



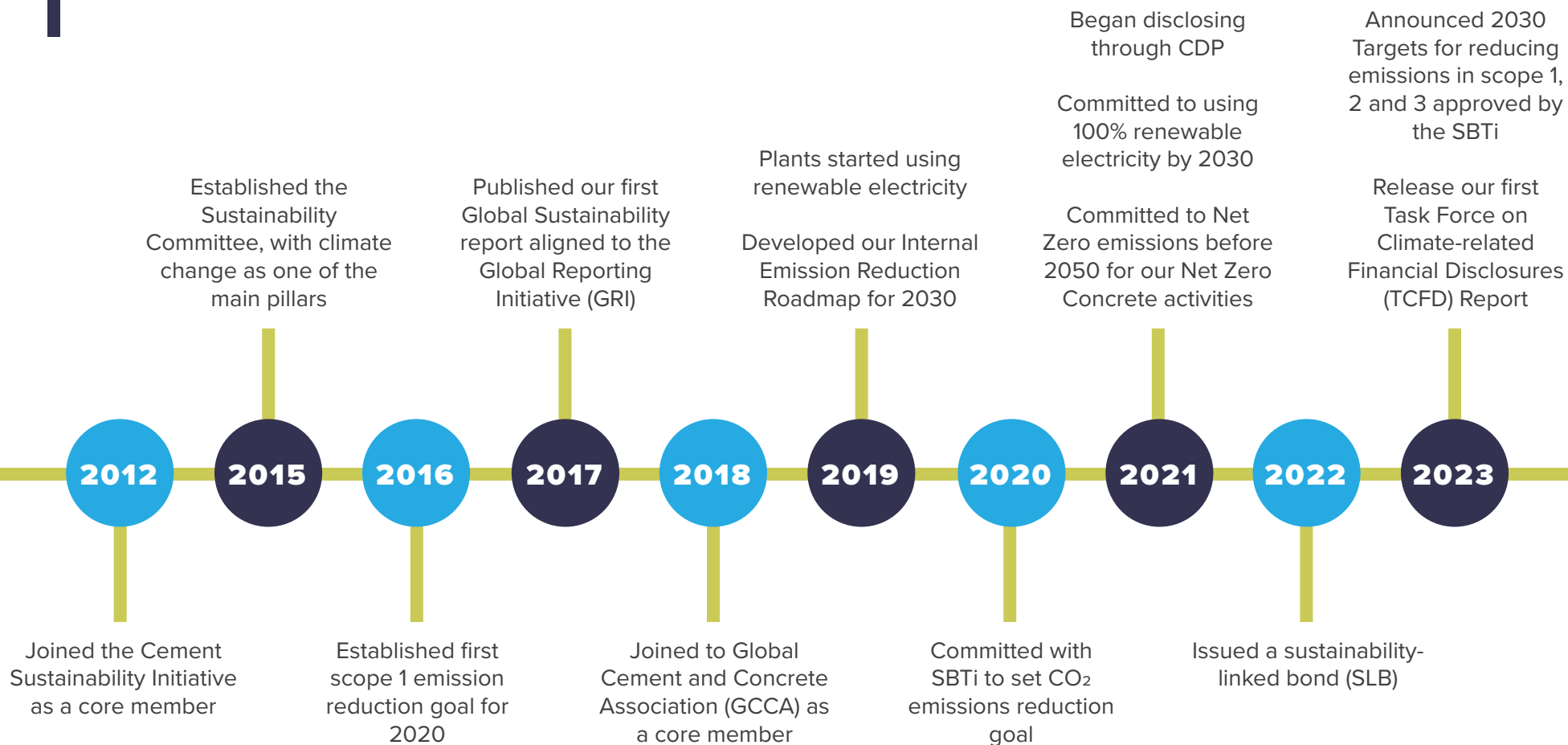
**TCFD REPORT**

**2023**



# TCFD

TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES



# A MESSAGE FROM OUR CEO/CSO

Since GCC's founding in 1941, the company has become the premier provider of cement and concrete solutions in the Rocky Mountain region of North America, expanding from one plant in Chihuahua, Mexico, to eight cement plants and 96 ready mix facilities throughout the US and Mexico. The company has grown through a business strategy that focuses on four pillars:

- **Customer Service:** We continually improve the quality of our products and services. Our integrated distribution network ensures we deliver our innovative products to our customers on time.
- **Innovation:** Through research and development, specialty products, blended cements, and digital transformation, GCC is taking the construction industry into the future.
- **People:** With leading-edge products and state-of-the-art technologies, our passionate teams drive our growth. Safety is a value at GCC, and we help our teammates to stay safe while building their careers.
- **Sustainability:** GCC's sustainability strategy focuses on climate protection, fostering social responsibility, and ensuring economic sustainability for all generations to come.

GCC's 2025 vision is to be the best cement company in North America with the proper balance of people, profit, and the planet. The company is aware that it has an important role to play in providing sustainable solutions to its customers and is taking meaningful steps to minimize its environmental impact to achieve a Net-Zero future. For example, GCC voluntarily reported to the Carbon Disclosure Project (CDP) for the last two years, achieving a score of 'B' in 2022. We are working to improve this score for 2023.

Also in 2023, the Science Based Targets initiative (SBTi) approved GCC's reduction targets to a well-below 2°C target. These targets aim to reduce our scope 1 GHG emissions by 30.7% per ton of cement, our scope 2 GHG emissions by 57% per ton of cement and our scope 3 GHG emissions from the use of sold products by 37.5% per ton of cement by 2030. The company is also working

to improve to align with the 1.5° C target of 500 kg of CO<sub>2</sub> per ton of cement by 2030.

This inaugural Task Force on Climate-Related Financial Disclosures (TCFD) showcases the comprehensive efforts undertaken by GCC to mitigate climate risks, leverage new opportunities, and bolster the company's long-term resilience. From the Board of Directors to our frontline employees, each member of the GCC family contributes to managing our climate risks and achieving our climate objectives.

GCC's commitments are in line with Net-Zero roadmaps published by industry groups such as the Global Cement and Concrete Association (GCCA), the Portland Cement Association (PCA), and Camara Nacional Del Cemento (CANACEM). We value the insights we gain by collaborating with these organizations, and many of our metrics, decarbonization levers and goals are informed by our membership in these groups.

This TCFD was built through extensive interviews with many senior leaders in the organization, incorporates key findings from our materiality assessment and reflects topics that are relevant to our company. In future reports we aim to further improve and quantify our companies' understanding of the risks and opportunities surrounding climate change, our oversight of these issues, and our ability to manage risk.

Thank you for taking the time to read this report and supporting us on our Net-Zero journey.

Sincerely,



A handwritten signature in black ink, appearing to read 'Enrique'.

Enrique Escalante  
Chief Executive Officer



A handwritten signature in black ink, appearing to read 'Gina Lotito'.

Gina Lotito  
Chief of Sustainability and Innovation Officer

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# 1 GOVERNANCE

(a) Describe the board's oversight of climate-related risks and opportunities.

(b) Describe management's role in assessing and managing climate-related risks and opportunities.

# BOARD OVERSIGHT OF CLIMATE-RELATED ISSUES

Oversight of climate-related risks and opportunities ultimately lies with GCC's Board of Directors (hereinafter referred to as Board). In 2022, our Board held six meetings and discussed climate-related topics during half of these meetings. Climate-related topics discussed during board meetings included budgeting, expenditures, research and development, employee incentives, corporate targets, transition plans, and risk management.

## BOARD COMPOSITION AND CLIMATE COMPETENCE

Our Board is comprised of 14 proprietary directors and 14 alternate directors. Some proprietary and alternate directors have climate-related responsibilities, experience, and competencies.

GCC's Chairman of the Board leads the Board in their review of strategic threats, opportunities, and risks, including those with climate-related considerations. The chairman receives and reviews climate-related metrics monthly. Additionally, the chairman aids in establishing remuneration based on responsibilities, including incentives tied to responsibilities for sustainability initiatives.

One of GCC's Board members holds the position of Executive Vice President of Sustainability, Commercial, and Development at a multinational building materials company. He oversees the integration of sustainability and climate-related issues in the company's overall business strategy. His expertise in climate-related issues significantly contributes to GCC's Board operations.

Our CEO is an alternate Director of the Board with responsibility for climate-related issues. The CEO leads the Sustainability Committee, which monitors our climate strategy. He has served on the Board of the Global Cement and Concrete Association (GCCA) since October 2021. GCCA's Board of Directors is committed to reducing the impacts of cement production, including advancing the industry-wide roadmap for net-zero cement and concrete.



# COMMITTEES WITH CLIMATE-RELATED RESPONSIBILITIES

## BOARD-LEVEL



### Audit and Corporate Practices Committee

Our Audit and Corporate Practices Committee consists of three independent Board members and their alternates and advises the Board of Directors on matters related to audit, risk management, best corporate practices, compliance, evaluation, and compensation.

## MANAGEMENT'S LEVEL

GCC's management plays a large role in assessing and managing climate-related risks and opportunities. Leaders and teams across GCC work to support our 2025 vision and several executive-level officers play a critical role in the development and execution of GCC's climate strategy.



### Sustainability Committee

Climate-related impacts and financial effects are emerging as a critical topic for companies to address. GCC's Sustainability Committee oversees the development and implementation of GCC's sustainability strategy and advises GCC's Board on related matters. The committee identifies and manages social and environmental impacts, risks, and opportunities, including those related to climate change. In 2020, the Sustainability Committee oversaw the company's commitment and publication of our carbon intensity reduction goal by the Science Based Targets Initiative (SBTi), which was verified in 2023. The Sustainability Committee also oversees our broader CO<sub>2</sub> strategy, including our energy efficiency and fuels supply initiatives, our increasing use of biogenic fuels, our blended cement initiatives, our carbon capture plan and our renewable energy.

The Sustainability Committee comprises experts from various business lines and disciplines to promote the exchange of information across GCC and ensure a holistic approach to climate and sustainability-related initiatives. The Sustainability Committee is led by our CEO and our CSO, and includes seven other members: the Presidents of our US and Mexico divisions, our Chief Technical Operations Officer, our Chief Financial and Planning Officer, our VP of Expansion Projects, our Energy and Procurement Director, and our Sustainability Manager. The Committee meets monthly to discuss the progress of GCC's climate strategy and reviews and approves sustainability performance. In 2022, the Board received quarterly updates from this committee on GCC's key climate-related metrics and initiatives. These initiatives are discussed as an agenda item in three Board meetings.

## GCC'S CLIMATE CHAMPIONS

The following GCC leaders and groups work to catalyze progress on our climate goals.



### ENRIQUE ESCALANTE, CEO

Evaluates the progress of climate and sustainability initiatives across our organization, leads the Sustainability Committee and reports directly to the Board. Our CEO is responsible for overseeing the execution of our CO2 reduction plans and projects while also monitoring our global CO2 emissions and tracking progress toward our corporate climate goals. He also plays a key role in assessing and managing climate-related risks and opportunities at GCC.



### GINA LOTITO, CSO

Works to set the strategic direction for climate-related issues impacting GCC, progress sustainability initiatives within the organization, and engage with key stakeholders outside of GCC on key sustainability topics. The CSO drives our sustainability strategy and oversees a dedicated team that continually works to integrate climate-related issues into GCC's operations and overall business strategy. To inform this strategy, the CSO is involved in assessing and managing climate-related risks and opportunities and scenario analysis efforts. She engages with policymakers and value chain members to manage climate-related issues and inform CO2 regulatory considerations. She also progressed on a carbon capture, utilization, and storage (CCUS) research team

The CSO led efforts to set GCC's Science-Based Targets developed a transition plan to achieve these targets, and now leads reduction initiatives to implement the transition plan while demonstrating progress toward these goals. This includes working with GCC's carbon capture, utilization, and storage research team, which initiates related projects to reduce GCC's carbon footprint. The CSO also supported the development of the Portland Cement Association's Roadmap to Carbon Neutrality. She is also co-chair on the GCCA's Best Practice Group which is focused on CO2 Protocol Worldwide Organization, and is the Vice Chair of the PCA Environmental and Energy Committee.

The CSO reports to the CEO and Sustainability Committee on climate-related issues monthly.



### MAIK STRECKER, CFO

Helps to establish and prioritize climate-related initiatives and strategies to inform our response to current challenges. The CFO sits on GCC's Sustainability Committee and oversees climate-related budgeting activities, as well as acquisitions, mergers, and divestitures, should they arise. The CFO is also involved with assessing and managing climate-related risks and opportunities through his involvement with the Sustainability Committee.





### **LUIS AMAYA, Energy and Procurement Director**

Executive-level officer who identifies opportunities to manage energy, including fuel mix, across the organization. This included the start of a ten-year renewable energy contract for GCC's Odessa plant in July of 2022. In 2022, the Energy and Procurement Director also managed several projects geared toward transitioning several GCC plants to less carbon-intensive fuels.



### **ROGELIO GONZALEZ, Chief Technical Operations Officer**

Helps to coordinate and implement climate-related and sustainability initiatives across the organization, such as our thermal efficiency initiatives. In 2022, as the Chief Technical Operations Officer, he updated projects for the optimization of thermal and electric efficiency. He also was instrumental in the creation of the Camara Nacional de Cemento (CANACEM) Road Map for 2030 in Mexico.



### **RON HENLEY, US Division President**

The U.S. Division President, alongside the management-level group, assesses relevant climate risks and opportunities, implements GCC's climate transition plan in the U.S. Division, and monitors progress against our climate targets and emissions reduction targets. The management-level group in the U.S. Division meets and reports to the US Division President monthly. The U.S. Division President served as Chairman of the Board of the Portland Cement Association (PCA) in 2022 and 2023. He continues as a member of the Board of the Portland Cement Association (PCA), and was instrumental in the creation of the Portland Cement Association's Roadmap to Carbon Neutrality.



### **MARCOS RAMIREZ, Mexico Division President**

The Mexico Division President sits on the Sustainability Committee and oversees climate and sustainability-related initiatives, including those related to emissions reduction targets in the Mexico Division. Each division of GCC has a management-level group that works to assess relevant climate risks and opportunities, implement GCC's climate transition plan, and monitor progress against our climate targets. The management-level group in the Mexico Division meets and reports to the Mexico Division President monthly.

## **GCC CORPORATE SUSTAINABILITY AREA**

GCC's Sustainability Team is responsible for overseeing and helping implement the company's low-carbon transition. A part of the team's responsibility is working collaboratively with other departments (Planning, Finance, Innovation, Research and Development, Energy, and Technical Operations) to analyze some of the climate risks and opportunities that the company may face. The team provides expertise on climate-related risks and opportunities to these departments to comprehensively analyze these topics to help inform corporate strategy. Examples include:

- Working with the corporate planning area to identify the main strategic initiatives related to the sustainability strategy.
- Working with the finance department to model costs related to compliance with emissions trading schemes.
- Working with Research and Development, as well as our sales departments to explore new markets for blended cements.
- Working with plant operations to reduce emissions.
- The team also oversees sustainability reporting to comply with a changing regulatory landscape and to engage proactively with stakeholders on sustainability topics.

## **INCENTIVES FOR THE MANAGEMENT OF CLIMATE-RELATED ISSUES**

GCC has established internal targets and objectives for KPIs related to climate change. The Senior Leadership Team has specific annual goals related to climate targets, strategy, and emissions reduction projects. Incentives for all Senior Leadership members are tied to key indicators including:

- Progress toward our climate-related targets.
- Achievements of climate-related targets.
- Implementation of employee awareness campaigns on climate-related issues.
- Achievement of climate transition plan KPIs.

Performance against these goals is reported and considered in relation to compensation.



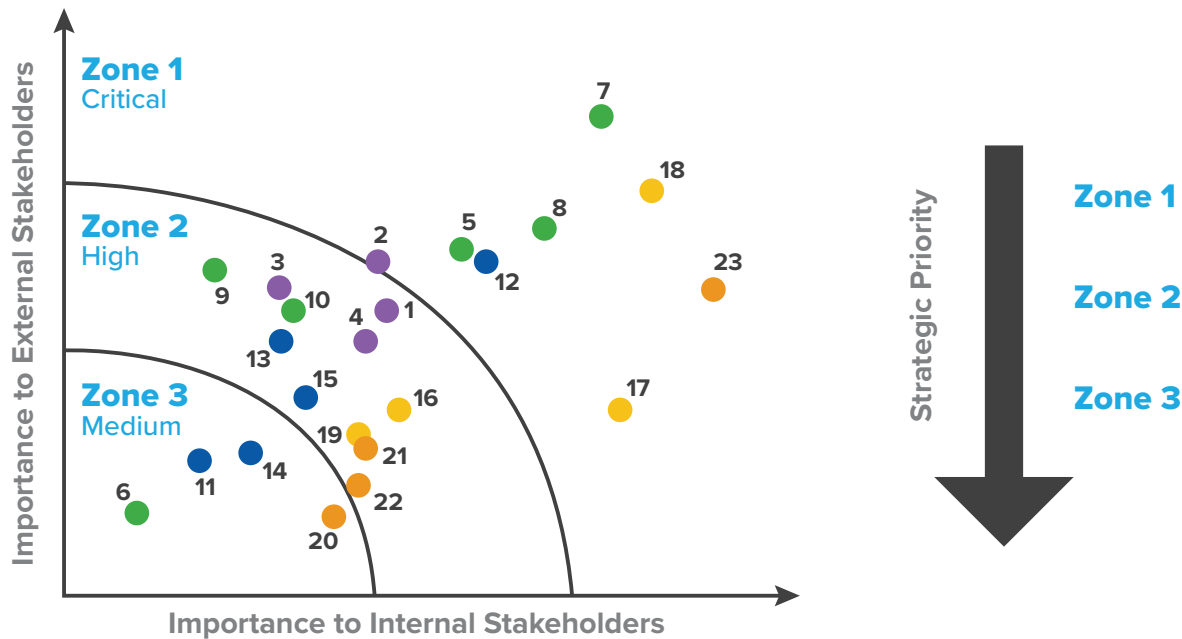
## 2 STRATEGY

- (a) Describe the climate-related risks and opportunities the organization has identified over the short-, medium- and long-term.
- (b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy and financial planning.
- (c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.

Climate change is a material issue for GCC. In 2022, GCC conducted a materiality assessment (figure below) where internal and external stakeholders were asked to rank key factors through the lens of importance to GCC’s business strategy and financial success, as well as GCC’s core values. The results of this assessment enable continued alignment between our business, sustainability strategies, and stakeholder priorities while also enhancing decision-making and future disclosures.

Through this assessment, seven factors were identified as critical by both internal and external stakeholders. Three of these seven factors fell within the environment category including air emissions, climate change and GHGs, and energy management.

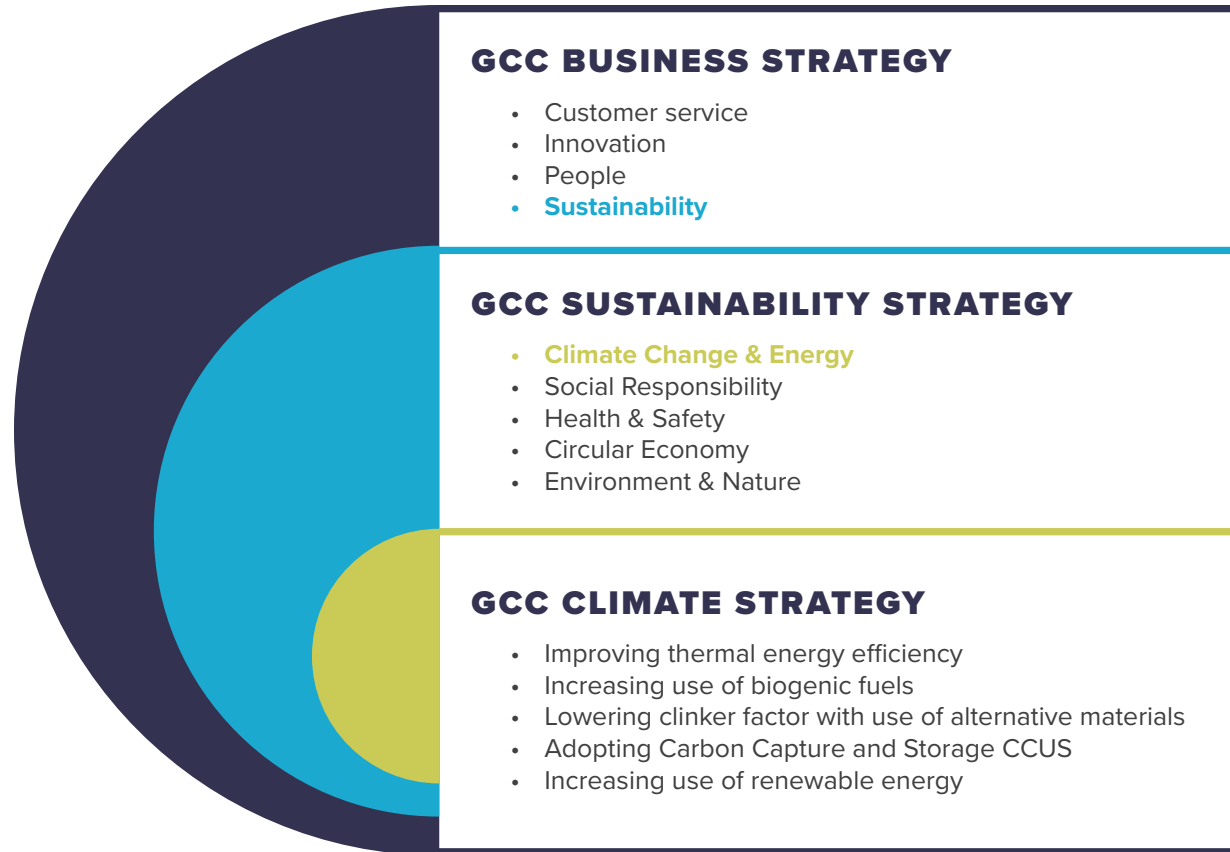
### MATERIALITY MATRIX PRIORITY ZONES



Importantly, the three factors in the environmental category are currently incorporated in GCC’s sustainability strategy under the climate change and energy pillar and are being addressed through specific targets. GCC is committing to Net Zero Concrete by 2050 along with the Global Cement and Concrete Association (GCCA). Further, GCC set verified targets through the Science-Based Targets initiative to lower Scope 1 and 2 GHG emissions, as well as Scope 3 emissions associated with the use of sold products (see [Targets section](#) for more information).

- |   |  |  |   |  |
|---|--|--|---|--|
| <ul style="list-style-type: none"> <li><span style="color: purple;">●</span> <b>Business Model &amp; Innovation</b></li> <li>1. Competitive Behavior</li> <li>2. Sustainable Products &amp; Innovation</li> <li>3. Product Life Cycle &amp; Circular Economy</li> <li>4. Supply Chain Management</li> </ul> | <ul style="list-style-type: none"> <li><span style="color: green;">●</span> <b>Environment</b></li> <li>5. <b>Air Emissions</b></li> <li>6. Biodiversity</li> <li>7. <b>Climate Change &amp; GHGs</b></li> <li>8. <b>Energy Management</b></li> <li>9. Waste &amp; Haz. Materials</li> <li>10. Water Management</li> </ul> | <ul style="list-style-type: none"> <li><span style="color: blue;">●</span> <b>Governance</b></li> <li>11. Board Independence &amp; Diversity</li> <li>12. <b>Business Ethics</b></li> <li>13. Governance of “ESG”</li> <li>14. Stakeholder Engagement</li> <li>15. Systemic Risk Management</li> </ul> | <ul style="list-style-type: none"> <li><span style="color: yellow;">●</span> <b>Human Capital</b></li> <li>16. Diversity, Equity, &amp; Inclusion</li> <li>17. <b>Employee Training &amp; Development</b></li> <li>18. <b>Health &amp; Safety</b></li> <li>19. Labor Practices</li> </ul> | <ul style="list-style-type: none"> <li><span style="color: orange;">●</span> <b>Social Capital</b></li> <li>20. Community Relations</li> <li>21. Data Security &amp; Privacy</li> <li>22. Human Rights</li> <li>23. <b>Product Quality &amp; Safety</b></li> </ul> |
|---|--|--|---|--|
- \*\*Topics in green are the most significant**

# CLIMATE STRATEGY & NET-ZERO CO<sub>2</sub> ROADMAP



To meet our goals, GCC has developed a Climate Strategy that leverages several methods under five key levers.

- Improving thermal energy efficiency
- Increasing use of biogenic fuels
- Lowering clinker factor with use of alternative materials
- Adopting Carbon Capture Utilization and Storage (CCUS)
- Increasing use of renewable energy

By taking action in these areas, GCC is confident that it will meet its GHG reduction goals. Surrounding these five key themes, our Net-Zero CO<sub>2</sub> Roadmap is led by each country division and executed through locally managed plans at each plant.

## **IMPROVING THERMAL ENERGY EFFICIENCY**

We are focused on the cement kilns' stabilization through continuous improvement and constant innovation that enables us to leverage opportunities to capture savings and reduce energy consumption across our cement plant operations. We have a long-standing partnership with EPA's ENERGY STAR Industrial Program that enables us to track energy consumption, set short-term reduction goals and compare our overall progress to our peer group.

## **INCREASING THE USE OF BIOGENIC FUELS**

We are continuously innovating to introduce an energy alternative to our operations, such as replacing carbon-intensive fuels with lower carbon options, including alternative fuels, especially those that contain carbon-neutral waste biomass. By 2030, we aim to generate 25% of our energy from alternative fuels across all plants. We use alternative and biogenic fuels to replace coal in cement kilns. In 2022, five of our plants used alternative fuels sourced from local and regional companies. Our plants in Chihuahua, Samalayuca and Juarez used the waste distribution of locally grown pecan nut shells, while our Pueblo Plant used railroad ties and our Rapid City Plant used a mix of biogenic fuels. These efforts resulted in a total fuel substitution rate of approximately 32% at our Juarez plant, 9% at our Samalayuca Plant, 22% at our Pueblo Plant, and 5% at our Chihuahua Plant. Rapid City started with trials in 2022 and is currently ramping up to achieve a 5% total fuel substitution rate. We are looking holistically at ways to increase our fuel substitution rate, including examining a variety of fuel sources and the infrastructure changes necessary to effectively utilize these sources.

## **LOWERING OUR CLINKER FACTOR**

GCC is working to reduce our clinker factor in several ways. This includes increasing limestone, natural pozzolans or Supplementary Cementitious Materials (SCM's), leveraging research and development, engaging stakeholders, and internally evaluating our supply chain. In 2021, our Sustainability Committee drove strategic initiatives in this area, including implementing four key projects across our operations, defining key measures to success, and developing internal goals which included new product sales and production of Portland-Limestone Cement (PLC).



Increasing the use of Portland-Limestone Cement (PLC) is listed as a pathway in the PCA's roadmap to carbon neutrality, which is one of our core strategic initiatives to achieving our target. By 2024, all our cement operations will convert to 100% Portland Limestone Cement (PLC). GCC's resources are being allocated to fill customer demand and enable them to also reach their sustainability targets. In 2021, GCC announced that our Trident Plant in Montana was going to 100% Portland Limestone Cement (PLC or Type 1L), and in 2022 GCC fully converted the Minnesota cement market to Portland Limestone Cement. The Minnesota transition to PLC represents approximately 300,000 tons of cement per year reaching this market. GCC estimates that this transition will reduce CO<sub>2</sub> by almost 20,000 tons per year. PLC is very similar to our existing cement which is known as Ordinary Portland Cement (OPC or Type I/II/V). The difference is that we add 8% limestone to our Portland Limestone Cement (PLC) which effectively lowers the CO<sub>2</sub> per ton. GCC is investing in and optimizing cement plants to ensure PLC maintains the same strength and workability.

In addition to PLCs, our Research and Development team continues to conduct trials and studies, which are reviewed by our Sustainability Committee. We are increasing the offer of blended cements by introducing other Supplementary Cementitious Materials (SCMs) to our cements, improving the durability indicators and the life of structures built with them, and at the same time reducing our clinker factor.

## **ADOPTING CARBON CAPTURE**

GCC is expanding its research into carbon capture, utilization, and storage (CCUS) technologies which we believe will also help us reach our goals and long-term commitments. We firmly believe that the adoption of CCUS technologies can effectively contribute to achieving Net Zero CO<sub>2</sub>, thus playing a vital role in accomplishing our sustainability objectives.

We are seeking unified technology for all our facilities. We have embarked on a multi-year plan to incorporate CCUS technology at select GCC plants. Beginning in 2020, we actively engaged in this area and conducted a comprehensive study to identify the plants best suited for testing CCUS technology and to find suitable technology developers. As a result of the study, we have decided to move forward with CCUS technology implementation at our Odessa and Pueblo plants. To ensure successful integration, we have established internal targets to maintain close collaboration with technology developers. Together, we are carefully assessing the right technology to fit each plant's specific requirements. In 2022, we furthered our efforts by conducting a screening study to identify the most adaptable technology options for our operations. This proactive initiative aligns with our commitment to achieve our emissions reduction goals.

GCC believes it should operate as profitably as possible without negatively impacting the environment. We also believe that the world should make all efforts to transition to an economy that supports a future in which warming is limited to 1.5°C, and we want to advance quickly into a leadership position towards that transition.

## **INCREASING THE USE OF RENEWABLE ENERGY**

In 2019, GCC signed a long-term agreement with renewable energy suppliers, covering 100% of the electricity consumed by the Odessa, Texas plant. Additionally, in May 2020, GCC signed a long-term agreement with a wind power provider to supply the Rapid City, South Dakota plant, thereby covering approximately 50% of the electricity consumed at the plant. In addition, part of the electricity consumed at the plant in Trident, Montana, comes from hydropower generation, which will also source up to 20% of its power requirements from its solar plant, starting in the first stage and delivering nearly 10% of power requirements in 2024.

# CLIMATE-RELATED RISKS

GCC considers climate-related risks and opportunities in ongoing **risk management processes** and strategic planning initiatives.

GCC has identified several climate-related risks that are material to our business. The table below illustrates these risk factors, how we are working to mitigate these risks, and how we have incorporated these considerations into our business strategy.

Specific Risk & Description	Type & Driver	Likelihood	Time Horizon	Risk Response, Mitigation Efforts, & Strategic Impacts	Financial Impact
<p><b>Loss of sales from high emitting plants that cannot easily be upgraded:</b></p> <p>Governments worldwide are implementing policies and regulations to reduce greenhouse gas emissions and transition to cleaner energy sources, which may lead to increased costs for compliance or penalties, making some of GCC's assets unviable. GCC has set a target of reducing emissions to 530 KgCO<sub>2</sub>/tcecm per ton of cement by 2030 and failing to meet this objective can imply a loss of sales.</p> <p>In particular, low thermal efficiency kilns could become unviable as regulation on emissions becomes stricter. GCC has one wet kiln in our Trident plant. The wet process of cement manufacturing refers to grinding raw materials into slurry after mixing with water and then feeding them into the wet process kiln for drying and calcination and finally forming clinker. The wet kiln technology is considered outdated and less efficient compared to modern dry kiln technologies. The cement industry has transitioned towards dry kiln processes, which offer improved energy efficiency and lower emissions. Less thermal efficiency is associated with higher Green House Gasses Emissions (GHG), and the additional energy required to remove moisture increases fuel consumption, leading to increased emissions of greenhouse gases.</p>	<p><b>Emerging regulation:</b> Mandates on and regulation of existing products and services</p>	<p>Virtually Certain</p>	<p>Medium Term</p>	<p>Our <b>Climate Strategy and Net Zero CO<sub>2</sub> Roadmap</b> outlined above was designed to reduce emissions from our plants. As we continue to improve thermal efficiency, we work toward mitigating this risk.</p>	<p>Medium - High Impact</p>



Specific Risk & Description	Type & Driver	Likelihood	Time Horizon	Risk Response, Mitigation Efforts, & Strategic Impacts	Financial Impact
<p><b>Increased plant interruptions due to extreme weather:</b> If the operations of any productive unit were unexpectedly interrupted, totally or partially, by floods, tornados, or other catastrophes, sales and financial results could be significantly affected. The amount of inventory required at each of the plants is determined based on the production schedule and cycles. If there is an unplanned outage at any of the plants, inventory levels can drop to a level that could compromise inventory of supplies efficiently so as to ensure adequate supply during peak periods and to minimize excess expenses during periods of less activity. The operations, operating results and financial situation of the company could suffer a significant adverse effect as a result of the lack of ability to match production orders for cement, ready-mix concrete or other products.</p>	<p><b>Acute physical:</b> Hail, freeze, wind, collapse, flood, storm (including blizzards, dust, and sandstorms)</p>	<p>Very Likely</p>	<p>Short Term</p>	<p>GCC assesses and responds to the exposures to physical risks and natural hazards the exposures in our main locations through a “Property Loss Prevention Program” (PLPP). To evaluate the probability of occurrence of these climate-related events (natural hazards), GCC works with its property insurer to analyze the potential impacts of several climate-related physical risk factors including windstorms, floods, and wildfires. This analysis is used to predict the potential cost of physical damage to equipment or infrastructure, production loss, and potential costs associated with restoring activities to original production. As a result of this assessment, we implement preparedness measures that could reduce or eliminate potential losses.</p> <p>See our <a href="#">Climate Risks Identification, Assessment, and Management Processes</a> section below for more information.</p>	<p>Medium - Low Impact</p>
Specific Risk & Description	Type & Driver	Likelihood	Time Horizon	Risk Response, Mitigation Efforts, & Strategic Impacts	Financial Impact
<p><b>Increased operating costs due to carbon pricing in under-regulated markets:</b> In both Mexico and the US, there is an increasing focus on reducing carbon emissions, and carbon pricing mechanisms have been or are being implemented to incentivize emission reductions.</p>	<p><b>Emerging regulation:</b> Carbon pricing mechanisms</p>	<p>Very Likely</p>	<p>Short Term</p>	<p>Given that carbon pricing presents a significant financial risk for GCC, we evaluate the risk of the transition to a carbon pricing regulation in Mexico and the US. The implementation of a carbon price as outlined in the scenarios or more stringent emissions trading systems than present provides a risk to the bottom line.</p>	<p>High impact</p>

# CLIMATE-RELATED OPPORTUNITIES

GCC has identified several climate-related opportunities that are material to our business. The table below illustrates these opportunities and how we are incorporating them into our business strategy.

Specific Opportunity & Description	Type & Driver	Likelihood	Time Horizon	Risk Response, Mitigation Efforts, & Strategic Impacts	Financial Impact
<p><b>Adopt carbon capture utilization and sequestration technologies at plant sites:</b></p> <p>A technology risk of GCC's is related to the adoption of carbon capture technologies. GCC has been working and will invest in feasibility studies for the adoption of carbon capture technology and has made important initial steps to date. According to the initial evaluation of CO<sub>2</sub> capture technologies, the cryogenic technology was identified as the most suitable for our plants. This technology has the benefit of lower water consumption, and the equipment does not take up much space, in addition to trapping all major pollutants from the kiln stack. The early adoption of new technologies like this one implies risks such as potential limitations in functionality and performance, higher costs, compatibility issues with existing systems and infrastructure lack of available support and expertise, and risk of market uncertainty, as the technology landscape can rapidly evolve, potentially rendering an early adopted solution obsolete or replaced by newer alternatives.</p>	<p><b>Resilience:</b> Use of new technologies</p>	<p>More Likely than Not</p>	<p>Medium Term</p>	<p>GCC is currently exploring different partnerships including researchers, consultants, carbon capture technology providers, carbon transportation companies, carbon storage companies and utilities companies.</p> <p>Achieving our ambition will require an effective carbon capture, utilization, and storage (CCUS) since about 48% of our total CO<sub>2</sub> footprint is created from the chemical reaction when the raw material (limestone) calcinates within the kiln. We are actively researching and engaging different CCUS companies so that when new technology becomes available, we can act quickly to implement the best solution for each of our plants.</p>	<p>High Impact</p>

Specific Opportunity & Description	Type & Driver	Likelihood	Time Horizon	Risk Response, Mitigation Efforts, & Strategic Impacts	Financial Impact
<p><b>Access and availability for the use of lower-carbon fuel mix:</b> GCC is developing a fuel mix strategy to reduce coal consumption and increase the use of low carbon fuels. Additionally, GCC is investing in permits and processing equipment to increase our use of natural gas, biogenic fuels and in the long term the use of hydrogen, which will reduce our overall carbon footprint. Opportunities can be derived from optimizing fuel mixes in each plant while pursuing emissions reduction. These strategies (increasing fuel substitution for cement production) will reduce scope 1 emissions and support our climate strategy and goals. In addition to this, using alternative fuels like biomass and non-recyclables can provide a lower cost of thermal energy for the kilns.</p>	<p><b>Energy Source:</b> Use of lower-emission sources of energy</p>	<p>Virtually Certain</p>	<p>Short Term</p>	<p>Our alternative fuel strategy for 2030 includes short-, medium- and long-term internal milestones. These include developing a corporate business unit (one company per division) to manage alternative fuels. The corporate business units drive the development of our waste management strategy, increasing the thermal substitution rate, maximizing alternative fuel usage, and supporting our 2030 sustainability goals across all plants. We have a phased approach to implement our alternative fuel corporate management team. This circular approach of substituting coal with non-recyclables and biomass fuels will reduce our carbon emission by 42 kg CO<sub>2</sub>/ton per ton of cement by 2030.</p>	<p>Low - Medium impact</p>

Specific Opportunity & Description	Type & Driver	Likelihood	Time Horizon	Risk Response, Mitigation Efforts, & Strategic Impacts	Financial Impact
<p><b>Increased requirements for lower-carbon products in the market:</b>            There is a significant gap in the demand of low-carbon cement and the supply. Our blended cement increases our product offering and enables us to meet anticipated customer and market demand. The production of PLC produces 7% lower CO2 emissions than Ordinary Portland Cement (OPC). According to GCCA, growth in societal need for concrete is expected due to: population growth and urbanization, concrete's role in sustainable development, and the contribution to resilience and climate adaptation plans. For this reason, GCC anticipates increased revenue and sales from low-carbon cement alternatives.</p>	<p><b>Markets:</b>            development and/or expansion of low emission goods and services</p>	<p>Virtually Certain</p>	<p>Short Term</p>	<p>The increased production of blended cement will reduce our clinker content from its current 88% to 80% by 2030. Replacing the clinker used in our final product with alternative materials such as limestone and Supplementary Cementitious Materials (SCMs) will result in a 37 kg CO<sub>2</sub>/metric per ton of cement avoidance in our carbon emissions helping us achieve our 2030 target.</p>	<p>Medium Impact</p>



# CLIMATE IMPACTS ON BUSINESSES, STRATEGY, & FINANCIAL PLANNING

## Business Strategy

GCC's Sustainability Committee oversees the development and implementation of GCC's sustainability strategy and advises GCC's Board on climate-related risks and opportunities that have influenced our business strategy in relation to our products and services, operations, supply chain, and investment in research and development (R&D). Examples of specific considerations are outlined below:

- **Products and Services:** In an effort to reduce carbon emissions, we continue to increase the production of blended cement. This shift will reduce our clinker content from its current 88% to 80% by 2030. In 2022, GCC reduced the clinker factor to 86%, blended cement represented 41% of 2022 cement production, Trident Plant was fully converted to PLC in 2022, and Pueblo was fully converted to PLC in Q4 2022. Replacing clinker used in our final product with alternative materials such as limestone and/or pozzolanic materials will result in a 37 kg CO<sub>2</sub>/metric per ton of cement avoidance in our carbon emissions, helping us achieve our 2030 target. We continue to seek business opportunities that lower the footprint of our products and drive climate-related progress in their life cycle use stages.
- **Operations:** Under increasingly strict environmental regulations in the United States and Mexico, GCC continuously invests in maintaining production facilities and surpassing the compliance requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) and the Clean Air Act in the United States, as well as Mexican environmental laws and regulations.
- We have 2030 targets for our operations to improve the energy efficiency of our cement plants. The below initiatives have helped us to advance toward these targets:
  - In 2022, additional activities implemented include historical data analysis of kiln efficiency by plant, kiln heat consumption analysis, downtime analysis by kiln, Mean Time Between Failures (MTBF) analysis by kiln, heat consumption calculation standardization, AFR analysis database, and updates as required.
  - In 2022, GCC's Pueblo, Colorado, cement plant achieved the "Energy Star" certification for superior energy performance from the U.S. Environmental Protection Agency for the fifth consecutive year, performing in the top 25% of similar facilities across the nation. In 2022, GCC's Rapid City Plant also achieved the Energy Star certification for the third consecutive year.

- **Energy Supply Chain:** Energy plays an increasingly important role in selecting suppliers to decarbonize our operations, especially in the scope 2 emissions, energy. We will reduce our scope 2 emissions for 2030 by sourcing electricity from renewable sources. As we advance our renewable energy initiatives, we see supply chain impacts in relation to energy procurement. Because of this, we have deployed efforts to procure renewable electricity including a Power Purchase Agreement (PPA) covering 100% of electricity usage at our Odessa Plant, and a PPA covering approximately 50% of electricity usage at our Rapid City Plant, both with renewable power.
  - In the state of Montana a 2.0 MW behind the meter solar project is expected to start operations in January of 2024.
- **Investment in Research and Development and Innovation:** GCC's Research and Development and Innovation teams report directly to the Chief Sustainability Officer to support GCC's 2030 sustainability targets. Related investments include:
  - **Internal Research and Development:** Develop new products and processes tailored to our customers' challenges. Our Research and Development team is focused on creating cements with lower clinker factors which will help meet our net CO<sub>2</sub> reduction targets. This group follows breakthrough technologies like carbon capture to be an early adopter of such technologies once fully developed.
  - **CCUS Innovation:** Focused on working with the CO<sub>2</sub> capture developers to identify the best technologies for adaptation in our plants. We have also pledged to be an early adopter of carbon capture by 2030. In 2022, we contracted a carbon capture company to conduct a screening and feasibility study to better understand our capacity to implement a carbon capture system. In Phase I of the study, we focused on identifying potential CO<sub>2</sub> capture technologies; their pros and cons; utility needs such as water, steam, and power; technology readiness level; CO<sub>2</sub> removal efficiency; and experience.
  - **Innovandi Partnership:** GCC is a member of the Global Cement and Concrete Research Network (Innovandi), a consortium that brings together academia (over 40 leading global institutions) and industry (34 cement and concrete manufacturers, admixture companies, equipment, and technology suppliers) to collaborate on essential and actionable pre-competitive research in areas such as calcined clays, concrete recycling, kiln electrification, and carbonation.



## Financial Planning

Climate-related risks and opportunities have influenced our financial planning in relation to revenues, direct costs, indirect costs, capital expenditures, capital allocation, access to capital, and assets. Examples of specific considerations are outlined below:

- **Sustainability-Linked Bond:** In January 2022, the Company issued a Sustainability-Linked Bond (SLB) aligned with the Sustainability-Linked Bond Principles leveraging a core, relevant, and material sustainability performance target such as CO<sub>2</sub> intensity reduction (calculated as specific gross kilograms of CO<sub>2</sub> (scope 1) emissions emitted per ton of cementitious material) to be equal to or lower than the lesser of a 30.7% reduction from the 2015 baseline by the end of 2030. This target was validated by SBTi.
- **Carbon Capture:** GCC is working to invest in carbon capture technology and has made important initial steps to date. We have developed internal targets in partnership with technology developers, working with them to identify the right technology to fit each plant. These steps are part of our broad-based sustainability strategy and entail a long-term process.
- **Carbon Pricing:** A market-based price on carbon scheme has already impacted our financial planning with respect to direct costs. Currently, our operations in Mexico are influenced by an Emissions Trading System where a price on carbon is being established.
- **Fuel Mix Composition:** In 2022, GCC began an initiative to analyze our long-term fuel mix composition in order to determine the most efficient fuel mix. In our analysis, we are considering the cost of fuels, cost of emissions, and the total financial impact to GCC, including social impact.

# SCENARIO ANALYSIS & STRATEGY RESILIENCE

In 2022, GCC began the process of initiating its first climate-related scenario analysis. This process concluded in 2023 and allowed GCC to better understand our resilience against several climate scenarios.

## Scope and Methods

The scenario analysis exercise was informed by guidance from the TCFD. To conduct the analysis, we developed a core working group and engaged subject matter experts (SMEs) from across GCC in a series of workshops and extended discussions. During these workshops and discussions, GCC explored several climate-related scenarios and used the following focal questions to complete the analysis:

- How resilient is the business strategy to the scenario described?
- Which assets become liabilities under the scenario described?
- How do our customer base and product offering change under the scenario described?
- How does the integration of our business perform under the scenario described?
- How does the scenario affect your specific area/department?

GCC's whole operation was considered during this analysis - no specific exclusions were made.

## SCENARIOS ASSESSED

The analysis used well established third-party published scenarios to understand climate risks and opportunities and their impact on the focal questions outlined above. Climate-related risks and opportunities can be categorized as transitional risks and physical risks. The table below outlines what each category refers to:

CATEGORY OF RISK	DESCRIPTION	TYPES
Transitional Risks	Relate to the changes that will occur in legislation, customer preferences, liability, technology and other regulatory matters as the climate changes	<ul style="list-style-type: none"><li>• Policy and Legal</li><li>• Technology</li><li>• Market</li><li>• Reputation</li></ul>
Physical Risks	Encompass the risks encountered from a different climate and weather event	<ul style="list-style-type: none"><li>• Chronic (heat waves, sea level rise, droughts)</li><li>• Acute (hurricanes, freezes, wildfires)</li></ul>



The four scenarios chosen were the IEA NZE and STEPS scenarios and the IPCC RCP 4.5 and 1.6 scenarios. IEA scenarios were used mainly to focus on **transitional risks** while IPCC scenarios were used mainly to consider **physical risks**.

Scenario Name	Stated Policies	NET ZERO EMISSIONS BY 2050	Representative Concentration Pathways	Representative Concentration Pathways
Short name- external reference scenario	IEA STEPS	IEA NZE	RCP 1.9	RCP 4.5
Source	International Energy Agency (IEA)	International Energy Agency (IEA)	Intergovernmental Panel on Climate Change (IPCC)	Intergovernmental Panel on Climate Change (IPCC)
Reference temperature Scenario	2.7 °C in 2100 (with a 50% probability)	>1.5°C in 2050	>1.5°C by 2100 (with a 50% probability)	>2.4°C in 2100
Category of Risk	Transitional risks	Transitional risks	Physical risks	Physical risks

## SCENARIO ANALYSIS OUTCOMES

Overall, this exercise demonstrated that GCC’s stated business and sustainability strategies are resilient to the scenarios analyzed. Emissions reduction efforts and a goal of Net Zero CO<sub>2</sub> are integrated into our business strategy which ensures that we monitor our transition to a low-carbon economy as part of our core practices and not as a separate effort. Through this exercise, our sustainability strategy and roadmap also supported the resilience of our business strategy as we move the company towards lower dependence on fossil fuels, higher energy efficiencies, and technologies that will allow us to mitigate transitional risks. GCC also has a strong program to identify, reduce, and manage physical risks in partnership with our insurance provider.

### Building Climate Resilience

This exercise brought several areas into focus as GCC continues to execute its climate strategy. As a result of this assessment, GCC plans to further evaluate next steps in the following areas to ensure proper preparedness measures are in place.

- Fuel switching.
- Monitoring risks of extreme regulations for coal.
- Accelerating applications of CCUS.
- Intensifying sustainability strategy communication and climate disclosure efforts.
- Use of renewable energy.



# 3 CLIMATE RISK MANAGEMENT

- (a) Describe the organization's processes for identifying and assessing climate-related risks.
- (b) Describe the organization's processes for managing climate-related risks.
- (c) Describe how processes for identifying, assessing and managing climate-related risks are integrated into the organization's overall risk management.

GCC has four methodologies in place to identify, assess, and manage climate-related risks, which are: Enterprise Risk Management (ERM), a Climate Scenario Analysis, a Climate-Related Risk Report done by a third party, and a Property Loss Prevention Program done by the same third party. Some of these processes are enterprise-wide and included climate considerations while others are specific to climate risk. GCC uses common definitions to ensure alignment throughout these processes.

- **Short-term:** 0 to 5 years. The short-term is related to the company's regular financial and business planning and helps understand actions needed before 2030.
- **Medium-term:** 5 to 15 years. The medium-term is defined as the time beyond regular business planning for the company and allows the consideration of transitions that will be required between 2030 and 2050.
- **Long-term:** beyond 15 years. The long-term is the time frame considered by the company for long-term investments like carbon capture and focuses on needs beyond 2050 for a 1.5°C world.

## CLIMATE RISKS IDENTIFICATION, ASSESSMENT, & MANAGEMENT PROCESSES

GCC's ERM program works to identify and assess risk exposures, in the pursuit of ensuring the company's long-term stability and success. The Climate-Related Risk Report includes climate-related risk by covering the improvement of business resilience, addressing key human elements and physical recommendations, and elevating the risk quality of all cement plants. Our insurance company provides a loss prevention program to identify, assess, and recommend reducing the chance of property loss due to fire, weather conditions, and failure of electrical or mechanical equipment. The Scenario analysis is the methodology for the identification of climate-related risks and opportunities, where a core working group within the company was established to conduct the analysis and a list of subject matter experts.

We have a coordinated, comprehensive approach to overseeing the enterprise-wide risk management responsibilities and ensuring the full incorporation of climate considerations as outlined on the following page.

Through the various processes existing through our four methodologies, GCC assesses a variety of climate-related risks including:

- Transition risks related to current and emerging regulations, technology, and legal market, and reputational considerations.
- Physical risks related to acute climate events and chronic, longer-term shifts in climate.

The Board regularly reviews strategic threats and risks that emerge through this process. Leadership is fully engaged in risk management and has made it a fundamental aspect of company strategy, operations, and culture.

## BOARD

Regularly reviews strategic threats, opportunities, and risks

## COMMITTEES

The Audit and Corporate Practices Committee consists of three independent members and three alternate directors assigned by the Board of Directors, except for the committee chair who is elected by GCC's shareholders. The Committee advises the Board on matters related to audit, best corporate practices, risk management, compliance, evaluation, and compensation.

### RISK IDENTIFICATION

GCC constantly works on identifying risks and scenarios that could materially and negatively impact the company's business, results of operations, or financial condition. Additionally, a third party verification by our insurance provider is conducted at least annually which consists of visiting each plant to identify specific areas that may be vulnerable to physical climate impacts and affect our operations. Quarterly we receive the Climate-Related Risk Report. In 2023 we completed our first climate scenario analysis measure for both physical and transitional climate risks.

### RISK ASSESSMENT

GCC conducts regular assessments of identified risks based on their likelihood and impact, to be aware of any changes in relevance. GCC assesses their main locations exposures to physical risks and natural hazards with a "Property Loss Prevention Program" (PLPP).

### RISK MANAGEMENT

GCC creates heat maps to review risk materiality, improve visualization and analysis to develop risk management strategies.

### RISK MONITORING

GCC constantly monitors strategy implementation and execution to reduce or eliminate threats, prevent losses, and optimize resources.

## CLIMATE SCENARIO ANALYSIS

Over the last year, GCC conducted its first Climate Scenario Analysis with the purpose of understanding how different futures may result in different climates and how the resulting transition and physical risks impact GCC. Overseen by the CSO, the analysis was conducted following TCFD guidance and included key stakeholders from analysis, legal, operations, procurement, sales, planning, energy, finance, mine, and sustainability teams.

The scenario analysis is incorporated into the organization's decision-making process and strategic management. The outcome of the analysis is a report and integration workshop where key stakeholders discuss how to integrate the findings into the business strategy. Results are then presented to upper management and include identified climate-related risks and opportunities, an assessment of GCC's business strategy resiliency in the face of different climate scenarios, and recommendations for management.

## PROPERTY LOSS PREVENTION PROGRAM

GCC assesses our locations' exposures to physical risks and natural hazards with a "Property Loss Prevention Program" (PLPP). This analysis is used to predict the potential cost of physical damage to equipment and infrastructure, production loss, and potential costs associated with restoring activities to original production. Outcomes from this assessment are prioritized and evaluated for decision-making using three criteria:

- Financial loss expectancy should the risk occur.
- Risk improvement ratios (defined as the ratio of loss expectancy to the cost to complete the recommendation to mitigate or avoid the risk exposure).
- Specific catastrophe risks.

## CLIMATE-RELATED RISK REPORT

To evaluate the probability of occurrence of these climate-related events (natural hazards), GCC works with its property insurer to analyze the potential impacts, including the financial impacts, of several climate-related physical risk factors including windstorms, floods, and wildfires.



# 4 METRICS & TARGETS

- (a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.
- (b) Disclose Scope 1, Scope 2, and if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.
- (c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.



# CLIMATE RISK & OPPORTUNITY METRICS

GCC evaluates several metrics to assess climate risks and opportunities. In addition to our Scope 1, 2, and 3 GHG emissions outlined in the next section, these metrics include:

<b>CO<sub>2</sub> &amp; Energy</b>	UNIT	2020	2021	<b>2022</b>
Cement business line:				
Total energy consumption (thermal + electrical )	TJ	17,129	18,932	19,182
Total thermal energy consumption	TJ	14,865	16,404	16,683
Thermal energy consumption: fossil fuels (coal, natural gas)	TJ	13,150	14,731	15,406
Thermal energy consumption: waste-based fuels	TJ	657	610	555
Thermal energy consumption: biomass fuels (renewable energy)	TJ	1,059	1,063	722
Thermal energy mix of clinker production: % of fossil fuels	%	88.5	89.8	92.3
Thermal energy mix of clinker production: % biomass	%	7.1	6.5	4.3
Thermal energy mix of clinker production: % alternative fuels	%	4.4	3.7	3.3

GCC also has an internal carbon price of 30 (\$/ metric tons of Scope 1 emissions). This is leveraged in decision-making processes to align our strategy and spending with our climate ambitions.

Clinker factor (cementitious material)	%	88.0	87.3	86.4
Thermal substitution rate in clinker production	%	11.5	10.2	7.7

# GREENHOUSE GAS EMISSIONS

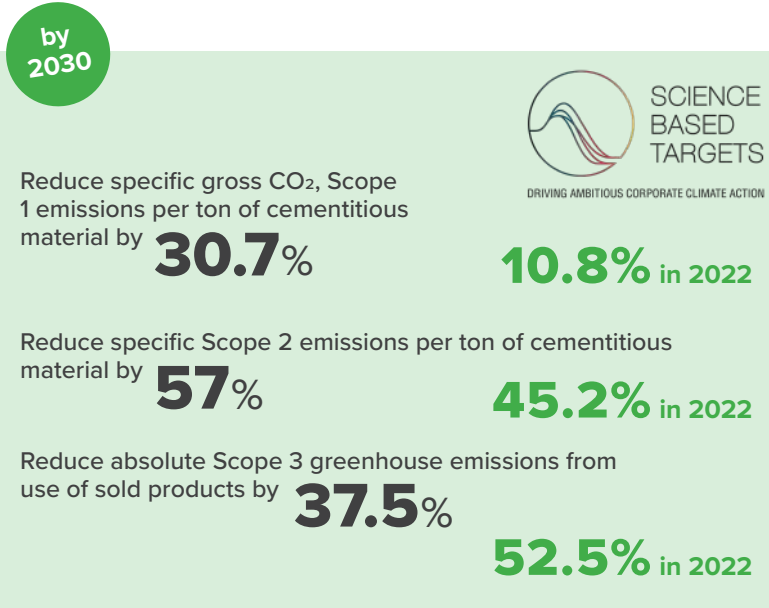
GCC measures its GHG emissions from its cement business line annually to track progress toward our reduction goals.

	UNITS	2020	2021	2022
Scope 1	tCO <sub>2</sub>	3,266,068	3,566,684	3,555,344
Scope 2 Location Based	tCO <sub>2</sub>	278,311	260,995	273,794
Scope 2 Market Based	tCO <sub>2</sub>	-	-	234,191
Scope 1 & 2 Location-Based Total	tCO <sub>2</sub>	3,544,379	3,816,339	3,829,138
Scope 1 & 2 Market-Based Total	tCO <sub>2</sub>	-	-	3,789,535
Scope 3, Category 1: Purchased goods and services	tCO <sub>2</sub>	594,000*	122,352	112,576
Scope 3, Category 3: Fuel- and energy-related activities	tCO <sub>2</sub>	9,216	5,034	4,255
Scope 3, Category 4: Upstream transportation and distribution	tCO <sub>2</sub>	56,622	73,905	88,934
Scope 3, Category 9: Downstream transportation and distribution	tCO <sub>2</sub>	16,165	12,955	42,191
Scope 3, Category 11: Use of sold products	tCO <sub>2</sub>	1,058,711	1,026,050	994,396
Biogenic Emissions	tCO <sub>2</sub>	112,853	113,771	76,426
Specific gross CO <sub>2</sub> emissions (kg/ton of cementitious)	kgCO <sub>2</sub> /ton	746.3	754.8	741.2
Specific net CO <sub>2</sub> emissions (kg/ton of cementitious material)	kgCO <sub>2</sub> /ton	734	744.1	731.7
Reduction gross CO <sub>2</sub> emissions/ton cementitious from 2015 (SBTi target)	%	2.7	1.6	3.4
Specific CO <sub>2</sub> emissions (Scope 2) (kg/ton of cementitious material)	kgCO <sub>2</sub> /ton	64.1	55.2	57.1
Reduction CO <sub>2</sub> emissions/ton cementitious material from 2015 baseline	%	16.8	28.3	25.8

*\*In 2021 the methodology for the calculation for Scope 3 changed.*

GCC's GHG emissions are considered in several risk factors outlined in the [Climate-related Risks section](#).

# TARGETS



Our 2030 goals and commitments are aligned and have been validated by the Science-Based Targets initiative according to the Well-Below 2°C Scenario. Additionally, we signed for the Business Ambition for 1.5°C so that our targets beyond 2030 are fully aligned with the Paris Agreement goals. GCC’s ultimate goal is to deliver Net Zero CO<sub>2</sub> concrete globally by 2050. To ensure we are on the right track, we have set ambitious 2030 targets in the cement industry. A significant portion of the actions required to deliver on the 2030 roadmap are based on known technologies.

## OUR VERIFIED SCIENCE-BASED TARGETS

“International Mexican company involved in the manufacture of building materials, GCC S.A.B. de C.V. commits to reduce scope 1 GHG emissions 30.7% per ton of cementitious materials by 2030 from a 2015 base year.\* GCC S.A. de C.V. also commits to reduce scope 2 GHG emissions 57% per ton of cementitious material within the same timeframe. GCC S.A.B. de C.V. further commits to reduce absolute scope 3 GHG emissions from use of sold products 37.5% within the same timeframe.

**\*The target boundary includes biogenic emissions and removals associated with the use of bioenergy.”**



# COMMITTED TO CLIMATE ACTION



GCC is a member of the [Business Ambition for 1.5°C campaign](#), an initiative led by the Science Based Targets initiative (SBTi) in partnership with the UN Global Compact and the We Mean Business Coalition.



GCC is a member of [The Race To Zero campaign](#) of the United Nations Framework Convention on Climate Change (UNFCCC), committed to reduce emissions across all scopes, swiftly and fairly in line with the Paris Agreement. We also have a goal to achieve Net Zero CO<sub>2</sub> by 2050 across our concrete value chain.

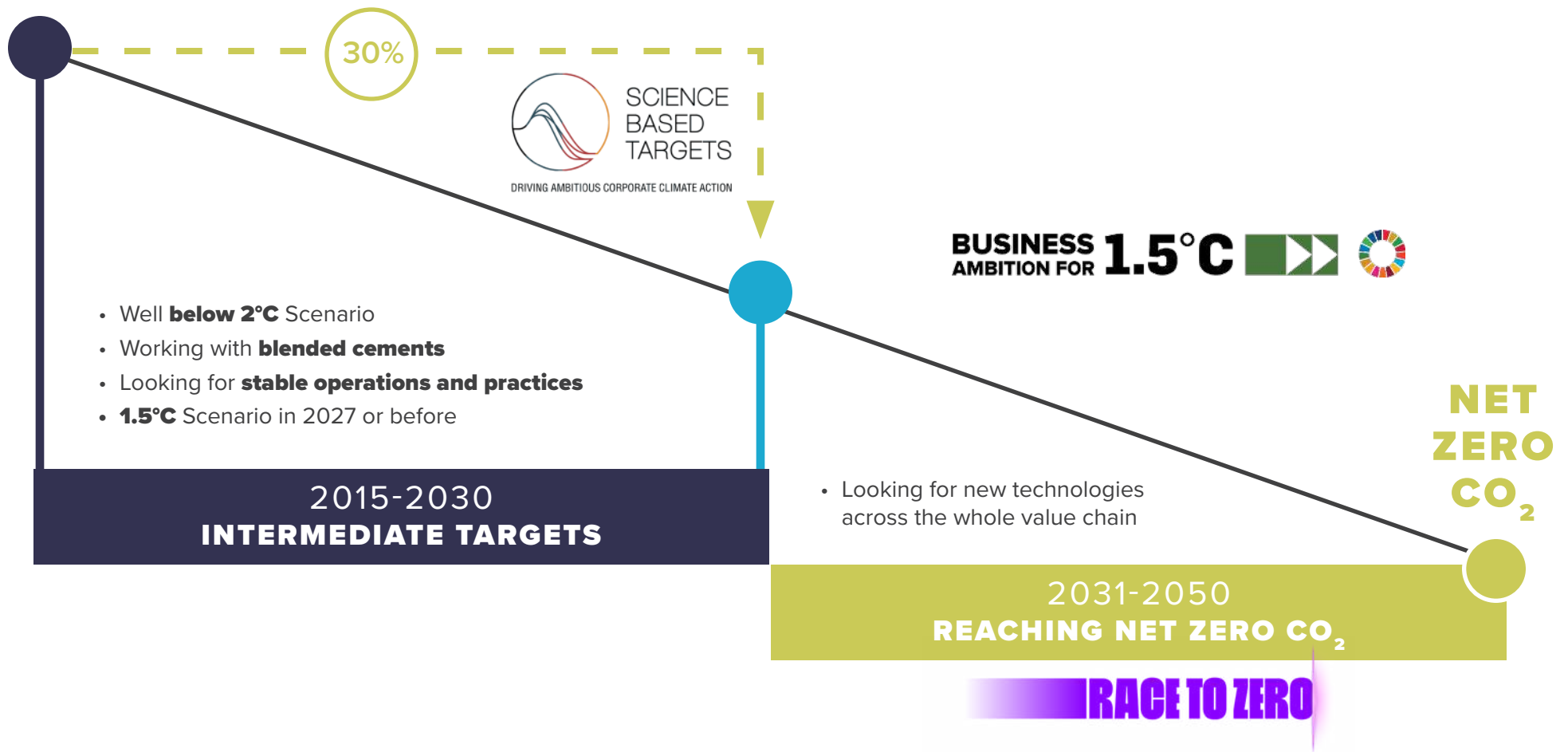


In January 2023 we obtained the validation for Science-Based Targets as part of our alignment with the SBTi. Our targets are aligned to the well-below two-degree Celcius curve according to the Paris Agreement. We will revalidate our Science-Based Targets (SBTi) in five years from our initial assessment and align our carbon intensity reduction target with the Business Ambition curve of 1.5°C.

Aligning with our net zero strategy, GCC also joined an ambitious journey to achieve Net Zero CO<sub>2</sub> across the cement and concrete value chain by signing onto the Portland Cement Association's (PCA) Roadmap to Carbon Neutrality and the Global Cement and Concrete Association's (GCCA) roadmap. GCC's strategy is aligned with the Camara Nacional de Cemento (CANACEM) Road Map for 2030 in Mexico, the Global Cement and Concrete Association (GCCA) and the Portland Cement Association (PCA) roadmaps. The Global Cement and Concrete Association targets and milestones include:

1. 11% will come from changes in clinker production.
2. 9% in blended cements.
3. 36% with the utilization of carbon capture technology in development.
4. 5% in renewable energy.
5. 11% reduction by efficiency in concrete production.
6. 22% reduction will come from efficiency gains in design and construction.
7. 6% in decarbonation.
8. Net Zero emissions by 2050.

Net Zero CO<sub>2</sub> Roadmap focuses on a comprehensive range of reduction strategies for stakeholders to adopt across all phases of the material's life cycle. Please see the [Climate Strategy and Net Zero CO<sub>2</sub> Roadmap section](#) for more information.





# 5 APPENDIX

# TCFD ALIGNMENT

TCFD Pillar	Recommended Disclosures	Report Reference
<b>Governance</b> Disclose the organization's governance around climate-related risks and opportunities.	a) Describe the board's oversight of climate-related risks and opportunities.	<b>Board Oversight of Climate-related Issues</b>
	(b) Describe management's role in assessing and managing climate-related risks and opportunities.	<b>Management's Oversight of Climate-related Issues</b>
<b>Strategy</b> Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning where such information is material.	(a) Describe the climate-related risks and opportunities the organization has identified over the short-, medium- and long-term.	<b>Climate Impacts on Businesses, Strategy, and Financial Planning</b>
	(b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy and financial planning.	<b>Climate Impacts on Businesses, Strategy, and Financial Planning</b>
	(c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	<b>Scenario Analysis and Strategy Resilience</b>
<b>Risk Management</b> Disclose how the organization identifies, assesses, and manages climate-related risks.	(a) Describe the organization's processes for identifying and assessing climate-related risks.	<b>Climate Risks Identification, Assessment, and Management Processes</b>
	(b) Describe the organization's processes for managing climate-related risks.	<b>Climate Risks Identification, Assessment, and Management Processes</b>
	(c) Describe how processes for identifying, assessing and managing climate-related risks are integrated into the organization's overall risk management.	<b>Climate Risks Identification, Assessment, and Management Processes</b>
<b>Metrics and Targets</b> Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.	(a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.	<b>Climate Risk and Opportunity Metrics</b>
	(b) Disclose Scope 1, Scope 2, and if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.	<b>Greenhouse Gas Emissions</b>
	(c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	<b>Targets</b>

# TCFD DIMENSIONS

## RISK MANAGEMENT

### Climate-related risk identification, management and monitoring

Read more in Risk Management  
Read more in Risk Improvement Plan

**Sustainability Report:** page 48

**CDP:** Categories C1.1, C1.2, C1.3

**CSA:** Categories 2.6.2, 2.6.4, 2.6.6, 2.6.7, 2.6.8

## GOVERNANCE

Governance around climate-related risks and opportunities

## STRATEGY

The actual and potential impacts of climate-related risk and opportunities on the organization's business, strategy and financial planning

## RISK MANAGEMENT

Is used to identify, assess and manage relevant climate-related risks

## METRICS AND TARGETS

Are used to assess and manage relevant climate-related risks and opportunities

## GOVERNANCE

### Board oversight

Read more in CORPORATE GOVERNANCE REPORT 2023

### The role of management

Read more in the SUSTAINABILITY REPORT 2023

**Sustainability Report:** page 4,5

**CDP:** Categories C1.1, C1.2, C1.3

**CSA:** Category 2.6.1, 2.6.3

## STRATEGY

### Risks and Opportunities

Read more in Risk Management

### Financial and business impact

Read more in the FINANCIAL STATEMENTS

### Scenarios

Read more in the SUSTAINABILITY REPORT 2023

**Sustainability Report:** page 48, 49, 50, 51, 52

**CDP:** Categories C2.1, C2.2, C2.3, C2.4, C3.1, C3.2, C3.3, C3.4, C3.5

## METRICS AND TARGETS

**Sustainability Report:** page 11,35,  
Read more in Annex ESG Performance, GRI and SASB

**CDP:** Categories C4.1, C4.2, C4.3, C5.1, C6.1, C6.2

**CSA:** Categories 2.2 and 2.6.9

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## CURRENCY TRANSLATIONS

All monetary amounts in this presentation are expressed in U.S. Dollars (\$ or US\$). Currency translations from pesos into U.S. dollars use the average monthly exchange rates published by Central Bank of Mexico. These translations do not purport to reflect the actual exchange rates at which cross-currency transactions occurred or could have occurred.