599,175.99		

* Data scope considering Votorantim Cimentos Brasil, VCNA and VCAA

Monetary value of fines	307-1				
Number of legal actions judged against the Company in the year	13	3	6		
Value involved in legal actions judged against the Company in the year			285,641.45		
N° of legal actions payed against the Company in the year			0		
Value payed in legal actions against the Company in the year			0		
N° of administrative sanctions received in the year	21	15	14		
Value involved in administrative sanctions received in the year			1,880,551.71		
N° of administrative sanctions payed in the year			3		
Value payed in administrative sanctions in the year			62,202.58		
N° of TAC's or TC's received in the year	9	0	2		
Value involved in TAC's or TC's received in the year			0		
N° of TAC's or TC's payed in the year			2		
Value payed in TAC's or TC's in the year			0		
Number of contentious claims received in the year			18		
Value involved in contentious claims received in the year			2,166,193.16		
Number of contentious claims payed in the year			3		
Value involved in contentious claims payed in the year			62,202.58		

*The Company works to ensure the fulfillment of the obligations set out by regulatory and supervisory bodies regarding the Conduct Adjustment Agreement and Commitment Agreement.

	CSI	GRI	2015	2016	2017
REDUCTION OF CO₂ EMISSIONS					
Cement					
Gross absolute CO ₂ emission (millions of tons)	x	305-1	24.3*	22.9*	21.7
Liquid absolute CO ₂ emission (millions of tons)	x		23.7*	22.3*	21.0
Gross specific CO ₂ emission (kg CO ₂ /t prod cem)	x	305-4	659*	656.8*	652.3
Liquid specific CO ₂ emission (kg CO ₂ /t prod cem)	x		644.2*	640.4*	633.3
% of reduction of CO ₂ based in 1990 (kg CO ₂ /t prod cem)	x	305-5	15.61%	16.11%	17.0%

*Values of 2015 and 2016 reviewed [GRI 102-48](#)

Aggregates					
Gross absolute CO ₂ emission (millions of tons)		305-1	0.013	0.009	0.004
Liquid specific CO ₂ emission (kg CO ₂ /t prod cem)		305-4	1.82*	1.75	1.55
Concrete					
Gross absolute CO ₂ emission (millions of tons)		305-1	0.029	0.02	0.01
Gross specific CO ₂ emission (kg CO ₂ /t prod cem)		305-4	9.9	10.3	10.0
Mortar					
Gross absolute CO ₂ emission (millions of tons)		305-1	0.0016	0.0017	0.0017
Liquid specific CO ₂ emission (kg CO ₂ /t prod cem)		305-4	1.9	2.3	1.9
Limes, sands e agricultural inputs					
Gross absolute CO ₂ emission (millions of tons)		305-1	0.13	0.22	0.17
Gross specific CO ₂ emission (kg CO ₂ /t prod cem)		305-4	121.0	123.0	87.9*

*Reduction compared to the last year, because we included in the report the ITM lime kiln data, previously not considered

INDIRECT CO₂ EMISSIONS					
Energy indirect CO₂ emissions (purchased energy) (Million metric tons)	305-2				
Cement			1.25	1.01	0.95
Concrete			0.0007	0.0002	0.0003
Aggregates			0.0024	0.0011	0.0007
Mortar			0.0011	0.0006	0.0011
Lime, sand and agricultural inputs			0.0020	0.0027	0.0026
Corporate					
Other indirect emissions - Scope 3 (million tCO₂e)		305-3	0.42	0.62	0.62
Transportation of inputs and final products*					

* Includes Scope 3 GHG emissions for cement, concrete and aggregates units

ENERGY					
Thermal energy mix of clinker production	302-1				
Fossil fuels (Coal, petroleum coke, heavy fuel oil, diesel oil, natural gas, shale and lignite)			89.4%*	87.1%	85.2%
Alternative fossil fuels (waste oil, tires, plastic, solvents, contaminated sawdust, mixed industrial waste and others) and biomass (dried sludge, dry sawdust, agricultural: organic and other wastes)	x		10.6%*	12.9%	14.8%
Thermal substitution rate (% thermal energy from alternative fuels and biomass)	x		3,508*	3,478*	3,447
Clinker factor (average % of clinker in cement)	x		75.5%	77.0%	76.6%

* Data adjusted

	CSI	GRI	2015	2016	2017
Fuel consumption*		302-3			
Cement (MJ/metric ton of cementitious product)			3,088	3,050	2,667
Aggregates (MJ/metric ton of product)			38	28	32
Concrete (MJ/m ³ concrete)			138	145	143
Mortar (MJ/metric ton of product)			64	70	74
Lime, sand and agricultural inputs (MJ/metric ton of product)			1,393	1,298	1,787
Total fuel consumption (TJ/Year)*		302-3			
Cement			99,924*	94,053*	88,655
Aggregates			216	130	54
Concrete			395	269	196
Mortar			54	53	24
Lime, sand and agricultural inputs			1,399	1,106	3,433
* Data adjusted GRI 102-48					
Specific consumption of electrical energy (KWH/Metric Ton)					
Cement (kWh/metric ton of cementitious product)	x		113.9*	114.6*	111.5
Aggregates (kWh/metric ton product)			2.5	2.7	2.9
Concrete (kWh/m ³)			1.8	1.7	2.2
Mortar (kWh/t produto)			10.1	10.5	13.0
Lime, sand and agricultural inputs (kWh/t produto)			14.8	18.9	14.2
* Data adjusted GRI 102-48					
Total electricity consumption (Total MWH/Year)					
Cement	x		3,995,899*	3,803,232*	3,567,112
Aggregates			18,566	13,745	7,395
Concrete			5,368	3,216	3,115
Mortar			8,625	7,963	11,494
Lime, sand and agricultural inputs			15,472	33,993	28,068
* Data adjusted GRI 102-48					
Energy consumption inside the organization (GJ)		302-1			
Cement			99,937,322*	94,065,853*	88,668,333
Aggregates			242,726	165,060	78,176
Concrete			414,449	280,166	207,020
Mortar			54,152	52,826	65,513
Lime, sand and agricultural inputs			1,431,391	2,329,994	3,531,322
* Data adjusted GRI 102-48					
Energy consumption outside the organization (GJ)		302-2			
Transport and distribution			5,730,993	8,087,144	8,074,023
MATERIALS USED BY WEIGHT (METRIC TONS)		301-1			
Cement			61,135,893	52,852,239	46,185,424
Other businesses			13,932,185	11,986,191	8,491,259
Total non-renewable materials			75,068,078	64,838,430	54,676,683

	CSI	GRI	2015	2016	2017
OTHER AIR EMISSIONS					
Nox					
Number of furnaces reported		305-7	44	39	40
Total emissions (metric tons/year)	x		52,952*	51,046*	54,449
Average specific concentration (g/metric ton clinker)	x		1,965*	2,012*	2,166
% Reduction in NOx compared to the previous year			3.9%*	-2.4%*	-7.6%
*Data adjusted GRI 102-48					
SO₂					
Number of furnaces reported		305-7	41	38	40
Total emissions (metric tons/year)	x		17,661*	17,004*	16,039
Average specific concentration (g/metric ton clinker)	x		655*	672*	638
% Reduction of SO ₂ compared to the previous year			10.5%*	-2.5%*	5.0%
*Data adjusted GRI 102-48					
PM					
Number of furnaces reported		305-7	49	41	40
Total emissions (metric tons/year)	x		1,977*	1,682*	1,561
Average specific concentration (g/metric ton clinker)	x		73*	66*	62
% Reduction of PM compared to the previous year			28.3%*	9.6%*	6.4%
*Data adjusted GRI 102-48					
Mercury					
Number of furnaces reported		305-7	37	31	35
Total emissions (kg/year)	x		324*	260*	553
Average specific concentration (g/metric ton clinker)	x		12*	10*	22
% Reduction of mercury compared to the previous year			-33.5%*	-43.6%	-104.4%
*Data adjusted GRI 102-48					
VOCS					
Number of furnaces reported		305-7	33	28	33
Total emissions (metric tons/year)	x		2,153*	2,113*	1,501
Average specific concentration (g/metric ton clinker)	x		80*	83*	60
% Reduction of VOCs compared to the previous year"			-177.5%*	-4.2%	28.3%
*Data adjusted GRI 102-48					
Dioxins/Furans					
Number of furnaces reported		305-7	36*	29*	34
Total emissions (mg/year)	x		1,598*	2,429	12,546
Average specific concentration (ng/metric ton clinker)	x		0.06*	0.10*	0.5
% Reduction of Dioxins/furans compared to the previous year			-255.1%*	-61.4%	-421.2%
*Data adjusted GRI 102-48					
HM1 (cadmium+thallium)					
Number of furnaces reported		305-7	36	28	34
Total emissions (Kg/year)	x		364*	191*	510
Average specific concentration (mg/metric ton clinker)	x		4	8*	20
% Reduction of HM1 compared to the previous year			35.7%*	44.4%*	-170,0%
*Data adjusted GRI 102-48					

	CSI	GRI	2015	2016	2017
HM₂ (antimony + arsenic + lead + chromium + cobalt + copper + manganese + nickel + vanadium)					
Number of furnaces reported		305-7	36	27	34,00
Total emissions (Kg/year)	x		41,665	22,391*	18.534
Average specific concentration (mg/metric ton clinker)	x		1,546*	882*	737
% Reduction of HM ₂ compared to the previous year			-66.6%*	42.9%*	16.5%

*Data adjusted [GRI 102-48](#)

Monitoring Data

"Total monitoring coverage rate (KP1) – Total coverage rate**	x	305-7	65.5%*	54.8%*	75.6%
"Continuous monitoring coverage rate (KP2) - PM, NOx and SO2"	x		84.5%*	90.2%*	89.0%

*Data adjusted [GRI 102-48](#)

** Percentage of clinker produced in kilns covered by the monitoring system for Particulate Matter, NOx, SO2, VOC/THC, heavy metals (Hg, Cd, Tl, Sb, As, Pb, Cr, Co, Cu, Mn, Ni and V) and PCDD/F

BIODIVERSITY AND RESOURCE CONSERVATION

Total number of active mines

Global			115	122	99
VCBR			-	-	40
VCNA			-	-	28
VCEAA**			-	-	31

Number of areas of high biodiversity value*

304-1

Global	x		65	74	20
VCBR			-	-	12
VCNA			-	-	6
VCEAA**			-	-	3

* In 2017, there was a review of the methodology to calculate this indicator. In this methodology three factors are evaluated:

- The importance of the area of high relevance to biodiversity overlapping the mining area,
- The percentage of overlapping area of high relevance to biodiversity under the mining area (considering a radius of 5 km from the center of the mine)
- The distance from the area of high relevance to biodiversity under the mining center. [GRI 102-48](#)

** VCEAA indicator only contemplates cement business.

Number of high biodiversity value areas with existing biodiversity management plans*

MM2

Global**	x		4	4	2
----------	---	--	---	---	----------

* In 2017 we increased the calculation scope, considering the total number of mines that have recovery plans for degraded areas [GRI 102-48](#)

** VCEAA indicator only contemplates cement business.

% of mines with closure plans *

MM10

Global**	x		85	86	90
----------	---	--	----	----	-----------

* In 2017 we increased the calculation scope, considering the total number of mines that have recovery plans for degraded areas [GRI 102-48](#)

** VCEAA indicator only contemplates cement business.

	CSI	GRI	2015	2016	2017
Habitats protected or restored (in hectares)*		304-3			
Amazônia				2,872.8	2872,8
Type of area					Legal Reserve(a), Areas of Permanent Preservation (b)
Status of the area					Preserved
Caatinga				336.4	336,4
Type of area					Legal Reserve(a), Areas of Permanent Preservation (b)
Status of the area					Preserved
Cerrado				2,847.7	2847,7
Type of area					Legal Reserve(a), Areas of Permanent Preservation (b) and Wildlife Refuge Area (d)
Status of the area					Preserved
Mata Atlântica				5,074.8	5074,8
Type of area					Legal Reserve(a), Areas of Permanent Preservation (b), Private Natural Heritage Reserve(c)
Status of the area					Preserved
Pantanal				168.5	168,5
Type of area					Legal Reserve(a), Areas of Permanent Preservation (b)
Status of the area					Preserved
Pampa				422.2	422,2
Type of area					Legal Reserve(a), Areas of Permanent Preservation (b)
Status of the area					Preserved

* Indicator that considers all VCBR's businesses [GRI 102-48](#)

Brazilian areas classification

- a) Legal Reserve
- b) Permanent Protection Area
- c) Private Reserve of Natural Heritage
- d) Wildlife refuge area

	CSI	GRI	2015	2016	2017
Total number of IUCN Red List and national conservation list species with habitats in areas affected by operations		304-4			
Threatened				119	119
Near Threatened				74	74
Critically endangered				32	32
Vulnerable				102	102
* Indicator includes information for VCBR (cement and aggregates).					
WATER		303-1			
Water Withdrawn (Concrete) - M³/Year					
Total water withdrawn			647,741	517,940	798,738
Groundwater			401,562	354,613	414,772
Water supply*			246,178	163,326	383,966
Water Consumed (Concrete) - l/Year**			231.56	133.91	553.09**
* New categorization: Water supply = Public / private supply (truck) + Water from public network					
** The increase in the amount of water used in 2017 was not a real increase in water use, but an increase in the accuracy of the reporting of the units.					
Water Withdrawn (Cement) - M³/Year					
Total water withdrawn			-	9,240,245	7,331,187
Surface water				6,570,818	5,652,059
Ground water			-	2,364,632	1,339,626
Rainwater collected				192,921	238,255
Public or private water supplies (truck)			-	111,875	101,247
Water Consumed (Cement) - l/ton				305.96	249.90
Water Discharge (Cement) - M³/Year*		306-1			
Surface water base			-	-	2,565,059
Surface			-	-	197,142
Total water discharge (Cement) - M³/Year				3,299,128	2,762,201
*Indicator recategorized for 2017					
WASTE MANAGEMENT AND RECYCLING		306-2			
Waste (generated and discarded) (tons)					
Cement					
Waste Production					
Total Non-Hazardous Waste (Metric Tons)					
Non-hazardous waste sent to industrial landfill			697,347	217,058	48,000
Non-hazardous waste incinerated			3,455	395	360
Non-hazardous waste sent for recovery			443	34,057	4,191
Non-hazardous waste sent for reuse/recycling			554,264	246,270	131,098
Non-hazardous waste sent for composting			7,277	328	1,689
Non-hazardous waste with another destination			52,136	5,322	209,016
Total Non-Hazardous Waste			1,314,924	503,428	394,354
Total Hazardous Waste (Metric Tons)					
Hazardous waste incinerated			4,996	2,168	2,021
Hazardous waste sent to industrial landfill			18,366	1,983	300
Hazardous waste stored in the place where generated			2,617	56	60,087
Hazardous waste with another destination			105,487	1,664	9,695
Total hazardous waste			131,467	5,870	72,102

SOCIAL PERFORMANCE

	CSI	GRI	2015	2016	2017
EMPLOYEES BY REGION		102-8			
Brazil			9,009	7,909	7,251
South America			314	397	411
North America			3,083	2,881	2,276
Europe, Asia and Africa			2,882	2,546	1,974
Employee turnover (%)		401-1			
By region					
Brazil			-	-	29.2%
Other countries			-	-	14.5%
By gender					
Women			-	-	4.7%
Men			-	-	18.3%
By age group					
Under 30 years old			-	-	8.8%
Between 30 and 50 years old			-	-	10.3%
Over 50 years old			-	-	3.9%
Rate of new hires		401-1			
By region					
Brazil			10.84%	9.81%	10.88%
Other countries			2.72%	5.3%	6.76%
By gender					
Women			1.84%	3.44%	4.35%
Men			11.72%	11.68%	13.29%
By age group					
Under 30 years old			6.12%	8.13%	9.0%
Between 30 and 50 years old			6.84%	6.14%	7.31%
Over 50 years old			0.59%	0.84%	1.32%
% Women in the workforce		405-1			
% Management and coordinator positions			1.50%	1.8%	1.78%
% Operational positions			10.84%	11.22%	6.24%
% Women in the workforce			12.34%	13.02%	12.96%
% Employees over 50 years old		405-1			
% Management and coordinator positions			1.66%	1.72%	2.0%
% Operational positions			18.28%	17.41%	11.48%
% Employees over 50 years old			19.94%	19.13%	13.48%

	CSI	GRI	2015	2016	2017
TRAINING					
Nº. average hours of training per employee per year		404-1			
Men					
President/Director			29	18	16
Manager/General Manager			37	53	60
Coordinator/Consultant			51	51	39
Technician/Analyst/Supervisor			50	51	57
Trainee			602	181	125
Operator			22	43	48
Women					
President/Director			9	65	9
Manager/General Manager			34	80	89
Coordinator/Consultant			35	58	34
Technician/Analyst/Supervisor			31	56	29
Trainee			602	208	122
Operator			40	27	20
Average hours of training (men and women)			38	34	46
TOTAL NUMBER OF EMPLOYEES COVERED BY COLLECTIVE BARGAINING AGREEMENTS 102-41					
Employees covered by collective bargaining agreements			11,208	9,720	9,312
Total number of employees			14,601	13,735	11,912
Percentage of employees covered			76.8%	70.8%	78.17%
PROPORTION OF SENIOR MANAGEMENT HIRED FROM THE LOCAL COMMUNITY AT SIGNIFICANT LOCATIONS OF OPERATION * 202-2					
Percentage of senior management hired from local communities**					
VCBR					90.6%
VCNA					93.0%
VCEAA					59.1%
VCLatam					15.4%
Percentage of employees from the local community***					
VCBR					99.8%
VCNA					99.9%
VCEAA					97.4%
VCLatam					69.3%

* Important operational units are those in countries where Votorantim Cimentos operates directly.
** Includes senior managers, general managers, directors and the CEO.
*** Employees born or naturalized in the country of operation are considered to be local hires.

	CSI	GRI	2015	2016	2017
OCCUPATIONAL HEALTH AND SAFETY 403-2					
Number of fatalities - Cement, Aggregates and Concrete*					
Employees (on-site)	x		0	0	1
Employees (off-site)	x		0	0	0
Contract staff (on-site)	x		0	5	0
Contract staff (off-site)	x		0	0	6
Third parties	x		3	0	2
INJURY FREQUENCY RATE WITH LOST TIME (LTI FREQUENCY RATE) 403-2					
Employees	x		1.12*	1.06	1.39
Contract staff	x		0.46*	0.87	0.77
Total - employees + contract staff			0.78*	0.97	
* Datas adjusted GRI 102-48					
DAYS LOST DUE TO INJURIES (CALENDAR DAYS) 403-2					
Employees	x		4,518*	2,246	3,442
Contract staff	x		470*	1,105	1,175
* Adjusted due reclassification GRI 102-48					
LOCAL COMMUNITY STAKEHOLDER ENGAGEMENT 413-1					
Global Social Investment (Million of reais)					
					4.7
Breakdown of social investments (%)					
Total number of operations with community involvement programs, impact and development assessments implemented in all organizations (Quantity)					64
Total number of operations					329
Percentage of operations with implemented programs of local community engagement, impact evaluation and local development (%)					19.5%
Taxa de Absenteísmo (%)				3.85	0.61
* Data pertaining only to VCBR					
Social Investment Distribution - By capital					
Human Capital					21.9%
Institutional Capital					8.6%
Social Capital					30.5%
Economic Dynamism					31.0%
Others					7.9%

* Exchange rate used - December 31st, 2017

GRI CONTENT INDEX



GRI Standard	Disclosure	Page number(s) and/or URL(s) and/or response	Omission		
			Part omitted	Reason	Explanation
GRI 101: Foundation 2016					
General Disclosures					
GRI 102: General Disclosures 2016	Organizational profile				
	102-1 Name of the organization	10			
	102-2 Activities, brands, products, and services	12			
	102-3 Location of headquarters	São Paulo/SP - Brasil			
	102-4 Location of operations	12			
	102-5 Ownership and legal form	11			
	102-6 Markets served	10			
	102-7 Scale of the organization	10, 11, 20, 34			
	102-8 Information on employees and other workers	52, 103			
	102-9 Supply chain	16			
	102-10 Significant changes to the organization and its supply chain	10, 35			
	102-11 Precautionary Principle or approach	69			
	102-12 External initiatives	92			
	102-13 Membership of associations	62			
	102-14 Statement from senior decision-maker	6, 8			
	Ethics and integrity				
	102-16 Values, principles, standards, and norms of behavior	11, 25			
	102-17 Mechanisms for advice and concerns about ethics	27			
	Governance				
	102-18 Governance structure	23			
	Stakeholder engagement				
	102-40 List of stakeholder groups	62, 64			
	102-41 Collective bargaining agreements	104			
	102-42 Identifying and selecting stakeholders	62, 64			
	102-43 Approach to stakeholder engagement	41, 58, 62, 94			
	102-44 Key topics and concerns raised	64, 88, 57, 94			

GRI Standard	Disclosure	Page number(s) and/or URL(s) and/or response	Omission		
			Part omitted	Reason	Explanation
GRI 102: Divulgação Geral	Reporting practice				
	102-45 Entities included in the consolidated financial statements	Calmit Industrial Ltda; Votorantim Cimentos N/NE S.A.; Votorantim Cimentos S.A.; CRB Operações Portuárias S.A.; Empresa de Mineração Acariúba; Cimentos Portland S.A.; Fazenda São Miguel Ltda.; Interávia Transportes Ltda; Itacamba Cimento S.A.; Supermix Concreto S/A; Votorantim Cement NA; Cia Cimento Pinheiro Machado; Cimento Itaú do Paraná Ltda; Pedreira Pedra Negra Ltda.; Cimentos Artigas S.A.; Cimentos Avellaneda S.A.; Petrolina Zeta Mineração Ltda.; Mineração Potilider; Lidermarc Indústria; Votorantim Cimentos Chile Ltda; Inversiones Votorantim Chile; IMIX Empreendimentos Imobiliários; Minerações e Construções Ltda; DL Mineração; Votorantim Cimentos EAA; Votorantim Cimentos Argentina; GB Minerales y Agregados AS; Votorantim Cement Trading, S.L; Silcar Empreend. Com. e Part.; VOTO Votor.Ov Trad Op.IV Ltd.			
	102-46 Defining report content and topic Boundaries	86			
	102-47 List of material topics	88			
	102-48 Restatements of information	97, 98, 99, 100, 105			
	102-49 Changes in reporting	Did not occur			
	102-50 Reporting period	86			
	102-51 Date of most recent report	Votorantim Cimentos Integrated Report 2016 - May, 2016			
	102-52 Reporting cycle	Annual			
	102-53 Contact point for questions regarding the report	ri@vcimentos.com			
	102-54 Claims of reporting in accordance with the GRI Standards	5, 106			
	102-55 GRI content index	106			
	102-56 External assurance	5, 114			

GRI Standard	Disclosure	Page number(s) and/or URL(s) and/or response	Omission	
			Part omitted	Reason Explanation
Material Topics				
GRI 200 Economic Standard Series				
Economic Performance				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	14, 38, 88		
	103-2 The management approach and its components	14, 22, 24, 35, 38, 42		
	103-3 Evaluation of the management approach	14, 22, 24, 35, 38, 42		
GRI 201: Economic Performance 2016	201-1 Direct economic value generated and distributed	93		
Market Presence				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	50, 88		
	103-2 The management approach and its components	50		
	103-3 Evaluation of the management approach	50		
GRI 202: Market Presence 2016	202-2 Proportion of senior management hired from the local community	104		
Procurement Practices				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	31, 88		
	103-2 The management approach and its components	31, 43		
	103-3 Evaluation of the management approach	31, 43		
GRI 204: Procurement Practices 2016	204-1 Proportion of spending on local suppliers	94		
Anti-corruption				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	25, 88		
	103-2 The management approach and its components	25, 27		
	103-3 Evaluation of the management approach	25, 27		
GRI 205: Anti-corruption 2016	205-1 Operations assessed for risks related to corruption	94		
	205-2 Communication and training about anti-corruption policies and procedures	26, 95		
	205-3 Confirmed incidents of corruption and actions taken	27, 95		

GRI Standard	Disclosure	Page number(s) and/or URL(s) and/or response	Omission	
			Part omitted	Reason Explanation
Anti-competitive Behavior				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	25, 88		
	103-2 The management approach and its components	25		
	103-3 Evaluation of the management approach	25		
GRI 206: Anti-competitive Behavior 2016	206-1 Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	95		
GRI 300 Environmental Standards Series				
Materials				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	71, 88		
	103-2 The management approach and its components	69, 71, 96		
	103-3 Evaluation of the management approach	69, 71		
GRI 301: Materials	301-1 Materials used by weight or volume	98		
Energy				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	74, 88		
	103-2 The management approach and its components	69, 74, 96		
	103-3 Evaluation of the management approach	69, 74		
GRI 302: Energy 2016	302-1 Energy consumption within the organization	97		
	302-2 Energy consumption outside of the organization	98		
	302-3 Energy intensity	98		
Water				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	77, 88		
	103-2 The management approach and its components	69, 77, 96		
	103-3 Evaluation of the management approach	69, 77		
GRI 303: Water 2016	303-1 Water withdrawal by source	101		Data refers to concrete and cement for VCBR only, there is projects of scope increase for the next years.
Biodiversity				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	78, 88		
	103-2 The management approach and its components	69, 78, 79, 96		
	103-3 Evaluation of the management approach	69, 78, 79		
GRI 304: Biodiversity 2016	304-1 Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	78, 100		
	304-3 Habitats protected or restored	100		
	304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations	101		

GRI Standard	Disclosure	Page number(s) and/or URL(s) and/or response	Omission		
			Part omitted	Reason	Explanation
Emissions					
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	70, 88			
	103-2 The management approach and its components	69, 70, 71, 96			
	103-3 Evaluation of the management approach	69, 70, 71			
GRI 305: Emissions 2016	305-1 Direct (Scope 1) GHG emissions	96, 97			
	305-2 Energy indirect (Scope 2) GHG emissions	97			
	305-3 Other indirect (Scope 3) GHG emissions	97			
	305-4 GHG emissions intensity	97			
	305-5 Reduction of GHG emissions	97			
	305-7 Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	99, 100			
Effluents and Waste					
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	71, 77, 88			
	103-2 The management approach and its components	69, 71, 77, 96			
	103-3 Evaluation of the management approach	69, 71, 77			
GRI 306: Effluents and Waste 2016	306-1 Water discharge by quality and destination	101		Data for 306-1 refers to concrete and cement for VCBR only, there is projects of scope increase for the next years.	
	306-2 Waste by type and disposal method	102			
Environmental Compliance					
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	25, 69, 88			
	103-2 The management approach and its components	25, 69, 96			
	103-3 Evaluation of the management approach	25, 69			
GRI 307: Environmental Compliance	307-1 Non-compliance with environmental laws and regulations	96			
Supplier Environmental Assessment					
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	31, 88			
	103-2 The management approach and its components	31			
	103-3 Evaluation of the management approach	31			
GRI 308: Supplier Environmental Assessment 2016	308-1 New suppliers that were screened using environmental criteria	94			
	308-2 Negative environmental impacts in the supply chain and actions taken	31, 94			
Mining and Metals					
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	78, 88			
	103-2 The management approach and its components	69, 78, 79, 96			
	103-3 Evaluation of the management approach	69, 78, 79			
GRI G4-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	78,100			

GRI Standard	Disclosure	Page number(s) and/or URL(s) and/or response	Omission		
			Part omitted	Reason	Explanation
GRI G4-MM10	Number and percentage of operations with closure plans	100			
GRI 400 Social Standards Series					
Employment					
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	50, 88			
	103-2 The management approach and its components	50			
	103-3 Evaluation of the management approach	50			
GRI 401: Employment 2016	401-1 New employee hires and employee turnover	103			
Occupational Health and Safety					
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	66, 88			
	103-2 The management approach and its components	60, 66			
	103-3 Evaluation of the management approach	60, 66			
GRI 403: Occupational Health and Safety 2016	403-2 Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	104, 105			
Training and Education					
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	53, 88			
	103-2 The management approach and its components	50, 53			
	103-3 Evaluation of the management approach	50, 53			
GRI 404: Training and Education 2016	404-1 Average hours of training per year per employee	104			
	404-3 Percentage of employees receiving regular performance and career development reviews	53			
Diversity and Equal Opportunity					
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	55, 88			
	103-2 The management approach and its components	50, 55			
	103-3 Evaluation of the management approach	50, 55			
GRI 405: Diversity and Equal Opportunity 2016	405-1 Diversity of governance bodies and employees	23, 55, 103			
Non-discrimination					
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	25, 55, 88			
	103-2 The management approach and its components	25, 27, 55			
	103-3 Evaluation of the management approach	25, 27, 55			
GRI 406: Non-discrimination	406-1 Incidents of discrimination and corrective actions taken	27, 95			

GRI Standard	Disclosure	Page number(s) and/or URL(s) and/or response	Omission		
			Part omitted	Reason	Explanation
Freedom of Association and Collective Bargaining					
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	25, 88			
	103-2 The management approach and its components	25, 31			
	103-3 Evaluation of the management approach	31			
GRI 407: Freedom of Association and Collective Bargaining 2016	407-1 Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk			Votorantim Cimentos' Code of Conduct respects free association, recognizes trade unions as legal representatives of employees and seeks, in a manner consistent with its values and management beliefs, to encourage open dialogue among the company, its employees and their union representatives. The company negotiates directly with unions, and employees may also participate at the negotiating table	
Child Labor					
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	25, 31, 88			
	103-2 The management approach and its components	25, 31			
	103-3 Evaluation of the management approach	31			
GRI 408: Child Labor 2016	408-1 Operations and suppliers at significant risk for incidents of child labor			Child labor and forced or compulsory labor is not tolerated by the organization. The issues related to these topics are addressed in the Code of Conduct and also by operational control audits. Complaints involving such incidents should be sent to the Ombudsman	
Forced or Compulsory Labor					
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	25, 31, 88			
	103-2 The management approach and its components	25, 31			
	103-3 Evaluation of the management approach	31			
GRI 409: Forced or Compulsory Labor 2016	409-1 Operations and suppliers at significant risk for incidents of forced or compulsory labor			Child labor and forced or compulsory labor is not tolerated by the organization. The issues related to these topics are addressed in the Code of Conduct and also by operational control audits. Complaints involving such incidents should be sent to the Ombudsman	

GRI Standard	Disclosure	Page number(s) and/or URL(s) and/or response	Omission		
			Part omitted	Reason	Explanation
Local Communities					
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	80, 88			
	103-2 The management approach and its components	80, 81			
	103-3 Evaluation of the management approach	80, 81			
GRI 413: Local Communities 2016	413-1 Operations with local community engagement, impact assessments, and development programs	81			
Supplier Social Assessment					
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	25, 31, 88			
	103-2 The management approach and its components	25, 31			
	103-3 Evaluation of the management approach	25, 31			
GRI 414: Supplier Social Assessment 2016	414-1 New suppliers that were screened using social criteria	94			
	414-2 Negative social impacts in the supply chain and actions taken				
Public Policy					
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	25, 88			
	103-2 The management approach and its components	25			
	103-3 Evaluation of the management approach	25			
GRI 415: Public Policy 2016	415-1 Political contributions	26			
Socioeconomic Compliance					
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	25, 88			
	103-2 The management approach and its components	25			
	103-3 Evaluation of the management approach	25			
GRI 419: Socioeconomic Compliance	419-1 Non-compliance with laws and regulations in the social and economic areas	95			
Mining and Metals					
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its Boundary	27, 88			
	103-2 The management approach and its components	27			
	103-3 Evaluation of the management approach	27			
GRI G4-MM7	The extent to which grievance mechanisms were used to resolve disputes relating to land use, customary rights of local communities and indigenous peoples, and the outcomes.	27			

ASSURANCE LETTER

GRI 102-56



ASSURANCE STATEMENT

STATEMENT BY SGS ICS CERTIFICADORA LTDA. (SGS) REGARDING THE SUSTAINABILITY ACTIVITIES PROVIDED IN "SUSTAINABILITY REPORT 2017" GIVEN TO VOTORANTIM CIMENTOS S.A.

ASSURANCE NATURE AND SCOPE

SGS was hired by Votorantim Cimentos S.A. to render independent assurance of its Sustainability Report 2017. Based on assurance methodology of SGS Sustainability report, the certification scope includes the text and data related to GRI standard indicators for 2017 provided herein.

The responsibility for information of "SUSTAINABILITY REPORT 2017" and its presentation lies on board and management of Votorantim. SGS does not take part of presentation in any material, including the "SUSTAINABILITY REPORT 2017". We are responsible for giving our opinion of the text, data, charts and statement within the certification scope, detailing the intention of informing the stakeholders of Votorantim Cimentos S.A.

The SGS group has developed a set of Assurance protocols for communicating the sustainability based on the best practices provided in *GRI Sustainability Reporting Standards* guide assurance standard - NBC 3000. These protocols give different options of assurance level depending on context and capacity of applicant organization.

This report was assured through our protocol for assessing the content legitimacy and its alignment with aspects of requirements of *GRI Sustainability Reporting Standards*, (Universal Standards 101, 102 and 103), as well as the requirements of *Topic-specific Standards (GRI 200, GRI 300 and GRI 400)* according to the subject matters identified by Votorantim Cimentos S.A. through the process detailed in the said report. Furthermore, the GRI sectorial appendix for cement industry was also consulted. Based on such context, "THE SUSTAINABILITY REPORT 2017" is deemed as Core Option.

INDEPENDENCE AND COMPETENCE STATEMENT

The SGS group is a worldwide leader in inspections, analysis and verifications which operates in more than 140 countries rendering services that includes management system certification, audits and training on quality, environment, social and ethic areas, as well as assurance of sustainability reports and verification of greenhouse gases. SGS reinforce its Independence from Votorantim, becoming cleared from any conflict of interest against the organization, its subsidiaries and stakeholders.

The assurance team was nominated based on knowledge, expertise and skills for this service and was composed of:

- A Lead Auditor on Assurance of Sustainability Report, a Lead Assessor of Greenhouse Gases (GHG), Lead Auditor on Socioenvironmental Programs, Lead Auditor on Environmental, Quality, Health and Safety Management Systems
- An Auditor on Assurance of Sustainability Report, Lead Assessor of Greenhouse Gases (GHG) and climate change program, lead auditor on socioenvironmental program.

ASSURANCE OPINION

A limited assurance was applied for and the service rendered was sufficient and suited to a reasonable assurance. Regarding the methodology presented and the verification performed, we are satisfied with the information and data provided in "SUSTAINABILITY REPORT 2017" verified are reliable and a balanced and real representation of the sustainability activities of Votorantim in 2017. The assurance team has the opinion that the report may be used by Votorantim stakeholders. The organization has elected the core assurance level based on their needs.

In our opinion, the report content meets the GRI standard requirements, including several indicators of the Sectorial appendix for the cement industry - MM2 indicator.



ASSURANCE STATEMENT

RECOMMENDATIONS, FINDINGS AND CONCLUSIONS OF GLOBAL GUIDELINES OF GLOBAL REPORTING INITIATIVE GRI STANDARD

The Votorantim "SUSTAINABILITY REPORT 2017" is aligned with *Sustainability Reporting Standards*, (Universal Standards 101, 102 and 103) as well as the *requirements of Topic-specific Standards (GRI 200, GRI 300 and GRI 400)*, Core Opinion, except the indicator that was not fully reported, which is 206-1.

The subject material and its limits inside and outside the organization were set properly according to the Reporting Principles of GRI. The subject matters and identified limits statements, as well as the commitments to stakeholders are properly detailed in the reference list and in report.

By keeping the GRI Standard use, Votorantim shows its commitment to sustainability report in the segments where it operates. Equally, it reports voluntarily its GHG inventory, which was also verified by SGS. This information was used in GRI report.

Votorantim has demonstrated its best efforts to make a consistent good sustainability report. The complexity of Votorantim Cimentos data compilation demands from report management team flexibility and persistence on data collection.

Concerning to contribution to improvement to development of sustainability reports in future and more effectiveness in assurance process, we recommend to Votorantim Cimentos that:

- Expands the reporting of all indicators with global data.
- Reviews the liability of all key points for providing the data on report so that it can be checked and compiled easily, thus promoting the best understanding of importance of GRI indicator management, despite of the current expertise of company. This awareness can be enhanced.
- Develops a continuous materiality process. Current practices show that the subject matters can be extracted from organization engagement process of stakeholders which are in course and that are performed over the year.

Executed by and on behalf of SGS

Fabian Peres Gonçalves
Business Manager - Sustainability
Lead Auditor on Sustainability Report
SGS ICS Certificadora Ltda.
March 23rd, 2018
www.sgs.com

CORPORATE INFORMATION

ADMINISTRATIVE BOARD

Paulo Henrique de Oliveira Santos (Chairman)
João Carvalho de Miranda
Fábio Ermírio de Moraes
José Ermírio de Moraes Neto
Markus Akermann (**Independent member**)
Alexandre Gonçalves Silva (**Independent member**)
Vinícius Prianti (**Independent member**)

EXECUTIVE LEADERSHIP

Walter Dissinger – Global CEO
Filiberto Ruiz – CEO, VCNA
Jorge Alejandro Wagner – CEO, VCEAA
Álvaro Lorenz – Global Technical Executive
André Roberto Leitão – Director of Corporate Development
Cristiano Carvalho Brasil – Global People and Management Executive
Gabriela Woge – Global Director of Treasury and Investors Relation
Luiz Marcelo Pinheiro Fins (Interim) – Global Legal Executive
Osvaldo Ayres Filho – Global CFO
Ricardo Turra - Global Internal Audit Director
Alexandre Lencastre – Director of VCBR Operations
Maurício Parolin Russomanno – Commercial Director, VCBR

HEADQUARTERS GRI 102-3

Rua Gomes de Carvalho, 1996
São Paulo – SP – Brazil
+ 55 11 4572-4000
www.vcimentos.com.br

CREDITS

Project Director

Álvaro Lorenz

General Coordination

Alexandre Henrique Takano

Team

Andressa Depetriz Marcelino, Bruna Rodrigues Debastiani, Gabriela Woge, Leonardo Ferreira Gomes Luna, Luiz Germano Bernartt Junior, Mayara Santos Mota, Renata Cristina Tutumi, Tathiane Bretone Azevedo, Viviane Regina Mansi.

Content and editing

Editora Contadino

Graphic design and layout

fmcom

Materiality and SDG study

BSD Consulting

English translation

Claudia Gustavsen

Photos

Leonardo Rodrigues, João Athaide Castelatto and image bank

Font

Adrian Frutiger's Frutiger Next, 1957

Contribution:

Alan Van Sloten, Alberto Carrillo, Aldo Damian Rodriguez Frachia, Alexander Capela Andras, Alexandre Augusto Mosquim, Alexandre Paraiso Cari, Aline Torres Ferreira, Ana Gonzalez de Aledo, Ana Paula da Silva José, Andre Themoteo da Silva Melo, Bárbara Fantinelli Coscolim, Beatriz Marques Carqueijo, Bill Asselstine, Bill Marquardt, Bruna Bezerra Lima, Bruna Leonor Segatto, Çağan Alpas, Camila Araujo Mazzini, Carlos Pedro Pereira Del Roy, Carolina Moreira Meira, Caroline Bolognesi Humberto, Caroline Tami Pivari Canashiro, Celso Martini, Christopher Mason, Cristiano Carvalho Brasil, Cristiano Fernandes da Silva, Danielle Arnoni Penteado, Dave Mashek, David Hanratty, Diana Giorgio, Dirley Antonio Maya, Edilson Chimilovski, Eduardo Botelho Lotti, Eduardo Costa Almeida, Eduardo Henrique Périco, Eduardo Montenegro Bortoleto, Edward Ruiz, Eider Nunes Moreira, Elaine Cristina Franquini, Erik Ribeiro Weide Araújo, Fabio Cirilo, Fausto Cesar Mantovani, Franciele Salmon Dias, Giulia Bueno Dagnino, Giuliano Giordano, Graciela Mognol, Heloisa Gabardo Caron, Henrique Paes de Carvalho, Hugo Armelin, Humberto Takaharu Shida, James Munro, Jessica Falcão Leite de Campos, Jéssica Giede Herbert, Joe Horton, John McCarthy, Joice Carvalho de Goes Venegas, José Carlos da Silva Valadares, José Ecio Pereira, Jose Luis Izquierdo, José Martino, José Mota Martins, José Renato Maurílio Gomes, Laercio Andreato, Laercio Solla, Lívia Ballot de Miranda, Marcela Venzel, Maria Eugenia Machado, Maria Jose Martin Aradilla, Marisa Costa Teles de Souza, Mary Angela de Carvalho, Maurício Russommano, Maurilo Rodrigues Moura, Meike Albrecht, Meire Correa Fontes, Michael Nolan, Michelle Costa Gonçalves, Murilo Rafael Miranda, Myrella Christina Cursino Pinto, Nathalia Gussen dos Santos Rosa, Nathalia Manfrim, Nelson Mitihiro Tsutsumi, Nelson Rodrigues de Sousa, Osvaldo Ayres, Persio Morassuti, Priscilla Alvarenga, Rafael Fowler, Rafela Vieira dos Santos Coimbra, Resha Watkins, Ricardo Soares de Andrade, Ruben Plaza, Ruthe Camila Berbet Alves, Shirlei Akemi Silva Sasaki, Silvia Maria Sotero, Silvia Regina Soares da Silva Vieira, Stefanie Linzmaier Felix Palma, Stephen Gallagher, Taís Castro, Tathiana Soto Riva, Thiago Jose Braga Lobato, Vitor de Oliveira Barone, Yonara Alquieri, Yves Willi Poci Banks Leite Belli

For the collection and verification of the information contained in this document, we appreciate the support and dedication of the Itaú de Minas (Brazil) and the Toral de los Vados (Spain) units, which underwent the assurance process, and corporate and industrial areas of Votorantim Cimentos S.A.



www.votorantimcimentos.com