

OUR VC WAY: CREATING CHANGES WHILE REMEMBERING OUR HISTORY



The cover of this Integrated Report illustrates two moments in the history of Votorantim Cimentos. It combines a photo from the 1930s of a cement kiln at the Santa Helena plant in Brazil with a modern kiln at the Hasanoglan plant in Turkey.

This integration of past and present represents the development of our company over time. As part of this dynamic world, we, too, are constantly changing. We change to last by reconnecting with our essence, while honoring the past, living the present and focusing on the future we want to build. This is Our VC Way, which represents our journey of cultural evolution—our way of creating changes while remembering our history.

We are a company made up of people who do, believe and build. Our Way of Being is ethical and respectful; our Way of Doing is together, with excellence; and Our Way of Thriving is with courage to transform. Our journey is one of courage, of moving and supporting lives and careers. We renew our plans and commitments to people and the countries where we are present on a daily basis. We are a team willing to dream and fight for what we want to build.

Our realization begins with the transformation of the lives of our customers, our people and each one of us, as we create a history based on character, respect and strength. Each day, we enhance our ability to win and grow by delivering sustainable results.

We have a history that spans 88 years. Some of our important milestones can be found in the timeline published in this report, which illustrates our journey of evolution, achievements and lessons that make us very proud of the company we are today—a company that moves forward, with its strategy and culture united in Our VC Way.













CONSTRUCTION OF THE FIRST PLANT IN SANTA HELENA, BRAZIL

FIRST MAJOR CONSTRUCTION **PROJECT: VIADUTO** DO CHÁ, IN SÃO PAULO, BRAZIL

CONCRETE BUSINESS: ACQUISITION OF ENGEMIX

EXPANSION IN EUROPE, ASIA AND AFRICA

LAUNCH OF JUNTOS SOMOS +

LAUNCH **OF VITER**

1933

1936

1938

2001

2002

2007

2012

2017

2018

2019

2020

2021

START OF OPERATIONS IN SANTA HELENA, BRAZIL

FIRST **INTERNATIONAL EXPANSION** (NORTH AMERICA)

EXPANSION IN SOUTH AMERICA **INAUGURATION OF PLANTS IN BOLIVIA AND**

TURKEY



START UP OF PECEM II, ACQUISITION OF **BALBOA, SUPERIOR AND VALLEY VIEW AND ADDITION OF MCINNIS**

















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TRANSPARENCY

|GRI 102-50, 102-52, 102-54, 102-56|

As part of our commitment to transparency in presenting strategies, impacts, risks and opportunities, since 2013 we have reported on our environmental, social and governance efforts, as well as on our economic and financial performance, annually and independently. The information includes results and how we manage our most critical issues from the point of view of our business and our key stakeholders, so that they can more fully understand and monitor our work closely. |GRI 102-52|

We prepared this document based on the guidelines of the International Integrated Reporting Council (IIRC), the GRI Sustainability Reporting Standards – Core option, the Global Cement and Concrete Association (GCCA) guidelines and the Sustainability Accounting

Standards Board (SASB) standards for the Building Materials industry. The report also includes the recommendations of the Task Force on Climate-Related Financial Disclosure (TCFD) regarding the disclosure of climate risks and opportunities. The GRI Standards and GCCA performance are continuously monitored as part of our everyday management and are aligned with the principles of the United Nations (UN) Global Compact and Sustainable Development Goals (SDG) [102-54].

The financial information is presented in accordance with the International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB) and follows the interpretations of the International Financial Reporting Interpretations Committee (IFRIC). We also follow the guidelines issued by the Brazilian Accounting Pronouncements Committee

(CPC). The data includes the companies that are consolidated in our results, which can be found on page 100.

Non-financial information relating to ESG (environmental, social and governance) topics is based on corporate procedures and on environmental and quality standards and certifications. Information relating to Argentina, where we do not have control over the operations, is recognized in the financial statements as an equity accounted investee and is not included in social and environmental indicators.

The report covers the period between January 1 and December 31, 2021; the financial information was audited by PwC and the non-financial information (ESG) was assured by Bureau Veritas. |GRI 102-50, 102-52, 102-56|

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MATERIALITY

|GRI 102-40, 102-43, 102-44, 102-46, 102-47, 103-1|

To identify our material topics, in our last cycle (2020), we interviewed nine company leaders and six stakeholder representatives (customers, investors, suppliers, non-profit organizations and experts). We also administered an online questionnaire to employees, investors, customers, suppliers, NGO representatives, community members, university faculties and public authorities. This questionnaire was made available in the six local languages of the countries where we operate (Arabic, English, French, Portuguese, Spanish and Turkish). In all, we heard 237 people, of whom 165 were employees and 72 were representatives of external stakeholder groups. This diversity enabled us to include points of view from different cultures and segments, thus ensuring that the results accurately represented our stakeholders. [GRI 102-43]

SUSTAINABLE G ALS



7 AFFORDABLE AN CLEAN ENERGY

13 CLIMATE ACTION



B DECENT WORK AND ECONOMIC GROWTH

14 LIFE BELOW WATER



15 LIFE ON LAND





10 REDUCED INEQUALITIES

∢= ▶

16 PEACE, JUSTICE AND STRONG















PHASES OF THE MATERIALITY PROCESS

IDENTIFICATION

PRIORITIZATION



ANALYSIS



VALIDATION

- Identification of internal documents
- Identification of industry documents/ commitments
- Benchmarking with the main players in the sector
- Stakeholder mapping

- Identification of the perceptions of the stakeholders through:
- 1 Online questionnaire
- 2 Guided interviews

- Analysis of the results from the previous phases
- Development of materiality matrix

- O Discussion of the materiality matrix with the company leadership
- Identification of risks and opportunities of material topics

SUSTAINABLE DEVELOPMENT GOALS (SDG)

Votorantim Cimentos is a signatory of the United **Nations Global Compact.** In addition, the material topics we identified were connected to the Sustainable Development Goals (SDGs), a global agenda with 17 objectives and 169 targets to be achieved by 2030. The integration of the SDGs into our activities aims to align our entire operation with the current and future needs of society while also creating shared value, producing a positive impact on the value chain and contributing to the achievement of the SDGs.

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MATERIAL TOPICS |GRI 102-44, 102-46, 102-47, 103-1|

The GRI Standards and AA1000 (2015) methodologies were the benchmarks for materiality and stakeholder engagement. The process, conducted by the consulting firm Report Sustentabilidade, identified eight material topics that guided the creation of content for this report |GRI 102-46|. The topics are detailed below:

Topic/Description

Why it is material to Votorantim Cimentos

Involvement Boundaries with impacts

Stakeholder group that raised the topic

Leadership

Investors

Suppliers

Government

Customers

Alignment with our 2030 **Commitments**

Environmental

Footprint

Related SDG and specific target

Climate change

Impact of climate change on the operations, greenhouse gases emissions, CO2 and climate risk management strategy

Development of eco-efficient

investment in innovations

technologies, sustainable products,

The cement sector is one of the world's highest emitters of greenhouse gases (GHG) | Competitiveness | Demands and pressures from customers and society | Environmental, reputational and regulatory risks

Competitiveness | Operational eco-efficiency

| Solutions for more affordable construction

Financial risk

Impacts all **Votorantim Cimentos** operations and, directly or indirectly, the whole society

Impacts all

whole society

Votorantim Cimentos

operations and the

 Leadership Experts Employees

Leadership

Experts

Suppliers Experts

Universities O NGOs

Government

Innovation

13 CLIMATE ACTION

13.2, 13.3

9a, 9b, 9c, 9.4 11.c

10.4, 10.2

17.16

3. Responsible relationship with the community

Innovation

technology

and

Community autonomy, open dialogue, local community development, local community involvement, impact and value creation

Solutions that improve the quality of life for families in vulnerable conditions | Increased participation of local suppliers | Boost local businesses | Social engagement

Impacts, directly or indirectly, all our operations and all the communities where we operate and sell our products

 Leadership Experts Employees Community Leadership Investors Suppliers

Experts Universities

NGOs

Community Government

Customers Employees

Communities and shared value

4 QUALITY EDUCATION 1 NO POVERTY 4b, 4c 1b 10 REDUCED INEQUALITIES

11.a, 11.c



	Topic/Description	Why it is material to Votorantim Cimentos	Boundaries	Involvement with impacts	Stakeholder group that raised the topic	Alignment with our 2030 Commitments		elated SDG specific target
Employee development	Employee diversity and inclusion, employee development and engagement, talent retention, compensation, preservation of human rights	Maintain qualified professionals to support business growth and efficiency Organizational climate Diversity and inclusion, expression of true self	Directly impacts all our employees, suppliers and contractors	LeadershipExpertsEmployeesSuppliers	ExpertsUniversitiesLeadershipEmployees	Diversity		8 DECENT WORK AND ECONOMIC GROWTH 5c, 5.5 8.3, 8.5, 8.7, 8.8
Ethics, integrity and transparency	Integrity and compliance, ethical and transparent relationships, price integrity and antitrust compliance, legal compliance and compliance with standards of relationship with competitors	Ensuring high standards of compliance, ethics and transparency is the path to excellence	Directly impacts all company employees and operations, and all stakeholders	LeadershipExpertsEmployees	 Customers Experts Universities NGOs Community Employees 	Ethics and integrity	PEACE, JUSTICE AND STRONG INSTITUTIONS 16b, 16.10	17 PARTNERSHIPS FOR THE GOALS 17.7, 17.17
Responsible use of materials, waste and circular economy	Solid waste management, responsible use of fuels, raw materials and natural resources, product life cycle analysis, circular economy, reuse and recycling	Maintain competitiveness in the medium and long terms, generating value for shareholders, employees and the whole society	Impacts all Votorantim Cimentos operations and, directly or indirectly, the whole society	LeadershipExperts	⊘ Leadership⊘ Customers	Circular economy	11 SUSTAINABLE CITIES AND COMMUNITIES 11c	12 RESPONSIBLE CONSUMPTION AND PRODUCTION 12.a, 12.3, 12.4, 12.5, 12.6 12.8
Risk and crisis management	Assessment and mitigation of risks to which the business is exposed, assessment of market risks, information management, confidentiality, crisis management	Ensure a quick response whenever we identify a topic with a potential negative impact on the company's performance	Impacts, directly or indirectly, all operations, employees, customers and shareholders	LeadershipCustomersInvestors	✓ Leadership✓ Investors	Ethics and integrity	PEACE, JUSTICE AND STRONG INSTITUTIONS 16b, 16.10	17 PARTNERSHIPS FOR THE GOALS 17.7, 17.17
Occupational health, wellbeing and safety	Healthy and safe working conditions (for employees and contractors), ensuring the safety of stakeholders who relate to the company, safe operating processes	Safety comes first at VC Industry is subject to high risk of occupational accidents	Directly impacts all our employees, contractors and suppliers	LeadershipExpertsEmployees	✓ Leadership✓ Employees	Health, safety and well-being	3 GOOD HEALTH AND WELL-BEING 3.9	8 DECENT WORK AND ECONOMIC GROWTH 8.3, 8.5, 8.7, 8.8

Stakeholder group Alignment with

OUR STAKEHOLDERS

The stakeholder groups with whom we engage were determined based on the analysis of economic, social and environmental impacts, actual or potential, that our businesses have on individuals, groups of individuals and/ or organizations. At the same time, we assessed how these stakeholders can affect our activities based on their demands and perceptions. This assessment was updated during the process of identifying our material topics (read more in Materiality, on page 6). |GRI 102-40, 102-42, 102-43|

	Stakeholder	Description	Communication and engagement channels	
	Shareholders	Votorantim S.A.	Board of Directors meetings, quarterly results conferences, conferences with investors focused on ESG, Integrated Report, Compliance Day	
(\$)	Financial Institutions	Banks, investors, multilateral lending agencies	Financial reports (quarterly and annual), roadshows, investor briefings, Integrated Report	
	Communities	Groups of people living in the 11 countries where we are present	Public meetings and consultations, open door-programs, community councils, complaint mechanisms, Ethics Line, Ombudsman, website, Integrated Report, social media	
	Customers/consumers	Trade (wholesale and retail), construction companies, government and industry	Website, apps (VC Online, Obra Fácil, Engemix app VC Ajuda), social media, loyalty programs (such as Juntos Somos+, in Brazil; Asmenty, in Morocco; and Mercim, in Tunisia), Customer Relationship Management System - CRM (chat and phone), online customer portal, Integrated Report, satisfaction surveys, e-mail marketing	
	Employees, contractors and unions	Employees, contractors and unions	Workplace, ComVC, Psiu Bulletin Board, Internal Town Halls, Nesri News (Tunisia), Construyendo contigo (Spain), Joussour Attawassoul (Morocco), VC Türkiye'de Yasam (Turkey), Coffee with the CEO (Turkey and Spain), Tea with the CEO (Tunisia and Morocco), Employee Assistance Programs (EAPs), KnowBe4 cybersecurity portal, discussions with the leadership, meetings, performance evaluations, climate surveys, union negotiations, positive dialogue agenda, Integrated Report, themed events, intranet, Ethics Line	
EXT	Suppliers and partners	Material and service providers; startups	Meetings, apps (drivers app, Mi Ruta), SAP Ariba procurement platform websites, Integrated Report, social media	
	Government agencies	Governments (federal, state and municipal) of the 11 countries where we are present	Meetings, public consultations, website, Integrated Report	
	Regulatory bodies	National Mining Agency (ANM), more than 50 environmental agencies and bodies (federal, state and municipal)	Meetings, public consultations, regulatory filings, websites, Integrated Report	
	Industry association	National and international cement and concrete associations	Meetings, participation in governance bodies, websites, Integrated Report, social media	
ۮؙڽ۠ػۣٛػ	Social organizations	United Nations Global Compact, Habitat for Humanity	Meetings, participation in governance bodies, websites, Integrated Report, social media, sponsorships and outreach	
	Academia and research institutes	Schools and institutions of higher learning in the countries where we maintain a presence.	Meetings, websites, Integrated Report, social media	
图()》	Influencers/media	Media and opinion leaders	Meetings, press releases, websites, industry publications Integrated Report, social media, Diálogos VC podcast	

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A MESSAGE FROM THE CEO

A YEAR OF ACHIEVEMENTS

The year 2021 was marked by volatility. In the first months, we still faced the major challenges brought by the COVID-19 pandemic. However, as time passed, we were able—thanks largely to vaccination—to resume some of our in-person activities, in a hybrid work model that tends to be the new reality. As we say at Votorantim Cimentos, we always hope for the best, while we remain prepared for the worst.

From a financial standpoint, our results were better than we anticipated. We had the highest revenue in our company's history, reduced our financial leverage and improved our credit metrics. We expanded our business by acquiring two operations in Spain (one is still subject to approval by antitrust authorities) and two in North America, as well as completed the transaction for the McInnis plant, which is fully operational now. We also expanded our footprint in the Northeast of Brazil.

Due to the COVID-19 pandemic, central banks and governments of the world's wealthiest countries increased the liquidity of the global economy; this action, which was essential to avoid unemployment, had an unwanted side effect in the form of high inflation. Constraints in supply and logistics chains put pressure on input costs worldwide. In addition, several countries are facing problems with power supply. In Spain, for example, energy prices have increased by a factor of five due to the increase in the price of

"WE HAD THE HIGHEST REVENUE IN OUR COMPANY'S HISTORY, REDUCED OUR FINANCIAL LEVERAGE AND **IMPROVED OUR CREDIT** METRICS. WE EXPANDED **OUR BUSINESS BY** ADDING TWO OPERATIONS **IN SPAIN AND** THREE IN NORTH AMERICA"

Marcelo Castelli, Global CEO of Votorantim Cimentos



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natural gas across Europe, while Brazil faced a water crisis that also resulted in higher costs for families and businesses.

High costs affected our raw materials, many of them traded as commodities, with globalized prices. This did not affect our determination to continue working in accordance with best practices, while looking forward, aligned with society in the pursuit of more sustainable solutions. We remain committed to accelerate the decarbonization of our operations toward the goal of producing carbon neutral concrete by 2050.

We improved our performance in the use of alternative fuels (AFR), thanks to the efforts of all regions to expand the use of new energy sources with lower air emissions. Co-processing enables us to incorporate solid waste into our kilns, reducing our environmental impact and production costs while diverting materials from landfills. Through waste management and our approach focused on the circular economy, we are actively working to expand co-processing licenses in our plants.

In all regions, we saw improvements in occupational safety indicators during the year. We worked hard to protect the health of our employees, with special emphasis on a major global effort to promote mental health at a very difficult time, as a consequence of the coronavirus pandemic. We invested in several prevention protocols, carried out campaigns and encouraged everyone to get fully vaccinated, to help save lives which, we believe, is something corporate citizens should be

obligated to do. Internally, we promoted an important evolution in our cultural journey, named Our VC Way. We looked to our past for stories, traditions and values that have brought us here. Listening to our teams, we recognized what honors our present and makes us better and, together, we identified ways to thrive and build an increasingly sustainable future for the company.

We believe that this simple and straightforward vision will be able to further integrate our operations in the 10 countries where we operate, in line with our 2030 Commitments, published in 2020.

As always, we invested in innovation and digitalization projects, worked side-by-side with our customers and further refined our governance practices. In the financial market, we raised funds linked to sustainability targets. And we continued our journey toward becoming an increasingly diverse company, enabling all regions to preserve their local characteristics, leverage their uniqueness and drive their development.

We rely on the passion, focus and competence of the entire VC team. We will continue to work with dedication and team spirit, always doing what is right, with ethics and respect. This is Our Way of Being, Working and Thriving. It is in our DNA. That is how we are going to outperform ourselves once again and deliver on our aspirations to achieve a positive and more sustainable future.

"WE RELY ON THE PASSION,
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WHAT IS RIGHT, WITH
ETHICS AND RESPECT. THIS
IS OUR WAY OF BEING,
WORKING AND THRIVING."

Marcelo Castelli,Global CEO of Votorantim Cimentos

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A MESSAGE FROM THE BOARD

ON THE RIGHT PATH

|GRI 102-14, 102-15|

The year 2021 will be marked as one of the best in the history of Votorantim Cimentos. True to our values, we put the safety of our employees first. Despite all the challenges posed by the coronavirus pandemic, we were always ready to meet market needs and expectations, increasing our production with a focus on our relationships with our customers and suppliers.

We were able to increase our internationalization with the acquisition of a cement plant in Spain, in addition to the announcement of another acquisition in the country that is still subject to approval by the local antitrust bodies, and three acquisitions in North America. In Europe, Cementos Balboa will increase our installed production capacity and activity in the South of Spain and in Portugal and will keep us on our path to reducing carbon emissions. In the United States, we acquired total control of Superior Materials (a joint venture we had been a part of since 2010), strengthening our concrete operations, and purchased the operational assets of Valley View Industries located in Illinois, which produce aggregates, crushed stone, shale, aglime and road construction products in America's heartland. In Canada, we entered a business combination to incorporate McInnis Cement into our portfolio, which further strengthens our presence in the Great Lakes region, Eastern Canada and the Northeastern Coast of the United States. In



Luiz Antonio dos Santos Pretti



Francisco de Sá Neto



Clarissa Lins



Johann Markus Akermann



"DESPITE ALL THE CHALLENGES POSED BY THE

CORONAVIRUS PANDEMIC, WE WERE ALWAYS

READY TO MEET MARKET NEEDS AND EXPECTATIONS."



new independent board member, Clarissa Lins, joined our Board of Directors, which now has seven members.

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Brazil, we completed the footprint expansion in the Northeast, with equipment and teams aligned with the increasing need to produce cement and concrete with a lower carbon footprint.

As important as growing is the consolidation of new businesses. The excellent results of our business units Verdera (focused on the waste management through the coprocessing of alternative fuels in cement plants), Viter (aglime), MOV-C (focused on logistic and distribution) and all other businesses adjacent to cement, such as mortars, concrete and aggregates, also point to the success of our long-term strategy.

We are committed to sustainability and to intensify the internal dialogue on this very important topic, in 2020 we established a working group on Decarbonization and ESG (environmental, social and governance) within our Board of Directors and approved our 2030 Commitments. In 2021, we continued to monitor our progress and approved the alignment of our CO2 targets with the Science Based Target initiative (SBTi), reinforcing our commitment to decarbonization.

Another important item in our strategy is the generation of clean energy, which gained momentum with our decision to invest in solar and wind power plants, in different regions where we operate.

We remain focused on our vision of the future, based on the concept of flexible solidity: we operate with excellence, safety, ethics and integrity, and are flexible to modernize and adapt to increasingly faster changes in the world. We

are committed to generating shared value and improving the quality of life for people in the communities where we are present. This brings us recognition as an increasingly sustainable company that generates value for all our stakeholders.

All of these achievements help us to renew our confidence in the new year. We bought new businesses and are working diligently to integrate them into our culture and operations; we improved processes and learned continuously, reflecting our organizational culture. We are committed to open dialogue, act with ownership and maintain a customer focus to achieve lasting results and, most importantly, to leave a positive legacy for new generations. More than ever, we believe we are on the right path to build an ever-stronger Votorantim Cimentos.

Board of Directors



"WE REMAIN FOCUSED ON OUR VISION OF THE FUTURE,

BASED ON THE CONCEPT OF FLEXIBLE SOLIDITY: WE OPERATE

WITH EXCELLENCE, SAFETY, ETHICS AND INTEGRITY,

AND ARE FLEXIBLE TO MODERNIZE AND ADAPT

TO INCREASINGLY FASTER CHANGES IN THE WORLD".



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A BUILDING MATERIALS AND SUSTAINABLE SOLUTIONS COMPANY

OUR WAY OF BEING, WORKING AND THRIVING

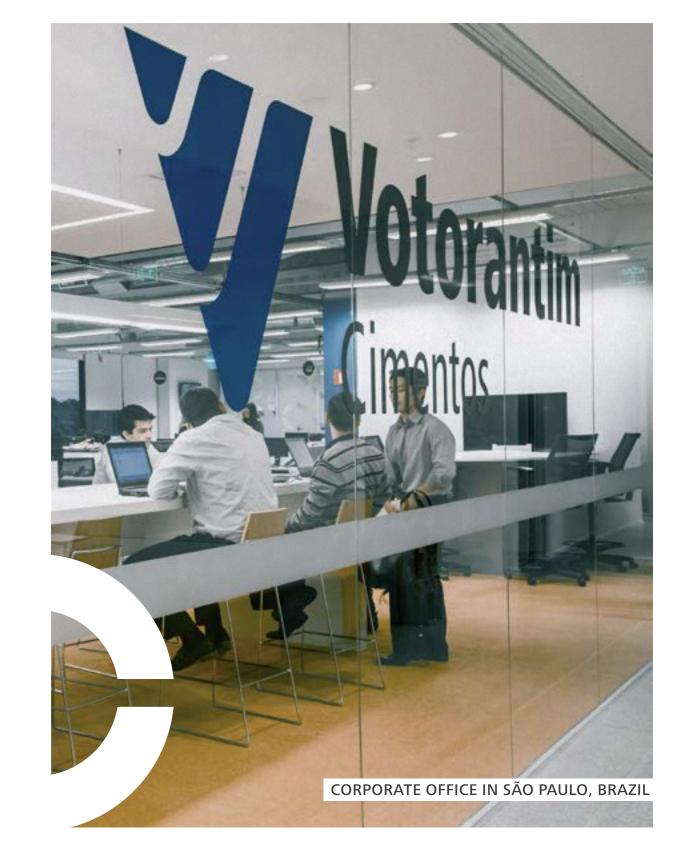
|GRI 102-1, 102-2, 102-3, 102-4, 102-5, 102-6|

We are Votorantim Cimentos S.A., an international building materials and sustainable solutions company, in operation since 1933. With corporate headquarters based in São Paulo, we are present in all regions of Brazil and in 10 other countries on four continents. Leaders in the Brazilian market for 88 years, we believe in entrepreneurship and honor our past to build an increasingly sustainable future.

Our shares are 100% owned by Votorantim S.A., one of the largest investment holding companies in Brazil, with businesses in several sectors, including metals, aluminum, energy, orange juice, finance and real estate. Together, the eight portfolio companies have more than 500 operating units worldwide, with more than 35,000 direct and 9,000 outsourced employees.

We work with the certainty that we must change to last; we combine the strength of a mature, long-cycle company with the flexibility needed to modernize and adapt to the new demands of society by leveraging technological evolutions to make better use of resources, evolve processes and positively impact people's lives. Therefore, we believe and invest in innovation, digital transformation and the diversity of our people and product portfolio, always with safety, ethics, respect for the environment and a commitment to doing things the right way—values that are non-negotiable for us.

We follow a business to business (B2B) model with strong participation in retail, industry, infrastructure, construction and agribusiness. We are one of the most vertically integrated companies in the industry, with a diverse portfolio that includes cement, concrete, aggregates, mortars, grouts, finishing products, plasticizers, aglime and waste management (co-processing).



OUR SHARES ARE 100% OWNED BY VOTORANTIM S.A.,

ONE OF THE LARGEST INVESTMENT HOLDING COMPANIES IN BRAZIL

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A year of expansions and modernizations

|GRI 102-10, 102-14, 102-15|

In line with our strategy of solidifying our presence in more mature markets, in 2021 we increased our number of operating units with the completion of the expansion of a cement plant in Brazil and the addition of three businesses in the United States and two in Spain (one of which was still in the process of being concluded at the time of this report's publication). In addition, we are investing US\$ 40 million in Uruguay to make the production of Cementos Artigas more efficient and sustainable, to strengthen our competitive position and financial performance.

CANADA | **MCINNIS** – On April 30, following approval by regulatory authorities in Brazil, Canada and United States, we completed the transaction to combine our St Marys Cement operations with McInnis Cement, which was majority owned by Caisse de Dépôt et Placement du Québec (CDPQ) in Canada. The new combined entity (St Marys) now has an installed production capacity of 7.8 million tonnes of cementitious material and includes plants in Canada (Bowmanville and St Marys, in Ontario and McInnis Cement, in Quebec) and in United States (Detroit and Charlevoix, in Michigan; Dixon, in Illinois; and Badger, in Wisconsin), along with an extensive distribution network concentrated in the Great Lakes region (on the border between the two countries), in the maritime provinces in Canada and on the Northeast Coast of the United States.

THE INTEGRATION OF MCINNIS INCREASED OUR INSTALLED CEMENT CAPACITY **IN NORTH AMERICA BY 29%**



UNITED STATES | SUPERIOR MATERIALS – On July 31, we acquired the remaining 50% of Superior Materials, located in Detroit, Michigan from our partner. After the conclusion of this transaction, the joint venture became a fully owned subsidiary that is now consolidated by Votorantim Cimentos. As a result, we expanded our concrete business and strengthened our presence in the Detroit metropolitan area. The company has 11 concrete plants, two mobile concrete batch plants, a fleet of 170 trucks and, most importantly, a team of 250 employees who are now fully integrated into our VC team. "Our company was born in Brazil and has become increasingly internationalized, with VCNA representing Votorantim Cimentos' first major international expansion in 2001. As we refined our growth strategy, we explored ways that we could capitalize on market opportunities in our region, leading to the three major transactions we completed in 2021," said Filiberto Ruiz, CEO of VCNA.



UNITED STATES | VALLEY VIEW – On August 9, we announced the purchase of Valley View Industries operational assets located in Illinois, an acquisition that was completed in August 31, reinforcing our presence in the state. The assets, which were incorporated into our Prairie Material business, operate in five locations and produces aggregates, aglime, crushed stone, shale and road construction products.

BRAZIL | PECÉM – Our expansion of the Pecém plant, in the Brazilian state of Ceará, started operating on July 11. The installation of a second grinding line increased the unit's cement production capacity from 200,000 tonnes to 1 million tonnes. In line with our sustainability strategy, the new unit uses state-of-the-art technologies to ensure more sustainable production, with less consumption of natural resources and an important reduction in CO2 emissions.

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SPAIN | CEMENTOS BALBOA – The purchase of Cementos Balboa, in Spain, was announced by VCEAA on June 29. The plant, located in Alconera, in the Extremadura region, has an installed production capacity of 1.2 million tonnes of cement per year. This transaction is in line with our global growth strategy and represents an excellent opportunity to expand our presence in Southwest Spain and in Portugal. The deal was formally approved by Spanish regulatory authorities on September 17 and officially closed on October 14. "In addition to increasing VC Spain's installed production capacity to 4.3 million tonnes of cement per year, an increase of more than 30%, the new unit, which was inaugurated in 2005 and is very modern—becoming the company's newest in the country—will accelerate our decarbonization program," highlighted Jorge Alejandro Wagner, CEO of VCEAA.



SPAIN | HEIDELBERGCEMENT – Finally, on November 10, we announced the acquisition of all HeidelbergCement operations in the Andalusia region, Southern Spain, which include a modern integrated cement plant, three aggregates mines and 11 concrete plants. The cement plant is located in Malaga and has an installed production capacity of 1.4 million tonnes per year. Together with Cementos Balboa, this new unit will enable us to further expand our presence in the Iberian Peninsula and leverage important synergies between existing assets in the country. This acquisition is still subject to approval by Spanish antitrust bodies.



URUGUAY | ARTIGAS – Cementos Artigas, our subsidiary with Cementos Molins, is consolidating its industrial activities in the city of Minas, 100 kilometers from Montevideo. The project includes the installation of a new, state-of-the-art vertical mill and new cement silos with a 4,000 tonne capacity. This initiative, to be completed in 2022, provides greater efficiency and sustainability at the new facilities due to technologies that result in reduced energy consumption and the deactivation of the unit installed in the urban center of Montevideo.

OPERATIONS AND ACTIVITIES AROUND THE WORLD



VOTORANTIM CIMENTOS BRAZIL (VCBR)







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EXTERNAL COMMITMENTS

|GRI 102-12, 102-13|

We recognize the importance of maintaining and solidifying partnerships. Therefore, we participate in different entities through the endorsement of external initiatives and projects. Some of the initiatives we participate in through our global headquarters include:



BENCHMARK CLUB OF THE CARBON DISCLOSURE PROJECT

(CDP): Organization that assesses how companies manage climaterelated risks and fight climate change and share this information with investors to demonstrate these companies' commitment to the issue.



BRAZILIAN BUSINESS COUNCIL FOR SUSTAINABLE

DEVELOPMENT (CEBDS): This organization represents the World Business Council for Sustainable Development (WBCSD) in Brazil. It brings together at least 60 of the largest business groups in the country, which are responsible for approximately 70% of the Brazilian GDP and for the creation of 1 million direct jobs.



BRAZILIAN COUNCIL FOR SUSTAINABLE

CONSTRUCTION (CBCS): Civil organization aimed at generating and disseminating knowledge and good practices in sustainability in civil construction in Brazil.



BUSINESS AMBITION FOR 1.5°C: Urgent call to action from a global coalition of United Nations (UN) agencies, business and industry leaders, in partnership with the Race to Zero campaign, to encourage businesses to commit to setting science-based targets aligned with the goal of limiting the global temperature rise to 1.5°C above pre-industrial levels.



BUSINESS FOR LGBTI+ CHARTER: Commitment signed with the Forum of LGBTQIA+ Rights Companies to promote inclusion and fight discrimination against the LGBTQIA+ population.



BUSINESS FOR NATURE: Global coalition formed by influential organizations and companies that have a sustainable vision for the future and are committed to establishing and disclosing biodiversity protection targets. The initiative includes NGOs, the International Chamber of Commerce, WWF, We Mean Business, the United Nations Global Compact and 560 companies from more than 50 countries.



BUSINESS INITIATIVE FOR RACIAL EQUALITY: Initiative championed by companies and institutions that are committed to promoting racial inclusion and fighting racism.



CORPORATE SOCIAL INCLUSION NETWORK: In 2021,

we signed a letter of commitment to the Pact for the Inclusion of People with Disabilities, a document that reaffirms our commitment to diversity and inclusion.



GLOBAL CEMENT AND CONCRETE ASSOCIATION

(GCCA): As one of the founding members of this organization created in 2018, we recognize its important role in uniting the cement and concrete sectors globally, fostering the evolution of sustainability practices in the construction chain.

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GLOBAL CEMENT AND CONCRETE RESEARCH

NETWORK: Known as Innovandi, this initiative was launched by the GCCA in 2019 to manage innovation projects.



GREEN BUILDING COUNCIL BRAZIL: Global coalition to promote the transformation of the construction industry toward sustainability.



LETTER OF COMMITMENT TO THE BUSINESS MOVEMENT FOR INTEGRITY, TRANSPARENCY AND ANTI-CORRUPTION: By signing this document, we reaffirmed our commitment to adopt practices to fight corruption in business and public-private relationships.



NATIONAL LGBTI+ ALLIANCE (BRAZIL): Civil, multiparty and nonprofit organization aimed at promoting and ensuring the defense of human rights and citizenship, in particular of the LGBTI+ community.

IRACE TO ZERO

RACE TO ZERO CAMPAIGN: Global campaign to rally leadership and support from businesses, cities, regions and investors for a healthy, resilient, zero carbon recovery that prevents future threats, creates decent jobs, and unlocks inclusive, sustainable growth.



SBE VC RBMA TECHNICAL PARTNERSHIP: Partnership with the Brazilian Society of Speleology and the Atlantic Forest Biosphere Reserve to develop and implement sustainable management practices in the Atlantic Forest and in cave areas.



TASK FORCE ON CLIMATE-RELATED FINANCIAL **DISCLOSURES (TCFD):** Develops recommendations for climate-related disclosures.



SCIENCE BASED TARGET INITIATIVE (SBTI): The SBTi drives ambitious climate action in the private sector by enabling companies to set science-based emissions reduction targets.



UN WOMEN'S EMPOWERMENT PRINCIPLES: Initiative of the UN Global Compact and UN Women that aims to unite, strengthen and expand global efforts in defense of women's rights.



VANZOLINI FOUNDATION: Non-profit organization created to improve the effectiveness of the sustainable development process in Brazil. It provides access to a system that files our Environmental Product Declarations (EDP), which are documents that are requested by customers seeking LEED certification.

WE RECOGNIZE THE IMPORTANCE OF MAINTAINING AND SOLIDIFYING PARTNERSHIPS.



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2021 HIGHLIGHTS



FINANCIAL CAPITAL

OUR AGILITY in resuming production and ensuring supply at a time of high demand globally and the rapid integration of the units acquired in North America and Europe resulted in the best financial performance in our history

R\$22.3 BILLION

net revenue

R\$5.2 BILLION

Adjusted Ebitda

R\$1.6 MILLION

net profit

1.55 x

leverage

R\$1.7 BILLION

raised through sustainability-linked financing



MANUFACTURED CAPITAL

TWO plants acquired in Spain: Cementos Balboa and HeidelbergCement (the latter still subject to approval)

EXPANSION of the Pecém II cement grinding facilities, in Brazil

BUSINESS COMBINATION of

McInnis Cement, in Canada

ACQUISITION of operational assets of Valley View Industries in Illinois and remaining 50% of concrete supplier Superior Materials, in the United States

37.2 MILLION

tonnes of cement sold

1.6 MILLION

tonnes

of mortar

8.1 MILION

m³ of concrete **24.4 MILLION** tonnes of aggregates

R\$ 1.48 BILLION

in Capex investments



HUMAN CAPITAL

OUR VC WAY

INITIATIVES to promote mental health and well-being globally

DEVELOPMENT and educational programs: VCEAA AFR Core Curriculum, VCBR Technical Schools, VCNA University Calls

DEVELOPMENT of diversity plans by region where we operate

INCREASE in the percentagem of women hired

1st DISTRIBUTION center 100% operated by women at VCBR

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INTELLECTUAL GAPITAL

CEMENT TECHNOLOGY RADAR

GLOBAL WORKING GROUP: AFR, Cementitious and New Technologies

HUBIC innovation platform

DEVELOPMENT of innovation territories

PARTNERSHIPS for sustainable development: Permeable Concrete (VCLatam), Sustainable Concrete (VCNA), Predictive Analysis (VCBR)

GLOBAL Cybersecurity Program

ideas analyzed by the Innovation Commission

projects under development

R\$71MILLION

in avoided costwith Spectrum, a mantainance asset monitoring platform



RELATIONSHIP CAPITAL

SUPPORT AND DONATIONS to communities where we operate during the coronavirus pandemic

SUPPORT FOR VACCINATION and for the construction of the COVID vaccine plant in Brazil

SOCIAL AND VOLUNTEER activities

1st SOCIAL HACKATHON, an idea accelerator that uses gamification to develop impactful social solution

regions where we operate

R\$ 12.7 MILLION in social investment

R\$ 1.5 MILLION to fight the pandemic



NATURAL CAPITAL

COMMITMENT to approve decarbonization targets aligned with the Science Based Target Initiative (SBTi)

PARTICIPATION in the Race to Zero campaign and the Business Ambition for 1.5°C coalition

COMMITMENT to Net Zero Concrete by 2050 (GCCA)

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AWARDS AND RECOGNITIONS

The company's achievements were highlighted by awards and recognitions received in 2021 in the different regions where it operates.

AGRO VISION AWARDS – Viter's Itaú limestone received the 18th Excellence in Quality award in the Limestone (soil corrector) category at one of the most important events in the agribusiness industry in Brazil.

ANAMACO AWARDS – Votorantim Cimentos was the winner of the 30th ANAMACO (National Association of Building Material Traders) Awards in the following categories: Cement (Master Award), Adhesive Mortars (2nd place) and Ceramic Grouts (2nd place).

ANEFHOP AWARD FOR OCCUPATIONAL RISK PREVENTION -

Prebetong Concreto, in Spain, received this award from the National Association of Ready-Mix Concrete Manufacturers of Spain (ANEFHOP) for initiatives to raise awareness of responsible health behaviors and attitudes and for working conditions.

BEST HEALTHY AND SUSTAINABLE COMPANY IN THE PROMOTION **OF OCCUPATIONAL HEALTH** – This award was granted to VC Spain by the National Institute of Occupational Safety and Health (Ministry of Labor and Social Economy).

BEST PLACE TO WORK BOLIVIA – We made the Great Place to Work Institute's ranking of the best companies to work for in Bolivia. We were also recognized as a "Company that cares" due to our excellent talent management and care for employees during the pandemic.

BOLIVIAN BUSINESS RANKING – We were recognized as the best cement company in the ranking of brands prepared by the newspaper Bolivian Business, for our performance in the areas of technological innovation, product launches, talent protection and external communication.



DERES RECOGNITION – The Network of Companies for Sustainable Development, in Uruguay, recognized VCLatam for its "Energy Revolution" initiative to improve the energy efficiency of the cement production process, as well as for its activities during the pandemic.

ENERGY EFFICIENCY CERTIFICATE (CEE) – The Ministry of Industry, Energy and Mining of Uruguay awarded companies that adopted energy efficiency measures to help reduce greenhouse gas emissions in the country. In the case of Cementos Artigas, this reduction was estimated at 15,874 tonnes of oil equivalent.

EXCELLENCE IN MINING AND SAFETY – Four units of Prairie Material's Aggregates division were recognized by the Indiana Mineral Aggregates Association in 2021. Kim Grose, a company employee, received the award from the president of the association.

FIESP ENVIRONMENTAL MERIT AWARD – The Verdera team won the award for their work with refuse-derived fuel in Salto de Pirapora (SP), where we co-process urban waste and invest in training for the city's recycling cooperative.

INTERNATIONAL CONCRETE CONSTRUCTION EXCELLENCE

AWARDS – Engemix, together with Nortis Incorporadora e Construtora, PhD Engenharia and Avila Engenharia de Estruturas, received this award from the American Concrete Institute (ACI), for the results with the use of high-strength concrete in the construction of a residential project in São Paulo, Brazil.

MICHIGAN CONCRETE ASSOCIATION AWARDS – The Michigan Concrete Association presented the award to Superior Materials' Detroit plant, and St Marys Cement products were used in eight winning projects.

MODEL WORKER AWARD – One of our employees, Hamouda Miled, received the award granted by the Tunisian Minister of Social Affairs on May 1, 2021.

NATIONAL MINING ASSOCIATION (NMA) SENTINELS OF **SAFETY AWARD** – This award was presented to Prairie Material Aggregates Division for its work on the Ashkum site.

NRMCA SAFETY EXCELLENCE – In 2021, 18 VCNA concrete plants were recognized by the National Ready-Mix Concrete Association. In addition, Bill Youngers, an employee of United Materials, received the NRMCA Driver of the Year award.

PROGRESSIVE REHABILITATION AWARDS – Four CBM Aggregates sites recognized for progressive rehabilitation by the Ontario Stone Sand and Gravel Association (OSSGA).

RESILIENCE AWARDS – For the second consecutive year, Itacamba Cemento S.A. received the Resilience award, given by the Bolivian National Chamber of Industries (CNI).

REVENDA CONSTRUÇÃO TOP OF MIND – We placed 1st in the Cement category, 2nd in the Mortar category and 3rd in the Grout category in the most important top of mind awards competition in the Brazilian construction market.

SAFETY AND ENVIRONMENTAL EXCELLENCE AWARDS — Four Prairie Materials Aggregates sites were recognized by the Illinois Association of Aggregate Producers.

SAP QUALITY AWARD 2021 – VCEAA was one of the companies to receive this award in the Business Transformation category, in recognition of the quality of the Central Finance project implemented in the region.

SENAI LOGISTIC PANEL AWARD – Our distribution center in Juazeiro do Norte, in Ceará, operated 100% by women, received an award granted by the National Service for Industrial Training (SENAI), as an example of Diversity and Inclusion in the Top Logistics category.

SUSTAINABLE CONCRETE AWARD – St Marys Cement was recognized as the winner of the Slag Cement in Sustainable Concrete Awards Program, presented by the Slag Cement Association, for providing 30% substitution of Portland Cement with Slag Cement in the Columbus Zoo Project.

SUSTAINABLE DEVELOPMENT GOALS RECOGNITION – We were recognized by the Confederation of Private Entrepreneurs of Bolivia (CEPB), a representative of the United Nations Global Compact, for our good practices to achieve the Sustainable Development Goals (SDGs).

THE BEST OF DINHEIRO AWARDS 2021 – We ranked first in the Construction Materials sector in the yearbook published by IstoÉ Dinheiro magazine based on results achieved in 2020. Five dimensions were considered: financial sustainability, corporate governance, human resources, social responsibility, and innovation and quality.

TURKEY SAFETY AWARD – The Cement Industry Employers Association (ÇEİS) presented the award to the Sivas cement plant for achieving the highest number of consecutive days with no lost-time accidents in the history of the cement industry in the country.

VALOR INNOVATION AWARDS BRAZIL 2021 – We placed 3rd in the Construction and Finishing Materials category and 47th overall in one of the most important innovation rankings in Brazil, organized by the consulting firm Strategy& and the Valor Econômico newspaper.



- **Our VC Way**
- **Our strategy**
- **Sustainability** and 2030 commitments
- Decarbonization
- ESG Ratings



OUR STRAIEGY AND THE CONNECTION WITH SUSTAINABILITY

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OUR VC WAY

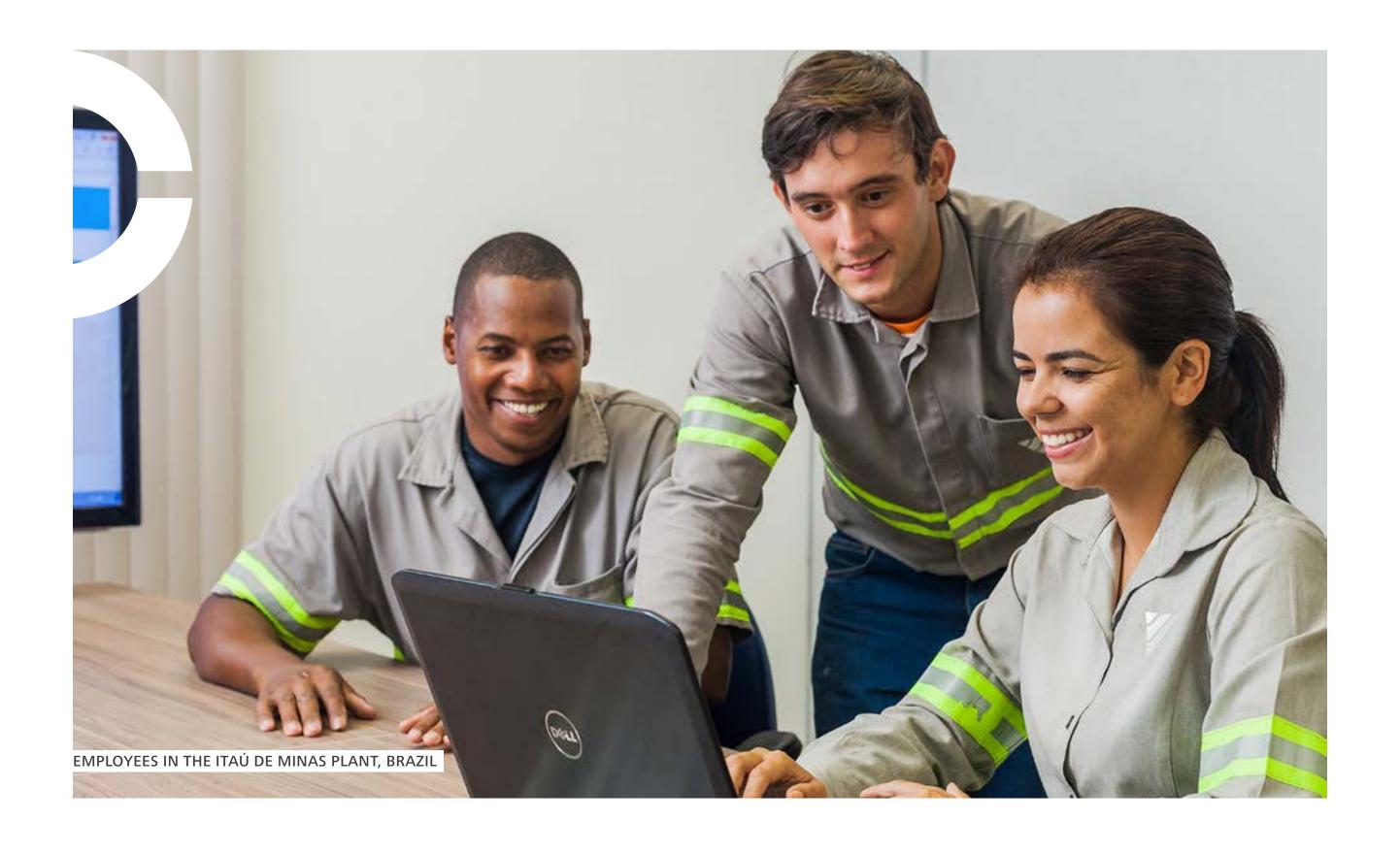
|GRI 102-16|

In 2021, we dedicated ourselves to advancing our journey of cultural evolution, recognizing that culture is the basis for building and executing our strategy. We embarked on a culture update project that took more than a year and involved approximately 400 people from various areas of the company, who worked with dedication, passion and, most importantly, simplicity. We call it an "evolution" because this work did not start from scratch—to the contrary, this project included the strengths of our long-held values and beliefs. Today, we are even more confident that Votorantim Cimentos has a rich and expressive business essence, which was not only maintained, but reimagined, simplified and modernized, in a way that:

- **OHONORS OUR PAST**
- **VALUES OUR PRESENT**
- **EXAMPLE 2** HELPS US BUILD OUR FUTURE

With the purpose of creating positive changes while building on our history, we named our organizational culture **Our VC Way** and organized it around three main axes: Our Way of Being, Our Way of Working and Our Way of Thriving.

Each has three dimensions, which include the nine general principles that are **highlighted** on the next page.



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OUR WAY OF BEING IS ETHICAL AND RESPECTFUL.

Safety and health are non-negotiable: they come before results and must guide our behavior inside and outside the company. We strive for zero accidents; we value the mental health and well-being of our employees; and we set an example by complying with rules and procedures.

Ethics and diversity are essential, since respecting and truly including people is the way to evolve and learn from differences. Therefore, we always choose the right thing, even when the path is longer, and we encourage people to be who they are, since they are our greatest asset.

Likewise, we believe in **open dialogue**. Sincerity and kindness strengthen our relationships and create space for individual and collective growth. Being open to different opinions, with courage and generosity to listen and say what you think, without fear of retaliation—this is the culture that we want.

OUR WAY OF WORKING IS TOGETHER, WITH EXCELLENCE.

For us, having **customer focus** means being close to each of our customers and knowing their real needs to guide our processes and decisions. We understand that we only succeed when our customers succeed, which drives us to work together, with transparency and flexibility.

Simplicity and trust are the way to cultivate relationships and create agile and uncomplicated solutions. We strive to reduce unnecessary bureaucracy and to reinforce connections between teams and areas to ensure that our initiatives are carried out on time and with excellence.

We believe that acting with ownership (with responsibility and leadership, regardless of roles and positions) is the best way to achieve our goals. We all must understand that our individual work impacts the whole organization; therefore, we must participate, express our opinions, make decisions and fulfill what has been agreed upon.

OUR WAY OF THRIVING: WITH COURAGE TO TRANSFORM.

Learn and evolve: we know that uncertainty is part of the business, and mistakes are part of the innovation process. We need initiative to propose improvements and courage to innovate, without fear of failing or sharing lessons learned.

We want to build **lasting results** that are always in line with our long-term vision and entrepreneurial essence. We know that our ethical behavior ensures our solidity. We encourage and invest in innovative initiatives to execute and adapt.

All this translates into a **sustainable legacy**: each of us must contribute to the development of people, the environment and the communities where we operate. Our results are delivered with environmental and social responsibility.



"THIS NEW ARTICULATION OF OUR CULTURE USES SIMPLER AND MORE DIRECT LANGUAGE THAT VALUES THE ESSENCE THAT HAS GOTTEN VOTORANTIM CIMENTOS UP TO THIS POINT, WHILE ALSO MODERNIZING AND UPDATING THE PRINCIPLES ACCORDING TO THE NEW CHALLENGES THAT LIE AHEAD"

Cristiano Brasil, global director of People, Management, Communications and IT.



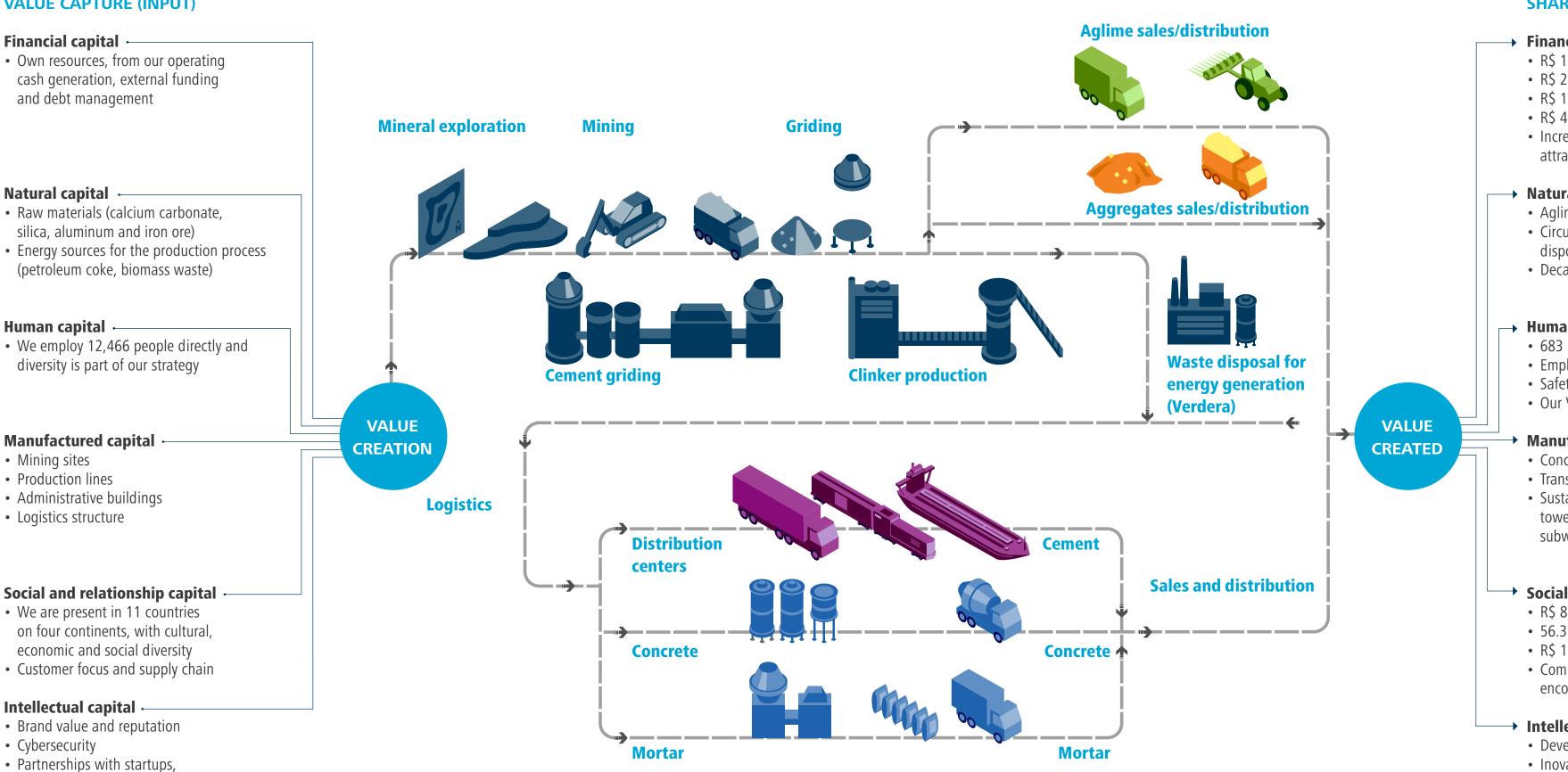


THROUGHOUT THE YEAR, WE PROMOTED OUR STRATEGY TO ALL TEAMS GLOBALLY AND DEVELOPED SPECIFIC INITIATIVES FOR EACH OF OUR REGIONS AND AREAS OF ACTIVITY.

BUSINESS MODEL

Based on our 2030 strategy, our business model captures, creates and distributes long-term value among all our stakeholders, thereby reinforcing that we are a building materials and sustainable solutions company with the ambition of pursuing sustainable growth and continuous competitiveness through solutions and initiatives that generate a positive impact for the company and society.

VALUE CAPTURE (INPUT)



SHARED VALUE (OUTPUTS AND RESULTS)

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Financial capital

- R\$ 1.6 million net profit
- R\$ 22.3 billion net revenue
- R\$ 1.48 billion invested in Capex
- R\$ 4.15 billion paid in taxes
- Increase in company value and more attractive financing lines

→ Natural capital

- Aglime and co-processing
- Circular economy and waste disposal for co-generation
- Decarbonization roadmap

→ Human capital

- 683 new jobs created
- Employee benefits and diversity
- Safety, health and well-being
- Our VC Way

Manufactured capital

- Concrete, cement, aggregates, mortars, aglime
- Transport and logistics: MOV-C
- Sustainable concrete infrastructure (wind towers, hydroelectric dams, decent homes, subways, etc.)

Social and relationship capital

- R\$ 8.5 billion paid to suppliers
- 56.3% spent with local suppliers
- R\$ 12.7 million invested in communities
- Community development and encouragement of local purchases

Intellectual capital

- Development of innovation territories
- Inova VC and Spectra
- Cement Technological Radar
- Development of industry 4.0 and artificial intelligence

universities, research centers

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SUSTAINABILITY AND 2030 COMMITMENTS

As leaders in the building materials industry in Brazil, and with major operations around the world, we grow, innovate and increase our operational efficiency using sustainability as a strategic driver. We have a long history in this constant pursuit of more advanced technologies to reduce emissions, improve energy efficiency and ensure the health, safety and well-being of our employees, to reduce our environmental footprint and promote the social and environmental development of the communities where we operate.

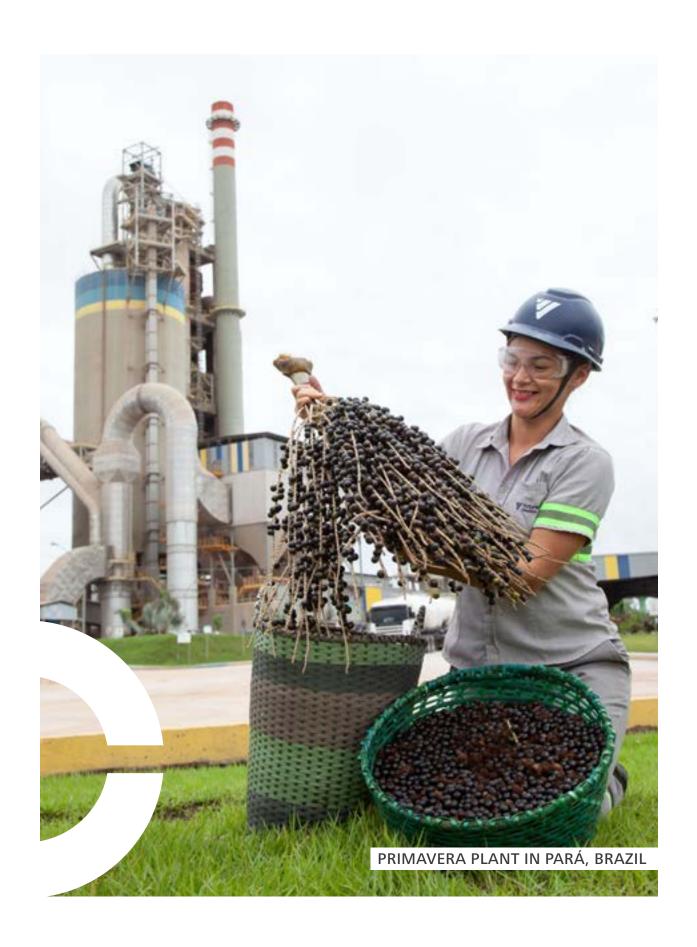
Our vision of the future is built around the concept of "flexible solidity": we are an established company that operates with excellence, safety, ethics and integrity, and, at the same time, has the flexibility needed to modernize and adapt to the fast changes happening in the world and with regard to people's needs. Everything we do is geared toward generating a positive and longterm impact, as an increasingly sustainable company that creates long-term value for all stakeholders by aligning our operations with current and future demands of society.

Sustainability is one of our strategic drivers and our strategy is in line with the Sustainable Development Goals (SDGs). Integrating the SDGs into our activities helps us to ensure the future success of our business.

In 2021, we continued in our ESG jorney, putting in practice our 2030 Commitments, which were approved by our Board of Directors in 2020 and published in our last report. The document includes goals and targets related to seven pillars:

- 1. WE OPERATE WITH INTEGRITY AND TRANSPARENCY
- 2. SAFETY, HEALTH AND WELL-BEING ARE FUNDAMENTAL VALUES
- 3. INNOVATION: WE CO-CREATE SUSTAINABLE SOLUTIONS
- 4. A DIVERSE AND INCLUSIVE ENVIRONMENT
- 5. REDUCING OUR ENVIRONMENTAL FOOTPRINT
- 6. PROMOTING A MORE CIRCULAR BUSINESS ENVIRONMENT
- 7. GENERATING SHARED VALUE IN OUR COMMUNITIES

These commitments are in line with Our Way of Being and megatrends in the construction sector, which consider the impacts of factors such as demographic changes; globalization and future markets; climate change challenges; and innovation and technology dynamics. More information on our commitments, targets and progress in 2021 can be found on page 85.



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DECARBONIZATION

|GRI 103-2, 103-3: 305, EM-CM-110a.2|

Climate change is at the core of our strategy and guides every step of our present and future investments and innovation efforts. Like any large-scale industrial activity, the cement industry also produces CO2, primarily due to the nature of its production processes, accounting for approximately 7% of total global emissions, according to the International Energy Agency (IEA).

The fact that we are experiencing a climate emergency is a consensus. Climate change is already manifesting in the form of droughts, fires, floods, resource scarcity and loss of species, among other impacts. In 2021, the planet's average temperature increased 1.1°C compared to pre-industrial levels, according to the Intergovernmental Panel on Climate Change (IPCC), and is on the path to increasing by more than 4°C if we fail as a society to transform our lifestyles and bring climate action to the center of political and business decisions. We understand our role and are implementing a number of initiatives to align our emissions reduction targets with the ambition of the Paris Agreement signed in 2015: to limit global warming to well below 2°C compared to pre-industrial levels, making every possible effort to limit the increase in global temperature to 1.5°C.

Even in countries where regulation on carbon emissions has not yet been approved, we consider an internal carbon price to assess the attractiveness of projects. In other words, our profitability analysis is done as if carbon were already priced. This helps us to align new investments with the decarbonization trajectory of our business—even more so now that the GCCA, the main industry association, has set a more ambitious emissions reduction target (read more on page 34).



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The fact that the European Union is one of the major leaders in the decarbonization process is a great learning opportunity for our company. "This will reach other countries and we will have the experience of our plants in Europe. Even though we are not the largest cement company, we have to assume the same high level of commitment-hence the importance of maintaining ourselves as an industry leader," said Jorge Alejandro Wagner, CEO of VCEAA.

In 2021, with approval from the Board of Directors, we joined the Business Ambition for 1.5°C Call to Action, committing ourselves to advancing toward a low-carbon economy; and in line with our 2030 Strategy and Commitments, we will align our CO2 emissions reduction targets with the Science Based Targets Initiative (SBTi). Created by four partner organizations (CDP, United Nations Global Compact, WRI and WWF), this initiative calls on companies to reduce their greenhouse gas (GHG) emissions and drive the transition toward a low-carbon economy by setting targets according to what current climate science indicates is necessary to reach the goals of the Paris Agreement.

In addition, we joined UN's Race to Zero campaign, which rallies and encourages companies, governments, and financial and higher education institutions to work for a healthier planet with zero carbon emissions. "We have a global ambition and know that this journey will be challenging, but we are fully aligned with the best industry practices, and we will work together to build a legacy that we are proud of and that will impact present and future generations," said Alvaro Lorenz, global director of Sustainability, Institutional Relations, Product Development and Engineering, who represented Votorantim Cimentos at the Climate Week in New York, in September, when we reaffirmed our commitments for the future.

"The COVID-19 pandemic has been a very hard experience for humanity, but it has showed us that we have to and can work together, just as we must with regard to climate change. We know that there are differences in technical specifications and legal challenges in different countries, but we are focused on creating a more sustainable future, and technology and innovation are enablers of and our allies in this process," said Bill Asselstine, VCNA's director of Sustainability.

Net Zero Concrete

In 2021, we joined forces with the world's leading cement and concrete manufacturers to accelerate the shift to greener concrete by pledging to cut CO2 emissions by an additional 25% by 2030, thus taking a decisive step in the race to net zero concrete by 2050. This move by the members of the Global Cement and Concrete Association (GCCA) marks the biggest global commitment to net zero by any industry.

The GCCA has published a detailed roadmap that sets out the path that the industry will follow to fully decarbonize by 2050. The actions between now and 2030 will prevent almost 5 billion tonnes of carbon from entering the atmosphere compared to a businessas-usual scenario. The roadmap includes ambitious yet achievable actions to reduce the amount of CO2-intensive clinker in cement, to significantly reduce the use of fossil fuels in manufacturing, and to accelerate innovation in products, process efficiency and breakthrough technologies, including carbon capture.



"THIS WILL REACH OTHER COUNTRIES AND WE WILL HAVE THE EXPERIENCE OF OUR PLANTS IN EUROPE. EVEN THOUGH WE ARE NOT THE LARGEST CEMENT COMPANY, WE HAVE TO ASSUME THE SAME HIGH LEVEL OF COMMITMENT—HENCE THE IMPORTANCE OF MAINTAINING OURSELVES AS AN INDUSTRY LEADER"

Jorge Alejandro Wagner, CEO of VCEAA

We are committed to producing carbon neutral concrete by 2050. To achieve this goal, we have created an internal roadmap and continue to work on several fronts in all countries where we operate. The five initiatives that will lead us to the decarbonization of the industry are:

② Reduce thermal energy-related emissions

by maximizing the co-processing of waste from other industries or processes to replace the use of fossil fuels. Our goal is to achieve 53% thermal substitution by 2030. Our energy efficiency initiatives include the modernization of equipment and the use of alternative energy sources.

Eliminate indirect energy emissions by using renewable sources of electricity. We have our own hydroelectric plants and are making large investments in solar and wind energy, aiming to reach 45% of selfproduction using renewable energy sources by 2030.

- **Reduce CO2 emissions** through the use of new technologies and the development of carbon capture.
- **②** Reduce the amount of clinker in cement and concrete and use concrete more efficiently in buildings and infrastructure projects. Our goal is for our clinker factor to reach 68% by 2030—which means that 32% of the final product will be made of alternative raw materials with lower CO2 emissions. Efficiency in the production and recycling of concrete are alternatives to avoid emissions by preventing raw material waste.
- **②** Reprocess and recycle demolition concrete, making this chain more circular and maximizing CO2 absorption through recarbonation.



CO2 EMISSIONS

In 2021, our CO2 emissions were 597 kgCO2/tonne of cementitous, an increase of 3.6% compared to 2020. This is primarily the result of two factors:

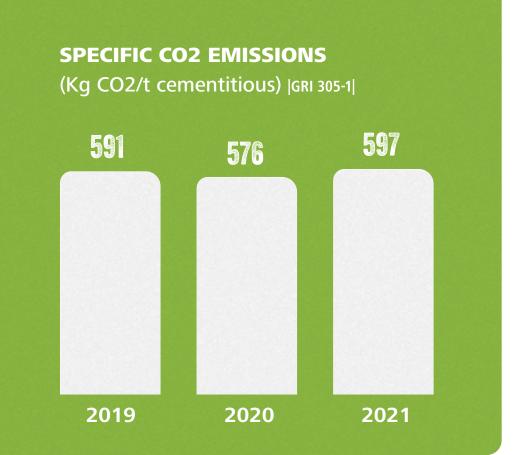
In line with our strategy to balance our presence in mature and emerging countries, in 2021 we acquired two new cement operations (McInnis and Balboa). These units add a significant volume of cement to our portfolio and are not yet at the same level of maturity as our other sites with regard to co-processing

and clinker factor. Our plan already includes investments and initiatives to advance decarbonization in these new acquisitions.

As a result of the pandemic, which affected the availability of waste, and of an increase in production volumes, we were not able to reach a volume of co-processed waste to maintain the level of thermal substitution reached in 2020. In any case, we have several investments planned for the coming years and we

must continue to increase our thermal substitution rates in all our regions.

Despite our 2021 results, we reaffirm our commitment to mitigate climate change in line with our decarbonization strategy and we are committed to approving a CO2 reduction target aligned with the Science Based Target initiative (SBTi). We continue to invest in technologies to increase thermal substitution, improve energy efficiency and reduce the clinker factor in all our operations.



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ESG RATINGS

Our ability to address environmental, social and governance (ESG) risks is evaluated by rating agencies specializing in non-financial topics, as well as by the CDP, an organization that gathers, analyzes and publicizes information on air emissions, climate and water.

¹ The use of any data from MSCI ESG research LLC or its affiliates ("MSCi") by Votorantim

Cimentos, and the use of MSCI logos, trademarks, service marks or index names herein,

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² This ESG Assessment was originally conducted by V.E, which is now part of Moody's

do not constitute a sponsorship, endorsement, recommendation, or promotion of









Sustainalytics³

In 2021, we received an ESG Risk

Rating of 21.1 and was assessed by

Sustainalytics to be at medium-risk

of experiencing material financial

impacts from ESG factors.

CDP

In 2021, we were recognized by the CDP, for the fourth consecutive year, as one of the best companies evaluated in the Climate Change Program. With a score of A-, we were the best rated cement company in Brazil and among the top 10 companies in the industry in the world.

logos are trademarks or service marks of MSCI.

https://www.cdp.net/en/

MSCI ESG¹

In 2021, we received a BBB rating in the MSCI ESG Ratings assessment.

https://www.msci.com/

In 2021, we received a 50/100 score in the Moody's ESG Solutions Assessment. This grade is considered a robust level by Moody's ESG

Moody's ESG Solution²

Solutions methodology.

https://www.sustainalytics.com/

section] contains information developed by Sustainalytics (www.sustainalytics.com).

https://esg.moodys.io/

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ESG Solutions.



- Boards and committees
- Ethics and compliance
- Risk management



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CORPORATE GOVERNANCE

GRI 102-18, 102-20, 102-22, 102-23, 102-26, 102-28, 102-31

We are fully committed to ethical conduct as well as to legal and regulatory compliance in our operations. Therefore, to ensure the creation of an ethical and transparent environment, since 2014, our global governance system has followed the standards adopted by publicly traded companies, thus strengthening our culture of ethics and integrity, and making us competitive when attracting investors. We have a structure dedicated to Corporate Governance that also advises the Board of Directors, aiming to implement best practices in all areas within the company. Our complete corporate structure can be found on our **Investor Relations website**.

WE ARE FULLY COMMITTED TO ETHICAL CONDUCT AS WELL AS TO LEGAL AND REGULATORY COMPLIANCE IN OUR OPERATIONS

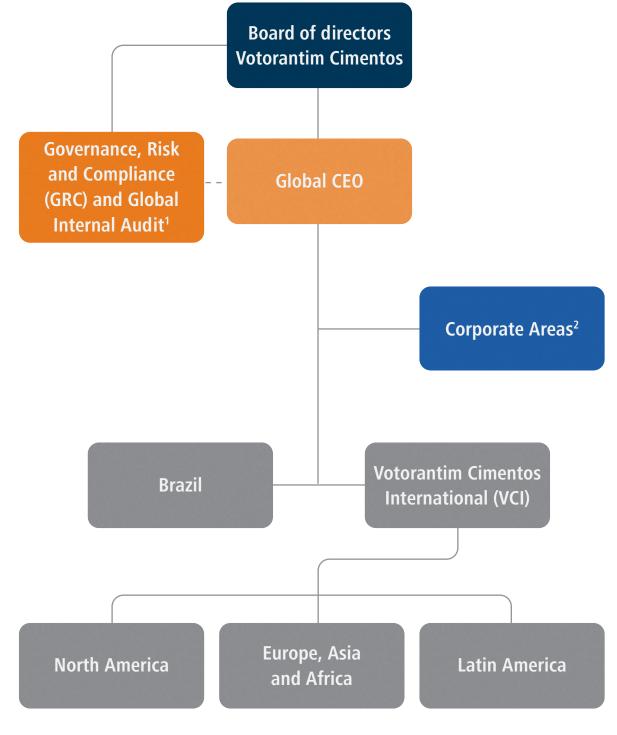
BOARDS AND COMMITTEES

Board of Directors

Our highest governance body has seven members, four of whom are independent (including the Chairman of the Board). Its members serve two-year terms and none of them hold an executive position in the company. Its main responsibilities are to develop and validate the strategy to ensure agility and efficiency in decision making. The Board of Directors is advised by three committees: Audit Committee (with three members, two of whom are independent), Finance Committee (with four members, two of whom are independent) and Compensation and People Committee (with three independent members). Their responsibilities are described in internal bylaws that have been approved by the Board. Some Board members are also part of these committees.

AUDIT COMMITTEE – Responsible for advising the Board on the appropriate monitoring of issues related to the continuity of the business, the effectiveness and integrity of internal controls, risk identification and management, the quality and integrity of financial reports, including financial statements and the work performed by by external auditors.

FINANCE COMMITTEE – Responsible for advising the Board in the evaluation and monitoring of issues in the finance sphere involving the analysis of the macroeconomic scenario that may affect the company, financial guidelines, such as cash management and liquidity guidelines and the monitoring and evaluation of alternatives to mitigate risk factors.



¹Governance, Risks and Compliance (GRC) and Global Internal Audit report to the Audit Committee of Votorantim Cimentos and administratively, to the CEO.

²Global areas: Finance, People & Management, Legal and Sustainability



More information about our governance bodies can be found on our <u>Investor Relations</u> website.

ORGANIZATION, COMPENSATION AND PEOPLE

COMMITTEE – Responsible for advising the Board of Directors on the appropriate monitoring of issues related to compensation models, nomination of management candidates, succession plan, and the corporate culture.

Board Performance and Meetings

The performance of the Board is independently evaluated by a specialized consultant every two years. To carry out in-depth discussions and detailed analysis of specific topics, the Board members are organized into four working groups (WG): Decarbonization and ESG; Merger and Acquisitions (M&A) Brazil; Global M&A; and Innovation. As per the bylaws, Board meetings are held every other month (and extraordinarily, when necessary). In 2021, the Board met 10 times; two of the meetings focused on Decarbonization and ESG topics, demonstrating the commitment of the governance bodies to environmental, social and governance issues. During the year, one of the most important agenda items, in line with our decarbonization strategy, was our decision to join the SBTi, as detailed on page 33.

THE BOARD IS COMMITED WITH **ENVIRONMENTAL, SOCIAL** AND GOVERNANCE ISSUES.

Board of Executive Officers

Statutory body of VCSA responsible for the management and representation of the company. Together with the Board of Directors, it develops the long-term strategy, as well as the company's mission, vision and values, which guide its shortand long-term strategic objectives. It is composed of the Global CEO, Global CFO, COO and Global General Counsel. The Board of Executive Officers is advised technically and strategically by two committees:

Brazilian Leadership Team (BLT) – Composed of the executive and non-executive Officers of the company in Brazil. Assists in the development and monitoring of the general business guidelines in the country, and follows up on reports on internal, management, operational and business matters.

Global Executive Team (GET) – Composed of the Executive Officers and CEOs of the four regions (VCBR, VCNA, VCEAA, and VCLatam), in addition to all non-executive global officers. Assists the monitoring and analysis of industry scenarios and the development of general global business guidelines. Each CEO reports on internal, management, operational and business matters in his/her region, in addition to informing, discussing and providing opinions to the Board of Executive Officers on strategic issues, including competitiveness, new markets, new businesses, products, innovation and sustainability. Each CEO can also form commissions to assist in the management of specific issues.

ETHICS AND COMPLIANCE

|GRI 103-2, 103-3: 205, 206, 307, 415, 406, 419; GRI 102-16, 102-17|

Our Way of Being is ethical and respectful, and we are committed to working with integrity and transparency. For us, as important as achieving results is how we get there. We believe that compliance is a requirement to ensure business perpetuity and that is the only way we operate at Votorantim Cimentos. Therefore, we expect our employees, at all levels, to follow the guidelines of our Code of Conduct and comply with laws, regulations and policies in all countries where we operate.

To support the organization on this journey, we rely on a Corporate Governance, Risk and Compliance & Internal Audit global department (GRC & IA). Based on best practices and to preserve its independency, this department reports directly to the Chairman of the Board of Directors and the Audit Committee.

Our Compliance Program is based on our Code of Conduct and Our VC Way, and its execution is part of every employee's responsibility. As a support department for all business areas, Compliance works side by side with Legal, Risk Management, Internal Controls, People Management, Internal Audit and the Business Ethics Office. The department establishes clear rules and guidelines to our employees, review processes and recommends improvements, organizes continued education programs through communication campaigns and training, monitors proper compliance with these obligations, and takes the necessary measures to identify and resolve any suspected violations of the standards.

Engagement

"Our compliance model is based on the engagement and participation of all levels of the company, according to their responsibilities, since we believe that misconduct, whether by action or omission, is harmful not only to Votorantim Cimentos, but also to society as a whole," said Adjarbas Guerra Neto, global director of GRC & IA.

In addition to everyday Compliance activities and responsibilities, 2021 highlights included:

- Guide, which details the main issues related to the company's activities.
- Training on issues related to competition for our leadership, management and other teams that maintain regular contact with customers and competitors.
- Review of the Third-Party Integrity Assessment Policy, which was approved in 2019.
- Approval of an Associations Policy to establish criteria for the participation of Votorantim Cimentos in associations and the conduct expected from our representatives.
- Review, together with the Environment and Safety areas, of processes related to the management of licenses and permits, resulting in a monthly report to monitor critical points and develop action plans.
- Reinforcement of compliance evaluations for strategic projects/ business models and top management decisions.

Although our core activities are not related to commercial transactions with governments, interactions with the public sector are part of Votorantim Cimentos' regular business, like with any other legal entity. Therefore, in addition to the compliance

evaluations incorporated into the company's daily processes (for example, integrity assessments of partners in M&A transactions or critical third parties, as well as risk assessments for new business models), Votorantim Cimentos conducted a specific anticorruption assessment in 2021. This complete map of interactions with the public sector enabled us to evaluate them, assess our level of control over them and identify our company representatives involved in these interactions to receive training in anticorruption issues.

Policies

Anticorruption and unfair competition have specific chapters in our Code of Conduct, as well as policies and guides to support our employees. In addition to being legal obligations, these issues are pillars of our Compliance Program. Through a risk-based approach, the most relevant and potentially exposed areas and positions regularly participate in virtual training (via an e-learning platform) and specific workshops held by the Compliance and Legal departments.

In addition to our Anticorruption and Antitrust policies, our Compliance Program also includes other global policies derived from our Code of Conduct: Gifts and Entertainment; Conflict of Interest; Donations and Sponsorships; Government Relations (with specific manuals for VCBR, VCNA and VCEAA) and the Third-Party Integrity Assessment.

Finally, we are signatories to the **Letter of Commitment to the Business** Movement for Integrity, Transparency and Anti-corruption, underscoring our commitment to adopt practical measures to fight corruption in the business environment and in public-private relationships.

Both our **Code of Conduct** and our **Compliance Program** guide, which was last revised in 2020, are available on our websites.



INTERNAL AUDIT PRACTICES

During the pandemic, we adapted the Internal Audit's work model to a hybrid format (on-site and remote assessments), to ensure that the safety of the professionals would be preserved and that the processes and controls would be evaluated and improved independently and thoroughly, according to international Internal Audit standards and guidelines. In 2021, our specialized employees carried out audits in the different regions where we operate, while also sharing best practices among the units and expanding the implementation of comprehensive action plans. In addition, our audit processes were assessed by an independent international audit firm, which resulted in the implementation of a global quality review program for the work performed by Internal Audit, accelerating the evolution of the level of maturity of the area.







TECHNOLOGY AT THE SERVICE OF ETHICS

We must always work preventatively to identify vulnerabilities and faults that may lead to losses and fraud within our organization—and given the geographic dispersion of our operations, the use of technology is essential. In 2021, we invested in digitalization as a way to improve the maturity level of our compliance process and controls. We promoted courses, used forensic intelligence and tools, and partnered with security experts to strengthen the Fraud and Loss Prevention pillar of our Compliance Program.

Complaints and Ethics Line

We know that the best way to solve problems is through open dialogue. Therefore, we always encourage our employees to express their concerns directly to their leaders or to the appropriate areas, such as People Management, Legal or Compliance. However, there are situations where an individual may not feel comfortable contacting internal people.

It is for these situations that we have the **VC Ethics Line**. Available 24 hours a day, seven days a week, by phone or via website (except in Morocco, where it can only be accessed via internet), the Ethics Line offers the option of anonymity. Not only our employees, but also partners, contractors and anyone who interacts with our operations may report suspected misconduct or irregularities (such as acts of corruption, bribery, discrimination, harassment, etc.). The channel can also be contacted for questions about our Code of Conduct.

Individuals can track the status of cases and add new information, if they so choose. The VC Ethics Line call center is operated by a third party and does not use caller ID. All information is stored on an external server to ensure that issues are dealt with confidentiality and impartiality. Retaliation against people who file complaints is not tolerated and all reports are investigated in accordance with our internal policies and applicable law. Cases related to fraud, conflicts of interest and embezzlement of resources are referred for investigation by Internal Audit. Corruption and unfair competition are investigated by the Legal department.

Twice a year, the Global Business Ethics Office reports the Ethics Line statistics to the Audit Committee, the Board of Directors and the Global Business Ethics Commission, formed by the global CEO, the global Legal director, the global director of GRC & IA and the global director of People and Management.



Compliance Day

For the fifth consecutive year, Compliance Day was held in all regions where we operate. Mixing educational and practical activities, the event enabled important reflections and reinforced how compliance is part of the daily lives and activities of our employees. We are aware that in a complex and dynamic environment, unforeseen compliance dilemmas may arise from time to time. Therefore, in 2021, the central theme of our events was Critical Thinking as an important tool to ensure ethical conduct, since what is right goes beyond what is written.

To protect the health and physical well-being of our employees, once again the events were held remotely and broadcast live via the company's internal social media and communications channels; they included messages from the Chairman, the coordinator of the Audit Committee, the Global CEO, the regional CEOs and other company leaders, as well as guest speakers. In Brazil, we chose to organize an entire month of events and activities designed to put compliance in practice. One of the main initiatives was a competition on "What inspires me to be ethical and respectful in my everyday life."

RISK MANAGEMENT

|GRI 102-15|

Our risk management model is based on the principles and guidelines of the ISO 31000/18 standard and on the recommendations of the Committee of Sponsoring Organizations of the Treadway Commission (COSO), with a focus on three main risk components: identification, assessment and response.

Risk identification of potential events that could affect the company's strategic and operational goals is carried out through a bottom-up and top-down approach that involves analyses of indicators, administration of technical questionnaires, interviews with operational and corporate areas and discussions with the leadership team. Risks are analyzed and classified according to their likelihood and impact (financial, legal, social, environmental, safety, image and reputation, stakeholders and internal climate). After classification, the risk response is determined, and the responsible areas develop detailed action plans to prevent the materialization of risks and mitigate their potential impacts.

Risks and action plans are monitored and periodically reported to the Global GRC & IA department and to the leadership team, according to their classification. Annually and when requested, the risk management process, from a global perspective, is reported to the Audit Committee and to the Board of Directors.

The risk management process is fundamental in the implementation of our strategy; through the risk appetite we determine the level of risk we are willing to accept in pursuit of value. In 2021, we revised our risk appetite to better guide discussions and ensure that the leadership team and the Audit Committee are aware of the risks that are critical to the organization. "The objective was to better detail and classify the risk impact in each instance to enable the company and its governance bodies to focus on what is truly critical," said Adjarbas Guerra Neto.

Climate Change

Climate change continues to be perceived as the gravest threat to humanity. Due to the nature of our business, one area that receives significant attention is the management of climate risks, linked to greenhouse gas emissions and the consequent increase in costs in countries where more restrictive legislation in this area already exists, such as Canada and Spain. This also includes technological risks due to a potential dependence of the industry on CO2 capture and sequestration technologies.

At the same time, the transition to a low-carbon economy offers business opportunities to our cement and concrete operations, as their products are characterized by durability, resilience and versatility for their use in the construction of low-carbon energy generation, buildings and transportation infrastructure.

"THE OBJECTIVE WAS TO BETTER **DETAIL AND CLASSIFY THE RISK IMPACT IN EACH INSTANCE"**

Adjarbas Guerra Neto, global director of GRC & IA



TCFD

Since 2020, we have voluntarily complied with the recommendations of the Task Force on Climate-Related Financial Disclosure (TCFD), which are structured around four dimensions: Governance, Strategy, Risk Management, and Metrics and Targets. Based on information disclosed by companies, the market can price the impact of climate change on business more accurately, increasing the efficiency of processes and the stability of the global economy. In 2021, we became formal **supporters** of the initiative.

Crisis Management

An organization's exposure to risk is increasingly complex, demanding a high level of risk management work, continuous assessment and rapid response to potential crisis situations. We have a structure dedicated to the crisis management process that coordinates the execution of initiatives to mitigate possible short-, medium- and long-term impacts on our assets, businesses, people, image and reputation.

The coronavirus pandemic forced us to be very active in this area throughout 2020, with daily meetings. In 2021, thanks to the availability of vaccines and increased control over the activities needed to mitigate the effects caused by the virus, these meetings were spaced out, becoming weekly and then monthly, with frequent tracking of the prevalence of new cases in different regions where we operate. The pandemic has taught us very important lessons, which will guide us in reviewing the area's operating strategy in the coming years. We monitor, in real time, any new issues that may trigger a crisis situation. In 2021, for example, we closely followed the threats of a truck driver strike in Brazil and macroeconomic volatility in Turkey. In 2022, we will continue investing to improve this process.

TCFD DIMENSIONS

Governance

The organization's governance around climate-related risks and opportunities

Board oversight

Read more in Corporate Governance

The role of management

Read more in A Message from the **Board**

Risks and opportunities

Strategy

The actual and potential impacts

opportunities on the organization's

businesses, strategy and financial

of climate-related risks and

Read more in Sustainability and 2030 Commitments Read more in Risk Management Read more in Decarbonization

Financial and business impact

Read more in Global Results

Scenarios

planning

Read more in Global Results Read more in Sustainability and 2030 Commitments

Integrated Report: pages 12-13, 38-CDP: items C1.1, C1.2, C1.3

Integrated Report: pages 32, 33-35, 42-43, 45-47

CDP: items C2.1, C2.2, C2.3, C2.4, C3.1

Risk Management

The processes used by the organization to identify, assess and manage climate-related risks

The metrics and targets used to assess and manage relevant climate-

Metrics and Targets

related risks and opportunities

Climate-related risk identification, management and monitoring

Read more in Risk Management Read more in Circular Economy Read more in Sustainability and 2030 Commitments

General risk integration

Read more in Risk Management

Integrated Report: pages 32, 42-43,

CDP: items C2.1, C2.2, C2.3

68-72,

CO2 targets report

Read more in Monitoring Our 2030 Targets

Details of scopes 1, 2 and 3

Read more in Circular Economy Read more in Monitoring Our 2030 Targets

Climate-related targets

Read more in Monitoring Our 2030

Integrated Report: pages 68-72, 85-

CDP: items C4.1, C4.2, C4.3, C5.1, C6.1, C6.2

SINCE 2020, WE HAVE VOLUNTARILY COMPLIED WITH

THE RECOMMENDATIONS OF THE TCFD



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GLOBAL RESULTS

Not even in our most optimistic forecasts could we have imagined that 2021 would end as the best year in our history in terms of financial performance. We grew strongly in virtually all indicators compared to 2020. Our sales volumes grew 15%, to 37.2 million tonnes of cement, resulting in R\$ 22.3 billion in net revenue (33%) higher than the previous year). Consolidated adjusted EBITDA (earnings before interest, taxes, depreciation and amortization) was R\$ 5.2 billion, an increase of 37% compared to 2020, with an EBITDA margin of 24%.

"In 2021, we had a remarkable year, with record results, increased operational leverage and improved financial metrics. We increased our capex allocation focused on competitiveness and executed important strategic steps, strengthening and diversifying our footprint," said Osvaldo Ayres Filho, Global CFO.

We were able to take advantage of this situation and expand our operations: we acquired a cement plant in Spain, with another pending required approvals, and, in North America, we added a major cement operation, an aggregates business and assumed full control of a concrete operation, in which we were already a partner. We also concluded the expansion of another cement plant in Brazil (read more about these operations in About VC, on page 16).

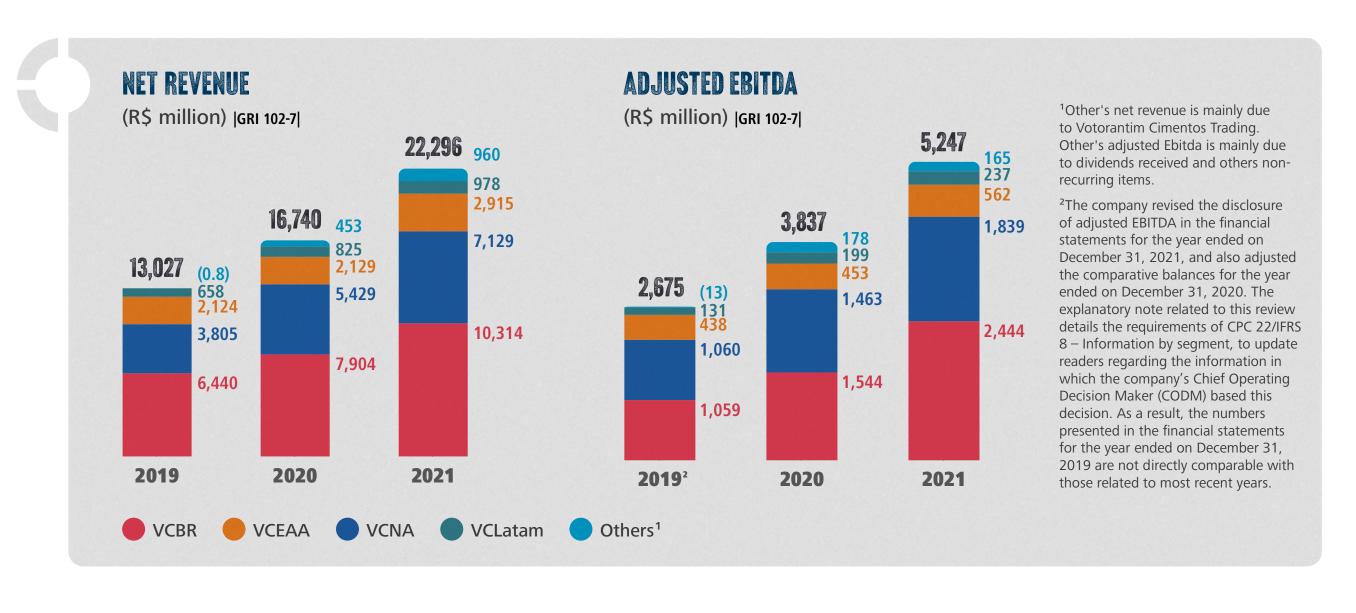
Growth in all Regions

In Brazil, despite the macroeconomic crisis, with high inflation and lower-than-expected gross domestic product (GDP) growth, our net revenue was R\$ 10.3 billion (compared to R\$ 7.9 billion in 2020) and our adjusted EBITDA followed the same trend, ending the year at R\$ 2.4 billion, a 58% growth compared to the previous year.

In North America, net revenue increased from R\$5.4 billion to R\$7.1 billion. Adjusted EBITDA, which had been R\$1.5 billion in 2020, grew to R\$1.8 billion. In 2021, VCNA's numbers were very close to VCBR's, as seen in the graphs below, in line with our strategy of balancing our presence between mature and emerging markets. "In

"IN 2021, WE HAD A REMARKABLE YEAR, WITH RECORD RESULTS, INCREASED OPERATIONAL LEVERAGE AND IMPROVED FINANCIAL METRICS."

Osvaldo Ayres Filho, Global CFO



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2022, there is a great expectation to maintain our growth, especially considering the infrastructure package approved by the US Congress in November," said Filiberto Ruiz, CEO of VCNA. Additionally, we reinforced our position with the completion of the McInnis transaction and the acquisition of Valley View operational assets in Illinois, in the United States, as well as by assuming 100% control of Superior Materials.

Likewise, the acquisition of two cement plants in Spain (Balboa, integrated since the end of October, and HeidelbergCement, pending final regulatory approval) is reinforcing our presence in the Iberian Peninsula by expanding our business both in Spain and in Portugal. In all VCEAA countries, after a challenging 2020 due to the pandemic, business resumed in force. Morocco continued to account for most of the region's EBITDA. In Turkey, there was significant improvement in numbers, and in Tunisia, as solid as our operations are, there is concern about political instability. The VCEAA region ended the year with net revenue of R\$ 2.9 billion and adjusted EBITDA of R\$ 562 million.

"At VCLatam, the results were also above expectations, thanks to a faster than expected economic recovery and strong cost focus to contain the impact of cost inflation," said Günther Smetana, CEO of VCLatam. We continued to invest in Latin America and ended the year with R\$ 978 million in net revenue and a 18.5% increase in adjusted EBITDA, which totaled R\$ 237 million, including the results from Uruguay and Bolivia.

"IN 2022, THERE IS A GREAT EXPECTATION TO MAINTAIN **OUR GROWTH, ESPECIALLY** CONSIDERING THE INFRASTRUCTURE PACKAGE APPROVED BY THE US CONGRESS IN NOVEMBER"



Filiberto Ruiz, CEO of VCNA



ESG-FOCUSED CONFERENCES

In September 2021, we participated in a meeting with investors focused on ESG, organized by a financial institution to address the increasing demand for information on environmental, social and governance topics, which have always been important issues for our operations.

We used the opportunity to present our evolution with regard to ESGrelated issues and our projects in greater depth, demonstrating that we are aligned with society's concerns for more transparency in the business environment. We also presented our 2030 Commitments and action plans to achieve our set targets.

At the event, we reaffirmed our understanding that ESG disclosure increases our credibility with investors and other stakeholders, as we communicate the company's strategy to manage the set of risks in this area and pursue related opportunities.

INVESTMENT GRADE, LEVERAGE AND INDEBTEDNESS

|GRI 102-7|

To achieve these results in 2021, we increased our gross debt primarily to fund the purchase of Cementos Balboa and due to adjustments to McInnis' balance sheet debt, which ended the year at R\$ 13.8 billion (compared to R\$ 12.2 billion at the end of our fiscal year in 2020) and was also impacted by the devaluation of the Brazilian currency. By the end of 2021, our leverage (net debt/EBITDA ratio) had been reduced to 1.55x, compared to 1.95x at the end of 2020 and 2.93x in 2019.

During the year, we borrowed a total of R\$ 3.7 billion. Considering all transactions in 2021, the company reduced the 2023 maturity by R\$ 1.5 billion, increasing the debt amortization average maturity with a competitive cost.

ESG Financing

Since our first sustainability-linked financing, in 2019, we have increased our use of this form of financial instrument. In February 2021, we became the first company in the Brazilian construction market to issue an ESG debenture to fully prepay debt from our subsidiary Votorantim Cimentos N/NE S.A. (VCNNE) maturing in 2023, thereby extending our term to 2026. The indicators (KPIs) that will be measured are CO2 emissions per tonne of cementitious and thermal substitution rate, two sustainability parameters that are relevant for the cement industry and align with our 2030 Sustainability Commitments. By achieving targets set every year, we will benefit from improved debt prepayment terms.

During the year, we issued four other sustainability-linked financing instruments, including a R\$500 million debenture with a seven-year term, also linked to thermal substitution and emissions reduction targets.

Ratings

The rating agency Moody's upgraded our credit rating from Ba1 to Baa3, with a stable outlook. S&P and Fitch maintained their BBBrating and stable outlook, all of which reflect our strong and positive cash flow, a solid business position and strong liquidity. With that, in 2021, the three main credit rating agencies confirmed our investment grade classification for our credit operations, a qualification that is part of our strategy for which we do not compromise. Votorantim Cimentos is one of the few Brazilian companies to have an investment grade rating attributed by the three main rating agencies.

CREDIT RISK CLASSIFICATION

	Moody's	Fitch	S&P	
Rating	Baa3	BBB-	BBB-	
Outlook	Stable	Stable	Stable	
Date	June 2021	May 2021	November 2021	

SUSTAINABILITY-LINKED FINANCING

CCF US\$ 290 million AUG 2019	EUR 85 million bilateral NOV 2020	ESG debenture R\$ 450 million FEB 2021	EUR 50 million bilateral JUL 2021	EUR 40 million bilateral JUL 2021	Global RCF US\$ 250 million SEPT 2021	ESG debenture R\$ 500 million OCT 2021
KPI 4: ESG Score						



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OUR EMPLOYEES

|GRI 103-2, 103-3: 401|

We are a company made up of people who believe, act and build. Our journey is one of courage, of moving and supporting lives and careers; we are one united team in all 11 countries where we are present. We renew our plans and commitments to people on a continual basis and we are a team willing to dream and fight for what we want to build.

Our VC Way guides us in doing what is right, respecting and including people as they are, valuing and learning from differences and delivering results in an ethical and respectful way. We want our employees to identify and take advantage of opportunities to simplify, test new possibilities, increase inclusion and act with ownership. We know that achieving our future business ambition will be challenging, but we are convinced that we have the right people to thrive, with the courage to provoke, transform and go beyond.

We ended 2021 with a total of 12,466 employees, 5.5% more than in 2020 (11,783), as a result of the creation of 683 new positions during the year, the integration of companies in North America and Europe and the start of new operations in Brazil. As in 2020, this year, our people management focus included special attention to safety, health and well-being (partially in connection with the COVID-19 pandemic that continued during the year) and diversity, as a reflection of our commitment to create an increasingly diverse and inclusive work environment.



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SAFETY, HEALTH AND WELL-BEING

|GRI 103-2, 103-3: 403; GRI 403-1, 403-2, 403-7|

We believe that excellence and competitive performance are not possible if we do not have safety, health and well-being as our foremost values. Therefore, these values are non-negotiable for us. People are our most valuable asset, and we set ambitious goals to prevent injuries, eliminate fatalities and promote a safe and healthy work environment throughout the entire production chain.

We have a Global Health and Safety Policy and Life-Saving Rules. We manage safety globally and maintain local teams responsible for participating in the development of and reinforcing these principles and for promoting training with the goal of creating an environment of zero harm to people. "Safety, health and well-being are part of Our Way of Being. In our operating strategy, these principles come first and must guide our behaviors inside and outside the organization," said Dirlane Albino, Safety and Environment manager.

We rely on specialized professionals and hire external consultants to assist in risk assessments, including those considered long term. We work to increase efficiency, improve productivity and reduce turnover and absenteeism through the implementation of a culture of well-being. "We want our employees to make positive decisions for their health, and we believe that promoting quality of life makes the company more and more human," said Cristiano Brasil, global director of People, Management, Communications and IT.

As per our Global Occupational Health and Safety Policy, we are committed to:

- **1. Observe and respect** the law and regulatory requirements relating to occupational health and safety.
- **2. Incorporate illness** and accident prevention in all processes involving our employees and contractors.
- **3. Strictly comply** with our Critical Risk Protocols and Life-Saving Rules; full compliance is a condition of employment.
- **4. Provide training** on occupational health and safety as part of the professional development of our employees.
- **5.** Audit and evaluate the effectiveness of preventive measures against accidents at work.
- **6.** Seek continuous improvements, aiming at zero accidents and illnesses at work.
- **7. Implement and monitor** proactive indicators with a focus on safe behavior.

Best Practices

|GRI 403-4, 403-5|

Our employees are trained in specific safety procedures required by law in each country, according to the type of task they perform. Employees hired as contractors have the same training requirements as company employees, since we follow and comply with the Contractor Management Manual, a document that formalizes and ensures that the best safety practices will also be adopted by our service providers.

In 2021, we launched the Practical Cement Safety Guide in Brazil. Created through collaboration between the Safety and Operation areas, it includes a list of specific rules for each area. In parallel, we developed new online courses to facilitate refresher training, including modules on safety standards such as NR 33 (work in confined spaces), NR 10 (work with electricity) and NR 35 (work at heights).

The SafeStart Program, to encourage safe behavior and reduce accidents, which has been implemented at VCBR since 2018, is expected to be extended to other units and businesses in 2022. Other initiatives worth mentioning are the Safety Recognition Program and the creation of Safety Committees in all businesses.

Due to the COVID-19 pandemic, for the second consecutive year, our Internal Work-Related Accident Prevention Week (SIPAT) was held 100% online in Brazil. The entire event, organized and managed by the corporate Safety area and the operational and medical teams, was recorded and distributed to all plants, increasing the engagement of the teams. In addition to our in-house team of professionals, we invited experts to reinforce the importance of maintaining safe behavior in the workplace.

In carrying out routine activities, Daily and Weekly Safety Talks are tools used to reinforce safety concepts and raise awareness of everyday risks. Also, preliminary risk analyses (PRA) help the company assess the factors that may increase the risk of a task to identify the necessary control measures.

Since 2019, we have included the Occupational Hazard and Risk Identification and Assessment Matrix as one of our auditable items, as a way to ensure that the tool is up to date with regard to control activities and measures.

We use tools such as pre-use checklists prior to the operation of equipment, vehicles and tools. We also reinforce the Right to Refuse, which guarantees our workers the right not to perform a certain activity when they believe the control measures may be insufficient or faulty.

1.30

0.93

2021

2021

51

Safety Indicators

We strive to have zero fatalities in our operations. Incident frequency rates are broken down by region and the challenge is always to ensure that the lessons learned are shared and the preventive measures adopted actually contribute to reduce the occurrence of accidents. In the midst of a pandemic, this was another significant challenge we faced with determination. At VCNA, seven businesses extended their safety records of working more than a year with no lost-time injuries, three of which have gone more than a decade. Worldwide, we ended 2021 with no fatalities, which is a major achievement.

In Brazil, despite our efforts, we had an increase in the number of losttime injuries. Approximately one third of these accidents were caused by falls in the workplace. Our operational and safety teams have been working together to implement initiatives to reduce these numbers.

The frequency rate and the number of fatalities in the last three years can be seen in the graphs to the right.



GLOBAL FREQUENCY RATE 1,2 |GRI 403-9, SASB EM-CM-320a.1| 1.83 1.17 1.11 0.60 2019 2020 Employees Contractors **NUMBER OF FATALITIES²** |GRI 403-9, SASB EM-CM-320a.1| 2020 2019 Employees Contractors

SAFETY RECOGNITION PROGRAM

Our Safety Recognition Program rewards both groups of employees and individual employees. In 2021, the 101 award-winning employees in our VCBR team showcased initiatives that confirm safety and health as non-negotiable values in our operations. In the Teams Category, three to five people can submit an improvement project that has already

been implemented. Individual initiatives are recognized by the Guardian in Safety trophy. The recognition happens annually and includes the Cement, AACI, Logistics and Concrete businesses. The winners of each phase qualify for the next, until they reach the final VCBR phase. This a healthy competition to further increase safety in our operations.

- ¹ Considers the number of lost-time injuries divided by the total hours worked x 1,000,000. Does not include Uruguay
- ² Considers on-site occurrences in cement, aggregates, mortar, logistic, grout and concrete facilities.

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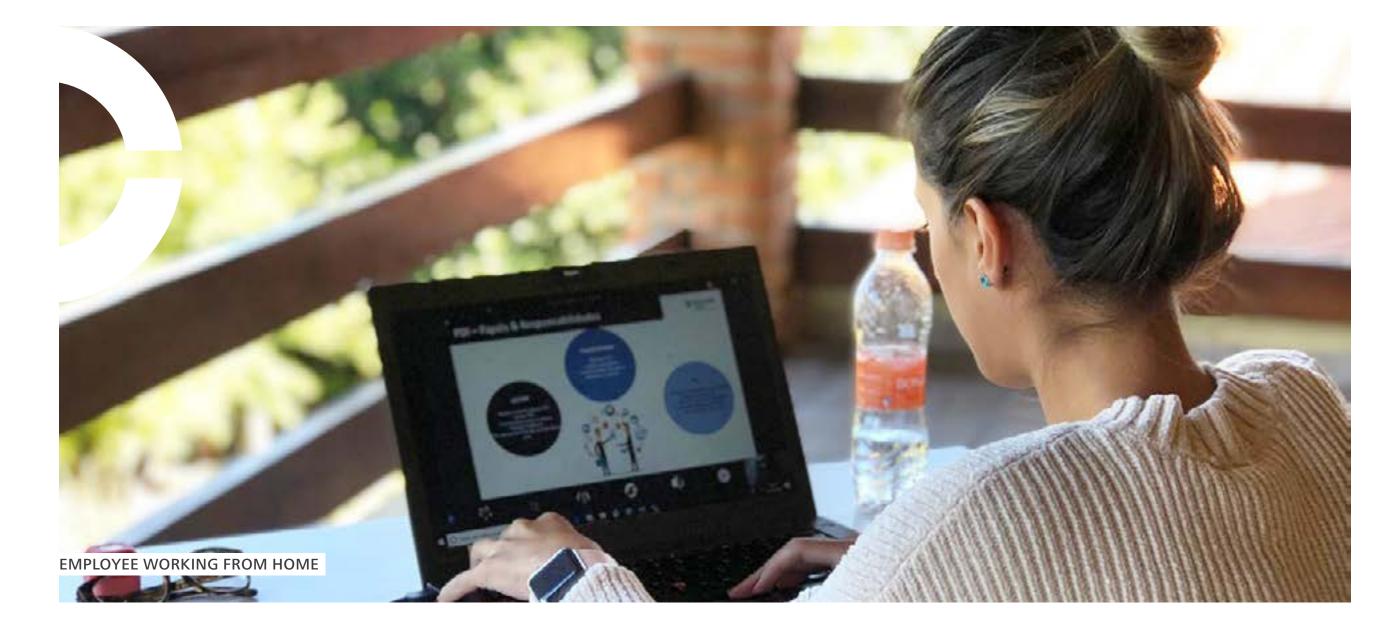
HEALTH AND WELL-BEING

|GRI 403-3|

In 2021, we once again dedicated energy and resources to fighting and minimizing the effects of the coronavirus. Initiatives implemented in the previous year (including social distancing in cafeterias, buses, and other common areas; temperature checks; wearing masks; monitoring all suspected and confirmed COVID-19 cases; and large-scale COVID testing), were maintained.

We also adopted a hybrid work system, where the majority of administrative employees have been working remotely since the beginning of the pandemic, while production areas have continued to work in person. To support that, in VCBR we distributed ergonomic kits (chair, mouse, keyboard, laptop stand and headset) to employees who needed to work remotely and, in 2021, we continued this initiative by providing a virtual credit card for our employees to purchase equipment.

In all regions, we encouraged our employees to be vaccinated, since we believe that the only way to get through the pandemic is by focusing on the common good. In Brazil, our campaign was called "Your Life is Made to Last" and focused not only on our employees but also on their families and the communities living in the vicinities of our sites. Our campaign to encourage vaccination was publicized internally and externally throughout Brazil, including through social media, internet, newspapers and billboards in cities where we operate. Worldwide, more than 90% of our employees had taken one dose of the vaccine and approximately 50% were fully vaccinated by December 2021.



Naturally, there are regional variations in the different countries where we operate. Uruguay, for example, was quick to vaccinate its population and avoided a large wave of cases and hospitalizations. Argentina also fared well, while Bolivia was affected by a lack of vaccines and insufficient hospital infrastructure. In Europe, Spain was the country that had the highest percent of its population vaccinated. In North America, despite the early start of vaccination, the percentage of people vaccinated progressed slowly. In Brazil, we had a delay in the start of vaccinations, but we managed to

vaccinate a significant percentage of the population in 2021.

This year, thanks to a reduction in number of cases and the increase in the percentage of the population that has been vaccinated, we published the Work from Anywhere Policy for administrative employees, which allows them to work half the time from home—an option that is offered in all regions. In addition, we produced a Home Office Guide that includes tips such as the importance of taking short breaks during the workday and maintaining a healthy diet.

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Comprehensive Program |GRI 403-6|

To help employees overcome challenges and limitations resulting from the pandemic, we paid special attention to mental health and sought to offer help in the best ways possible. The first step was to carry out an internal survey and create a comprehensive global health program that included:

- organized a Mental Health Awareness Week, with lectures and discussions on the issue and promoted the availability of Employee Assistance Programs (EAPs). In Brazil, we also promoted a mental health virtual live event focused on how to balance family, children, home and work and shared what we are doing in our personal lives to keep our spirits up.
- Video distribution: At VCBR, we distributed videos on topics such as hypertension, sexually transmitted diseases, alcohol consumption, smoking, women's and men's health, sedentarism and metabolic diseases.
- Partnership with specialists: At VCEAA, we worked in partnership with specialists from the Jaume I University, in Castellón (Spain), to develop initiatives that were combined under the umbrella of VCEAA's Mental Health Strategy, which was also implemented in other countries (Morocco, Tunisia and Turkey).
- Psychological support: In Brazil, we developed an initiative named Estamos com Você ("We are with You"), which included virtual, free-of-charge counseling for employees and their dependents and mental health virtual live events with psychologists, and the Pilar Program ("Pillar"), with psychologists and social workers available by phone, 24 hours a day.







- Online well-being platform: At VCBR, we created an online platform, named Total Pass Plus to promote emotional well-being and offered mindfulness workshops and stress management training. At VCNA, we launched a monthly newsletter (focused on health, nutrition, personal and family care, use of medication and suicide prevention) and a new employee wellness portal, which already has more than 170 exclusive product and service offerings for our employees in the U.S. and Canada, including discounts for in-person and virtual fitness classes.
- H1N1 vaccine: Every year, we offer the H1N1 vaccine at no cost to our employees.

- Project VIK: An app that uses gamification to promote a healthier lifestyle through physical activities (launched as a pilot in Brazil, the project will be extended to other units starting in 2022).
- Social Service: In 2020, we started the Social Service program for Engemix employees and in 2021 we expanded the service to all VCBR employees. Through this program, social workers support employees with personal problems that impact their productivity and help employees that have trouble using the healthcare plan offered by the company.
- Baby Program: Provides prenatal care and a stipend until the child's first birthday.

DIVERSITY

|GRI 103-2, 103-3: 405|

We are committed to create a diverse, ethical and inclusive work environment, respect people regardless of their characteristics, and value and learn from our differences. We understand that we have a fundamental role in promoting diversity and inclusion and in the fight for equal opportunities.

With the purpose of recognizing the differences that make us unique, in 2019, we had established groups of allies in Brazil on four major themes (gender, race/ethnicity, LGBTQIA+ and people with disabilities) to promote diversity and inclusion; in 2021 the work of these groups advanced through the organization of more than 50 meetings, diversity talks and events.

Also in 2021, our governance process based on Regional Diversity Plans strengthened our culture of inclusion in different businesses and locations. More than 300 local initiatives were organized in eight plans (regional Center-North office, regional Southeast office, regional South office, regional Northeast office, Sales & Marketing, Concrete, Adjacencies and Corporate).

During the year, we also carried out the Diversity and Inclusion Census (in the past, our performance in this area was evaluated through climate surveys). The results of this assessment, which had the participation of 77% of employees in Brazil, will help us develop and prioritize initiatives in the coming years.

As part of our ongoing efforts to build VCNA's pipeline of talent and attract a new generation to our industry, we announced several new improvements to our maternity and paternity coverages in Canada and United States, aimed at providing a better working environment for our current employees and making VCNA an even more attractive destination of choice for future employees of all ages and cultural backgrounds. We also partnered with the Toronto Community Benefits Network (TCBN) to hire people with different profiles, increasing diversity, and we sponsored the Building Diversity Awards. All funds raised will support the entity's NexGen Builders mentoring program. The objective is to increase the participation of Black people, indigenous people and other races in the local construction industry.

In addition, we encouraged our employees to participate in Juneteenth (a date that celebrates the end of slavery in the United States and became a national holiday in 2021) through a webinar focused on diversity, inclusion and equality promoted by LifeWorks. The session discussed the various ways in which we can be complicit, intentionally or unintentionally, in producing or perpetuating systemic barriers, prejudices and norms surrounding racial issues. VCNA also organized a Pride Month and a Transgender Awareness webinar on being an LGBTQ+ Ally. Another regional initiative was to create the option to add gender pronouns to email signatures.

At VCEAA, we produced a video in which four employees from Spain shared their experiences from the perspective of four generations working side by side in our company, using different knowledge and skills to promote tolerance and enrich our teams, processes

and decision-making. The Spanish unit also signed the Diversity Initiative Charter, a voluntary charter of principles promoted by the European Commission and the Ministry of Equality to reinforce and give visibility to our commitment to diversity and inclusion at work. In Morocco, the company extended paternity leave beyond the time required by law.



"PODE ENTRAR" VIRTUAL LIVE EVENTS

We promoted discussions about diversity through live events hosted by a sponsoring director, with the participation of important Brazilian public figures, such as Mafoane Odara (Psychologist from São Paulo University and specialist in reducing gender and race inequalities), Rita Von Hunty (drag queen, artist and speaker), Laís Souza (Brazilian gymnast who became quadriplegic) and Benilda Brito (Social manager and founder of the Odara Black Women's Institute). On average, each video was watched by 1,500 employees.

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GENDER

As part of our 2030 strategy, we are committed to steadily increasing the number of women in leadership positions. We ended 2021 with 20.2% of women in leadership positions. This was the result of several initiatives we carried out throughout the organization.

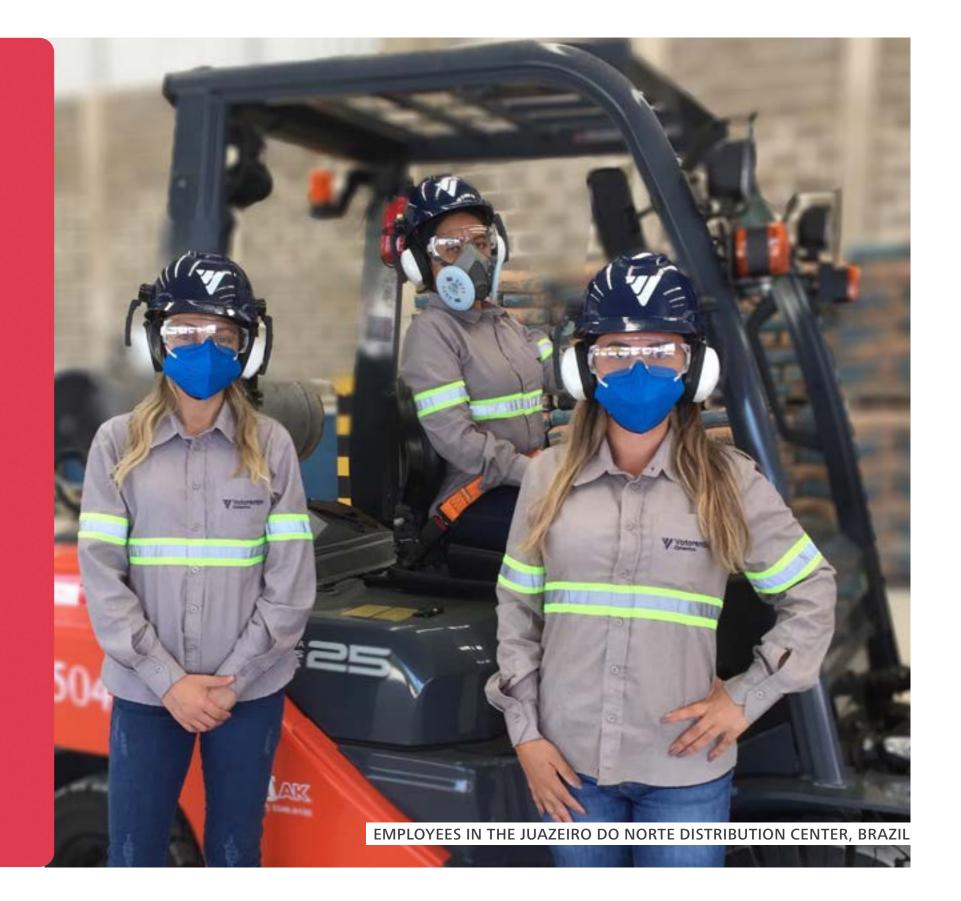
During the year, three women joined our governance bodies: economist Clarisse Lins became a member of our Board of Directors, Luciana Domagala joined the Compensation and People Committee, and Cristina Betts became a member of our Finance Committee.

At VCBR, we had important developments in this area: we opened a new distribution center 100% operated by women in Juazeiro do Norte, Ceará; launched the Reliable Engineers training and development program for women, to increase the number of women in technical operational positions; offered a free training program for women interested in becoming ready-mix truck drivers; hosted a unique course on Neuroscience Applied to Unconscious Decision Making, which had the participation of 100% of our senior leadership team; and opened the second LideraVC, a program for the development of leadership skills exclusively for women, to all female managers in Brazil.

At VCNA, we appointed our first woman president, Resha Watkins, who heads up VCNA's Aggregates business. We also teamed up with an organization, to create the Hamilton Uplift program, which offers training and refresher courses to women and non-binary individuals to expand their career opportunities.

WOMEN IN CHARGE

In line with our strategy to increase the number of women in our operations, in the second quarter of 2021 we inaugurated a distribution center in Juazeiro do Norte (Ceará) 100% operated by women. This is our first unit operated exclusively by women, representing a milestone in the inclusion of women. With the opening of the new distribution center, we ended the year with 27% more women in the Logistics area than initially anticipated. "We are very proud of this important milestone and believe that it serves as a great example of diversity, inclusion and the important role women play in the construction industry," said Luis Eduardo Valim, Logistics director at VCBR. This initiative earned us the VI SENAI 2021 Logistic Panel Award, as an industry benchmark in Diversity and Inclusion.



TRAINING AND DEVELOPMENT

|GRI 103-2, 103-3: 404-1|

Since the beginning of 2020, we have pledged to not lay off employees as a result of the COVID-19 pandemic. The good news is that, since then, we have actually created jobs. And during this time, we have improved how we train new and existing employees virtually.

One of the main highlights of 2021 was the launch of the VC Learning Platform, which enables independent knowledge management in different areas, such as personal and professional development, and technical, operations and corporate issues (through video classes, technical manuals, podcasts and other tools), ensuring that employees can play a leading role in their own development at the company. The platform is now available to 100% of the VCBR team and is planned to be extended to VCNA and VCEAA in 2022.

We also launched the Leadership Development Journey (a new development model for all Votorantim Cimentos leaders that includes different content on culture, people management, business and self-knowledge), divided into four tracks according to career stages: Toward Leadership, First-rate Leadership, From Leader to Leader, and Succession in View. Another highlight was our Gateway program, to help recruit talent in the market for succession in the medium and long term.

In 2021, we opened enrollment for the Technical Internship Program, exclusively for women. In all of Brazil, 25 technical school students were selected. Another program, University Internship,

offered 333 undergrad students in different fields the opportunity to work in the corporate, industrial and commercial areas of the different VCBR business units (cement, concrete, mortar, aggregates, co-processing and aglime).

Our training initiatives at VCNA included the creation of six new Corporate University classes, including courses in French to accommodate our new employees in Quebec (Canada), with a 22% increase in the number of students, and the relaunch of the Mind-to-Mind employee mentoring program. In technical training, the highlights were a new partnership with the Colorado School of Mines and TPC Training (which specializes in industrial maintenance training) and the strengthening of a program in partnership with the Kline Group focused on providing knowledge and solutions for the value chains of various sectors of the economy.

At VCEAA, we assessed our development needs to implement strategic initiatives to increase thermal substitution. We designed a program, called VCEAA AFR Core Curriculum, to train more than 100 employees by the end of the first half of 2022. This is in line with one of our priorities to implement co-processing operations for the use of alternative fuels in the different plants in the region. We also focused on the on-boarding and engagement of new employees with the launch of a welcome mentor program. In addition, we concentrated our efforts to support the "new normal" by offering training on remote work and creating specific Communities of Practice to exchange ideas and tools.



TECHNICAL SCHOOLS

Another important initiative in Brazil was the continuation of technical schools to strengthen and train teams. More than 2,500 employees participated in training on maintenance, production, processes, mining and quality. During the year, our focus was on technical training—a continuous education effort on the mastery of the 18 critical functions we have in our operations. With support from in-house specialists (employees) and certified external consultants, we launched Green Berets and White Berets programs. We also worked on technical training as part of the Cement Leaders program and technical internships, and held technical workshops for leaders (maintenance, production, quality, mining and area managers). In addition, we had more than 550 participants in our management training program. In 2021, the Sales and Marketing School focused on training on product and sales techniques, and on virtual orientation for new employees. This was also the first full year of the Concrete School; its programs prioritized training and recycling in operations and safety, aiming at productivity and operational excellence.



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INNOVATION

|GRI 103-2, 103-3: VC-2|

To meet the current and future needs of society, we are constantly looking for innovative solutions for our products and services. This is a cross-cutting theme within our company that is facilitated through partnerships with startups, suppliers, universities and research centers. This is the path to gain competitiveness with sustainability and leave a positive legacy for society. And the speed at which these changes are being implemented is increasing.

Therefore, we believe in the importance of implementing a culture of innovation and conveying to our teams the idea that we are not afraid of making mistakes, since this is part of a company's evolution process. What is important is to have a curious, growth mindset, to find technological solutions that align with our journey. Continuing the strategy set the previous year, in 2021 we maintained an Innovation Commission (within the Executive Committee) and a working group (within the Board of Directors) that analyzed more than 100 ideas and 17 projects under development, six of which were determined to have the greatest overall impact and are already being implemented.

Our innovation territories are: future plants, retailer performance, construction optimization, affordable housing, clinker reduction, carbon capture and use, and construction waste management the last four topics are directly linked to our sustainability performance. "Our goal is to prioritize major themes every six months and review future scenarios at least every three years," explained Danielle Totti, global general manager of Strategic Planning and Innovation. Each project has specific performance



TECHNOLOGIES ON OUR RADAR

The Technological Radar, created by the Research & Development (R&D) team, enables us to monitor the most interesting developments taking place around the world in the area of cement, concrete and aggregates; this increases our competitiveness while mapping out solutions that can support the safe and sustainable growth of cities. Technical news and articles are evaluated by specialists from the R&D team and the topics considered most relevant are commented on, highlighting their technical and economic feasibility and strategic importance.



SCRUBBER (SOX)

At our St Marys Cement plant in Bowmanville, Ontario (Canada) we commissioned a new scrubber that is expected to result in a significant decrease in process emissions. This \$25 million investment in technology to improve the plant's environmental performance has proven to be 90% effective in removing sulphur dioxide (SO2) produced in the cement manufacturing process. This is the first scrubber installed at a cement plant in Canada.



PERMEABLE CONCRETE

In Uruguay, through Cementos Artigas, we participated in the development of a permeable concrete, an environmentally friendly solution and an adaptive strategy for new materials to address the expansion of cities without impairing the soil's drainage capacity. Today, green spaces are replaced by waterproof buildings, pavements and sidewalks, which leads to the collapse of rainwater collection systems and causes, among other effects, floods.

Developed as part of the National Adaptation Plan (NAP Cities) to address climate change, the project is the result of an agreement with the School of Engineering of the University of the Republic, through the Ricaldoni Foundation. The product has been studied since 2020 by a group of students from the institution. In June 2021, a 30-square-meter area of permeable concrete pavement was built to enable the evaluation of the real-life performance of this concrete.

indicators (KPIs). More than 48 employees were directly involved in the working groups in 2021, a year in which we invested almost R\$ 6 million in innovation initiatives.

In parallel, we created three global working groups throughout 2021 to address issues of significant relevance to the company's future:

- NEW TECHNOLOGIES, INCLUDING INDUSTRY 4.0 INITIATIVES (SUCH AS DIGITALIZATION, ANALYTICS, ARTIFICIAL INTELLIGENCE)
- **ALTERNATIVE FUELS AND RAW MATERIALS**
- CLINKER FACTOR REDUCTION (KKC)

An industry 4.0 initiative that continues to advance involves the Spectrum platform, which we use for the predictive maintenance of assets; in two years (2020 and 2021), it has already resulted in R\$ 71 million in cost savings. Based on artificial intelligence, it enables online monitoring of our main operational assets (such as kilns, mills, fans, gearboxes and elevators) and anticipates planned interventions in these types of equipment.

We also created the InovaVC program, for employees to suggest new ideas, and relaunched VC Connect, an open innovation platform: in November, startups and research centers presented possible solutions in four of the territories (construction optimization, retailer performance, affordable housing and clinker reduction). Proof that we are increasingly maturing in this area is our evolution in the Valor Inovação ranking of the 150 most innovative companies in Brazil, published by the newspaper Valor Econômico and the consulting firm Strategy&: in 2019, we occupied the 84th position; in 2020, we moved up to 65th place; and in 2021, we ranked 47th.



CARBON CAPTURE

Through a partnership with the School of Engineering of the University of the Republic, in Uruguay, VC Latam offered a master's in engineering program to one of our employees. The focus of the program was on CO2 capture initiatives—a pilot project conducted at the Minas site resulted in a 25% reduction in emissions, thanks to joint funding with the National Agency for Research and Innovation.

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Artificial Intelligence

In an innovative way, we developed and implemented an artificial intelligence system that predicts final cement strength. Under Brazilian technical standards, compressive strength tests are mandatory at day 28. Thanks to models based on machine learning, we can now predict the results—which used to take four weeks—in just three days. This way, we can make fast preventive corrections in occasional resistance deviations, eliminating or reducing concrete problems at the jobsite.

The artificial intelligence system is being used in 27 laboratories of our cement plants in Brazil and Turkey. Naturally, the tests required by Brazilian law continue to be performed in the traditional way and confirm the predictions in 99% of cases.

In addition, the new system also enables us to predict technical efficiency—the only parameter that measures the performance of cement in concrete. Since technical efficiency tests are not a legal requirement and are relatively slow to complete, our industrial units used to perform them only once or twice a week (and only for cement sold in bulk). Currently, we have faster and better ways to perform these tests in our plants.

As a result, we reduced the time dedicated to testing by 119 hours per month and increased in more than 200% the number of results available for analysis. In other words, we have more agility to solve quality problems, resulting in greater customer satisfaction. This initiative supports decision-making in construction sites, paves the way for our leading role and established us as a benchmark in sustainability in the value chain.



AI FOR A MORE SUSTAINABLE CONCRETE

VCNA's Ready Mix Concrete businesses have entered into an agreement with the UCLA's Samueli School of Engineering, in California, to provide operational and performance data that will be fed into machine learning models that will use artificial intelligence (AI) to predict and propose more sustainable Algenerated concrete mixes. The models will be used to optimize raw materials consumption, reduce the environmental footprint of concrete and its production and further quantify the environmental and performance benefits of Portland Limestone Cement (PLC). VCNA will then participate in the testing and validation of the Al-generated mixes.

THE ARTIFICIAL INTELLIGENCE SYSTEM IS BEING USED IN

LABORATORIES OF OUR CEMENT **PLANTS**

PREDICTIVE CONCRETE ANALYSIS

Engemix is already using predictive quality analyses to assess the potential for standard deviation reductions (in cost and carbon footprint) to be gained from the lower volume of cement used in concrete production. Based on artificial intelligence (AI), the project uses mathematical and statistical resources to calculate future results. From a model initially used in our cement operations we created others for use in our concretes and mortars.

CYBERSECURITY

Information security is vital for business. With more employees working from home, we intensified campaigns to ensure that everyone is aware of cyberattacks that can endanger both personal and company data. This year we implemented a global program to review our cybersecurity risks. In February, we administered a questionnaire to better understand our behavior in relation to data security, to identify our main weaknesses and improve the management of our environments.

Based on the responses, we created awareness campaigns. Among the tips we offered were the need to redouble our attention to suspicious messages that include urgent matters, ask to open a file or visit a website, share and offer miraculous cures or offer free services, for example. Our Information Security team also reinforced the importance of making sure that all links or emails we receive come from a trusted source. Another effort was to ensure that passwords used in computers and other electronic devices are always strong, difficult to guess and updated frequently.

In August, we launched the campaign VC Protecting Information and in November we participated in the International Information Security Day, which highlighted, for example, how criminals try to trick us into obtaining confidential information. Marcos Meira, specialist in cyber scams and fraud, participated in a discussion about the dangers in the digital world.

LOGISTICS

Inflationary pressure in the second half of 2021 was one of the major challenges faced by our Logistics area. Adding to the rise in fuel prices were the difficulties in contracting shipping containers, which required significant efforts from the teams to maintain and improve productivity. At VCNA, we faced a lack of supplies and tools in several areas. Significant flexibility was required to procure the materials needed and protect our teams without disrupting operations, especially in times of coronavirus.

In VCNA, the McInnis integration resulted in a significantly strengthened network of maritime operations and distribution terminals for transporting and supplying bulk cement. VCNA's network and reach now extends from the Great Lakes region in Canada and U.S. across Eastern Canada and into the Northeastern Coast of the United States.

At VCEAA, in line with our strategy, we digitalized another part of our VCEAA dispatching operation. The new system that had been installed at cement plants in Morocco and Tunisia in 2020 was extended to the aggregates operation. In Turkey, a similar project started in November, improving our relationship with customers.

In Brazil, we continued to expand the use of river transport to meet the demand for bagged cement in Manaus (AM); we also created a new flow for the transport of plaster from Maranhão to our plants in Mato Grosso. Another highlight was the use of rail instead of road transport. By transporting part of our products via train, we substantially reduced our CO2 emissions. In September alone, we prevented the emission of 34,724 tonnes of CO2, which is equivalent to the emissions produced by 4,000 homes or more than 6,000 cars.

Despite all efforts to use different transportation modes, there is still a significant prevalence of road transport in Brazil.

During the year, we invested R\$ 18.5 million in Brazil to improve the infrastructure at our terminals, to inaugurate and expand distribution centers and to update machinery and equipment. In the first half of the year, our distribution centers in Juazeiro do Norte (CE) and Santarém (PA) started operating and we moved the one in Rio de Janeiro to a location with larger storage capacity. In addition, we have two other distribution centers under construction in Ceará (one in Crateús and another one in the metropolitan region of Fortaleza). In September, we also inaugurated a distribution center exclusively for Viter, in Pratápolis (MG).

"What we already knew before the pandemic—and our experience in the last two years has only made it more evident—is that the work of our business areas to achieve the best performance necessarily involves the proper use of technology," said Luis Eduardo Valim, Logistics director at VCBR. In this area, we see four opportunities to leverage our efforts and contribute to greater value generation:

- INCREASE THE PRODUCTIVITY OF PROCESSES THAT TAKE PLACE IN OUR DISTRIBUTION CENTERS AND IN THE DISPATCH AREAS OF OUR PLANTS.
- 2. ENSURE THAT OUR DECISION-MAKING PROCESS IS FASTER AND MORE ASSERTIVE DURING PRODUCTION PLANNING.
- 3. CONTRIBUTE TO THE IMPROVEMENT OF THE CUSTOMER BUYING EXPERIENCE.
- **ENSURE THAT INDEPENDENT DRIVERS CONSIDER VCBR AS THEIR FIRST OPTION TO WORK.**

Routinely, we work to ensure good working conditions for drivers by maintaining clean, organized and comfortable spaces in our distribution centers. And, naturally, we always emphasize a nonnegotiable value: safety. Throughout 2021, we intensified awareness campaigns for drivers and, in the last quarter, we launched a series of four educational podcasts on rushing and distraction, overconfidence, patience in traffic and vehicle checklists.

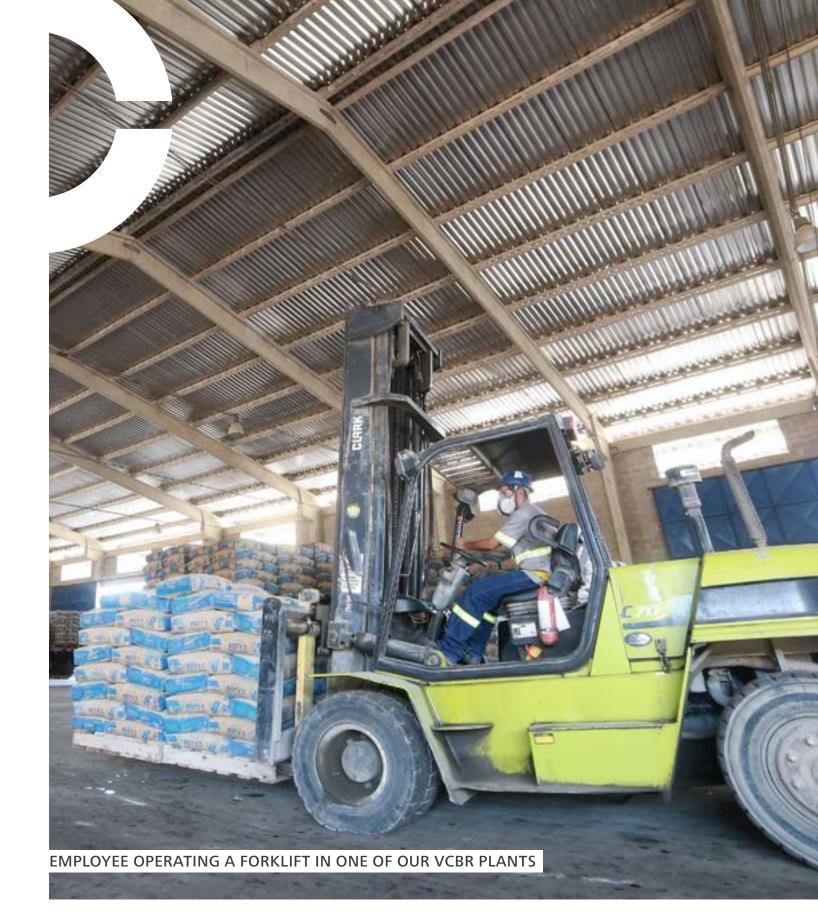
Technology at the Service of Logistics

In Brazil, the MOV app has been used for a few years to strengthen the relationship with independent drivers. In 2021, new features of the app included scheduling of new shipments, confirmation of deliveries and settlement of transport contracts (in the past, they needed to go to a designated location to confirm deliveries, which is not required anymore). In addition, we expanded the scope of the order routing system: we started the year with 13 units and ended with more than 54 units with all shipments programmed by software to reduce the distance traveled by trucks and optimize their schedule. With smarter and shorter routes, drivers are able to finish

their trips faster and occasionally return to the unit for a second trip on the same day, thereby increasing their earnings. In addition, we expanded the use of the "Mi Ruta" app in Spain. The app helps track deliveries to our customers and provides information on the availability of our fleet.

Business Transformation

We achieved exceptional results throughout 2021 with MOV-C, our carrier dedicated exclusively to the supply chain, whose main customer is our own company: we transported 9.6 million tonnes of products. Through MOV-C, we hire independent drivers directly to transport our products and support cargo identification to facilitate return logistics, increasing the profitability for the drivers and strengthening our relationship with these partners. In line with the Business Transformation pillar, we decided to extend input supply routes to our plants and offer logistics services to third parties. The goal is to offer road transport and move and store materials in markets close to MOV-C facilities that have logistical needs, especially customers who have cargo needs that are similar to those of Votorantim Cimentos.



IN LINE WITH THE BUSINESS TRANSFORMATION PILLAR,

WE DECIDED TO EXTEND INPUT SUPPLY ROUTES TO OUR PLANTS

AND OFFER LOGISTICS SERVICES TO THIRD PARTIES

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CUSTOMER FOCUS

|GRI 103-2, 103-3: VC-1|

Our customers are at the heart of our strategy. Therefore, we seek to offer solutions and products that are aligned with their needs, which drives the diversification of our businesses and products. This includes not only investments in innovation, but also specialized technical support and guaranteed quality in everything we do.

In 2021, we continued to improve our digitalization with a focus on our customers. Our main initiative in this area was the launch of eCare, an online platform for interacting with our customers at VCEAA: in just four months, it accounted for more than half of our virtual sales in the four countries in the region (Morocco, Spain, Tunisia and Turkey). In addition to being a digital sales channel that offers our entire product portfolio, the tool enables customers to download invoices, delivery notes and technical documentation, schedule and track orders and monitor complaints. The system went live in July, in six different languages.

Our sales platform **Juntos Somos+**, created in 2018 in partnership with Gerdau, Tigre and other large manufacturers, received a contribution of R\$ 100 million from our shareholders during 2021, to continue to explore the vast potential of digital solutions for the building materials sector. One of the initiatives was the purchase of the Habitissimo website, which established the program as the largest construction marketplace in the country. We have more than 80,000 registered retailers, who can enjoy the convenience







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of taking the best brands in Brazil to their stores in a single order. In addition, we launched a new portal that facilitates business even more—and has already reached the incredible mark of R\$ 7 billion in sales. In the last six months of the year, more than 30% of customers redeemed rewards.

In Brazil, retailers also have access to **VC Ajuda**, an online platform that provides tools and tutorials to accelerate sales through digital channels (for example, how to create a WhatsApp commercial account or promote products on Instagram and Facebook). Another initiative is **Mapa da Obra**, a website that contains articles, videos and complete content about the construction sector. Papo de Obra is a YouTube channel that aims to bring us closer to construction workers and end consumers. In December 2021, we had more than 150 videos uploaded, 50,000 subscribers and 10 million views.

Other initiatives in the region in 2021 included expanding the Asmenty loyalty program, which we maintain in Morocco, to concrete customers, and Mercim, a similar program developed in Tunisia. In addition, the call center system implemented in Spain in 2020 inspired Morocco and Tunisia to set up a similar service in 2021.

Customer Satisfaction

We conducted customer satisfaction surveys, such as net promoter score (NPS), and used the results to guide our initiatives. These evaluations help us to improve products and services by pointing out if we need to enhance the monitoring of the performance of our salesforce, reduce bureaucracy for large purchases, monitor compliance with deadlines and do improvements in logistics and in the sales channel. These are initiatives that reflect our concern for our customers and demonstrate our agility and ability to adapt to market demands.

In 2021, VCBR's NPS was 71 (compared to 61 in 2020)."This significant increase in our overall high NPS score is the result of a dedicated plan that focuses on the main needs and pains of our customers and looks at the entire order-to-cash cycle," said Hugo Armelin, VCBR's commercial director.

In 2021, for the first time, we expanded the NPS survey to new business in VCBR and to all countries in the VCEAA region. The survey with Viter customers, for example, found that 74% of them would recommend our products and services to friends and colleagues, putting our NPS at a level of excellence. "The positive result is primarily a reflex of the recognition of the quality of the Viter products; the survey helped us in our process of continuous improvement related mainly to customer service," said Bruno Marin, commercial manager of Viter.

At VCEAA, in addition to the Customer Satisfaction Score (CSAT) survey, which we have been periodically conduction, we carried out a NPS survey for our cement and mortar businesses. Feedback from our customers led to the decision to modernize our visual identity in the four countries in the region, with new product branding and new cement packaging—an improvement that was identified by surveys conducted in 2020. It is worth mentioning that, in Africa, most of our cement (75%) is sold in bags, while in Europe the majority of our sales is in bulk (75%). Also, as we continuously strive to increase our efficiency, we invested in an automated rotary system for packing cement and on the dispatch automation at the Hasanoglan plant in Turkey.

At VCNA, the exceptional performance of the business was a reflection of not only robust demand in the region, but strengthened customer relationship and the value customers place on VCNA's value proposition, which combines technical expertise and high-quality products with trusting relationships and uncomplicated solutions.

"THIS SIGNIFICANT INCREASE IN OUR OVERALL HIGH NPS IS RESULT OF A DEDICATED PLAN THAT **FOCUSES ON THE MAIN NEEDS** AND PAINS OF OUR CUSTOMERS AND LOOKS AT THE ENTIRE



ORDER-TO-CASH CYCLE"

Hugo Armelin, VCBR's commercial director

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More Technology in Concrete

At Engemix, we continued to invest in technology. We strive to offer fair and competitive prices and technical quality. "In our concrete operations, for example, a high level of service is critical, hence the importance of meeting agreed-upon delivery times very precisely," said Ricardo Soares, VCBR's Ready Mix director.

Technology also helps us offer better services. The Engemix Online app, which provides real-time information about concrete application, incorporated new features in 2021, including access to the customers' credit limit and a tab to respond to a satisfaction survey.

Likewise, we are committed to serving smaller retail customers, who, during the pandemic, saw a need to build or renovate. In 2021, we experienced a 28% growth in the volume of concrete sold to this specific target, which already accounts for approximately 20% of the total sold. To help people make the right choice in terms of material and quantity, we developed a sales channel and trained a salesforce to work specifically with this market segment.

In the industrial segment, we launched the Masters project, focused on medium and large customers, many of whom have strong local or regional presence, with the goal of helping them grow. We offered technical training and the development and optimization of concrete mixes, as well as macroeconomic and marketing information. This way, we improved our services and reduced costs for these partners, thereby increasing their competitiveness.

Our focus remains on product and portfolio quality, agility in commercial processes, service level, carbon footprint, integration with the production chain and innovation with a focus on construction productivity, always with credibility, reputation and financial security.



EXCELLENCE WITH SPECTRA

Since 2020, the Spectra concrete has ensured superior performance and increased productivity in the construction of structures and reduced the use of concrete and steel, which translates into lower costs and less greenhouse gases emitted in the construction process. Our concern with sustainability has earned us, in partnership with the construction company Nortis, the ACI's (American Concrete Institute) **Excellence in Concrete Construction** award: the mechanical properties of the concrete we supplied for the Leopoldo 1201 project in the center of São Paulo, enabled a 17% reduction in the building structure's carbon footprint with no negative effect on the performance of the material.

BUSINESS AND PRODUCT DIVERSIFICATION

We believe that long-term sustainable growth involves business transformation. Our priority is to continually innovate to strengthen our cement operations and increase our participation in adjacent areas (such as Verdera, Viter, Aggregates, Mortars and Concrete), developing new business models that improve the retail experience and bring us closer to the end consumer.

In 2021, we diversified our product portfolio in Brazil. To increase the strength of our Votomassa brand, we launched a pilot project for the Superfix adhesive additive and the Imperplus waterproofing additive, which provide higher yield and greater efficiency when used with mortar. Our intention is to further expand this product line to offer different waterproofing admixtures in the future.



IMPERPLUS AND SUPERFIX MORTAR ADDITIVES

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We also extended Votomassa's warranty to ten years and launched new packaging for the end consumer, made 100% of paper—since it no longer has an inner layer of plastic, it is much more sustainable. Its expiration date was also extended from six to twelve months.

Another new product in our portfolio is Sungard, launched by Viter (VCBR's agribusiness brand), which protects perennial plants, such as coffee, tomatoes and citrus fruits, from excessive exposure to the sun by providing higher thermal protection. "This is the first product of its kind produced in Brazil—and it was developed internally using raw materials that we already have in our plants, such as calcium and magnesium hydroxide," explained Bruno Marin, Viter's manager. It was launched in October 2021, at a time when meteorologists were predicting a hot summer with below-average rainfall in Brazil.

High temperatures and intense sunlight can burn leaves and fruits, in addition to causing physiological disturbances in plants, such as reduced photosynthesis, enzyme degradation and reduced cell membrane stability. All these factors affect the formation of the reproductive structures of crops and lead to a drop in productivity. Sungard is a highly soluble product that is applied by spray to create a protective physical layer on leaves and plants, without interfering with gas exchange and photosynthesis.



PORTLAND LIMESTONE CEMENT (PLC)

At VCNA, a major innovation in 2021 was the expansion of the use of **ENVIROCEM™** Portland Limestone Cement (PLC) in the United States, which works, measures and performs the same as traditional cement, but with a 10% lower carbon footprint. At the Praire Material business, which supplies concrete and aggregates, more than 25% of the concrete supplied in 2021 used this more environmentally friendly Portland Limestone Cement. PLC, which was already sold in Canada, contains more limestone and less clinker. Compared to the rest of the world, U.S. regulations are more specific regarding the amount of clinker in cement. "For this reason, we had to work with government agencies to ensure that our product has the same properties required by law and can be used in infrastructure projects, since it must comply with regulations from the Department of Transportation," said Jeffrey Ouhl, vice president of VCNA's Cement Operations.



- Circular Economy: Verdera, Cementitious and Viter
- Energy efficiency
- Sustainable supply chain
- Environmental management
- Biodiversity and water resources
- Social transformation
- Our impacts
- Monitoring our 2030 targets



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CIRCULAR ECONOMY: VERDERA, CEMENTITIOUS AND VITER

|GRI 103-2, 103-3: 302, 305, 306, 306-1|

Like any large-scale industrial process, cement production also has social and environmental impacts. Recognizing our responsibility, we adopt a regenerative approach in the way we do business, seeking to eliminate waste, repurpose by-products from other industries and increase the use of renewable resources, through a circular economy.

In this way, we create a renew/reuse circuit, in which the extraction of natural resources is minimized, losses are eliminated and by-products from other production processes are transformed into new raw materials.

In our operations, we adopt several practices in line with the concept of the circular economy. We have ambitious global levers related to this significant challenge:

- 1) REPLACE FOSSIL FUELS USED BY THE COMPANY WITH ALTERNATIVE FUELS.
- 2) REDUCE THE PROPORTION OF CLINKER IN CEMENT.
- 3) RECYCLE CONCRETE THAT RETURNS TO OUR PLANTS OR RESULTS FROM DEMOLITION.
- 4) USE LIMESTONE THAT IS NOT SUITABLE FOR **CEMENT PRODUCTION AS AGLIME.**

VERDERA AND CO-PROCESSING

Waste co-processing and management are drivers of the circular economy. During the cement production process, kilns reach temperatures as high as 1,500°C, requiring a high amount of thermal energy. Through co-processing, we reuse industrial, urban and biomass waste as alternative fuels, helping to reduce the amount of waste sent to landfills, which also has a positive impact on our CO2 emissions.

Globally, we have already replaced 22.4% of the fuels we consume with alternative energy sources and we are committed to reaching 53% by 2030.

At VCEAA, we achieved 30.1% thermal substitution—an increase of 63% in four years. In 2021, all of our plants in the region had co-processing facilities. We achieved a thermal substitution rate of 52.3% at our plant in Hasanoglan, Turkey, the highest yearly rate achieved in VCEAA operations.

"Increasing our thermal substitution rate in all VCLatam countries is a key element of our sustainability strategy. The pandemic had a strong effect on the availability of used tires and other alternative fuels. Despite that, we were able to achieve a 24% thermal substitution rate in Uruguay. In Argentina, we managed to maintain an 18% thermal substitution rate, despite the high increase in production volumes," highlighted Günther Smetana, CEO of VCLatam.

In Uruguay, Cementos Artigas developed a project together with the Montes del Plata pulp mill and the Ministry of the Environment to enable the recovery of waste (such as boiler ash and filter cake) for use in our cement and concrete operations. Both programs were successful and in 2022 we will collect proceeds from the disposal of waste. This is a step that paves the way for other initiatives with other pulp mills in the country.

VCNA is also increasing the rate of co-processing throughout Canada and United States. In Bowmanville, Ontario, for example, we obtained a new license that allowed us to increase our thermal substitution from 5% to 15%. In Charlevoix, Michigan (U.S.), our license was amended for increased use of AFR.

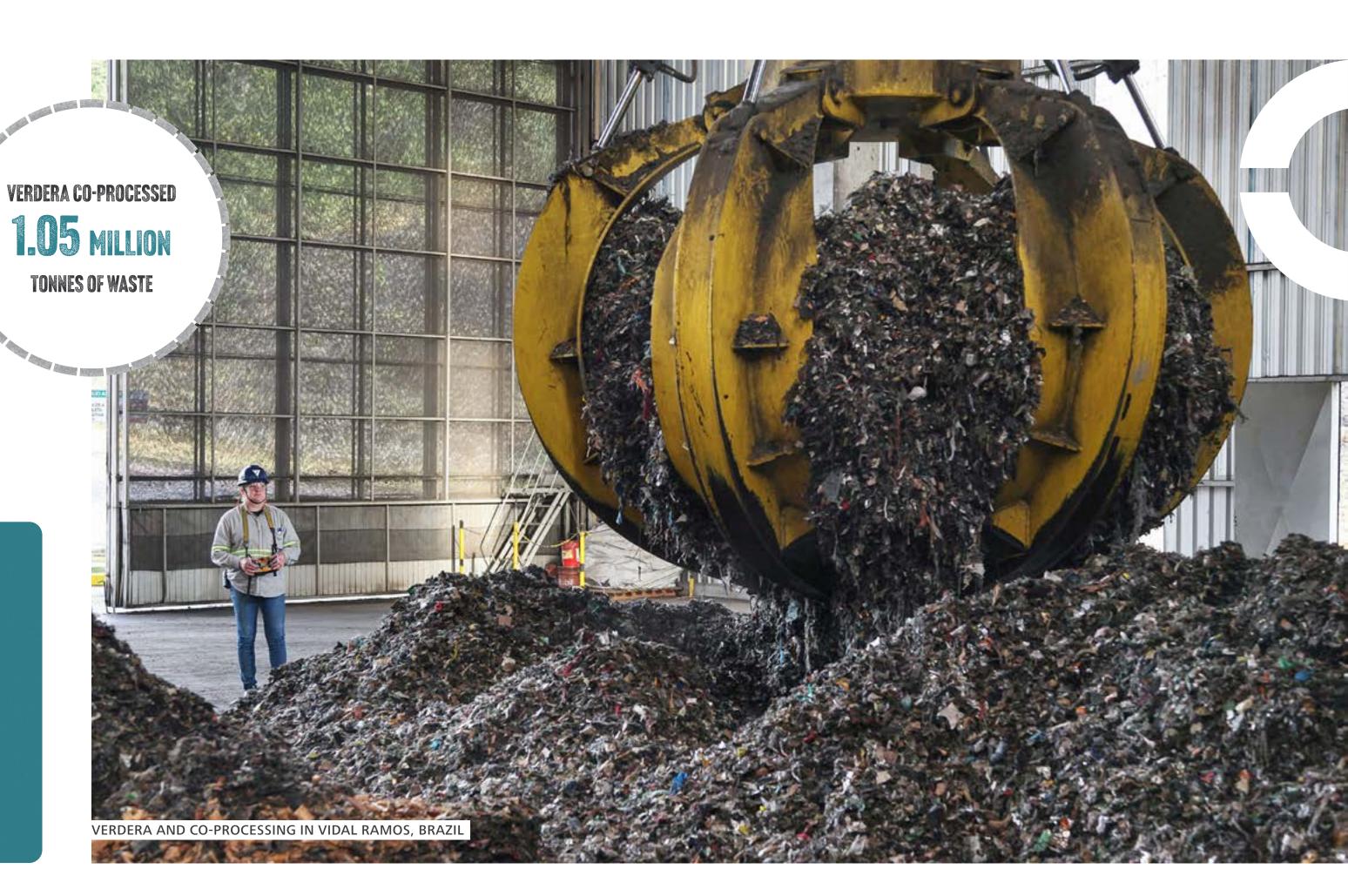
At VCBR, in Laranjeiras (SE), we started co-processing sugarcane bagasse, a type of biomass that used to be discarded by sugar and ethanol plants in the state of Sergipe. And at our plant in Rio Branco do Sul (PR), we are reusing solid waste from the production of pulp and paper.

In line with our strategy of expanding co-processing in all units, we obtained a preliminary license to co-process hazardous waste (Class I) at our plant in Salto de Pirapora, São Paulo. This will allow us to start co-processing trials, in our path to obtaining a permanent license to diversify our energy matrix. During the year, we also obtained a license to use cashew nut and babassu coconut at the Sobral plant, in Ceará, and we are awaiting a permanent license to co-process palm fronds in our cement kiln in Primavera, Pará.

Environmental Solutions

In 2019, we created our Verdera business unit, which operates in the environmental solutions chain in Brazil by offering a sustainable co-processing technology alternative to dispose waste that cannot be recycled, using it to generate alternative thermal energy.

The pandemic led us to diversify our waste portfolio and expand our operations to new industrial sectors, such as the food and packaging industry. Verdera coprocessed 1.05 million tonnes of waste. We have a robust investment plan (R\$ 400 million in the next five years) to increase our waste management capacity globally.



BY PASS TECHNOLOGY

One of the highlights in 2021 was the development of the Bypass project at the Vidal Ramos plant, in Santa Catarina. This technology removes chlorine from the kiln, enabling us to increase the co-processing of alternative fuels; our forecast is to achieve 70% fuel substitution at the unit. The system will start operating in 2022 and this is the first plant in Brazil to have this type of technology.

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CEMENTITIOUS

By-products from other industries, such as slag from blast furnaces and ashes from coal-fired power plants, find sustainable use when they are incorporated into cement and concrete. They are a sustainable alternative to clinker, which is the main material produced in the manufacture of cement and, through its manufacture, produces CO2 emissions. We have a team dedicated to identifying opportunities in the areas of cement, lime and aglime production and processing.

We are usually able to reduce the clinker factor (amount of clinker in cement) in our products by using additions such as slag, pozzolans, calcined clay and/or fly ash, or by reducing quality and operational deviations during cement production. In 2021, the use of additions brought the clinker factor in cement to 74.9% (compared to 74.0% in 2020). Our goal is to reduce this percentage to 68% by 2030.

Our investments take this goal into consideration. For example, the expansion of the plant and installation of a new mill in Pecém, Ceará, led to an increase in the use of by-products with a consequent effect on the clinker factor. At VCNA, the upgrade of the Charlevoix and the St Marys Cement mills (using press technology plus hot gas) also increased our grinding capacity, including slag, by 3.4%, in addition to reducing the specific consumption of energy per tonne produced.

Over the past two years, VCNA successfully reduced its clinker factor by more than 3%. This improvement is equivalent to eliminating the greenhouse gas emissions from 28,000 vehicles for one year, or the carbon sequestered from 150,000 acres of forest in a year's time. Contributing further to the improvement was VCNA's investment in thermogravimetric analysis (TGA) technology, which enables VCNA's Cement Operations to monitor variations in the mass of a sample, in

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an environment with controlled temperature and atmosphere, as the temperature of the sample is changed over time. This provides evaluable data that can be analyzed to help determine the properties of the material and identify additional opportunities to reduce the clinker factor.

VITER

We awaken and perpetuate the maximum potential of the soil through Viter, a brand with Votorantim Cimentos quality, exclusively for the agricultural segment. Through it, we promote the circular economy by using limestone that is not suitable for cement production as an agricultural input. "A portion of limestone with high magnesium content that used to be considered waste to be discarded is now repurposed and used in agribusiness, which is a growing market in Brazil," said Bruno Marin, Viter's Commercial manager

We offer the best products to promote the renewal, maximum power and high productivity of the many different types of soil and crops. In 2021, we continued to renew our portfolio of solutions, including the development of special products, such as our Optimix line. Viter's sales grew 4.8% to 5.2 million tonnes in 2021 (compared to 5 million tonnes in 2020). We opened the brand's first dedicated distribution center in Pratápolis, Minas Gerais. The site will supply high quality limestone produced by an external partner. At the Itapeva (SP) plant, we invested to increase our capacity; as a result, our production grew by 83,000 tonnes a year. In Nobres (MT), we now have a new shipping scale, improving the logistical flow, and a new storage shed. And in Xambioá (TO), we started the production of Optimix as part of a major expansion and



modernization plan for the plant, which also produces cement and aggregates.

In December, we launched the first phase of Viter's Go to Market project: we invested R\$ 1 million to accelerate agricultural businesses and enhance our relationships with customers in this area.

Increased Fertility

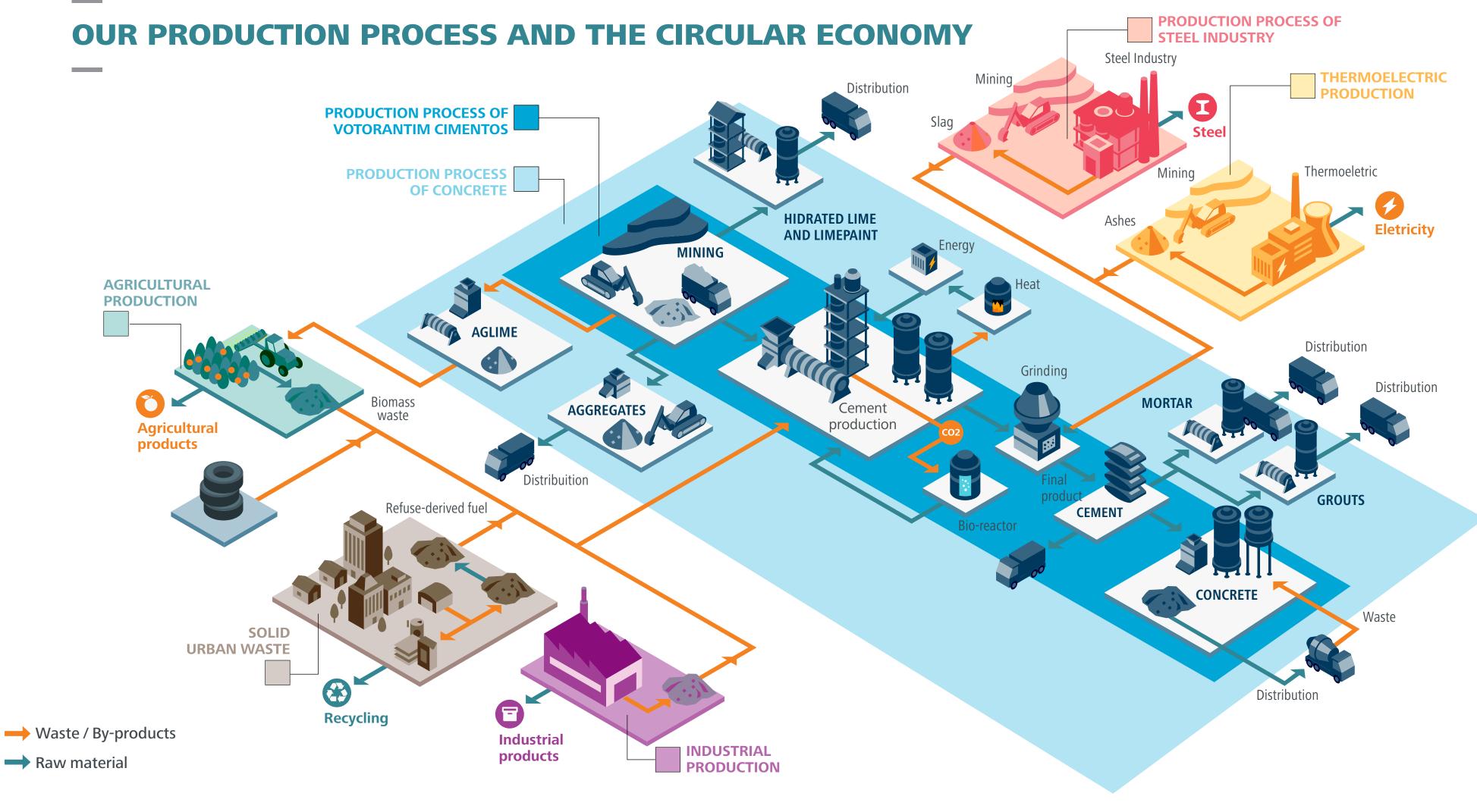
An experiment carried out at the Campo Novo Farm, in Aquidauana (MS), owned by singer and composer Almir Sater, proved the efficacy of Optimix, our limestone-gypsum mix to

VITER'S INTERNATIONAL EXPANSION

In 2021, we took an important step to establish Viter as a relevant brand in this segment: we entered the international market and made our first sale to Paraguay, which is the sixth largest soybean producer in the world and has great potential for agricultural growth. Our expectation is to export 30,000 tonnes to Paraguay, increasing our volumes and directly benefiting the Rio Branco do Sul (PR) and Itapeva (SP) units.

improve soil quality. According to the Brazilian Agricultural Research Company (EMBRAPA), pasture makes up the largest planted area in Brazil—159 million hectares (IBGE's 2017 Agra Census), compared to 39 million hectares covered by soy (CONAB 2020/21 harvest), for example. However, less than 15% of pasture areas are managed using high technology.

In our study, we collected soil samples and found that high pH and aluminum levels impaired root development. After six months of Optimix use, new chemical analyzes showed increased levels of calcium, magnesium and sulfur, which improved soil characteristics and fertility and ensured full development of the pasture area. "We performed the test on 50 hectares and the preliminary results were fantastic. Before, we used to leave 100 head of cattle in this area for 20 days. Today, we leave 150 cows and 150 calves in the same place for 90 days," said Almir Sater.



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ENERGY EFFICIENCY

CLEAN AND RENEWABLE ENERGY

|GRI 103-2, 103-3: 302|

We believe that cement production must use clean technologies that minimize the use of natural resources and enable constant improvements to reduce emissions and energy consumption. For this reason, we seek to increase the use of renewable energy in all regions. In 2021, 18.5% of the electric energy we consumed globally came from renewable sources—and we are committed to reaching 45% by 2030.

Since 2018, our Asment Temara plant in Morocco has had a contract to acquire 83% of its electricity from wind sources—currently, 100 GWh out of the 120 GWh the plant consumes come from renewable sources. At the end of 2020, we signed an agreement to acquire all energy used at our plant in Tenerife, Spain, from renewable sources. And at the Toral unit, in the same country, we are implementing a photovoltaic project to generate 15% of the energy we require on a daily basis. In Tunisia, we have a waste heat recovery (WHR) system that converts waste heat from combustion processes into electricity, resulting in a 30% reduction in our electricity purchases.

In Argentina, with the expansion of the San Luís unit, the plant started operating at full capacity, which also resulted in an important reduction in energy consumption (24%). The next step will be to build a photovoltaic plant in the unit, with 20 MWp of installed power and an overall annual energy capacity of 50,000 MWh.

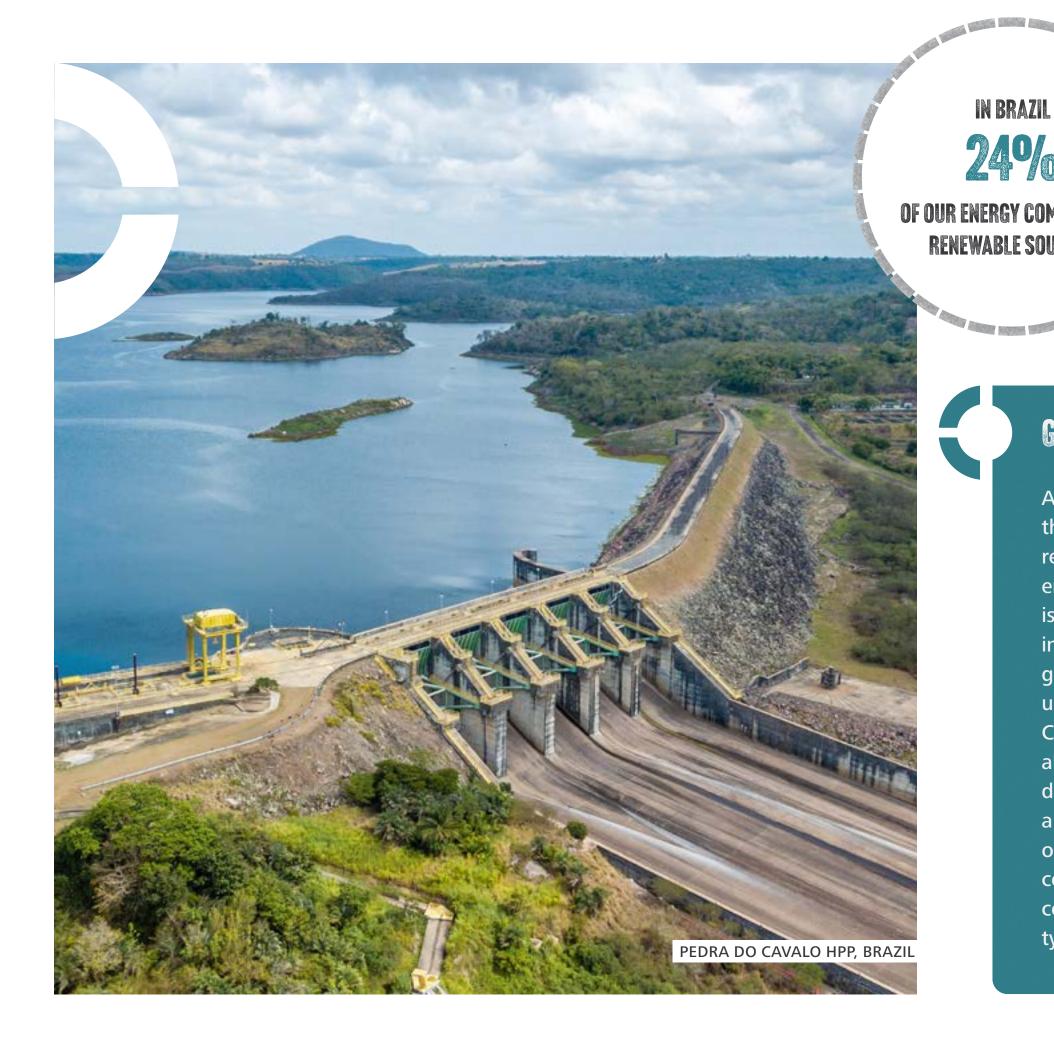


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In Brazil, 24% of our energy comes from renewable sources (self-generation by our hydroelectric plants). We own four Small Hydroelectric Power Plants (SHPP), one hydroelectric power plant (the Pedra do Cavalo HPP), and a stake in the Machadinho HPP consortium. Historically, the operation and maintenance of the Pedra do Cavalo HPP has been managed by Votorantim Energia through a service agreement. However, as of February 2022, we will fully assume the management of the Pedra do Cavalo HPP operation. The plant is located on the Paraguaçu River, in the state of Bahia, and has a total installed capacity of 160 MW. This change will give us more autonomy in managing our renewable energy needs.

In partnership with Votorantim Energia, two new wind farms will be inaugurated in the state of Piauí by 2023, adding 55 megawatts (MW) in installed generation capacity and increasing our share of renewable energy to 49%. In addition to the environmental benefit, the complexes will provide more predictability with regard to energy costs and reduce our exposure to volatility.

In VCNA, our St Marys Cement business is an industry leader in the area of energy management. Over the past seven years, our Cement Operations were able to reduce power consumption by more than 7%. Our investment in the modernization of our Charlevoix, Michigan (U.S) plant contributed significantly to this reduction. In Canada, our Bowmanville plant, in Ontario, became the first industrial operation in North America to earn ISO 50001 energy management certification in 2012 and in 2021, our St. Marys, Ontario, plant also earned this highly regarded energy certification. At VCLatam, we obtained, during the year, the ISO 50001 energy standard recertification in Uruguay, reaffirming our commitment to the energy efficiency of our operations. At VCEAA, the Alconera plant (Spain) also earned ISO 50001 energy management certification.



OF OUR ENERGY COMES FROM **RENEWABLE SOURCES**

GREEN HYDROGEN

An opportunity to advance the consumption of renewable energy, while ensuring energy efficiency, is the program launched in 2021 by the Uruguayan government to allow the use of green hydrogen. **Cementos Artigas has** already signed a nondisclosure agreement with a local company to carry out a feasibility project to convert part of our fleet of concrete mixers to use this type of fuel.

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SUSTAINABLE SUPPLY CHAIN

|GRI 103-2, 103-3: 204, 407, 408, 409; GRI 102-9, 204-1|

We play close attention to our supply chain and maintain our procurement management focused on generating value for our stakeholders. Local suppliers, in particularly service providers, represented 56.3% of our annual purchases, while the remaining spend was sourced either nationally or globally. We hire nationally operating companies for continuous services, materials and inputs.

Our current operating expenses can be divided into three large groups:

- ② Inputs, such as paper bag, diesel, admixtures, pet coke, sand and explosives.
- Services, such as internal handling, mechanical maintenance, IT, consulting and transportation.
- Materials, such as refractory materials, spare parts, casts, belts and industrial equipment.

The year 2021 was very challenging with regard to supply negotiations. We had to seek balance with our partners to maintain competitive costs, high quality, and, most importantly, product supply. We faced significant constrains in the global supply chain with lack of raw material and production shortage in certain industries, both in Asia and Europe, and also a bottleneck on the overseas circulation of containers (read more in Logistics, on page 61). Faced with this situation, our procurement team had to continue to focus both on cost control and on a continuous effort to keep operations running. As a result, some plants had to work with very low inventories, with supply of essential materials reaching the production lines just in time. Despite the challenging landscape, we did not have any production interruption due to a breach in the supply chain.

At VCBR, our Sustainable Supply Program, approved in 2020, made significant progress in different areas throughout the year. One of the results was the approval, by our top leadership, of five objectives that will guide the Supply strategy through 2030:

- 1. INCREASE LOCAL PURCHASES IN THE REGIONS WHERE WE OPERATE.
- 2. STRENGTHEN OUR RELATIONSHIPS WITH SUPPLIERS THAT HAVE SUPERIOR SUSTAINABILITY PRACTICES.
- 3. INCREASE PURCHASES FROM SUPPLIERS WITH DIVERSE LEADERSHIP TEAMS.
- 4. ENGAGE OUR TEAMS TO INCORPORATE BEST PRACTICES IN SUSTAINABILITY INTO PROCUREMENT.
- 5. REDUCE WASTE AND SCRAP PRODUCTION ALONG THE SUPPLY CHAIN.

The Sustainable Supply Chain Program is divided into 10 pillars; our 2021 achievements are described on the next page:



LOCAL PURCHASES

One of our 2030 Commitments is to increase the number of local purchases in all regions where we operate. Guided by this target and in partnership with the Instituto Votorantim, we developed a pilot project in the units of Primavera (PA) and Corumbá (MS) to help improve the quality of services provided by companies in these cities and, as a result, increase hiring in the region.

Four categories were chosen for this project: mechanics, belt vulcanization, machining and civil maintenance. The first step was to identify and interview local companies. As a result of this initiative, we reached a broad contract with one local supplier for each of the units. Initially, the companies we identify may not have the technical and financial expertise to meet our requirements; however, we will train these partners to qualify them to work with us.

By helping to prepare these small providers, we aim to have reliable and efficient local partners to provide essential services to our plants, while also promoting local entrepreneurship and the growth of these businesses. Our idea is to replicate this model in two additional cities each year, through 2030. With that, we hope to increase our spending on local purchases by four percentage points.

PILLARS OF THE SUSTAINABLE SUPPLY CHAIN PROGRAM

Pillars	2021 achievements
Sustainable Supply Chain policy and strategic plan	Our strategic objectives were validated by the top management of Votorantim Cimentos.
Incorporating sustainability into the process (planning, sourcing and contract management)	We held three Risk Committee meetings to monitor the action plans for the 30 suppliers identified as high risk.
Incorporating sustainability into the process (registration and re-registration)	We re-registered the 1,140 high- and medium-risk suppliers.
Supplier portfolio management	We developed the first version of the dashboard with an intelligent view of the supply portfolio.
Sustainable technical requirements	We defined technical requirements with social and environmental criteria applied to the procurement process and conducted a bidding process on five pilot categories.
Internal customer assessment of suppliers (IQF)	We reviewed our assessment tool (IQF — Supplier Qualification Index) and carried out audits with support from 430 internal auditors to assess 350 partners, from 46 categories, who work with 150 VC units.
Pact with strategic suppliers	We held a quarterly committee meeting to monitor 22 selected projects, of which 16 were completed in 2021.
Development of local suppliers	We mapped out and trained local companies, started bidding processes in pilot units (Corumbá and Primavera), developed the Local Procurement Matrix and trained category managers.
Supplier recognition program (VC Partner)	In May 2021, we held an event for the 2020 cycle, where we recognized 53 suppliers.
Communications of the Sustainable Supply Chain Program	We trained buyers and the Procurement leadership on sustainable procurement, performed benchmarking with Group companies and other industries, and communicated the Program's results at external events and through the media.

ENVIRONMENTAL MANAGEMENT

[GRI 103-2, 103-3: 307, GRI 102-11, SASB EM-CM-160a.1]

We strive to make our operations increasingly sustainable by managing and reducing our impacts on the environment and natural resources. We work to ensure the fulfillment of our environmental commitments, with each country setting its goals and targets in accordance with local legislation. Our performance is guided by our **Global Environmental** Policy and Green Rules, and our Environmental Management System is based on the ISO 14001 standard.

The environmental results of each of our units are compiled into the Operational Environmental Performance Indicator, which is monitored by our leaders and teams on a monthly basis. The items analyzed include control of legal requirements; operating licenses and their conditions; environmental risk management; solid waste management; water resources management; prevention of contamination; air emissions management; biodiversity management; and recovery of degraded areas. In addition to monitoring our operational results, we encourage the exchange of best practices between our units to improve these indicators.

In 2021, VCBR's Pecém unit (CE) and the South Regional units underwent the process to renew their ISO 14001 certification. After resuming operations, our Samsun unit, in Turkey, also received this same certification; as a result, all VCEAA cement plants are now ISO 14001 certified.

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BIODIVERSITY AND WATER RESOURCES

We are committed to protecting water resources and biodiversity by managing protected areas and implementing plans to recover degraded areas. Following the Integrated Biodiversity Assessment Tool (IBAT) methodology, in 2020, we identified 10 priority locations for the development of Biodiversity Management Plans—and we are committed to implementing these plans in sensitive areas.

Our commitment to the protection of natural resources is also reflected in internal investments to close mines. In 2021, more than R\$ 2 million were invested in ARO (Asset Retirement Obligation) activities (refers to the legal or non-formalized obligations of restoration of the environment upon discontinuation of operations of mines) in the VCBR units. They included the implementation of good practices for the recovery of degraded areas, such as: installation of drainage systems, revegetation of areas, planting of native species and development of mine closure plans. In 2022, the plan is to invest approximately R\$ 4 million in 16 units.

In July 2021, the State Foundation for Environmental Protection (FEPAM) of Rio Grande do Sul issued a term of closure for the Augusta mine (in the town of Pinheiro Machado, Brazil, near the border with Uruguay), which has 22 hectares in advanced stage of recovery. We enclosed the entire site to ensure the preservation of biodiversity in the area, which has great potential as a refuge for wild fauna, with spaces for nesting, burrows and natural perches.

In an area within our Oural cement plant, in the province of Galicia, Spain, we found signs of human presence dating back to 30,000 to 50,000 years ago. We set up a plan for the preservation of the rock mass surrounding the Cova Eirós cave to ensure that our mining

activities do not affect paleontological studies and that the local ecosystem and biodiversity are preserved. In 2019, we received an award from the European Aggregates Association for our restoration work at Cova Eirós and in 2021 we developed the Sustainable Land Management Plan for the area.

At VCNA, Canada Building Materials (CBM) is recognized as an industry leader in land rehabilitation. In 2021, we rehabilitated a total of 57.17 hectares, in three different locations, for agricultural activities and biodiversity preservation (with the reintroduction of animals in the former mining sites). We are anticipating the first harvest in an area known as Brown Pit, scheduled for the spring of 2022 in the Northern Hemisphere (between March and June). We also planted more than 26,000 trees and continue working to further increase our total preserved area.

Water

In addition to preserving biodiversity, we implemented measures to ensure sustainable water management to prevent negative impact on watercourses near our operations and to reduce our water withdrawal. With the help of technology, we monitored 11 VCBR units and another seven VCEAA units in areas of water scarcity and implemented local Water Management plans to preserve this important natural resource.

In Tunisia, we installed a new gas filter and an osmosis water treatment system to return clean water to the dam. At one of our major Toronto, Ontario (Canada), ready-mix

MORE THAN WERE INVESTED IN ARO (ASSET RETIREMENT **OBLIGATION**)

REHABILITED MINES

In September, the Institute for the Environment and Water Resources of the Federal District approved the activities for the recovery of degraded areas in the Rua do Mato and Boa Vista mines, at the Sobradinho unit, where approximately 10,000 seedlings of native Cerrado species were planted. The Institute recognized the effectiveness of the good practices implemented as it attested to the survival and growth of 90% of the seedlings planted, as well as the absence of erosive processes, which had a positive impact on the local biodiversity.

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concrete plants, we installed a large-scale concrete pond with a sophisticated water treatment facility in the third quarter of 2021. The system captures water from existing on-site production and rainwater for concrete production and has reduced freshwater consumption by 27%.

In Itaú de Minas (Brazil), we manage more than 60 existing springs on our properties in the region, through strong interaction with the community and public authorities. Thanks to this relationship, we were invited to support the Pró-Mananciais project, financed and conducted by the Water Supply Company (COPASA). The main objective of the project is to preserve and recover springs and water courses in rural areas. Votorantim Cimentos contributes technical knowledge, provides support to understand local demands and helps direct the activities (which include inclosing springs, building eco-friendly sewage systems, recovering degraded areas, improving access pathways and building decanting systems).

The year 2021 marked the end of the **El Agua nos Une** project, a Latin American network that aims to develop and strengthen the management of water resources in companies through the water footprint technique. In the 2018-2020 cycle, three companies (CBA, Klabin and Votorantim Cimentos) developed impact studies and action plans to reduce their water footprint. The process involved studies of the lifecycle of concrete and the use of several important software tools to assess the impact of the operations on water resources. The project enabled the identification of critical points along the value chain, increasing knowledge about the impacts related to the product, which led to improvements in our internal management systems. The results were published and presented at an event held in June.

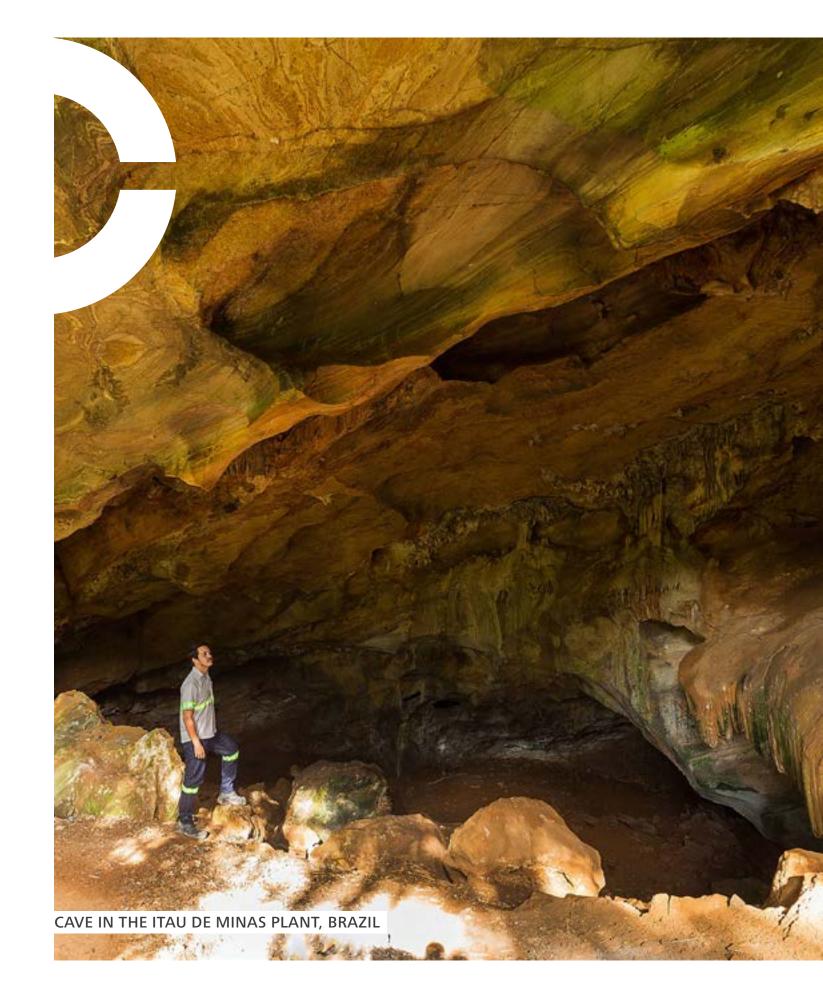
Partnerships for the Environment

In 2021, we celebrated 11 years of partnership with the Brazilian Speleology Society and the Brazilian Atlantic Forest Biosphere Reserve. This is a one-of-a-kind initiative, since it brings together industry, one NGO that focuses on cave preservation and another that fights for the conservation of biomes in the Atlantic Forest. In December, we participated in the presentation of the results of the first seven research projects selected to receive funds from this partnership. This work shows the evolution of our internal environmental management system, which is now much more robust than a decade ago.

To promote biodiversity and water conservation, in 2021 we continued our work as one of the sponsors of **Legado das** Águas, the largest private reserve of Atlantic Forest in Brazil. In an area of 31,000 hectares, in the South of the state of São Paulo, we support environmental protection activities, with an emphasis on scientific research, cultivation of native plants, ecotourism and income-generating projects for local communities. In December, in conjunction with a celebration for this partnership, we were recognized for our involvement as founders of Legado das Águas.

> IN AN AREA OF HECTARES WE SUPPORT ENVIRONMENTAL PROTECTION ACTIVITIES

> > NAME OF THE OWNER OWNER OF THE OWNER O



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SOCIAL TRANSFORMATION

|GRI 103-2, 103-3: 413|

With more than 300 industrial sites on four continents, we are in constant and direct contact with very different communities in terms of diversity, knowledge, needs and cultures. We work to promote the social and environmental development of these communities, while remaining committed to generating shared value, improving people's lives and respecting the unique characteristics of each country and region. In 2021, we extended our social performance to include Engemix and Viter in the activities we carry out and support.

We focus our efforts and leverage our experience to support initiatives that can address social issues by leveraging the knowledge, talent and resources in each location. We pay special attention to solutions aimed at improving the quality of life of families in vulnerable conditions, in addition to seeking to increase the participation of local suppliers in our value chain, boost local businesses and create employment opportunities for local residents. We also identify areas considered important by the communities and municipal governments surrounding each of our operations to invest and to partner with other like-minded organizations for the benefit of each community.

Effectiveness

The mechanisms to assess effectiveness focus on two areas: we monitor and analyze direct indicators of each social activity, project or program that we develop in each location, and we measure engagement events and initiatives, including crisis management, community activities and protests. This movement is strengthened through transparent dialogue channels and the active participation



of our employees in volunteer initiatives.

Our 2030 Sustainability Commitments establish that the company's positioning encompasses all stakeholders (customers, employees, shareholders and communities) and that we must do more than required by law in each country. Land development, dialogue with

the community and respect for local culture guide our strategies and initiatives. We also work in partnership with the Votorantim Institute, which is managed by our holding company Votorantim S.A. Our initiatives are guided by policies and by the Procedure for Implementing and Executing Community Relations Plans at Votorantim Units.

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SOCIAL INVESTMENT

In 2021, we invested R\$ 12,7 million globally in social transformation projects, including activities in the areas of social engagement, connection with the business, support to public management, education and other initiatives.



Fighting COVID

Despite mobility restrictions imposed by the pandemic, we still actively participated in communities where we operate. Globally, we invested more than R\$1.5 million in initiatives to fight COVID.

At VCNA, we continued our established tradition of giving to healthcare facilities such as the Bowmanville Hospital, the St. Mary's Healthcare Foundation and the Munson Healthcare Charlevoix Hospital Foundation, among other institutions.

At VCEAA, our most important initiative was the donation of 50,000 dinars to support hospitals in Tunisia. In Bolivia, we donated equipment, medical supplies and construction materials to the hospitals El Carmen Rivero Torrez, Arroyo Concepción and Centro de Salud Yacuses and Puerto Suarez.

In Brazil, through the Votorantim Institute, we were one of the companies that supported Fiocruz in the construction of a laboratory (LAFIQ), which was essential for the production of vaccines in the country. In a record 18 months, the Foundation completed four installations: the COVID Vaccine Plant (Oxford/AstraZeneca viral vector technology); LAFIQ; the Hospital Center, with 195 beds; and Biobank.

To address the coronavirus crisis, five municipalities from different regions of Brazil participated in the second phase of the Support to Public Management program, carried out by the Votorantim Institute, which offered technical support to their municipal health offices for the development of contingency plans to address the pandemic.

Housing

One of our most important initiatives in the area of housing falls within the territory of affordable housing innovation and led us to be recognized by Habitat for Humanity as a valuable partner in building a world where people have a decent place to live.

We also participated in the Coalition for Housing, led by Artemisia, which maintains a Housing Lab that has accelerated 64 business in three years. In addition, following our decision to include the Engemix business in our social strategy, we developed a pilot project, called Reforma VC, to renovate five homes of Engemix employees, thus promoting decent housing and ensuring better quality of life. And in Turkey, in support of communities that were affected by summer fires, we donated cement to renovate approximately 700 homes, as part of the #birdestekbiryuva project started by the NGO Need Map.

CO-INVESTMENT FOR SOCIAL IMPACT

In 2021, we also created and structured a new form of social investment, directly aligned with the social component of our ESG (environmental, social and governance) efforts. As a result, we led the creation of a collaborative co-investment network in the area of housing and standing forest: the Rede Transformar, which was designed as a social investment fund formed by suppliers, customers, financial institutions and other companies to maximize the collective impact. In September, we also participated, together with other portfolio companies of the Votorantim Group, in the Social Performance Meeting organized by the Votorantim Institute around ESG issues. At that event, we presented our practices and had the opportunity to learn about other important initiatives, broadening our view of this strategic and relevant agenda.

AFFORDABLE HOUSING

We know that many people in Brazil live in precarious conditions—and many don't even have a place to live. That is why we want to invest in affordable housing for more and more people. Since 2019, we have participated in the Housing Lab, an initiative to accelerate impact businesses to provide affordable housing for low-income populations, water and sanitation, landholding regularization and reverse logistics in partnership with social businesses, incubators, NGOs and other large companies, such as Gerdau, Vedacit and Tigre.

We supported the renovation of 89 homes in communities in São Paulo, Curitiba, Recife, Aracaju and Laranjeiras, benefiting a total of 328 people by improving their housing conditions. In June, this initiative was recognized by Habitat for Humanity, a social organization that works in over 70 countries to ensure affordable housing conditions for people living in poverty.

The project is also one of the themes of Inova VC, our internal program to identify ideas within the innovation territories established in each new cycle. At the end of 2021, we launched a challenge to create solutions that can expedite construction, use less waste, and result in lower carbon footprint, lower costs and increased productivity.

HELIÓPOLIS COMMUNITY IN SÃO PAULO, BRAZIL

"One of the lessons learned from being part of the coalition is to think about the ecosystem as a whole to look at houses as part of a system that includes issues such as land. They are part of a broad, complex and historical context," said Priscilla Alvarenga, Social Transformation manager. Since 2018, Coalizão Habitação, through the Housing Lab, has supported several entrepreneurs from all over Brazil, creating a network of strengthened businesses with enhanced impact.

IMPACT BUSINESS WITH ENHANCED HOUSING SOLUTIONS

124 ENTREPRENEURS SUPPORTED BY THE PROGRAM

198 MENTORS AND EXPERTS ENGAGED

WOMEN ENTREPRENEURS

i.V Ventures Investment

In 2021, we joined i.V Ventures, a new impact fund managed by the Votorantim Institute that supports earlystage entrepreneurs who are committed to developing transformative solutions for issues related to Water and Sanitation, Low Carbon Economy and Social Interest Housing.

Over the next five years (the average period expected for the development of new businesses), iV Ventures will invest resources from the companies Votorantim Cimentos, Banco BV, CBA, Nexa, Votorantim Energia, Citrosuco and Altre, and from the Institute itself, in startups with projects in these areas.

Specific metrics will be used to calculate the social and environmental impacts achieved by the initiatives. In addition, as these startups develop, the financial return on investments will enable i.V Ventures to reinvest more capital to continue multiplying the positive impacts of the initiatives.

Health Initiatives

Our Support to Public Management Program (AGP) in Brazil moved its focus away from emergency action and toward partnerships that can help municipalities structure and improve their health management. At VCNA, we funded health and medical science initiatives at the Bowmanville Hospital, Stratford Perth Rotary Hospice, Munson Healthcare Charlevoix Hospital Foundation, and St. Marys Healthcare Foundation. In Tunisia, we sponsored a campaign called Breast Cancer Prevention Caravan, through which we invited women from the community to have a physical exam and attend an awareness session in our cement plant.

Partnership for the Enhancement of Education (PVE)

Through the Partnership for the Enhancement of Education (PVE), conducted together with the Votorantim Institute, we were active in 540 schools in 18 Brazilian municipalities, involving 72,590 elementary, middle and high school students. The project supported municipal offices in the development of distance learning programs during the pandemic.

At VCNA, we reinforced our educational partnerships with the RMC Research & Education Foundation (Alexandria, USA), the Ontario Tech University (Ontario, Canada) and the Industrial Art Institute (Michigan, USA). In Morocco, we organized an entrepreneurship course for women. We also supported community and family-related initiatives such as the Osprey Valley Open (official PGA Tour event in Toronto, Canada).

At VCLatam, we carried out the campaign "Building values – with solidarity, we contribute to a better future", which resulted in the delivery of 175 books and teaching materials to children at school N° 63 in Minas, Uruguay. In Bolivia, we sponsored computer classes in Puerto Quijarro, offered technical training scholarships to students from the INFOCAL Foundation in Yacuses, supported the construction of a multisport court at the Yacuses Educational Unit and trained construction workers in Albañilería.

Income Generation – Inclusive Production

To encourage entrepreneurship and social and production inclusion, we promote the Valor and ReDes programs, the latter in partnership with the Votorantim Institute, to support different production chains (waste and recycled materials, biomassand agriculture). Both programs help develop the local economy and workforce, aiming to increase the income of vulnerable communities. In Primavera, since the beginning of the Valor Program, the income generated through family farming has increased by 82%.



EVOLUIR - PROFESSIONAL QUALIFICATION

The Evoluir Program offers technical and professional qualification courses in strategic areas of industry, such as mechanical maintenance and mining. The initiative promotes the access of workers to education and encourages communities and our own employees to improve their qualification and development. The program is part of our social strategy to contribute toward community development and increase local employment, especially in municipalities such as Primavera (Pará), Edealina (Goiás), São Luís (Maranhão) and Vidal Ramos (Santa Catarina), in Brazil.

SOCIAL ENGAGEMENT AND **COMMUNITY COUNCILS**

Our community councils continued to be active during the pandemic, with virtual meetings to facilitate open dialogue with residents in the vicinity of our units. In addition, in VCBR we started a new virtual program FortaleCIMENTO dos Conselhos Comunitários Brasil ("Strengthening the Community Councils in Brazil"), which was created in collaboration with 45 participants of the councils. This program focuses on training council members to develop abilities and skills they identify as critical to improve communication, fundraising efforts, financial results, and community engagement. After two years of pandemic, our experience has resulted in initiatives that are more autonomous and can drive the agenda of priorities created by communities themselves.

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Volunteer Program

As a result of the social distancing measures implemented at the beginning of the pandemic, in 2021, our volunteering activities continued to be held remotely. To reach our target of having 20% of our employees engaged in volunteering initiatives by 2030, in 2021 we increased our participation in projects that we carry out and support. Our main initiative was the Volunteer Challenge, a game among the companies of the Votorantim Group that encourages the participation of employees. The theme of this year's challenge was Playing Together: we are ready to build a positive legacy ("Joga Junto - prontos para constuir um legado positivo").

In November, we published the e-book "Volunteering with the face of your VC area". Produced by the São Paulo Corporate Volunteering Committee and the Social Transformation area, the guide offers a large menu with suggestions of groups and volunteer activities.

At VCBR, we also hosted the 1st Social Hackathon, in partnership with ASID Brasil (Social Action for Equality of Differences). The event, held in May and 100% online, aimed to explore our ability to solve problems and create solutions to produce social impact. In a dynamic, gamified and collaborative way, 54 employees were invited to help non-governmental organizations (NGOs) in their work to improve the lives of people with disabilities. At the end of the volunteering campaign, 372 employees were involved in the social activities via online.

At VCNA and VCEAA, we also launched our volunteer program that provides for paid time off for employees to take part in various social and charitable initiatives and activities. At VCLatam, through the voluntary participation of employees, we delivered 40 food baskets to El Caif Verdisol, supporting families in situations of socioeconomic vulnerability.

54 EMPLOYEES **WERE INVITED TO HELP NGOS** IN THEIR WORK TO IMPROVE THE LIVES OF PEOPLE WITH DISABILITIES

AT THE END OF THE **VOLUNTEERING CAMPAIGN** 372 FMPI OVERS WERE INVOLVED IN THE SOCIAL **ACTIVITIES VIA ONLINE** THE REAL PROPERTY.

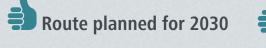


OUR IMPACTS

We map the impacts of our activities, recognizing that they include both positive and potentially negative aspects from an economic, social and environmental standpoint. In our analysis, we consider our key activities: construction of plants, mining, production, logistics, sales, research, process management, communication and co-processing.

MONITORING OUR 2030 TARGETS

|GRI 102-15|





Pillar	SDG		Initiatives in 2021		Status
We operate with integrity and transparency	16 PEACE, JUSTICE AND STRONG INSTITUTIONS THE PEACE AND STRONG FOR THE GOALS THE PEACE AND STRONG FOR THE GOALS THE PEACE AND STRONG FOR THE GOALS	Our DNA guides Our Way of Being, Working and Thriving, ethical conduct, supported by Compliance processes, is the basis for our operations. Regardless of changes in the market, business portfolio or organizational structure, Votorantim Cimentos seeks to preserve its principles and values. In this sense, through reassessment processes, we work to further establish our Compliance Program globally by increasing its power and reach.			
Pillar	SDG	Indicator	2030 target	Initiatives in 2021	Status
2 Safety, health and well-being are fundamental values	3 GOOD HEALTH AND WELL-BEING BECONOMIC GROWTH	Lost-time injurie	Global lost-time injury rate lower than 0.40	Safety and health are non-negotiable values. We continued to work to prevent accidents, our lost time injury rate decreased from 1.14 to 1.12.	
rundamentar values		Fatalities	Achieve zero fatalities in our operations	Safety and health are non-negotiable values. We continued to work to prevent accidents and ended the year with zero fatalities in our operations	
		Employee satisfaction and well-being	Achieve at least 85% favorability in climate surveys.	We achieved 67.4% favorability in satisfaction and well-being surveys	4
Innovation: we co-create sustainable solutions	8 DECENT WORK AND ECONOMIC GROWTH 9 INDUSTRY, INNOVATION 11 SUSTAINABLE CITIES AND COMMUNITIES 17 PARTNERSHIPS FOR THE GOALS	Financial revenue through sustainable solutions	30% of revenue from sustainable solutions	We increased the revenue coming from sustainable solutions from 20.8% to 24.8%, especially from products with a lower environmental footprint	
A diverse and inclusive environment	4 QUALITY 5 GENDER EQUALITY	Gender diversity in leadership positions	At least 25% of leadership positions occupied by women	We increased the percentage of women in leadership positions from 20.1% to 20.2%	4
Christinent	+	Internal perceptions of diversity and inclusion	Achieve at least 90% favorability with respect to diversity and inclusion in employee surveys.	We achieved 81.1% favorability in diversity and inclusion surveys	

Pillar	SDG	Indicator	2030 target	Initiatives in 2021	Status
5 Reducing our	6 CLEAN WATER 7 AFFORDABLE CLEAN ENERGY CLEAN ENERGY		Achieve 520 kg of net CO2 emission per tonne of cementitious product	We increased our CO2 emissions from 576 to 597 kg/tonne of cementitious product due to the acquisition of two new operations and to lower waste availability, as described on page 35.	P
environmental footprint	13 CLIMATE 15 LIFE ON LAND	Dust emissions per tonne of clinker	Reduce the emission of dust per tonne of product to 30g/ tonne clinker	We reduced our dust emission from 44 to 38 g/tonne of clinker	4
	13 action 15 Life on Land	SOx emissions per tonne of clinker	Reduce the emission of SOx per tonne of product to 490g/tonne clinker	We increased our SOx emission from 667 to 687 g/tonne of clinker	P
		NOx emissions per tonne of clinker	Reduce the emission of NOx per tonne of product 1,400g/ tonne clinker	We reduced our NOx emission from 1,483 to 1,394 g/tonne of clinker	4
		Renewable electricity	Achieve 45% renewable electricity	As a result of the increase in production, we reduced our renewable energy use from 21.0% to 18.5%. However, our projects Ventos do Piauí, in Brazil, and Solar Panels, in Spain, will put us back on track toward our 2030 targets.	*
		Water and biodiversity management plans	Evolve in the implementation of our water and biodiversity management plans in sensitive areas	Biodiversity management plans are already being implemented by at least four units, including activities to survey springs, environmental monitoring and environmental education for employees. The initiatives had been limited by the COVID-19 pandemic but are currently being resumed.	4
6 Promoting a	11 SUSTAINABLE CITIES AND COMMUNITIES CONSUMP AND PROD	UCTION	Achieve 53% thermal substitution	We decreased our thermal substitution from 23.8% to 22.4% due to the acquisition of two new operations and to lower waste availability, as described on page 35	*
Promoting a more circular business		Percentage of clinker in cement	Reduce the clinker/cement factor to 68%	We increased our clinker/cement factor from 74.0% to 74.9% due to the acquisition of two new operations and to lower waste availability, as described on page 35.	P
environment		Percentage of recycled concrete returned	70% recycled concrete returned	We increased the reuse of concrete in our operations by using the returned concrete as aggregates, recycling it and reusing it in our production processes. We achieved a record in 2021 of 93% of concrete returned recycled.	
Generating shared	1 NO POVERTY 4 QUALITY EDUCATION	Operations with community engagement, impact assessment and/or development programs	90% of operations with community engagement, impact assessment and/or development programs	We expanded our social activities in the countries where we are present, achieving 46.1% of operations with community engagement programs	
value in our communities	10 REDUCED 11 SUSTAINABLE AND COMMUN	Employees engaged in volunteer	20% of employees engaged in volunteer initiatives	We increased the percentage of employees engaged in volunteer initiatives from 4.7% to 4.9%.	4
		Local supply	60% local supply	We increased the percentage of our expenses with suppliers coming from local purchases ended the year with a percentage of 56.3%	4



FOR PEOPLE

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EXTERNAL READER

I welcome Votorantim Cimentos' integrated report and the messages it conveys. From this report, I have the sense of a company sincerely working to change the reality and the future of cement, famously one of the most useful, and most used, materials on earth. Yet the sector has major sustainability impacts, which is why this report, and Votorantim Cimentos's ongoing attention to sustainability matters, is so important.

First, I would like to congratulate Votorantim Cimentos for its commitment to setting science-based targets in relation to carbon reduction. This commitment obliges the company to identify specific, time-bound actions in line with the Paris agreement on climate change, and for these targets to be reviewed and accredited by the Science-Based Targets Initiative (SBTi). Votorantim Cimentos has further committed to Net Zero Concrete, an initiative with potentially transformative impact, which is also business material. Climate change is the defining global challenge of our time—it is essential that all of our institutions, including private sector companies, do everything in our power to reduce carbon emissions rapidly and radically, and we must all have confidence that the actions institutions are taking are fit for purpose and sufficient to the magnitude of the task. The cement sector generates some 8% of global warming emissions worldwide, which means Votorantim Cimentos has the obligation, and the opportunity, to take action of real consequence. Its commitment to science-based targets is, therefore, a commitment to be held accountable, not only for the promises it makes, but also for their delivery.

More broadly, Votorantim Cimentos should be proud of its approach to sustainability targets in general. The 2030 progress report, with the breadth of targets and the progress update provided, demonstrate genuine seriousness. I would have preferred to see more evaluation and analysis of the performance demonstrated, whether Votorantim Cimentos considers its progress to be strong enough, and how it will act to drive performance even further in the coming year.

Cement is a material with a high sustainability impact, but Votorantim Cimentos has demonstrated how cement contributes to the circular economy, including through making use of numerous waste materials and industrial by-products, some of which have little intrinsic value otherwise and few alternative uses or safe disposal options. Nevertheless, it is imperative for the sector to make progress on materials substitution and lower-impact renewable energy. This may not be something that Votorantim Cimentos can deliver on its own, but is rather a sector-wide and cross-sector industrial challenge. Nevertheless, the company should demonstrate its ambition in this area, with a strong and clear vision of sustainable transformation.

Votorantim Cimentos' efforts embrace the power of the capital markets' gathering sophistication in respect of key sustainability drivers—not only because it is the right thing to do, but because it is recognised as essential to business performance. Votorantim Cimentos' use of sustainabilitylinked finance to drive its business strategy is one indicator of the emerging alignment between at least some sustainability and business concerns, one that will become more important in the years to come. Another example is the company's response to the reporting recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), embraced by investors and regulators around the world as a means to substantiate and act upon—climate-related risk and opportunity in investment. TCFD reporting is still in its infancy, but I urge Votorantim Cimentos to build on these foundations with more specific, and increasingly quantifiable, concrete disclosures presented clearly and succinctly for investors. The TCFD recommendations are ultimately intended to be incorporated into financial statements—and Votorantim Cimentos current TCFD reporting is a long way away from this.

Judy Kuszewski is chief executive of Sancroft International, a London-based sustainability advisory company. She has over 25 years' experience in sustainability and corporate responsibility. Judy is also chair of the Global Sustainability Standards Board.



I very much appreciate the clarity of Votorantim Cimentos' action plans on sustainability, including its overall environmental impact activities and its efforts to build sustainability into its supply chain, although I would encourage the company to make this more prominent and more explicitly related to its business strategy. In the social sphere, I appreciate the strong health & safety performance figures and the holistic approach to the COVID-19 response, from mental health to community resilience, this report highlights.

Votorantim Cimentos joins many other leading businesses around the world in committing to report transparently using a variety of international standards and frameworks, notably the Global Reporting Initiative (GRI), SASB and the Global Cement and Concrete Association's (GCCA) charter. In truth, there is significant overlap between these standards, which is regrettable in that it leads to reports that may be more cumbersome than necessary, but Votorantim Cimentos has recognized that they have distinct purposes, and that it is possible to produce an engaging, transparent report that seeks to address a multiplicity of audiences.

Moreover, I appreciate this report and Votorantim Cimentos' efforts to link clearly its business strategy with the impacts to people and planet associated with its business activities—and to present these alongside performance against targets and commitments for the future, which many corporate reports avoid.

The sustainable transformation of cement is not going to be easy, but Votorantim Cimentos has demonstrated with this report that they are serious about helping to make it a reality. Based on these foundations, I anticipate seeing even more action toward the urgent change we need in the years to come.

GCCA CHARTER

_		Status 2021
CO2 and climate protection	 Use the tools set out in the GCCA CO2 and Energy protocol to define and make public our baseline emissions Develop a climate change mitigation strategy, and publish targets and progress Report annually on CO2 emissions in line with the protocol Participate in and contribute agreed datasets to the global cement database system of CO2 and energy information 	 → Protocol used by all plants of our cement business and verified by a third party → Decarbonization strategy approved by the Board and publicly annouced in 2020 in Our 2030 Commitments → See our 2021 Integrated Report → Effective participation since the beginning of CSI (founding member) — current GCCA
Responsible use of fuels and raw materials	Apply the guidelines for co-processing fuels and raw materials in cement manufacturing	→ Effective application (2018 CSI audit) and elaboration, in 2019, of internal VC guideline
Employee, health and safety	 Apply the Health and Safety in the Cement Industry: Guidelines for measuring and reporting Report to the GCCA annually on employee safety data in line with the guidelines developed for measuring and reporting Promote the sharing of good health practices 	 → Implemented → Through 2021 Integrated Report and reported to GCCA → Implemented
Emissions reduction	 Apply the Guidelines for Emissions Monitoring and Reporting in the Cement Industry Make emissions data publicly available and accessible to stakeholders Set emissions targets for main pollutants (NOx, SOx, dust) and report publicly on progress 	 → Reports used by all plants of our cement business and audited by the CSI in 2014 and 2018 → See our 2021 Integrated Report → Set in Our 2030 Commitments and monitored annually in the Integrated Report
Local impact on land and communities	 Apply the Environmental and Social Impact Assessment Guidelines and develop tools to integrate them into decision making processes Apply the Guidelines on Quarry Rehabilitation 	 → We adopt environmental and social impact assessment criteria for our new projects and for significant expansion projects. Verified by CSI audit in 2018 → Guidelines adopted for all cement plants in Brazil
Water	Apply the Protocol for Water Reporting for the Cement Industry	Protocol adopted by all cement plants
Reporting and communications	 Report publicly on all agreed GCCA Key Performance Indicators (KPIs) on an annual basis Publish a statement of business ethics Establish a systematic dialogue process with stakeholders to understand and address their expectations Report progress on developing stakeholder engagement programs Develop documented and auditable environmental management systems at all plants 	 → See our 2021 Integrated Report → See our Code of Conduct → See our 2021 Integrated Report → See our 2021 Integrated Report → See our Global Environmental Policy
Assurance CO2 emissions data	 Companies will carry out assurance at least once every two years using recognized, independent third-party assurance practitioners Assurance practitioners will decide on the number of sites to be visited Assurance statements will explicitly mention the number of sites visited and the corresponding % CO2 emissions covered 	 → Carried out every year by BVQI → Decided by BVQI → Included in BVQI assurance statement
Assurance safety data	© Companies will carry out assurance at least once every three years using recognized, independent third-party assurance practitioners	⊕ Carried out every year by BVQI
Assurance NOx, SOx and Dust emissions data	O Companies will carry out assurance at least once every three years using recognized, independent third-party assurance practitioners	

KPIS GCCA

Climate protection	2019	2020	2021 ¹
Total CO2 emissions — gross (million tonne)	19.0	20.4	24.9
Total CO2 emissions — net (million tonne)	18.3	19.6	24.0
Specific CO2 emissions – gross (kg/tonne cementitious material)	615	599	619
Specific CO2 emissions — net (kg/tonne cementitious material) vc 2030	591	576	597
Scope: Global 1 Increase due to a change in scope and the acquisition of two new cement operations (McInnis and Ba	ulhoo) which are still at a low	or lovel of there	mal cubetitution

'increase due to a change in scope and the acquisition of two new cement operations (McInnis and Baiboa), which are still at a lower level of thermal substitution and clinker factor, in addition to reduced thermal substitution in some regions due to limited access to waste caused by the pandemic in a time of increased cement production.

Responsible use of fuels and raw materials	2019	2020	2021
Specific heat consumption of clinker production (MJ/tonne clinker)	3,474	3,398	3,584
Alternative fossil fuel rate (%)	11.6%*	11.6%*	10.3%
Biomass fuel rate (%)	11.0%*	12.3%*	12.1%
Alternative raw materials rate (%)	6.2%	7.5%*	9.2%
Clinker / cement ratio (%) vc 2030	74.3%	74.0%	74.9%
Scope: Global *Revised figures GRI 102-48			

Safety ¹	2019	2020	2021
Number of fatalities (directly employee)	0	1	0
Number of fatalities per 10,000 directly employed	0	0.87	0
Number of fatalities (indirectly employee) ²	1*	1*	0
Number of fatalities (third party)	1	0	0
Number of days lost due to injuries (calendar days / directly employees)	5,320	1,522	1,602
Number of days lost due to injuries (calendar days / directly + indirectly employees)	5,750	2,149	2,613
Lost time injuries per 1 million man-hours (directly employees)	1.83	1.11	1.30
Scope: Global			

¹Figures do not include Uruguay operations

^{*}Revised figures GRI 102-48

Emissions reduction ¹	2019	2020	2021
Overall coverage rate (KPI1) ²	90%*	85%	82%
Coverage rate continuous measurement (KPI2) ³	100%	100%	100%
Dust - coverage rate (%)	100%	100%	100%
NOx - coverage rate (%)	100%	100%	100%
SOx - coverage rate (%)	100%	100%	100%
VOC/THC - coverage rate (%)	98%	96%	96%
PCDD/F - coverage rate (%)	93%*	85%	83%

97%* 96%* 97% 58* 1,734*	98% 98% 98% 44*	96% 96% 91%
97% 58*	98%	
58*		91%
	11*	
1 73/1*	44	38
1,734	1,483*	1,394
723*	667*	687
63	54	118
0.10	0.12	0.02
12	8	11
22	14	19
889	688*	475
1,318*	1,041*	1,122
39,186*	35,385*	41,150
16,330	15,918	20,282
1,413	1,298	3,473
2,239	2,866	541
274	200	311
500	324	564
20,079	16,407*	14,022
	39,186* 16,330 1,413 2,239 274 500	39,186* 35,385* 16,330 15,918 1,413 1,298 2,239 2,866 274 200 500 324

¹Includes only cement business, ²KPI1: Monitoring of all pollutants mentioned in the emissions guidelines, ³KPI2: Monitoring of PM, NOx and SOx, ⁴HM1: Cadmium and Thallium, ⁵HM2: Antimony, Arsenic, Lead, Chromium, Cobalt, Copper, Manganese, Nickel, Vanadium.

*Revised figures GRI 102-48

Local impact on land and communities	2019	2020	2021
Sites with existing community engagement plans (%) ¹	41.0%	33.4%	46,1%
Sites with existing mine rehabilitation plans (%) ²	93.1%	93.7%	91.1%
Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity, as specified by GRI 304-1 ²	12*	11*	10
Mines with high biodiversity value in which biodiversity management plans are actively implemented (%) ²	58.3%*	72.7%*	80.0%
¹ Scope: Global, ² Scope: VCBR, VCNA, VCEAA			

Specific water consumption	2019	2020	2021
Total water consumed (liters) per tonne of cement produced ¹	384*	340*	370
Total water consumed (liters) per m ³ of concrete produced ²	350*	612*	533

¹Scope: Global

²Considers on-site occurrences in cement, aggregates, mortar, logistic, aglime and concrete facilities

²Scope: VCBR and Uruguay

GRI CONTENT INDEX



|GRI 102-55|

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

For the Materiality Disclosures Service, GRI Services reviewed that the GRI content index is clearly presented and the references

for Disclosures 102-40 to 102-49 align with appropriate sections in the body of the report. This service was performed in the English version of the report.

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	102-47 List of material topics	6, 7		
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	102-50 Reporting period	5		
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GRI Standard	Disclosure item	Page	Omission	SDG
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	103-2 The management approach and its components	33, 68		
	103-3 Evaluation of the management approach	33, 68		
GRI 305: Emissions 2016	305-1 Direct GHG emissions (scope 1)	35, 107		3, 12, 13, 14, 15
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GRI 306: Waste 2020	306-1 Waste generation and significant waste-related impacts	68		
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	103-2 The management approach and its components	49		
	103-3 Evaluation of the management approach	49		
GRI 401: Employment 2016	401-1 New employees hires and employees turnover			5, 8

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	103-2 The management approach and its components	56		
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	103-2 The management approach and its components	39		
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GRI 406: Non-discrimination 2016	406-1 Incidents of discrimination and corrective actions taken	104		5, 8, 16

GRI Standard	Disclosure item		Omission	SDG	
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GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its boundary	6, 7			
	103-2 The management approach and its components	75			
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GRI 408: Child Labor 2016	408-1 Operations and suppliers at significant risk for incidents of child labor	104		8, 16	
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GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its boundary	6, 7			
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GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its boundary	6, 7			
	103-2 The management approach and its components	39			
	103-3 Evaluation of the management approach	39			
GRI 415: Public Policy 2016	415-1 Political contributions	102		16	
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GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its boundary	6, 7			
	103-2 The management approach and its components	39			
	103-3 Evaluation of the management approach	39			
GRI 419: Socioeconomic Compliance 2016	419-1 Non-compliance with laws and regulations in the social and economic area	104		16	

GRI Standard	RI Standard Disclosure item		Omission	SDG
VC Topic				
Customer Relationship and Satisfaction				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its boundary	63		
	103-2 The management approach and its components	63		
	103-3 Evaluation of the management approach	63		
VC Topic: Customer Relationship and Satisfaction	VC-1 Satisfaction survey results (NPS)	102		8, 9
Research and innovation				
GRI 103: Management Approach 2016	103-1 Explanation of the material topic and its boundary	58		
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	103-3 Evaluation of the management approach	158		
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GRI 201: Economic performance 2016	201-1 Direct economic value generated and distributed	101		2, 5, 7, 8, 9
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GRI 204: Procurement Practices 2016	204-1 Proportion of spending on local suppliers	101		2, 5, 7, 8, 9
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GRI 304: Biodiversity 2016	304-3 Habitats protected or restored	107		6, 14, 15
	304-4 IUCN Red List species and national conservation list species with habitats in areas affected by operations	107		6, 14, 15
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Sector disclosures: MM10	MM10 Number and percentage of operations with closure plans	106		
GRI 308: Supplier Environmental Assessment 2016	308-1 Percentage of new suppliers that were screened using environmental criteria	101		
	308-2 Negative environmental impacts in the supply chain and actions taken	101		
GRI 411: Rights of Indigenous Peoples 2016	411-1 Incidents of violations involving rights of indigenous people	104		
GRI 414: Supplier Social Assessment 2016	414-1 Percentage of new suppliers that were screened using social criteria	101		
	414-2 Negative social impacts in the supply chain and actions taken	GRI Content Index		

SASB CONTENT INDEX

SASB standards are intended for use in communications to investors regarding sustainability issues that are likely to impact corporate ability to creative value over the long term. This report was prepared according to SAB Standards for Construction Materials.

Sustainability Disclosure Topics & Accounting Metrics

Торіс	Accounting Metric	Category	Unit of Measure	Code	Page
Greenhouse Gas	Gross global Scope 1 emissions, percentage covered under emissions-limiting regulations	Quantitative	Metric tons (t)	EM-CM-110a.1	107
Emissions			CO2-E,		
			Percentage (%)		
	Discussion of long-term and short-term strategy or plan to manage Scope 1 emissions,	Discussion and		EM-CM-110a.2	33
	emissions reduction targets, and an analysis of performance against those targets	Analysis			
Air Quality	Air emissions of the following pollutants:	Quantitative	Metric tons (t)	EM-CM-120a.1	108
	(1) NOx (excluding N2O)				
	(2) SOx				
	(3) particulate matter (PM10),				
	(4) dioxins/furans				
	(5) volatile organic compounds (VOCs)				
	(6) polycyclicaromatic hydrocarbons (PAHs)				
	(7) heavy metals				
nergy Management	1) Total energy consumed	Quantitative	Gigajoules (GJ),	EM-CM-130a.1	105
	(2) percentage grid electricity		Percentage (%)		
	(3) percentage alternative				
	(4) percentage renewable				
Water Management	(1) Total fresh water withdrawn	Quantitative	Thousand cubic meters	EM-CM-140a.1	106
	(2) percentage recycled		(m³), Percentage (%)		
	(3) percentage in regions with High or Extremely High Baseline Water Stress				
Waste Management	Amount of waste generated, percentage hazardous, percentage recycled	Quantitative	Metric tons (t),	EM-CM-150a.1	109
			Percentage (%)		

Торіс	Accounting Metric	Category	Unit of Measure	Code	Page
Biodiversity Impacts	Description of environmental management policies and practices for active sites	Discussion and Analysis		EM-CM-160a.1	76
	Terrestrial acreage disturbed, percentage of impacted area restored	Quantitative	Acres (ac), Percentage (%)	EM-CM-160a.2	Not reported
Workforce Health & Safety	 Total recordable incident rate (TRIR) near miss frequency rate (NMFR) for (a) fulltime employees and (b) contract employees 	Quantitative	Rate	EM-CM-320a.1	111
	Number of reported cases of silicosis ²	Quantitative	Number	EM-CM-320a.2	111
Product Innovation	Percentage of products that qualify for credits in sustainable building design and construction certification	Quantitative	Percentage (%) by annual sales revenue	EM-CM-410a.1	Not reported
	Total addressable market and share of market for products that reduce energy, water, and/or material impacts during usage and/or production	Quantitative	Reporting currency, Percentage (%)	EM-CM-410a.2	101
Pricing Integrity & Transparency	Total amount of monetary losses as a result of legal proceedings associated with cartel activities, price fixing, and anti-trust activities ³	Quantitative	Reporting currency	EM-CM-520a.1	103

Activity Metric	Category	Unit of Measure	Code	Page	
Production by major product line ⁴	Quantitative	Metric tons (t)	EM-CM-110a.1	GRI Content Index	

GRI AND SASB STANDARDS DISCLOSURES

PROFILE MEMBERSHIP OF ASSOCIATIONS

|GRI 102-13|

Following are the major associations of each region, which also participate in numerous local affiliations and associations for the advancement of the industry.

GLOBAL

- Federación Interamericana del Cemento (FICEM)
- Global Cement and Concrete Association (GCCA)
- Innovandi GCCA Research Network
- World Business Council for Sustainable Development (WBCSD)

BOLIVIA

- Asociación Boliviana de Gestión Humana (ASOBOGH)
- Cámara de la Construcción de Santa Cruz (CADECOCRUZ)
- Cámara de Exportadores de Santa Cruz (CADEX)
- Cámara de Industria, Comercio, Servicios y Turismo de Santa Cruz (CAINCO)
- Fundación Germán Busch
- Global Compact Bolivia Network
- Instituto Boliviano del Cemento y Hormigón (IBCH)

BRAZIL

- Associação Brasileira de Cimentos Portland (ABCP)
- Associação Brasileira da Indústria de Materiais de Construção (ABRAMAT)
- Instituto Brasileiro do Concreto (IBRACON)
- Instituto Brasileiro de Mineração (IBRAM)
- Sindicato Nacional da Indústria de Cimento (SNIC)
- Sindicato Nacional da Indústria de Produtos de Cimento (SINAPROCIM)

CANADA

- Cement Association of Canada (CAC)
- Concrete Ontario
- Ontario Stone, Sand and Gravel Association (OSSGA)

MOROCCO

- Arab Association for Cement & Building Materials (AUCBM)
- Association Marocaine des Producteurs de Béton (AMBPE)
- Association Professionnelle des Cimentiers (APC)
- Confédération Générale des Entreprises du Maroc (CGEM)

SPAIN

- Asociación Industrial de Canarias (ASINCA)
- Asociación Nacional de Empresarios Fabricantes de Áridos (ANEFA)
- Asociación Nacional Española de Fabricantes de Hormigón Preparado (ANEFHOP)
- Asociación de Fabricantes de Morteros (ANFAPA)
- European Cement Association (Cembureau)
- Fundación Laboral del Cemento y el Medio Ambiente (CEMA)
- Instituto Español del Cemento y sus Aplicaciones (IECA)
- Oficemen (Association of Cement Manufacturers in Spain)

TUNISIA

- Arab Association for Cement & Building Materials (AUCBM)
- O Chambre Nationale des Producteurs de Ciments de la Tunisie (CNPC)

TURKEY

- Çimento Endüstrisi İşverenleri Sendikası (ÇEiS) (Cement Industry Employers Association)
- Türk Çimento (Turkish Cement Manufactures Association)
- Türkiye Hazır Beton Birliği (THBB) (Turkish) Ready Mixed Concrete Association)

UNITED STATES

- Illinois Association of Aggregate Producers (IAAP)
- National Ready Mix Concrete Association (NRMCA)
- Portland Cement Association (PCA)

URUGUAY

- Cement Manufacturers Association
- Construction Chamber of Uruguay
- Construction League
- Exporters Union of Uruguay
- Promoters of Construction Uruguay (APPCU)
- Spain-Uruguay Business Chamber
- Trade Defense League
- DERES Empresas por el Desarrollo Sostenible

ENTITIES INCLUDED IN THE CONSOLIDATED FINANCIAL STATEMENTS

|GRI 102-45|

Calmit Mineração e Participações Ltda.; Votorantim Cimentos N/NE S.A.; Votorantim Cimentos S.A.; CRB Operações Portuárias S.A.; Fazenda São Miguel Ltda.; Cia. de Cimento Pinheiro Machado; Cimento Itau do Paraná Ltda.; Pedreira Pedra Negra Ltda.; Petrolina Mineração Zeta Ltda.; Mineração Potilider Ltda.; Lidermac Indústria e Comércio Ltda.; D&L Mineração Ltda.; Cimento Vencemos do Amazonas Ltda.; MOV-C Transportes Ltda.; Silcar; Empreendimentos, Comércio e Participações Ltda.; Votorantim Cimentos Machadinho Energia Ltda.; St Marys Cement Inc.; Cementos Artigas S.A.; Votorantim Cimentos EAA Inversiones, S.L.; Votorantim Cimentos Argentina S.A.; Votorantim Cement Trading S.L.; Itacamba Cementos S.A.; GB Minerales Y Agregados S.A.; Votorantim Cimentos International S.A.; VC Latam S.A.

ECONOMIC PERFORMANCE

Direct economic value generated and distributed |GRI 201-1|

	2019	2020	2021
Economic value generated (R\$ thousands)	15,877,520	19,600,528	25,914,457
Net revenue	13,026,664	16,740,228*	22,295,681
Cement	9,127,448	11,542,316	15,584,206
Concrete	2,606,247	3,561,241	4,771,898
Aggregates	481,304	545,417	670,253
Mortar	425,218	604,661	731,441
Others	386,447	486,593*	537,883
Economic value distributed (R\$ thousands)	7,157,514	8,941,224	11,630,113
Employee remuneration ¹	2,305,332	2,900,373	3,430,794
Taxes and fees ²	2,603,860	3,431,588	4,154,439
Third-party capital remuneration ³	1,699,082	2,136,807*	2,418,168
Economic value retained ⁴	8,720,006*	10,659,304*	14,284,344*

Scope: Global. ¹Direct remuneration, retirement plan and pension plan, social charges and benefits. ² Federal, State, Municipal and Deferred taxes and contributions. ³Financial expenses and passive exchange variations and rents. ⁴Non-controlling interest, profit (loss) retained and profit (loss) from discontinued operations.

Production by major product line |SASB EM-CM-000.A|

	2019	2020	2021
Sales of cement (million metric tons)	29.9	32.4	37.2
Sales of aggregates (million metric tons)	21.7	22.7	24.4
Sales of concrete (million m³)	6.8	7.1	8.1
Sales of mortar (million metric tons)	1.5	1.5	1.6
Scope: Global (cement, aggregates and concrete) and VCRR (mortar)			

Financial revenue through sustainable solutions |VC 2030| |SASB EM-CM-410a.2|

	2021
Financial revenue through sustainable solutions ¹ (%)	24.8%

Scope: VCBR, VCNA, VCEAA

¹Products and/or services that mitigate our environmental footprint or offer environmental benefits compared to traditional options

Suppliers |GRI 204-1| |VC 2030|

	2019	2020	2021 ¹
Total amount spent with suppliers (R\$ billion)	1.9	3.2*	8.5
Total amount spent with local suppliers (R\$ billion)	0.9	1.2	4.8
Spent with local suppliers at significant operating locations (%) GRI 204 VC 2030	49.3%	37.8%*	56.3%
C NORD NOMA NOTA			

Scope: VCBR, VCNA, VCEAA. ¹Change in scope: in 2020, the scope of the indicator was VCBR. As of 2021, the scope was expanded to include VCBR, VCNA and VCEAA. Local suppliers: Due to the territorial extension of the countries where we operate, specific criteria were adopted for each of the regions. VCBR: local suppliers are those located within a 200km radius from the operating unit; VCEAA: local suppliers are those located in the same country of the operating unit; VCNA: suppliers within the United States or the province (Canada) where the plant is located.

Contracting of suppliers |GRI 308-1| |GRI 308-2| |GRI 414-1| |GRI 414-2|

	2019	2020	2021
Total number of new suppliers	751	836	1,262
Total number of new suppliers selected according to environmental criteria GRI 308-1 1	751	836	137
New suppliers selected according to environmental criteria (%) GRI 308-1 1	100%	100%	10.9%
Number of suppliers identified as causing negative environmental impact and actions taken GRI 308-2 ²	Not monitored	Not monitored	7
Total number of new suppliers selected according to social criteria GRI 414-1 ¹	751	836	806
New suppliers selected according to social criteria (%) GRI 414-1 1	100%	100%	63.9%
Number of suppliers identified as causing negative social impact and actions taken GRI 414-2 ²	Not monitored	Not monitored	0

¹Change in the indicator's accounting method starting in 2021: number of suppliers approved in the registration process for categories that consider environmental and social criteria and number of suppliers that were re-approved for the first time and received a purchase order in the current year. 100% of suppliers go through an approval process via the SIPM Ariba platform. As part of this process, suppliers that fall into environmental and social categories must meet certain procurement criteria. VSA performs the analysis and rejects the approval of suppliers that do not meet the pre-defined criteria. The assessment included the suppliers of alternative fuels and inputs (Verdera), according to the criteria for prioritization established by Supply Chain.

²In 2021, risk mapping was carried out for each procurement category. Action plans were created for suppliers with greater risk potential, which are periodically monitored by the Risk and Sustainability Committee.

Local hires |GRI 202-2|

Senior management hired from the local community (%) ¹	2019	2020	2021
VCBR	88.2%	81.3%	81.6%
VCEAA	35.3%	56.3%	60.0%
VCNA	100%	95.8%	87.5%
VCLATAM	40.0%	47.0%*	46.7%
Employees from the local community (%) ²	2019	2020	2021
VCBR	82.9%	82.4%	89.6%
VCEAA	96.4%*	98.4%	98.4%
VCNA	96.6%*	99.8%	99.2%
VCLATAM	70.8%	75.9%	75.6%

¹Includes senior managers, general managers, directors and CEO.

²Employees born or naturalized in the country of operation are considered to be local hires at VCNA, VCEAA and in Uruguay. At VCBR and in Bolivia, due to specific local characteristics, we adopt regional criteria.

*Revised figures GRI 102-48

Government relations |GRI 415-1|

	2019	2020	2021
Political contributions	0	0	0
Scope: VCBR, VCNA, VCEAA			

Consumer relations |GRI 102-43| |VC-1|

Net Promoter Score (NPS) survey results	2019	2020	2021
VCBR	73	61	71
VCEAA		-	36

Scope: VCBR, VCEAA

The indicator can range from -100 to 100.

Operations assessed for risks related to corruption |GRI 205-1|

	2019	2020	2021
Operations assessed (%)	0%	25%	50%
Significant corruption-related risks identified through this assessment	Em 2019, the Compliance area conducted a self-assessment of its Compliance Program at a global level, including the Anti-Corruption pillar. The self-assessment, which involves several areas of the company aims to provide insight into the level of maturity of the pillars that make up the Votorantim Cimentos Compliance Program through an integrated and consolidated panel, as well as to direct the strategy and priority actions to improve compliance over the next years.	For VCBR, the Compliance area performed a pilot Anti-Corruption Risk Assessment including two specific areas and exposures in relationships with the Government. For the other regions, the Compliance area maintained the continuous self-assessment of its Compliance Program at a global level, including the Anti- Corruption pillar.	Even though our core business is not related to commercial transaction with governments, at Votorantim Cimentos, like any other legal entity, interactions with the public sector are part of the company's inherent activities. Therefore, in addition to the compliance evaluations incorporated into the company's daily processes (for example, integrity assessments of M&A partners and critical third parties, as well as risk assessments for new business models), at VCBR and VCEAA we carried out specific anti-corruption assessments. At VCBR, we mapped all the interactions with the public sector, which enabled us to qualify them, assess our level of control over them, identify the parties involved and train them on anticorruption issues. This mapping confirmed an original perception regarding the absence of significant risks related to corruption and served as a resource to inform integrity processes. At VCEAA, because of the diverse legal framework in the region, we carried out an anti-corruption risk assessment that focused on mapping and evaluating each country's legislation; we also did a self-assessment of our Compliance Program, including the Anti-Corruption pillar. In the other regions, the Compliance area continued to work on priority issues/gaps identified in previous self-assessments, including anti-corruption training and the background check process.

Scope: Global

2021¹

Anti-corruption communication and training |GRI 205-2|

		2019	2019 2020			2021 ¹			
	Number of		Communicated	Number of ——		Communicated	Number of ——		Communicated
Employees	employees	Number	Percentage	employees	Number	Percentage	employees	Number	Percentage
President/Director	17	17	100%	17	17	100%	38	38	100%
Manager/General Manager	232	232	100%	321	321	100%	366	366	100%
Coordinator/Consultant	397	397	100%	481	481	100%	618	618	100%
Technician/Analyst/Supervisor	2,036	2,036	100%	2,421	2,421	100%	2,909	2,809	97%
Operator	4,377	4,377	100%	6,173	5,293	86%	8,131	7,295	90%
Total number of employees	7,059	7,059*	100%	9,413	8,533	91%	12,062	11,126	92%
Members of governance bodies	13	1	8%	11	0	0%	13	13	100%
Business partners ²	-	4,159	~50%	<u>-</u>	9,480	~50%		21,402	~70%

	Number of		Trained	Number of ——		Trained Number of			Trained
Employees	employees	Number	Percentage	employees	Number	Percentage	employees	Number	Percentage
President/Director	17	6	35%	17	1	6%	38	17	45%
Manager/General Manager	232	57	25%	321	103	32%	366	104	28%
Coordinator/Consultant	397	102	26%	481	145	30%	618	213	34%
Technician/Analyst/Supervisor	2,036	600	29%	2,421	645	27%	2,909	878	30%
Operator	4,377	1,921	44%	6,173	832	13%	8,131	1,109	14%
Total number of employees	7,059	2,686*	38%*	9,413	1,726	18%	12,062	2,321	19%
Members of governance bodies	13	1	8%	11	0	0%	13	0	0%

Scope: VCBR, VCNA, VCEAA.

Anti-corruption |GRI 205-3|

	2019	2020	2021¹
Number of cases of corruption confirmed by the Business Ethics Line	0	0	0

¹Change in scope: in 2019 and 2020, the scope of the indicator was VCBR, VCEAA and VCNA. As of 2021, the scope was expanded to global.

Competition |GRI 206-1| |SASB EM-CM-520a.1|

	2019	2020	2021
Total number of legal actions for unfair competition, trust and monopoly Practices ¹	2	2	4
Value of legal actions (R\$ million)	6,100	6,344*	7,754

Scope: Global

¹Change in scope: in 2020, the scope of the indicator was VCBR and VCEAA. As of 2021, the scope was expanded to include VCBR, VCNA and VCEAA.

²Documents referring to the Anti-corruption policy

^{*}Revised figures GRI 102-48

¹Considers only legal actions above R\$ 98 million, in line with the standards applied for M&A and Due Diligence.

^{*}Revised figures GRI 102-48

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Socioeconomic Compliance |GRI 419-1|

	2010	2020	2024
	2019	2020	2021
Total number of significant fines received in the year ¹	0	0	1
Total monetary value of significant fines received in the year (R\$ million)	0	0	1.6
Total number of non-monetary sanctions ²	0	0	0
Number of cases (fines + sanctions) brought through dispute resolution mechanism	0	0	1
Scope: Global			

¹Significant monetary fines: value above R\$ 1 million. ²Non-monetary sanctions that cause interruptions or adjustments over R\$ 5 million

Discrimination |GRI 406-1|

Total number of incidents of discrimination received by			
the business ethics office and corrective actions taken	2019	2020	2021 ¹
Race / Color	2	5	1
Age group	0	0	0
Gender	0	0	0
Religion	0	0	1
Political opinion	0	1	0
Nationality / nationality	1	4	0
Social origin	0	0	0
Physical conditions	1	0	0
Harassment and abuse of power	0	0	0
Other incidents (discrimination)	0	0	4
Total number of incidents analyzed	4	10	6
Analyzed and considered unfounded	2	6*	1
Analyzed and considered well-founded	1	1	3
Analyzed and considered inconclusive	1	2	1
Under analysis	0	0	1
Without sufficient Information for investigation	0	1	0

Scope: Global

Child labor |GRI 408-1|

Operations at significant risk
for incidents of child labor

Operations at risk of having young workers exposed to dangerous work

Suppliers at significant risk for incidents of child labor

Suppliers at risk of having young workers exposed to dangerous work

Forced or compulsory labor |GRI 409-1|

Operations at significant risk for incidents of forced or compulsory labor

Suppliers at significant risk for incidents of forced or compulsory labor incidents

Compulsory and child labor are issues included the Votorantim Cimentos Code of Conduct, which addresses our commitment to the United Nations Universal Declaration of Human Rights and the UN Global Compact and has among its principles to eliminate all forms of forced or compulsory labor and eradicate all forms of child labor from our production chain. These practices are prohibited in all company and commercial partners' facilities. It is also prohibited to hire any organization that does not follow our company's conduct guidelines. This issue is also addressed in the event of complaints to our Business Ethics Office, which is prepared to carry out investigations and verify the materiality of the complaint. All the suppliers contracted must be submitted to the registration process. The Office of Labor (within the Ministry of Economy) Restricted List is cross-checked with our SAP list of suppliers. If there is evidence of misconduct, the supplier is demobilized and blocked to prevent future hiring. The Votorantim Cimentos General Conditions Term states that all suppliers must follow our Code of Conduct (ethics, values and compliance with labor legislation). Through the new SIPM tool, suppliers must accept our General Conditions Term; otherwise, they are rejected in the certification process. They must also fill out a Compliance Survey, in which they need to address several topics, including child labor. If the survey answers are unsatisfactory, the supplier is submitted for analysis by the Compliance area and may be rejected in the certification process. The company will map operations and suppliers with significant risks to child, forced or slave-like labor

Indigenous rights |GRI 411-1|

	2019	2020	2021 ¹
Incidents of violations involving rights of indigenous peoples	0	0	0
Scone: Global			

¹Change in scope: in 2019 and 2020, the scope of the indicator was VCBR, VCEAA and VCNA. As of 2021, the scope of the indicator was expanded to include the global.

¹Change in scope: in 2019 and 2020, the scope of the indicator was VCBR, VCEAA and VCNA. As of 2021, the scope was expanded to global.

^{*}Revised figures GRI 102-48

ENVIRONMENTAL PERFORMANCE

Energy consumption inside the organization |GRI 302-1| |SASB EM-CM-130a.1|

Non-renewable sources (GJ)	2019	2020	2021
Cement	71,774,692*	75,249,280	95,601,831
Aggregates	72,528*	77,412	71,983
Concrete	220,278*	220,288	254,853
Mortar	12,254*	11,785	15,206
Limes and agricultural inputs	29,427*	24,900	24,328
Total	72,109,178*	75,583,666*	95,968,201
Renewable sources (GJ)	2019	2020	2021
Cement	8,593,891	10,244,265	12,857,184
Aggregates	9,283*	11,049	9,079
Concrete	32,274*	36,073	35,518
Mortar	6,927	15,090*	33,999
Limes and agricultural inputs	2,040,042*	1,695,075*	1,759,473
Total	10,682,417*	12,001,552*	14,695,253
Electricity (MWh)	2019	2020	2021
Cement	3,422,937	3,707,824	4,242,316
Aggregates	10,294	4,368	8,943
Concrete	3,067	3,086	3,394
Mortar	7,928	7,601	8,544
Limes and agricultural inputs	47,561	50,094	50,096
Total	3,491,786	3,772,973	4,313,292
Total consumption (GJ)	2019	2020	2021
Cement	92,691,154*	98,841,710	123,731,351
Aggregates	118,870*	104,187	113,256
Concrete	263,591*	267,470	302,590
Mortar	47,721*	54,238*	79,963
Limes and agricultural inputs	2,240,690*	1,900,314*	1,964,147

Scope: all VCBR operations and VCEAA, VCNA and VCLatam cement operations.

Energy Management | EM-CM-130a.1 | | VC 2030 |

	2019	2020	2021
Grid electricity (%)	79.2%	81.8%	84.3%
Renewable Energy (fuels + electricity)(%)	13.9%	14.3%	13.6%
Alternative fuels (%) vc 2030	22.6%	23.8%	22.4%
Renewable Energy (electricity) vc 2030			18.5%
Scope: Global.			

Energy consumption outside the organization |GRI 302-2|

Transport and distribution (GJ)	2019	2020	2021
VCBR	4,101,619*	3,862,299	4,322,852
Scope: VCBR			

Energy intensity |GRI 302-3|

*Revised data GRI 102-48

Fuels	2019	2020	2021
Clinker(MJ/tonne of clinker)	3,474*	3,398	3,584
Aggregates (MJ/tonne of product)	22*	28	26
Concrete (MJ/m³ of product)	142*	141	144
Mortar (MJ/tonne of product)	27*	39*	62
Lime and agricultural inputs (MJ/tonne of product)	996*	819*	816
Electricity ¹	2019	2020	2021
Cement (kWh/tonne of cement)	112	109	109
Aggregates (kWh/tonne of product)	2.7	1.4	2.9
Concrete (kWh/m³ of product)	1.7	1.7	1.7
Mortar (kWh/tonne of product)	11	11	11
Lime and agricultural inputs (kWh/ton of product)	23	24	23

Scope: all VCBR operations and VCEAA, VCNA and VCLatam cement operations

^{*}Revised figures GRI 102-48

¹The cement business has the highest energy consumption (98%)

^{*}Revised data GRI 102-48

Environmental investments

Total Environmental Capex and Opex (million R\$)	2019	2020	2021 ¹
Environmental investments (Capex)	102.3*	39.6*	108.8
Environmental expenses (Opex)	105.3*	69.8*	86.3
Scone: Global	103.5	03.0	00.

*Revised figures GRI 102-48

Material used |GRI 301-1|

	2019	2020	2021
Non-renewable materials (tonne)	44,048,090	54,048,612*	66,529,293
Renewable materials (tonne)	54,429*	68,181	66,294

Scope: VCBR, VCNA and VCEAA cement operations

Materials include raw materials used in the raw meal (flour) phase and in the cement griding phase, alternative raw materials and other materials.

All materials used in our processes are non-renewable, except biomass.

*Revised figures GRI 102-48

Water withdrawn by source |GRI 303-3| |SASB EM-CM-140a.1|

	2	019	2020		2021	
Water withdrawn - Cement (megaliter) ¹	All areas	Areas with water stress	All areas	Areas with water stress	All areas	Areas with water stress
Surface water	11,763*	6,372	13,110	5,978	13,107	6,080
Groundwater	1,750	817	1,054	177	2,818	221
Rainwater	5.7	0.0	14.4	0.9	43.4	0.2
Produced water	31,213	24,804*	39,663	16,806	41,496	14,954
Third-party water	233	157	363*	138	258	196
Total	44,965*	32,150*	54,205*	23,099	57,723	21,451

Water withdrawn - Concrete (megaliter) ²	All areas	Areas with water stress	All areas	Areas with water stress	All areas	Areas with water stress
Surface water	0.0	0.0	0.0	0.0	8.8	0.0
Groundwater	321	0.0	1,002*	0.0*	1,042	0.0
Rainwater	0.0	0.0	0.0	0.0	0.0	0.0
Produced water	0.0	0.0	0.0	0.0	0.0	0.0
Third-party water	334	0.0	155	0.0*	164	0.0
Total	655	0.0	1,157*	0.0*	1,214	0.0

²Change in scope: in 2019 and 2020, the scope of the indicator was VCBR. As of 2021, the scope was expanded to VCBR and Uruguay. The data was obtained by measurement and estimates. Water stress analysis was performed using the Aqueduct tool

* Revised data GRI 102-48

Water discharge by source |GRI 303-4|

	20	019 2020		20	2021	
Water discharge - Cement (megaliter)	All areas	Areas with water stress	All areas	Areas with water stress	All areas	Areas with water stress
Surface water	35,015*	27,985	44,429	17,997	45,828	15,729
Groundwater	11.0	0.0	164	12.8	119	2.3
Sea water	0.0	0.0	0.0	0.0	0.0	0.0
Water sent to third-party supplier	32.0	8.9	40.1	11.3	29.8	13.9
Total	35,058*	27,994	44,632	18,021	45,977	15,745
Water sent to third-party supplier Total						

Scope: Global

The data was obtained by measurement and estimates. Water stress analysis was performed using the Aqueduct tool

*Revised data GRI 102-48

Water consumption |GRI 303-5|

	20	2019 20		20	2021	
Water consumption - Cement (megaliter)	All areas	Areas with water stress	All areas	Areas with water stress	All areas	Areas with water stress
Total water withdrawn GRI 303-3	44,965*	32,150*	54,205*	23,099	57,723	21,451
Total water discharged GRI 303-4	35,058*	27,994	44,632	18,021	45,977	15,745
Total water consumed GRI 303-5	9,907*	4,156*	9,573*	5,078	11,746	5,706
Scope: Global						

*Revised data GRI 102-48

Biodiversity and resource conservation |GRI 304-1| |GRI MM2| |GRI MM10|

	2019	2020	2021
Total number of mines	130*	127*	135
Mines with closure plans (%) GRI MM10	93.1%	93.7%	91.1%
Total number of high biodiversity value units GRI 304-1	12*	11*	10
Number of high biodiversity value areas with existing biodiversity management plans GRI MM2	7	8	8
Units with high biodiversity value with existing biodiversity management plans (%) GRI MM2	58.3%*	72.7%*	80.0%

According to the "Votorantim Cimentos Biodiversity Management Plan Manual", the identification of areas of high biodiversity value considers three factors:

- The importance of the area of high biodiversity relevance overlapping with the mining area;

- The percentage of overlap between the area of high biodiversity relevance and the mining area (considering a 5-km radius from the center of the mine);

- The distance of the area of high biodiversity relevance to the mining center.

We apply the methodology and rank all areas that are close to or overlap with areas of high biodiversity value, according to these criteria.

*Revised data GRI 102-48

Biodiversity |GRI 304-4|

with habitats in areas affected by operations	2019	2020	2021 ¹
Critically endangered	8	1	0
Endangered	24	26	0
Vulnerable	53	39	7
Near Threatened	17	28	12
Least concern ²	N/A	N/A	N/A
Least concern ² Total number of species in the National Conservation List	N/A	N/A	N/A
Least concern ² Total number of species in the National Conservation List and with habitats in areas affected by operations	N/A 2019	N/A 2020	N/A 2021 ¹
Total number of species in the National Conservation List			
Total number of species in the National Conservation List and with habitats in areas affected by operations Critically endangered	2019	2020	
Total number of species in the National Conservation List and with habitats in areas affected by operations Critically endangered Endangered	2019	2020	
Total number of species in the National Conservation List and with habitats in areas affected by operations	2019 0 2	2020 0 2	2021 ¹ 0

Scope: VCBR

Biodiversity |GRI 304-3|

Habitats protected (in km²)	2019	2020	2021¹
Amazônia	28.72	33.72	21.95
Type of area	LR, PPA	LR, PPA	LR, PPA
Status of the area	Preserved	Preserved	Preserved
Caatinga	3.36	5.79	7.50
Type of area	LR, PPA	LR, PPA	LR, PPA
Status of the area	Preserved	Preserved	Preserved
Cerrado	25.52	25.52	25.54
Type of area	LR, PPA, PRNH, WRA	LR, PPA, PRNH, WRA	LR, PPA, PRNH, WRA
Status of the area	Preserved	Preserved	Preserved
Mata Atlântica	50.03	87.70	45.35
Type of area	LR, PPA	LR, PPA	LR, PPA, PRNH
Status of the area	Preserved	Preserved	Preserved
Pantanal	1.68	1.68	1.68

Biodiversity |GRI 304-3|

Habitats protected (in km²)	2019	2020	2021 ¹
Type of area	LR, PPA	LR, PPA	LR, PPA
Status of the area	Preserved	Preserved	Preserved
Pampa	4.22	4.22	2.40
Type of area	LR, PPA	LR, PPA	LR, PPA
Status of the area	Preserved	Preserved	Preserved
Cooper VCDD			

Scope: VCBR

Brazilian classification of areas: Legal Reserve (LR), Permanent Protection Area (PPA), Private Reserve of Natural Heritage (PRNH), Wildlife Refuge Area (WRA). The indicator only considers protected habitats.

Direct CO2 emissions |GRI 305-1| |GRI 305-4| |SASB EM-CM-110a.1| |GCCA| |VC2030|

Cement	2019	2020	2021 ¹
Gross absoluteCO2 emission (tCO2)	19,027,609	20,421,293	24,877,550
Net absolute CO2 emission (tCO2)	18,280,538	19,630,033	23,999,550
Gross specific CO2 emission (kg CO2/tonne cementitious)	615	599	619
Net specific CO2 emission (kg CO2/tonne cementitious)	591	576	597
Aggregates	2019	2020	2021
Absolute CO2 emission (tCO2e)	4,943	5,199	5,168
Specific CO2 emission (kgCO2e/tonne aggregates)	1.30	1.63	1.69
Concrete	2019	2020	2021
Absolute CO2 emission (tCO2e)	16,430	20,455	19,007
Specific CO2 emission (kgCO2e/m³ concrete)	9.22	11.22	9.42
Mortar	2019	2020	2021
Absolute CO2 emission (tCO2e)	1,853	1,674	1,563
Specific CO2 emission (kgCO2e/t mortar)	2.62	2.42	1.98
Lime and agricultural inputs	2019	2020	2021
Absolute CO2 emission (tCO2e)	156,781	184,442	194,582
Specific CO2 emission (kgCO2e/tonne lime and agricultural inputs)	75.49	87.78	89.06
Total - Scope 1	19.207.615	20.633.043	25.097.870
Biogenic emissions - Scope 1 (tCO2)	1,189,082	1,322,731	1,524,961

Scope 1 emissions include cement operations in Brazil, VCNA, VCEAA and VCLATAM through a consolidation approach. Emissions from the Cement business were calculated considering the GCCA guidelines for calculating the sector's CO2 emissions. Emissions from other businesses were calculated considering the guidelines of the Brazilian GHG Protocol Program. The gases included in the calculation for scope 1 and 3 were: CO2, CH4, N2O.

¹Increase due to a change in scope and the acquisition of two new cement operations (McInnis and Balboa), which are still at a lower level of thermal substitution and clinker factor, in addition to reduced thermal substitution in some regions due to limited access to waste caused by the pandemic in a time of increased cement production.

¹Change in the indicator's accounting method: in previous years, the indicator considered the accumulated wealth, which explains the high number of species in all categories. As of 2021, the indicator considers only the species sampled in the year.

²Information not available due to a focus on identifying species of greatest concern for conservation.

¹Change in the indicator's accounting methodology starting in 2021.

ABOUT THE REPORT 02 MESSAGE FROM THE GLOBAL LEADERSHIP 03

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Indirect CO2 emissions |GRI 305-2| |GRI 305-3|

Indirect CO2 emissions - Scope 2 (tCO2)	2019	2020	2021¹
Cement	660,573	532,913	771,610
Concrete	230	190	429
Aggregates	772	270	1,130
Mortar	595	469	574
Lime and agricultural inputs	3,569	3,092	6,333
Total - Scope 2	665,739	536,934	780,076
Other indirect emissions - Scope 3 (tCO2e)	2019	2020	2021 ²
Total	581,035	249,061	5,158,605
Total - Scope 3	581,035	249,061	5,158,605
Biogenic emissions (tCO2)	61,437	30,661	30,297

Scope 2 activities consider emissions related to electricity purchased by Brazilian operations and VCNA, VCEAA and VCLatam cement operations.

Reduction of GHG emissions |GRI 305-5|

	2019	2020	2021	Base year/ denominator
CO2 reduction as a direct result of initiatives (%)	23%	25%	22%	1990
Scope: Global				

Other air emissions |GRI 305-7| |EM-CM-120a.1| |VC 2030|

	2019	2020	20214
Number of kilns reported	35	36	39
NOx	2019	2020	20214
Absolute emissions (tonne/year)	39,186*	35,385*	41,150
Specific emissions (g/tonne clinker)	1,734*	1,483*	1,394

Other air emissions |GRI 305-7| |EM-CM-120a.1| |VC 2030|

SOx	2019	2020	20214
Absolute emissions (tonne/year)	16,330*	15,918*	20,282
Specific emissions (g/tonne clinker)	723*	667*	687
PM (Dust)	2019	2020	20214
Absolute emissions (tonne/year)	1,318*	1,041*	1,122
Specific emissions (g/tonne clinker)	58*	44*	38
Mercury	2019	2020	20214
Absolute emissions (kg/year)	274	200	311
Specific emissions (mg/tonne clinker)	12	8	11
voc	2019	2020	20214
Absolute emissions (tonne/year)	1,413	1,298	3,473
Specific emissions (g/tonne clinker)	63	54	118
Dioxins/Furans	2019	2020	20214
Absolute emissions (mg/year)	2,239	2,866	541
Specific emissions (µg/tonne clinker)	0.10	0.12	0.02
HM1 ¹	2019	2020	20214
Absolute emissions (kg/year)	500	324	564
Specific emissions (mg/tonne clinker)	22	14	19
HM2 ²	2019	2020	20214
Absolute emissions (kg/year)	20,079	16,407*	14,022
Specific emissions (mg/tonne clinker)	889	688*	475
Polycyclic Aromatic Hydrocarbons EM-CM-120a.1	2019	2020	20214
Absolute emissions (tonne/year) ³			80
Specific emissions (g/tonne clinker) ³		-	0.01
Monitoring data			
Overall coverage (KPI1) ⁵	90%*	85%	82%
Coverage rate continuous measurement (KPI2) ⁶	100%	100%	100%
Scope: Global			

¹HM1: Cadmium and Thallium.

²HM2: Antimony, Arsenic, Lead, Chromium, Cobalt, Copper, Manganese, Nickel, Vanadium.

¹Increase due to a change in scope and the acquisition of two new cement operations (McInnis and Balboa).

²For 2021, we refined our Scope 3 inventory including the emissions from purchased goods and services, fuel and energy related activities, upstream and down-stream transportation and distribution. In the last years, the scope 3 considered only transportation and distribution.

³Setor average in Spain, extrapolated to Tunisia, Morocco and Turkey.

⁴In 2021, we had an increase in emissions in some of the parameters, as result of three factors: higher number of kilns in operation in 2021, compared to 2020; significant increase in clinker production; and significantly higher rate of waste co-processing.

⁵KPI1: Monitoring of all pollutants mentioned in the emissions guidelines.

⁶KPI2: Monitoring of PM, NOx and SOx.

^{*}Revised data GRI 102-48

Management of significant waste-related impacts |GRI 306-2|

2021

As per its Global Environmental Policy and Green Rules, Votorantim Cimentos aims to minimize waste production through reuse, recycling and responsible waste disposal. To prevent waste from reaching the environment, it is necessary to:

- Store waste in closed, ventilated, access-controlled spaces and on impermeable bases that have areas to drain and collect contaminated liquids.
- Avoid contact between rainwater and waste; if there is contact, the rainwater must be collected for inspection.
- Train employees to take action in case of incidents, according to the Emergency Plan and the internal and external Communication System.
- Dispose of waste according to its characteristics and classification.

In addition, internal waste management, separation and temporary storage until final disposal is performed by Votorantim Cimentos. Waste transportation and final disposal is carried out by service providers

Scope: Global

Waste generated by composition |GRI 306-3|

	2019	2020	2021
Hazardous waste (tonne)	4,921	14,250	3,733
Non-hazardous waste (tonne)	55,412	138,250	97,580
Scope: Global			

Waste management | SASB EM-CM-150a.1|

	2019	2020	2021
Amount of waste generated (tonne)	60,333	152,500	101,313
Hazardous (%)	8.2%	9.3%	3.7%
Recycled (%)	27.1%	27.5%	61.7%
Scone: Global			

Waste diverted from disposal and directed to disposal |GRI 306-4| |GRI 306-5|

		2019		2020		2021 ²
Diverted from disposal GRI 306-4	Hazardous	Non- hazardous	Hazardous	Non- hazardous	Hazardous	Non- hazardous
Total (tonne)	2,011	18,432	222	47,180	1,547	65,178
Composting	0	1,785	1	3,049	0	46
Reuse	142	6,224	0	27,867	34	35,620
Recycling	1,351	8,618	39	14,103	727	26,161
Recovery	208	1,243	183	1,249	371	2,149
On-site storage	309	562	0	913	414	1,203
		Non-		Non-		Non-

		Non-		Non-		Non-
Directed to disposal GRI 306-5	Hazardous	hazardous	Hazardous	hazardous	Hazardous	hazardous
Total (tonne)	2,910	36,980	14,028	91,070	2,186	32,402
Incineration	244	553	12	1,086	19	255
Landfilling	106	12,843	5	86,758	185	12,071
Deep well injection	0	1,585	0	0	0	34
Others	2,560	22,000 ¹	14,010	3,226 ¹	1,982	20,042 ¹

Scope: Global

Non-compliance with environmental laws and/or regulations |GRI 307-1|

	2019	2020	2021
Total number of significant fines received for non-compliance with environmental laws and/or regulations	0	1	1
Total monetary value of significant fines received in the year (in millions R\$) ¹	0	1.2	1.2
Total number of non-monetary sanction ²	1	1	0
Number of cases (both fines and sanctions) brought through dispute resolution mechanism	0	1	2
Scone: Global			

¹Significant monetary fines: value above R\$ 1 million.

Recycled Concrete Returned [vc 2030]

	2021
Percentage of recycled concrete returned	93%
Scope: VCBR, VCNA, VCEAA	

¹For non-hazardous waste, it includes the use in co-processing.

²In 2021, we acquired new operations that were included in the base and impacted the total hazardous and non-hazardous waste generated by the organization.

²Non-monetary sanctions that cause interruptions or adjustments over R\$ 5 million.

SOCIAL PERFORMANCE

Employment |GRI 102-8|

By type of employment		2019	2020	2021
	Female	1,468	1,507	1,679
Full-time	Male	9,818	9,796	10,210
	Total	11,286	11,303	11,889
	Female	366	264	332
Part-time	Male	301	216	245
rt-time remployment contract mporary	Total	667	480	577
By employment contract		2019	2020	2021
	Female	18	15*	13
Temporary	Male	148	132*	136
	Total	166	147	149
	Female	1,816	1,756	1,998
Permanent	Male	9,971	9,880	10,319
	Total	11,787	1,507 9,796 11,303 264 216 480 2020 15* 132* 147 1,756	12,317
	Female	1,834	1,771	2,011
Total employees	Male	10,119	10,012	10,455
	Total	11,953	11,783	12,466

Scope: Global

Collective bargaining agreements |GRI 102-41|

	2019	2020	2021
Total number of employees	11,953	11,783	12,466
Employees covered by collective bargaining agreement	9,263	9,358	9,791
Employees covered by collective bargaining agreement (%)	77.5%	79.4%	78.5%
Scope: Global			

Turnover |GRI 401-1|

Total number and rate							
of employee turnover	20	019	2	020	2021		
By gender	Number	Rate	Number	Rate	Number	Rate	
Female	500	4.2%	485	4.1%	566	4.5%	
Male	1,965	16.4%	1,589	13.5%	1,976	15.9%	
By age group	Number	Rate	Number	Rate	Number	Rate	
Under 30 years old	908	7.6%	800	6.8%	924	7.4%	
30-50 years old	1,224	10.2%	984	8.4%	1,214	9.7%	
Over 50 years old	333	2.8%	290	2.5%	403	3.2%	
By region	Number	Rate	Number	Rate	Number	Rate	
VCBR	1,742	22.5%	1,530	20.0%	1,798	22.4%	
VCEAA	268	19.1%	147	11.0%	152	10.9%	
VCNA	412	17.0%	367	15.2%	557	0.0%	
VCLATAM	43	10.9%	30	7.7%	34	8.7%	
Total rate of turnover		20.6%		17.6%		20.4%	
Scope: Global							

New hires |GRI 401-1|

Total number and rate of	20	140	7	020	20	124	
new employee hires	20	019	20	020	2021		
By gender	Number	Rate	Number	Rate	Number	Rate	
Female	646	5.4%	406*	3.4%	417	3.3%	
Male	1,855	15.5%	1,404*	11.9%	1,792	14.4%	
By age group	Number	Rate	Number	Rate	Number	Rate	
Under 30 years old	1,168	9.8%	832*	7.1%	800	6.4%	
30-50 years old	1,182	9.9%	937	8.0%	1,269	10.2%	
Over 50 years old	151	1.3%	124	1.1%	140	1.1%	
By region	Number	Rate	Number	Rate	Number	Rate	
VCBR	1,975	25.5%	1,431	18.7%	1,622	20.3%	
VCEAA	87	6.2%	81	6.0%	209	15.0%	
VCNA	407	16.8%	365	15.1%	342	12.8%	
VCLATAM	32	8.1%	26*	6.7%	36	9.2%	
Total rate of new hires		20.9%		16.2%		17.7%	

Scope: Global * Revised figures GRI 102-48

Occupational health and safety |GRI 403-9| |VC 2030|

Work-related injuries – Employees GRI 403 -9	2019	2020	2021
Fatalities	0	1	0
Rate of fatalities	0.00	0.87	0.00
High-consequence accidents ¹	4	0	1
Rate of high-consequence accidents ¹	0.17	0.00	0.04
Number of lost-time injuries ²	42	25	33
Rate of lost-time injuries ²	1.83	1.11	1.30
Severity rate	232.16	67.71	63.11
Number of hours worked	22,915,653	22,478,029	25,382,557
Work-related injuries - Contractors GRI 403 -9	2019	2020	2021
Fatalities	1	1	0
Rate of fatalities	0.14	4,68	0,00
High-consequence accidents ¹	1	1	1
Rate of High-consequence accidents ¹	0.05	0.06	0.04
Number of lost-time injuries ²	13	20	22
Rate of lost-time injuries ²	0.60	1.17	0.93
Severity rate	19.88	36.66	42.62
Number of hours worked	21,625,476	17,102,640	23,720,780
Total work-related accident rate (employees + contractors) vc 2030	1.23	1.14	1.12
Near accidents (employees + contractors) EM-CM-320a.1	- 1		11,079
Near miss frequency rate (employees + contractors) EM-CM-320a.1 ³	-	- 9	45.13

Scope: Global. Figures do not include Uruguay operations

Other rates were calculated based on 1,000,000 hours worked. Among employees, the main work-related injuries involve the ankles, feet, hands and fingers, and include sprains and fractures. The greatest risks for high-consequence injuries are dangerous energies, moving and rotating parts, high temperatures, possibility of hot flour leakage, movement of machines and equipment, lifting of loads and activities at height and in confined spaces. These risks are determined after a systematic study of the processes and assessment of the hazards and risks involved.

Health |EM-CM-320a.2|

	2021
Number of reported cases of silicosis	0
Scope: VCBR	

Satisfaction and Well-being |EM-CM-320a.2| |VC 2030|

	2021
Favorability in climate surveys (%)	67,4%
Scope: VCBR, VCNA, VCEAA	

Average hours of training |GRI 404-1|

	20	19	20	2020		2021	
By functional category	Female	Male	Female	Male	Female	Male	
President/Director	10	11	1	8	3	9	
Manager/General Manager	14*	27*	22	27	60	26	
Coordinator/Consultant	26*	31*	24	33	41	27	
Technician/Analyst/Supervisor	20*	25*	24	31	19	18	
Operator	10*	16*	11	13	8	16	
Average hours of training (female + male)	1	6*	1	8	1	9	

Scope: Global

Diversity |GRI 405-1| |VC 2030|

	2019				2020			2021		
By age group (%)	Under 30 years old	30-50 years old	Over 50 years old	Under 30 years old	30-50 years old	Over 50 years old	Under 30 years old	30-50 years old	Over 50 years old	
President/Director	0.0%	48.6%	51.4%	0.0%	38.9%	61.1%	0.0%	40.0%	60.0%	
Manager/General Manager	2.1%	75.5%	22.4%	1.0%	72.2%	26.7%	0.2%	72.1%	27.7%	
Coordinator/Consultant	10.1%	74.0%	15.9%	5.8%	75.7%	18.5%	5.4%	77.3%	17.3%	
Technician/Analyst/Supervisor	17.8%	67.2%	15.1%	15.6%	67.8%	16.6%	15.5%	69.1%	15.5%	
Operator	18.9%*	59.8%*	20.7%*	17.1%	59.9%	23.0%	18.4%	60.3%	21.4%	
Intern	97.9%	2.1%	0.0%	95.8%	4.2%	0.0%	94.6%	5.4%	0.0%	
Apprentice	100.0%	0.0%	0.0%	100.0%	0.0%	0.0%	100.0%	0.0%	0.0%	
Total employees	22.2%	59.7%	18.1%	18.9%	60.7%	20.5%	19.9%	61.0%	19.1%	
Members of governance body (%)	0.0%	38.1%	61.9%	0.0%	38.1%	61.9%	0.0%	23.5%	76.5%	

Scope: Global

*Revised figures GRI 102-48

¹The number and rate of high-consequence accidents include amputations or six-month leave of absence and exclude deaths.

²The number and rate of accidents consider only lost-time incidents.

³The rate of near accidents was calculated based on 2,000,000 hours worked.

^{*}Revised figures GRI 102-48

The percentage corresponds to the number of employees within each functional category that meets the diversity criteria.

Diversity |GRI 405-1| |VC 2030|

		2019		2020		2021
By gender (%)	Female	Male	Female	Male	Female	Male
President/Director	10.8%	89.2%	8.3%	91.7%	7.5%	92.5%
Manager/General Manager	16.8%	83.2%	18.8%	81.2%	17.9%	82.1%
Coordinator/Consultant	27.9%	72.1%	29.3%*	70.7%	30.6%	69.4%
Technician/Analyst/Supervisor	23.0%	77.0%	22.8%	77.2%	24.1%	75.9%
Operator	7.7%	92.3%	7.9%	92.1%	8.7%	91.3%
Intern	57.9%	42.1%	57.4%	42.6%	57.9%	42.1%
Apprentice	48.7%	51.3%	50.8%	49.2%	57.1%	42.9%
Total employees	15.3%	84.7%	15.0%	85.0%	16.1%	83.9%
Members of governance body (%)	9.5%*	90.5%*	9.5%	90.5%	17.6%	82.4%
Gender diversity in leadership positions ¹ (%) VC 2030 	-	-	20.1%	79.9%	20.2%	79.8%
Scana: Global						

Scope: Global

The percentage corresponds to the number of employees within each functional category that meets the diversity criteria.

The calculation of gender Diversity in leadership Positions includes the Positions of CEO, director, manager, general manager and coordinator *Revised figures GRI 102-48

People with disability (%)	2019	2020	2021
President/Director	0.0%	0.0%	0.0%
Manager/General Manager	1.3%*	1.0%	1.0%
Coordinator/Consultant	0.8%*	0.8%	0.5%
Technician/Analyst/Supervisor	1.5%*	1.5%	1.5%
Operator	2.4%*	2.6%	2.5%
Intern	0.2%	0.0%	0.0%
Apprentice	0.4%	0.0%	0.0%
Total employees	1.9%	2.0%	2.0%
Members of governance body (%)	0,0%	0,0%*	0,0%

Scope: Global

The percentage corresponds to the number of employees within each functional category that meets the diversity criteria.

Internal perceptions of diversity and inclusion [VC 2030]

	2021
Favorability in climate surveys (%)	81.1%
Scope: VCBR, VCNA and VCEAA	

Social transformation |GRI 413-1| |VC 2030|

Operations with implemented local community engagement, impact assessments, and/or development programs	2019	2020	2021
Total number of operations ¹	305	323	336
Number of operations with implemented local community engagement, impact assessments, and/or development programs	124	108	155
Operations with implemented local community engagement, impact assessments, and/or development programs (%) [VC 2030]	41%	33%	46%
Global social investment (R\$ thousand)	2019	2020	2021
VCBR	14,513.3	7,975.1	8,749.7
VCEAA	1,706.0	2,151.3	1,509.7
VCNA	1,379.5	810.4	1,729.6
VCLATAM	831.3	786.6	725.5
Total	18,430.5	11,705.3	12,714.5

Scope: Global

Volunteer initiatives |VC 2030|

	2021
Employees engaged in volunteer initiatives (%)	5%
Scope: VCBR, VCNA, VCEAA	

^{*}Revised figures GRI 102-48

¹Total number of sites mapped for the social engagement plan.

ASSURANCE LETTER

INDEPENDENT ASSURANCE STATEMENT – BUREAU VERITAS

GRI 102-56

INTRODUCTION

Bureau Veritas Certification Brazil (Bureau Veritas) was engaged by Votorantim Cimentos to conduct an independent assurance of its 2021 Integrated Report (hereinafter referred to as the Report).

This assessment was conducted by a multidisciplinary team with expertise in non-financial data.

SCOPE OF WORK

The scope of this verification encompassed the Standards and Principles¹ of the Global Reporting Initiative[™] for Sustainability Reports, including GRI's Mining and Metals Sector Disclosures (2013), and covered the period between January 1 and December 31, 2021.

Additionally, the scope of verification included three GCCA (Global Cement and Concrete Association) Guidelines: (1) Reporting and Monitoring of Safety in Cement Manufacturing (February 2020); (2) Reporting and Monitoring of CO2 emissions in Cement Manufacturing (October 2019).

With regard to geography, we state that we verified Votorantim Cimentos data and information on a global level.

RESPONSIBILITIES OF VOTORANTIM CIMENTOS AND BUREAU **VERITAS**

The collection, calculation and presentation of the data published in the Report are the sole responsibility of Votorantim Cimentos' management. Bureau Veritas is responsible for providing Stakeholders with an independent opinion, in accordance with the scope of work defined in this statement.

METHODOLOGY

The verification included the following activities:

- 1. Interviews with the parties responsible for material topics and the content of the Report;
- 2. Analysis of documentary evidence provided by Votorantim Cimentos for the period covered by the Report (2021);
- 3. Verification of performance data in relation to the principles that ensure the quality of the information, in accordance with the GRI standards and the sector disclosures;
- 4. Verification of performance data against the criteria established in the GCCA Guidelines described in the scope of work;
- 5. Evaluation of the systems used to compile data;
- 6. Remote assessments of the following units: Global Corporate Center (São Paulo/SP, Brazil), and Edealina/GO (Brazil), Vidal Ramos/SC (Brazil), St Marys – Ontario (Canada) and Toral de los Vados (Spain) operational units.
- 7. Documentary analysis of stakeholder engagement activities conducted by Votorantim Cimentos.

The verification level adopted was Hybrid (Limited* and Reasonable*), according to the requirements of the ISAE 3000² standard, which were incorporated into the internal verification protocols of Bureau Veritas.

- * Limited verification level: All indicators, except those described below.
- * Reasonable verification level: GRI 305-1/305-2/305-3/305-4/305-5 standards (GHG emissions and emissions intensity); GRI 302-1/302-2/302-3 (Energy consumption and intensity) GRI 403-9 (Work related accidents).

In addition to this scope of verification, Votorantim Cimentos Brazil's Greenhouse Gas (GHG) inventory was the subject of an exclusive verification, carried out through a specific protocol from Bureau Veritas.

LIMITATIONS AND EXCLUSIONS

This assessment excluded any information referring to:

- Activities outside the determined reporting period;
- Position statements (expressions of opinions, beliefs, objectives or future intentions) by Votorantim Cimentos;
- Economic and financial data included in this Report and taken from financial statements verified by independent auditors;
- Data and information regarding operations and activities that are not part of the scope of the Report.

OPINION ON THE REPORT AND THE VERIFICATION PROCESS

- Votorantim Cimentos prepared the Report in accordance with the GRI Standards and Principles, and also with the Mining & Metals Sector Disclosures;
- Votorantim Cimentos published information on the indicators associated with the material aspects of the GRI standards and the sector disclosure. We evidenced an expansion in the disclosure of GRI indicators and conceptual/technical quality improvement of the data collection sheets. However, we emphasize the importance of implementing data collection systems and disclosure of common data, to all geographic regions where the company operates, since part of the indicators verified by us is limited to the geographic scope Brazil (VCBR);
- The safety indicators follow the criteria from the GCCA Guidelines for Safety in Cement Manufacturing. We assessed the completeness and reliability of safety data according to the Reasonable scope;
- The CO2 emissions indicators are in accordance with criteria from the GCCA Guidelines for the Reporting and Monitoring of CO2 Emissions from Cement Manufacturing (Reasonable scope);

¹Materiality, Stakeholder Inclusiveness, Sustainability Context, Completeness, Balance, Comparability, Accuracy, Timeliness, Clarity and Reliability

² International Standard on Assurance Engagements 3000 – Assurance Engagements other than Audits or Reviews of Historical Financial Information.

ANNEX

- The data presented to meet the GHG emissions indicators are part of Votorantim Cimentos' GHG Emissions Inventory. This inventory was verified by Bureau Veritas through an independent assurance process. We found that the presentation of data regarding the inventory followed the methodology of the GRI standards;
- We evidence that Votorantim Cimentos started a global governance structure to monitor and present its 2030 targets (published in the 2020 integrated report) to the Executive Board, ESG Committee and Board of Directors, on a quarterly basis. The company is in the process of defining metrics and strategies regarding these targets;
- We found that the Report presents SASB indicators associated with the material topics of the company's business. However, the assessment of these indicators was not part of the Bureau Veritas verification scope;
- Regarding occupational safety indicators, we evidenced a certain inconsistency in the calculation of the number of lost days, representing a weakness in the consolidated presentation of some safety indicators, which depend on the number of lost days;
- With regard to the indicator of "new suppliers that were screened using environmental criteria" (GRI 308-1), we found an improvement in the establishment of environmental criteria for the approval of suppliers. However, we observed a certain weakness in the method of accounting for them, since we evidenced categories of suppliers that were selected based on environmental criteria, but were not accounted for as such;
- With respect to the mining operations with closure Plans (MM10 indicator), we found that there is an opportunity to optimize the management approach, associating the updating of the Plans (including their scope) with the Economic Mining Plans (Plano de Aproveitamento Econômico PAE). It was not possible to evidence the provision of resources for the execution of mine closure plans;
- We noted that the company has improved the system for monitoring protected areas in its operational units, but maintained the disclosure of the GRI 304-3 indicator limited to the geographic scope of Brazil (VCBR) and without data on restored areas;

Regarding the indicators GRI 408-1 and 409-1 (Operations and suppliers at significant risk for incidents of child labor and forced or compulsory labor), we evidenced that Votorantim Cimentos is planning a process to map the associated risks of operations and suppliers

RECOMMENDATIONS

- Prioritize efforts to obtain consolidated data on recovered and/or restored areas within the company's operating units (recommendation from the previous cycle);
- With regard to the process of collecting data from units abroad, improve
 the systematization of the collection process, defining calculation
 memories and data traceability to obtain a minimum reliability base of the
 information received (recommendation from the previous cycle);
- Implement a mechanism for associating the Economic Mining Plans (Plano de Aproveitamento Econômico PAE) with the Mine Closure Plans (MM10 indicator), aligning the requirements applicable to both, especially with respect to guarantees of the provision of financial resources for the execution of closure plans;
- Improve the calculation of lost days of the units, necessary for the final consolidation of safety indicators;
- Review the system for calculating the indicator "new suppliers that were screened using environmental criteria" (GRI 308-1), in order to account for all categories of suppliers for which there are established criteria;
- Improve the system of establishing long-term targets, including the resources needed to achieve them

CONCLUSION

Based on the verification performed, on the evidence presented to us and according to the scope of work defined in this statement, nothing has come to our attention that could indicate that:

 The information provided in the Report is not balanced, consistent and reliable;

- Votorantim Cimentos has not established appropriate systems for the collection, compilation and analysis of quantitative and qualitative data used in the Report;
- The Report does not adhere to the Core option and does not comply with the Principles for defining content and ensuring the quality of the GRI Standards and Mining & Metals Sector Disclosures.

DECLARATION OF INDEPENDENCE AND IMPARTIALITY

Bureau Veritas is an independent professional services company specializing in Quality, Health, Safety, Social and Environmental management, with more than 185 years of experience in independent assessment services.

Bureau Veritas has a quality management system that is certified by a third party, according to which it maintains documented policies and procedures to ensure compliance with ethical, professional and legal requirements.

The verification team has no connection with Votorantim Cimentos, and its work is conducted independently.

Bureau Veritas created a Code of Ethics that is followed in all of its business activities to ensure that its employees maintain the highest standards of ethics, integrity, objectivity, confidentiality and professional competence/behavior in their daily activities.

At the end of the Verification process, a Detailed Report was produced; the document is kept as a record in our Management System.

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São Paulo, March 2022.

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We are grateful for the support and dedication of the corporate and industrial areas of Votorantim Cimentos and, especially, to the Edealina, St Marys, Toral de los Vados and Vidal Ramos units, which were part of the assurance process and the collection and verification of the information that is included in this document.

Questions about this document or about Votorantim Cimentos, as well as comments and suggestions that may help us improve our reporting process, can be directed to ri@vcimentos.com.br |GRI 102-53|

¹ Independent Board members

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