

SUSTAINABILITY REPORT

2017





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MESSAGE FROM THE CHAIRMAN OF THE BOARD

Dear shareholders,

2017 was a year of significant achievements for GCC. We consolidated our most recent acquisition in the United States, we broke sales records and progressed in all our strategic pillars, sustainability included.

We are aware that the years to come will be challenging, not only because of the competitive environment, but also by economic factors in the regions where we operate. However, we are on the right track to be acknowledged by our customers as a partner who generates the greatest value in their construction projects. We continue working to be a sustainable, growing company, a great place to work and a solid investment for you.

We are achieving this through **4 strategic pillars**:

- **Customer Service**

We have focused our strategy, philosophy and corporate values on our customers. We work together with them to find quality products and solutions, with a more sustainable and resilient offer.

- **Sustainable Growth**

We are aware of the need to implement growth strategies that are sustainable in the long run. We will continue to pursue opportunities for acquisitions, increased capacity and organic growth, always working on our sustainability system for a proper economic-environmental-social balance.

- **People**

As part of our steadfast effort to be a great place to work, we have driven the Health and Safety program, with the purpose of not only reducing the risks in our operations but of also improving the quality of life of all of us who work at GCC.

- **Innovation**

We consider innovation as a driving force of our strategy, which is focused not only on developing products and lasting solutions, but also on making our operations more efficient.

Throughout this report, we will present our sustainability results, together with the specific actions we are implementing.

On behalf of the Board of Directors and all GCC's collaborators, we appreciate your trust. We will continue to strengthen our commitments regarding sustainability, allocating resources and prioritizing projects. We are positive that with the continuous support of all our stakeholders, we will enhance our performance and achieve our long-term vision.

Sincerely,

Federico Terrazas Becerra

Chairman of the Board of Directors
Grupo Cementos de Chihuahua



MESSAGE FROM THE CEO

To all our stakeholders,

I am very pleased to share our sustainability results that we achieved in 2017. You will be able to see our progress, the obstacles we have faced and the programs that we will be working on; all these efforts are aimed towards our long-term vision.¹

The competitive environment and the different economic scenarios pose a challenge on organizations to maintain a responsible balance in sustainability. GCC has been no exception; for this reason we have set clear goals and allocated resources for the proper implementation of our sustainability process. We will continue developing practices will allow us to enhance sustainability in each and every action and thus mitigate any impacts on the environment, reduce risks in our processes, collaborate with the communities where we operate and maintain the profitability needed to continue growing.

Financial Performance:

In 2017 we achieved a 24% year-to-year sales increase, reaching US\$925 million. This result reflects a strong demand in the United States and Mexico, the rapid integration of the assets acquired in Texas and New Mexico at the end of 2016, a better price scenario and favorable climate that extended the construction season in both countries. In addition, the efficiencies achieved supported EBITDA growth, reaching US\$250 million, 32% above 2016. With lower financial expenditure, the Consolidated Net Profit totaled US\$83 million, 20.5% higher than the previous year.

At the same time we reduced our net leverage (Net Debt/EBITDA) from 2.57 times to 1.86 times upon closing 2017. This year, the rating agency S&P Global Ratings upgraded our global credit and corporate debt rating from BB- to BB, with a stable outlook given the rapid integration of assets and the accelerated decline in financial leverage.

Environmental Performance:

We continue working on different fronts to reduce our environmental impact. Even with the integration of the new plant in Texas, we have decided to maintain the goal of reducing CO₂ per ton of cement by 9%² through 2020.

To date, we have reduced emissions by 7% as a result of because of:

- The increase in the use of alternative fuels up to 11%. In 2017, we replaced coal and natural gas fossil fuels with 81 thousand tons of alternative fuels.
- The increase in the production of composite cements, which are less intensive in energy consumption. This led to reducing our clinker/cement ratio, which today is at 88%.

Social Performance:

During 2017 we continued supporting social programs focused on improving the areas of education, infrastructure and social welfare, as well as promoting culture, with support to over 65 organizations in Mexico and the United States. We are active members of international organizations working for sustainability, among which the following stand out: The Cement Sustainability Initiative (CSI) of the World Business Council for Sustainable Development (WBCSD) and CESPEDS a member of the WBCSD global network. We are also part of national organizations such as the Mexican Business Coordinating Council, and the Mexican Center for Philanthropy (Cemefi).

It is important to mention that without the dedication of all of us who work at GCC, the preference of our customers, the participation of our suppliers, the support of the communities where we are present and the commitment of the Board of Directors, these results would not have occurred. I thank each one of them for their support us to build together a more sustainable GCC.

Sincerely,

Enrique Escalante

CEO

Grupo Cementos de Chihuahua

Notes:

1. GCC Philosophy: mission, vision and values pages 19-21.
 2. Reduction estimated considering 2005 as the base year.
- For further details, see the Emissions Section in Chapter 3.

A large industrial facility, likely a cement plant, is shown at dusk. The sky is a deep blue with some clouds. In the foreground, there are large, rounded structures and a tall, complex tower with many levels and scaffolding. The word "ABOUT" is written in large, white, sans-serif capital letters across the middle of the image.

ABOUT

We present to our stakeholders our Annual Sustainability Report, which makes known the Corporation's main results and the manner in which we have worked to meet our sustainability goals during the period between January 1st and December 31st, 2017. This report has been formally reviewed and approved by our CEO; it was officially disclosed in April 2018, at the stockholders meeting held by Grupo Cementos de Chihuahua, S.A.B. de C.V. (GCC). **(102-50)**

This report was prepared using the principles and foundations recommended by the GRI (Global Reporting Initiative), core version, regarding the definition of its contents, including stakeholders, sustainability context, materiality and comprehensiveness.

• **Aligned to the Global Reporting Initiative (102 – 49) (102 – 56)**

With the purpose of improving the Corporation's communication on sustainability with our stakeholders we applied the Global Reporting Initiative Guidelines and Standards (GRI Standards) to prepare our Sustainability Report using the "in accordance" core option, without external verification.



THIS REPORT

(103 – 32)

The content of this account is under the responsibility of GCC's Sustainability Committee, chaired by the CEO. The Committee analyzes and approves each of the topics discussed within this document, ensuring the legitimacy of every aspect included in this Sustainability Report.



A soft-copy of this Report is available at: www.gcc.com

GCC welcomes any feedback or questions from our stakeholders regarding this Report; please contact:

(102 – 53) Manuel Fernández de la Mora or the Corporate Communication Area, at the following email addresses: mfernandez@gcc.com and comunicacion.corporativa@gcc.com

OUR COMPANY

ABOUT GCC (102-5)(102-6)

GCC is a corporation with a global and sustainable approach. Founded in 1941, it is a vertically integrated controlling company with operations in Mexico and the USA; whose subsidiaries are mainly devoted to producing and selling gray Portland cement, mortar, ready-mix concrete, aggregates, concrete blocks, plaster and other construction materials.

01

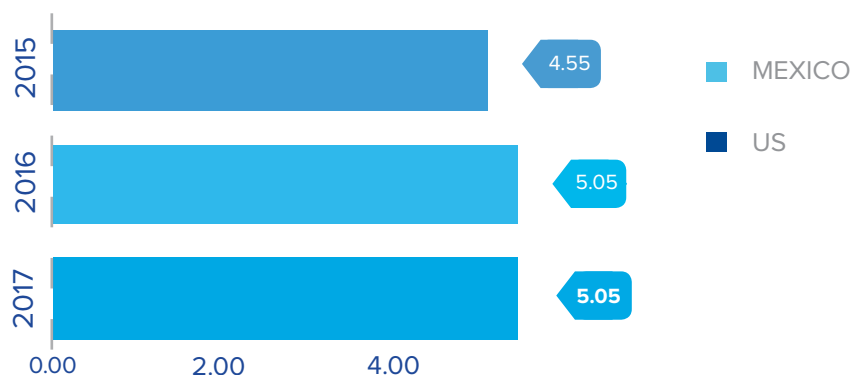




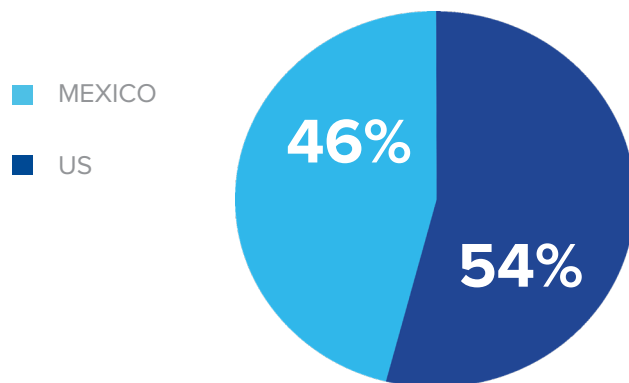
OUR COMPANY

CEMENT INSTALLED CAPACITY

million metric tons

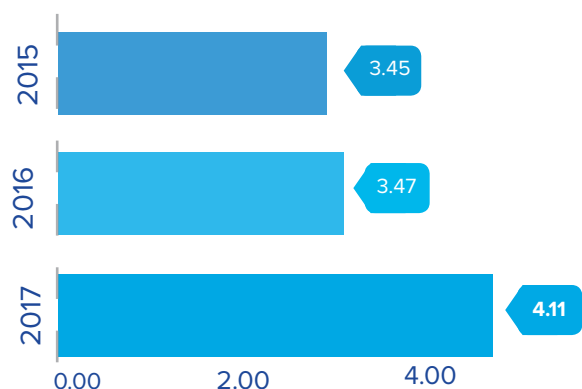


EMPLOYEE PERCENTAGE BY REGION



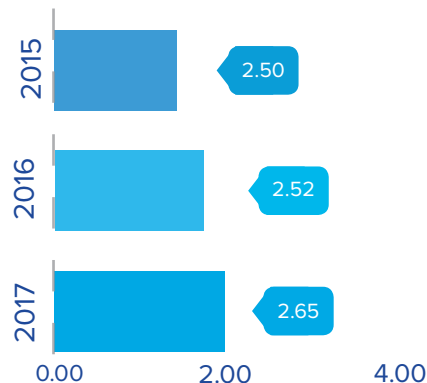
SHIPPED CEMENT VOLUMES

million metric tons



SHIPPED CONCRETE VOLUMES

million metric tons



3,026

Total number of employees

2,745 Male
281 Female

72% Non-unionized
28% Unionized



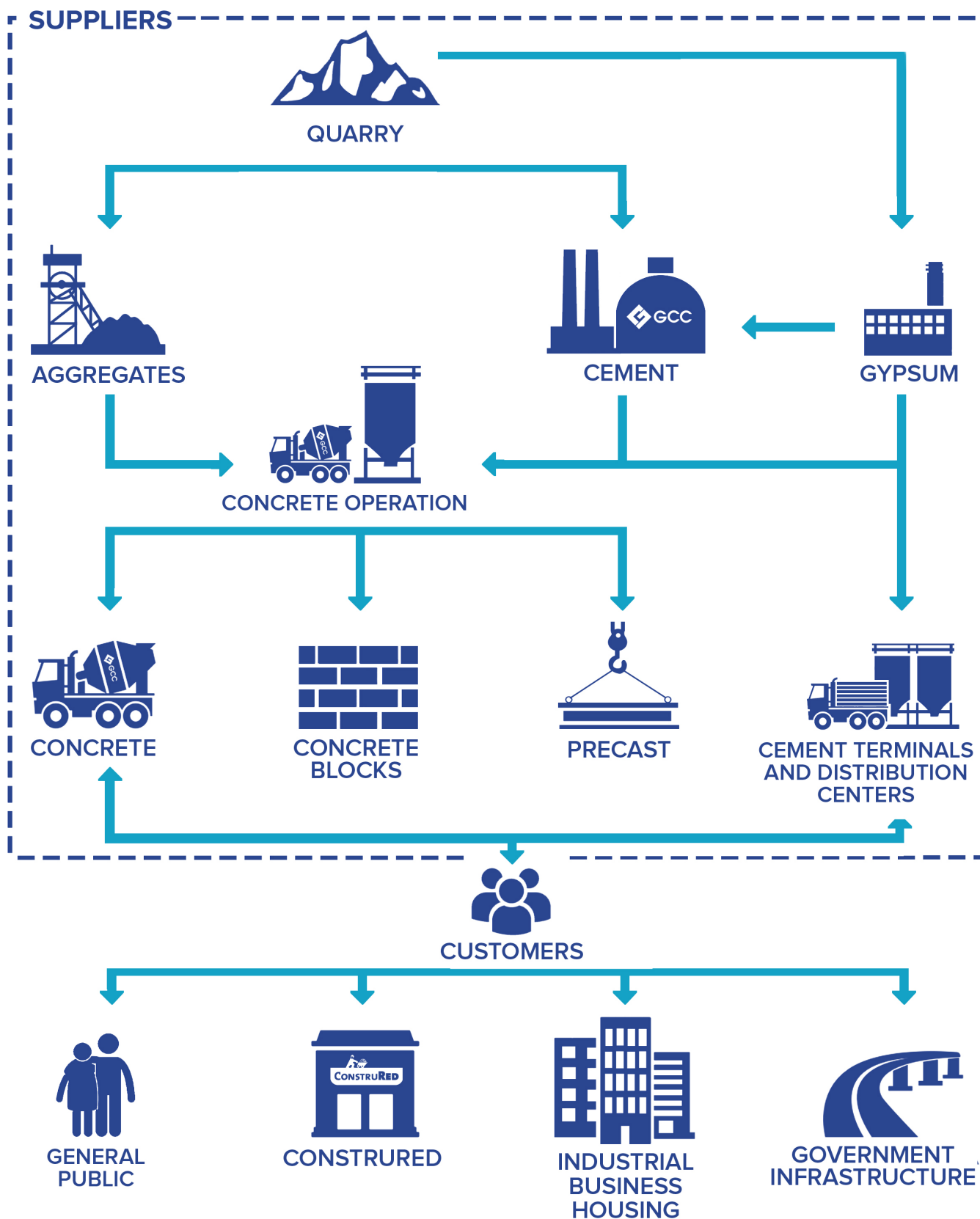
2017

CORPORATION'S CAPACITY

	MEXICO	USA	TOTAL
CEMENT			
Cement plants	3	4	7
Cement capacity (million tonnes)	2.29	2.76	5.05
Cement distribution terminals	2	19	21
Distribution centers	-	3	3
CONCRETE			
Concrete plants	40	92	132
Ready mix concrete trucks	247	489	736
AGGREGATES			
Aggregate plants	4	6	10
BLOCKS AND PREFABS			
Concrete block plants	6	-	6
Concrete prefabs plants	2	-	2
OTHER PRODUCTS AND SERVICES			
Transport trucks	155	276	431
Gypsum plants	1	-	1
Asphalt plants	-	5	5
Coal Mine	-	1	1
Railway hoppers		1,900	1,900

OUR BUSINESS MODEL (102-9)

Below, are the main elements of the supply chain for the organization's activities, products and main services:



CEMENTS

GCC offers a wide range of cement products for different uses and industries. Cement is the main ingredient of ready-mix concrete.

READY MIX

Ready mix concrete is the cement mixture, stone aggregates and water, which may contain chemical or mineral additives.

AGGREGATES

Aggregates are materials, like stone, sand and gravel, used as the main ingredients for concrete and other construction means.

CONCRETE BLOCK

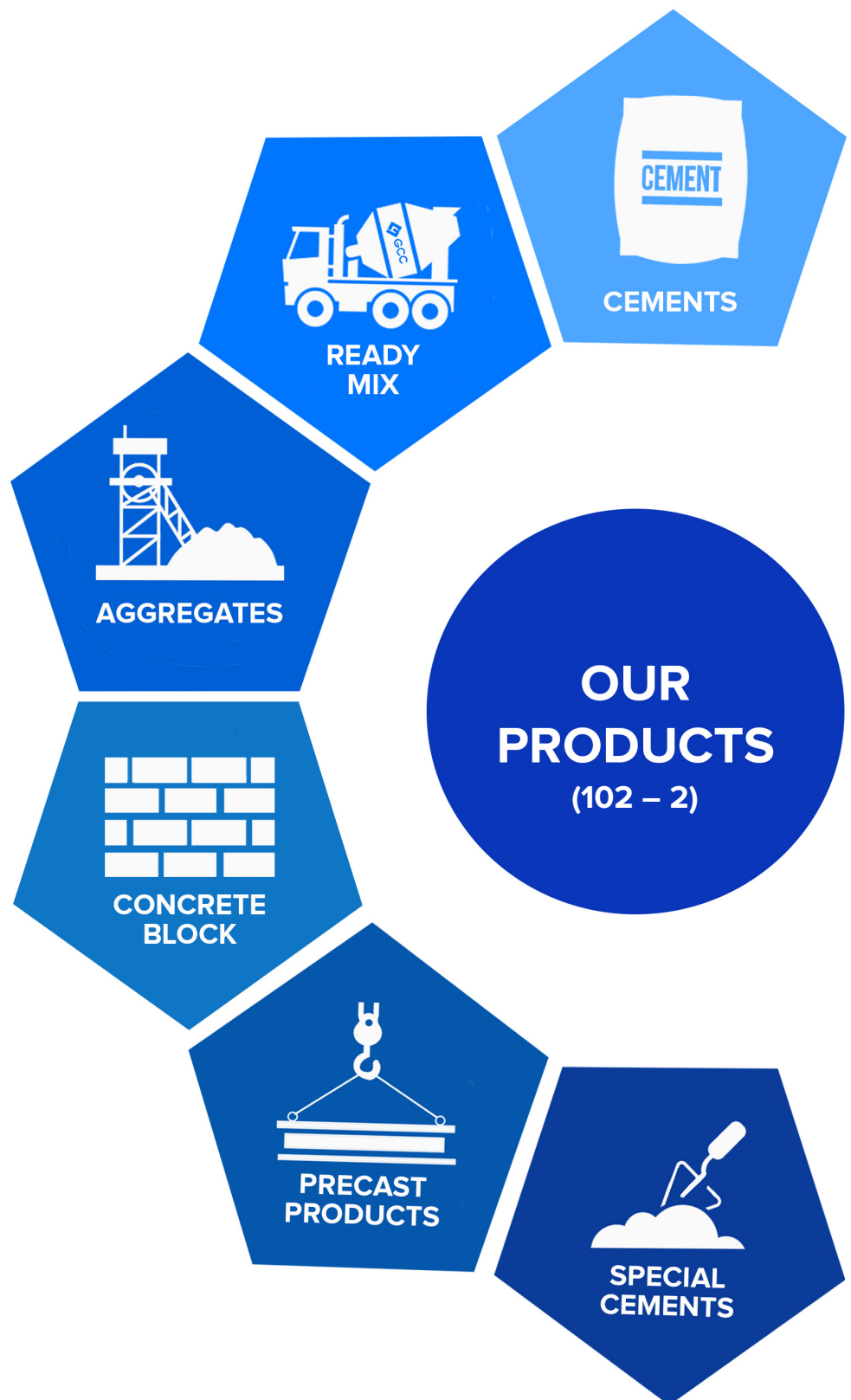
The concrete block is a right rectangular prism-shaped, precast piece, with one or more vertical hollow cores to be used in simple or structural masonry systems.

PRECAST PRODUCTS

Precast products are made of prestressed concrete, offering solutions for the construction of infrastructure as well as commercial and industrial buildings.

SPECIAL CEMENTS

These cementing products were developed to provide special characteristics to concrete and therefore offer specific solutions for our customers.



INITIATIVE MEMBERSHIPS

(102 – 12) (102 – 13)



CEMENT SUSTAINABILITY INITIATIVE (CSI)

An organization consisting of 24 major cement producers with operations in more than 100 countries pursuing sustainable development. To date, CSI is the most important sustainability initiative in the cement industry and is highly regarded world-wide.



CESPEDES

Founded in 1994 by Mexican entrepreneurs to face the challenges of sustainable development posed by Mexico's incorporation into the global markets. CESPEDES is a member of the World Business Council for Sustainable Development (WBCSD) network and the Mexican Business Coordinating Council; it currently consists of a Board of Directors from 33 companies representing the most important sectors of the economy that provide guidance and resources.



UNITED NATIONS GLOBAL COMPACT

The United Nations Global Compact is an international initiative that promotes the implementation of 10 Principles, universally accepted to promote Corporate Social Responsibility (CSR) in the areas of Human Rights and Business, Labor Standards, the Environment and the Fight against Corruption in the activities and business strategy of the companies.



MEXICAN CHAMBER OF CEMENT

A Mexican association that represents the sector and adopts programs that contribute to the development and expansion of economic activities, safety, sustainability and innovation within the existing legal framework.



PORTLAND CEMENT ASSOCIATION

A United States-based organization that participates in the establishment of industrial cement manufacturing standards, promotes the economic development of industry, safety, sustainability and innovation in every construction aspect.

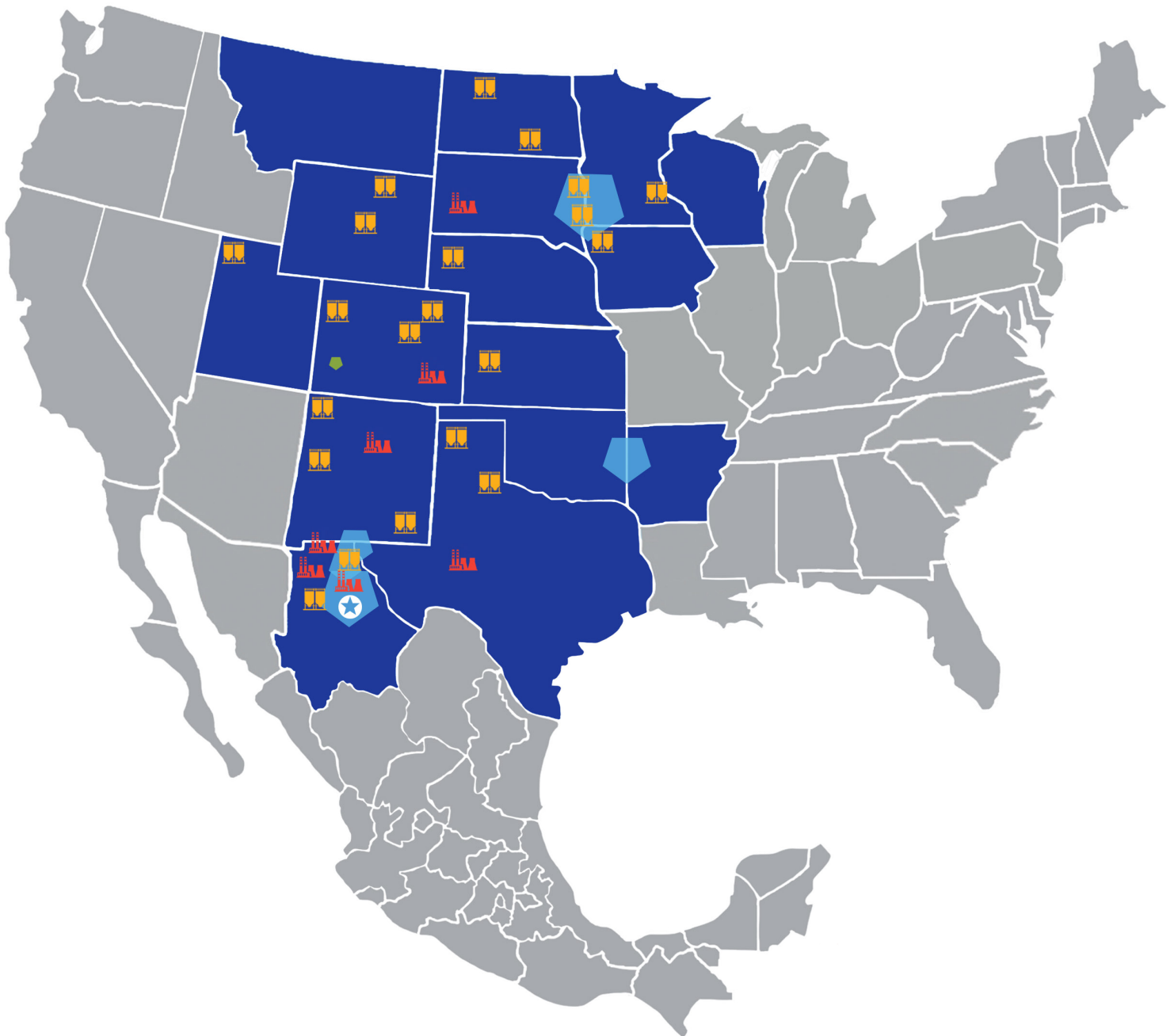


SOCIALLY RESPONSIBLE COMPANY

The purpose of the Mexican Center for Philanthropy (Cemefi) and the Alliance for Social Business Responsibility (AliaRSE) is working in the strategic venues of business social responsibility. This is a voluntary effort by its members, companies committed to implementing socially responsible and continuous improvement management practices, as part of our culture and business strategy.

OUR GEOGRAPHIC FOOTPRINT

(102 – 4)



★ **Corporate Office**
CHIHUAHUA, MÉXICO



Cement plants



Cement terminals



Ready Mix plants



Coal Mine





GCC's STRATEGIC PLAN

The pillars that support our strategy are:

Increasing Profitability

GCC increases its profitability by increasing efficiency, reducing costs and implementing an adequate pricing strategy for the markets in which it operates. In addition, GCC has a network of plants and distribution hubs strategically located that provide for prompt, efficient and low-cost product delivery.

Offering our Customers Technical and Logistic Services

GCC constantly strives to improve its robust cement distribution logistics network, which is strategically located to guarantee customer proximity and allows ensuring availability of our products. GCC has developed strategic alliances in Mexico through the retail network “Construred”, which mainly serves our customers in the self-construction segment.

Expanding our Products Offer through Innovating Solutions

GCC continually seeks to expand the range of products, services and value-added technologies for its customers and thereby generate better margins, focusing on increasing integrated solutions, expanding its portfolio of precast products and develop cement products specialized with specific traits for your application.



Fostering Sustainable Development

GCC is committed to social and environmental sustainability in all its operations. It has adopted the principles of the Cement Sustainability Initiative (CSI) as a basis for the generation of its sustainability system.

Pursue Operating Expansion and Geographic Positioning

GCC is determined to continue consolidating and expanding through organic growth, increasing its production capacity and the acquisition and integration of new business.

Developing Human Capital and Investing in the Local Communities

GCC has developed cutting-edge programs in safety, health and welfare, as well as the formation of the GCC Foundation, which invests in projects to address the specific needs of the communities where we operate. In order to attract and retain highly qualified human capital, GCC is committed to being acknowledged as a great place to work. In this aspect, we promote talent development through our associates' mobility.

The background of the image is a blurred industrial facility, likely a cement plant, featuring tall silos, conveyor belts, and complex metal structures under a clear blue sky. In the foreground on the right, a person's arm is visible, wearing a black sleeve and a tan work glove with a logo. The overall scene conveys a sense of industrial strength and reliability.

MISSION

To be the supplier of choice in cement,
concrete and innovative solutions.



VISION

Our customers recognize us as a business partner that generates the most value to their construction projects. We're a sustainable growing company, a great place to work and a solid investment for our shareholders.

OUR VALUES

GCC's values help us guide all our actions and the way we should work.





We are committed to carry out all our actions with responsibility to minimize any risk that could endanger the safety of our employees or anyone interacting with our operations. Our healthy lifestyle and best safety practices have earned many awards. We will continue working in projects focused on improving the health and safety of all our collaborators, leading us to be an incident-free organization.

At GCC, the customer comes first. Our systems allow us to anticipate and look for optimum solutions to consistently meet your needs. Our goal is to make business easier with GCC.



Our behavior is ruled by honesty, respect and ethics. We assume our commitments with responsibility, we are congruent between what we think, what we say and what we do, we maintain an open mind to the reasons or ideas of others. Our Code of Ethics is clear and has access and vigilance mechanisms to ensure that our behavior reflects GCC's values.

Our internal and external relationships are aimed at creating synergies, pursuing mutually beneficial goals and continuous and a transparent dialog. Collaboration is a fundamental element to achieve our purposes.



We create value by finding new ways for product-making, services and processes, which translates into better solutions. We undertake the implementation of improvements with initiative as if it were our own business, supporting creativity, initiative and tolerance to risk in our collaborators.

Our actions are executed with passion, dedication, depth and commitment in the search for perfection and sustainability. We set ambitious goals by mutual agreement and we commit to achieve the results.



SUSTAINABILITY STRATEGY

In order for GCC to increase its value in the long term and be in constant growth, we work to achieve a sustainable balance based on three axes.



FINANCE

Our financial goal is to maximize our stockholders' value, increase profitability on capital invested, reduce the cost of capital and strengthen and expand our geographic footprint.



ENVIRONMENT

We are researching, developing and implementing initiatives to mitigate any impacts to the environment.

We are currently working on (i) developing better-performing composite cements that allow reducing clinker/cement factor, (ii) manufacturing thermal products and (iii) increasing the use of alternative fuels and raw materials.



COMMUNITY AND EMPLOYEES

Through our GCC Foundation we participate in specific projects with the communities that we serve.

Additionally, we have programs to improve safety, health and welfare of our workers, their families and suppliers.



SUSTAINABLE DEVELOPMENT GOALS

As part of the World Agenda for Sustainable Development heading into 2030, the General Assembly of the United Nations agreed in September, 2015 to work with 17 Sustainable Development Goals (SDG). These goals are aimed at ending poverty, fighting against inequality and injustice, and address climate change.

GCC, committed to the environment and society, will work with different world initiatives on sustainability, so that in 2018 we may incorporate five Objectives in our strategy. To achieve this, we will carry out a detailed process that allows prioritizing the Objectives, defining specific goals and developing action plans for the short, medium and long term. go plazo.



• **GOAL 7:**

Affordable and Clean Energy.

• **GOAL 9:**

Industry, Innovation and Infrastructure.

• **GOAL 11:**

Sustainable Cities and Communities.

• **GOAL 12:**

Responsible Consumption and Production.

• **GOAL 13:**

Climate Action.

We have selected these objectives because they are focused on addressing the most important challenges in our sector in terms of reducing emissions, making use of resources, security and growth in our society.



GOVERNANCE

At GCC we believe that a great part of our business success lies in having an honest, clear and open communication with our stakeholders. We encourage the plurality of cultures and opinions.

Board of Directors (102 – 18)

We have also provided you, our shareholders, with information and results that boost confidence and transparency that your investment is under proper management.

GCC's administration is entrusted to a Chief Executive Officer and a Board of Directors, who establish the general strategy and guidelines to conduct run the business.

PROPIETARY DIRECTOR		ALTERNATE DIRECTORS	
CHAIRMAN OF THE BOARD: Federico Terrazas Becerra			
Federico Terrazas Becerra		Alberto Terrazas Seyffert	
Federico Terrazas Torres		Manuel Antonio Milán Reyes	
Miguel Márquez Prieto		Silvia Márquez Villalobos	
Enrique G. Terrazas Torres		Luis Enrique Terrazas Seyffert	
Martha Marquez de Corral		Ana Cecilia Márquez Villalobos	
Luis Márquez Villalobos		Héctor Enrique Escalante	
Fernando Ángel González Olivieri		Sergio Mauricio Menéndez Medina	
José Antonio González Flores		Luis Guillermo Franco Carrillo	
Ramiro Gerardo Villareal Morales		Antonio Díaz García	
Juan Romero Torres		Rafael Garza Lozano	
Héctor Medina Aguilar (I)		Armando J. García Segovia (I)	
Fernando Ruiz Sahagún (I)		José Alberto Araujo Saavedra (I)	
Rómulo Jaurrieta Caballero (I)		Manuel Esparza Zuberza (I)	
Pedro Miguel Escobedo Cónover (I)		Gilles Alain Boud'hors Leautad (I)	

I = INDEPENDENT



Sustainability and Health and Safety Committees (102-19)(102-20)

In order to manage the sustainability strategy and develop specific plans, the Sustainability Committee and the Safety and Health Committee were formed to provide support to our operations for its proper implementation.

SUSTAINABILITY COMMITTEE	HEALTH AND SAFETY COMMITTEE
Enrique Escalante	Enrique Escalante
Manuel Fernández de la Mora	Manuel Fernández de la Mora
Ronald S. Henley	Ronald S. Henley
Jesús Rogelio González Lechuga	Jesús Rogelio González Lechuga
Daniel E. Helguera Moreno	Daniel E. Helguera Moreno
Carolina Prieto Gomez	Dale Kotzea
Saúl Alonso Alvidrez	Matthew Rowell
Raúl A. Ambriz Sotelo	Roberto J. Molina Hernandez
Gina Nance	Edward Hernandez
Ismael Terrazas Veyna	Eduardo Ituarte

ETHICS AND INTEGRITY (102 -16)

We are committed to managing with integrity, so it is vitally important that all our collaborators are committed and put into practice our Code of Ethics and Share it with third parties.

GCC's Code of Ethics is a set of standards that were established so that all those working in the group adhere to the same rules of coexistence, act in an expected manner and guide their decisions and work actions based on the philosophy of the organization, i.e based on the mission, vision and values of GCC. We are in the process of extending the code of ethics to all our suppliers.

Ethics Committee Annual Report(102 – 17)

At GCC we have an Ethics Committee, which is made up of representatives from different areas of the company and by people who are role models for honesty. It is important to point out that this Committee is governed by internal regulations for decision making and that it has documents that have been shared with our collaborators, in order to give transparency, objectivity and impartiality to any sanction imposed according to our code.

During 2017, 30 cases were reported in the Confidential Whistleblowing System, The Ethics Committee solved 29 of those cases.

The main topics addressed were:

- (i) Conflict of interest
- (ii) Health and Safety
- (iii) Use of Assets
- (iv) Inquiries and Ethical Dilemmas

Whistleblowing Mechanisms:

The Code of Ethics has confidential and anonymous whistleblowing mechanisms, which help our people point out at any attitudes straying from the Code.

Email: gcc@ethic-line.com
Phone: 01 800 062 4008
Website: www.ethic-line.com/GCC





OUR STAKEHOLDERS

(102 – 40) (102 – 42)

At GCC we have identified seven types of stakeholders and assigned specific areas responsible to properly meet their needs:



ECONOMIC MANAGEMENT

At GCC we try to maintain and improve our profitability by increased efficiency in operations, cost reduction and an appropriate pricing strategy suitable for the markets in which we operate.

It is our intention to continue growing organically in the markets in which we operate and through acquisitions that allow us to consolidate our presence or increase our geographic footprint.

02





FINANCIAL PERFORMANCE AND GROWTH

In 2017, we achieved an increase in sales of 24% compared to the previous year, reaching US \$ 925 million. This result reflects strong demand in the United States and Mexico, the rapid integration of assets acquired in Texas and New Mexico at the end of 2016, a better price scenario and a favorable climate that extended the construction season in both countries. In addition, the efficiencies reached supported EBITDA growth, reaching US \$ 250 million, 32% above 2016. With lower financial expenditure, the Consolidated Net Profit totaled US\$83 million, 20.5% higher than the previous year.

At the same time we reduced our net leverage (Net Debt/EBITDA) from 2.57 times to 1.86 times upon closing 2017. This year, the rating agency S&P Global Ratings upgraded our global credit and corporate debt rating from BB- to BB, with a stable outlook given the rapid assets integration and the accelerated decline in financial leverage.

For further details on our financial performance, please see our Annual Report, available in the Investor Relations section on our webpage www.gcc.com.

CEMENT PRODUCTION CAPACITY



5.05

million metric tonnes

**Cement Installed
Capacity**

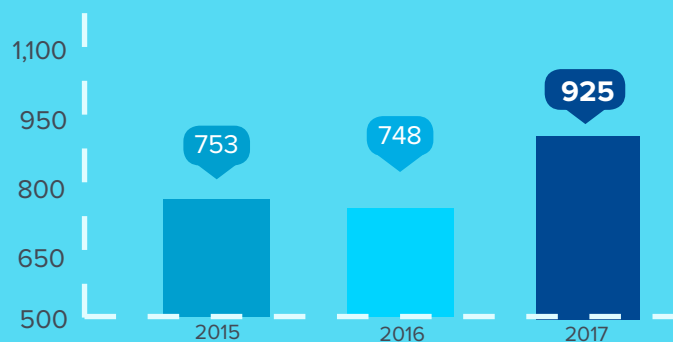
BUSINESS PERFORMANCE BY REGION

	Dispatched Cement Volume	Dispatched Concrete Volume
MEXICO	28.5%	35.7%
UNITED STATES	71.5%	64.3%



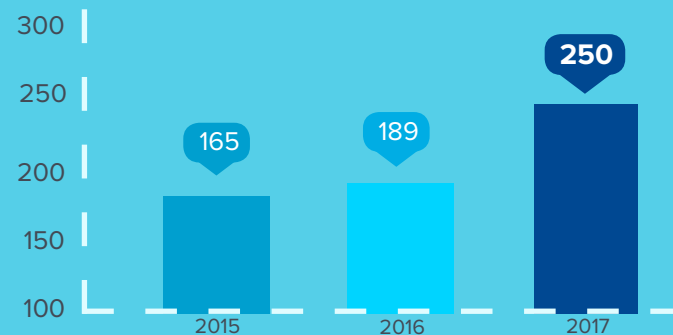
NET SALES

(million US dollars)

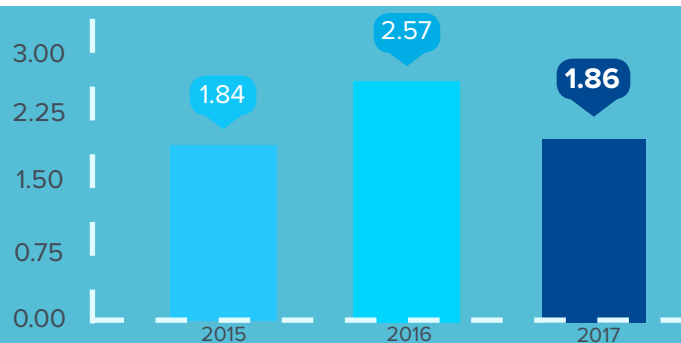


EBITDA

(million US dollars)

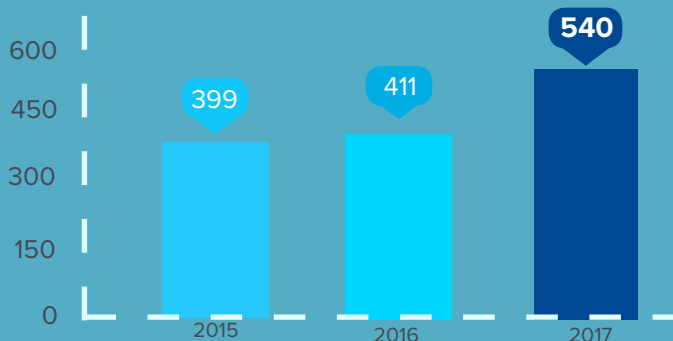


NET DEBT/ EBITDA RATIO



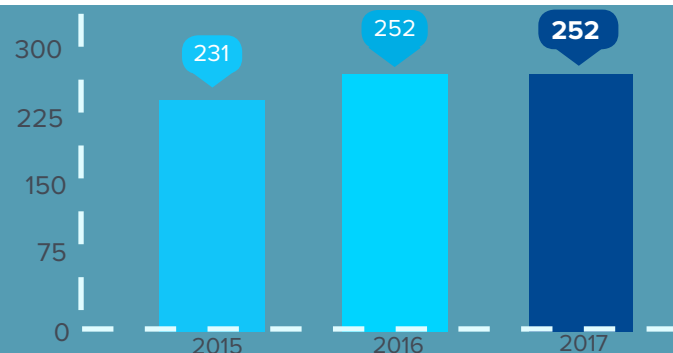
NET CEMENT SALES

(million US dollars)



NET CONCRETE SALES

(million US dollars)



Direct economic value generated and distributed: (201-1)

The table below shows the economic value generated and distributed (EVG&D) accrued to 2017, including the basic components for the organization's global operations, such as revenue, general data, benefits to employees, payments to suppliers, payments to government and donations.

ECONOMIC VALUE (MILLION US DOLLARS)

	2015	2016	2017
Income	753.0	748.0	925.0
Operating, administrative and sales general expenses	506.0	480.5	585.6
Employee benefits expenses	144.2	142.8	166.5
Payments to vendors from capital	41.1	42.1	75.7
Government payments	9.3	8.6	9.6
Donations	0.6	0.8	0.7
Retained economic value	51.8	73.2	86.9

Investment on infrastructure and supported services: (203-1)

The most significant investments in infrastructure and services in the last 3 years are shown below: Growth in 2017 was mainly due to the modernization of Kiln 6 of the Rapid City Plant, located in the state of South Dakota in the United States of America, in addition to the purchase of transportation equipment to strengthen our logistics network.

INVESTMENTS ON INFRASTRUCTURE AND TYPES OF SERVICES (MILLION US DOLLARS)

	2015	2016	2017
Modernization and automation of cement plants	26.3	27.2	50.4
Transport equipment	13.6	19.9	18.3
Coal mine	4.5	5.0	5.0
Aggregates plants	2.4	0.3	2.5
Information systems equipment	2.2	2.9	0.6
Distribution Centers	0.8	1.7	0.1
Lots and buildings	1.1	0.9	0.1
TOTAL	50.8	57.9	77.1

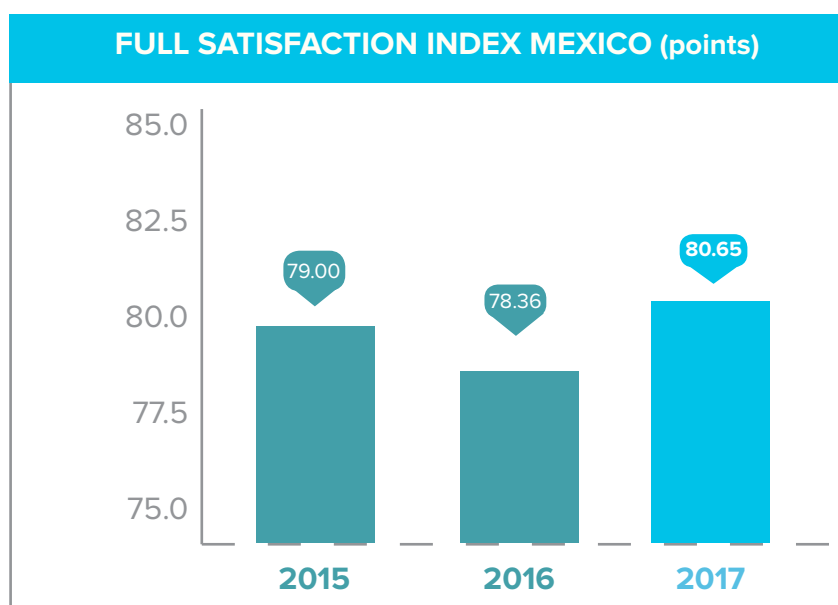


CUSTOMER RELATIONS



At GCC, our customers are the core of our business, we therefore strive to have them recognize us as a partner that generates the greatest value in their construction projects.

To meet the needs of our customers we have a methodology that allows us to evaluate their opinion on the services received. We employ a tool called “Full Satisfaction Index” to provide decisive information that defines projects and improvement actions.





AUTOMATION OF IRONDALE HUB

In order to offer better service to our customers in the state of Colorado, and in the USA, and to optimize costs, the Irondale project 7x24 was developed to provide automated service in bulk cement sales, 24 hours a day. This project will be implemented in 2018, with support from our suppliers and the Automation and Information Technologies areas. Once the objectives have been met, we will scale this project to other cement hubs.

SUPPLIER RELATIONS (204-1)

In order to meet our business unit's quality, time and cost requirements for supplies and services, GCC has a Supplier Management System for selection, integration, assessment, feedback and development of the productive chain continuity.

In addition, we participate in programs to support local suppliers. GCC considers local suppliers those who have operations and GCC supplies their products and services at the states where our plants are located.

LOCAL SUPPLIERS EXPENSES PERCENTAGE		
2017	EUA	MÉXICO
No. Active Suppliers	3,009	1,719
No. Local Suppliers	1,991	1,128
% Local Suppliers	66%	66%
% Expense in Local Suppliers	58%	44%





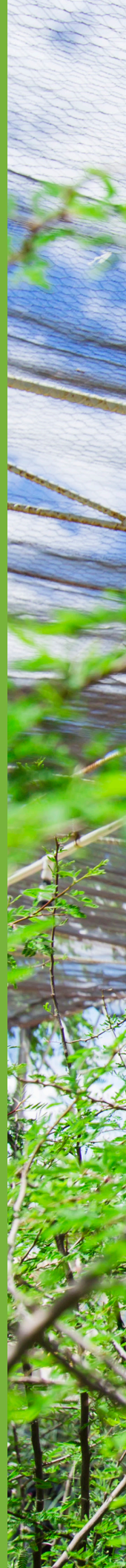
ENVIRONMENT

(103-1, 103-2, 103-3)

The cement industry is facing multiple environmental challenges arising from the extraction of raw materials from quarries, high energy consumption, and emissions generated in the manufacturing processes.

(102-11) GCC is committed to mitigating the environmental impact of our operations. To this end we have developed a system focused on four distinct areas: alternative fuels and materials, emissions, biodiversity and water.

03





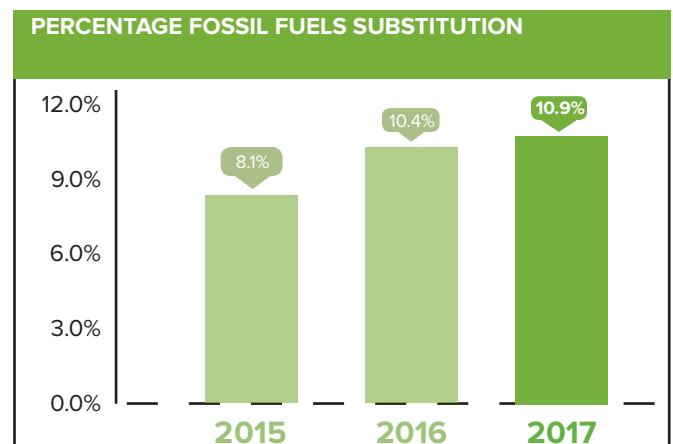
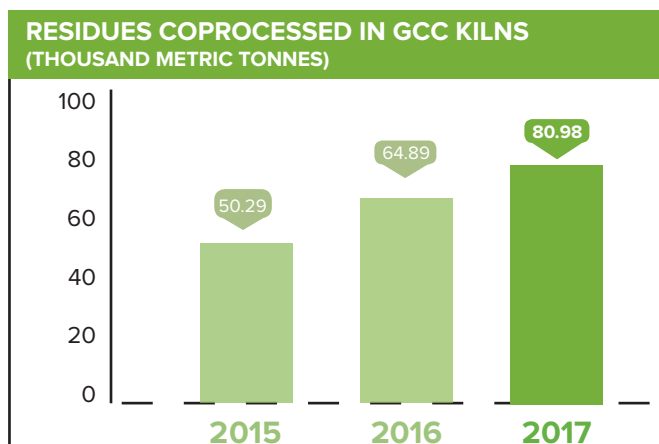


ENERGY AND CO-PROCESSING

(302-1, 302-3, 302-4)

To transform raw materials into cement we consume large quantities of thermal and electric energy; that is why at GCC we are working to achieve more efficient use of energy and increase the use of alternative fuels.

In 2017, our consumption of industrial byproducts or alternative fuels (nutshells, sawdust, tires, industrial waste, plastics) for kiln combustion reached **81 thousand tons**, a significant increase over the previous year.



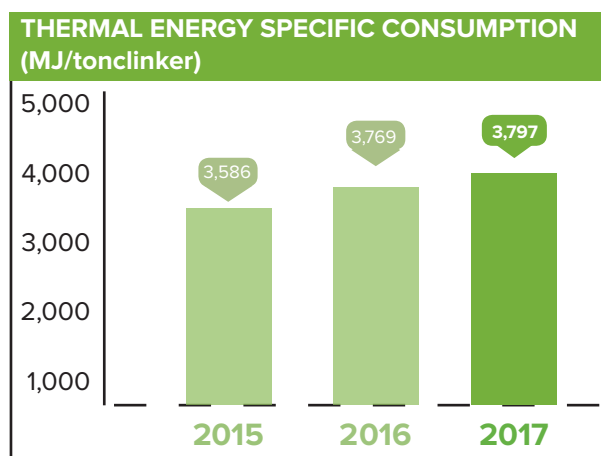
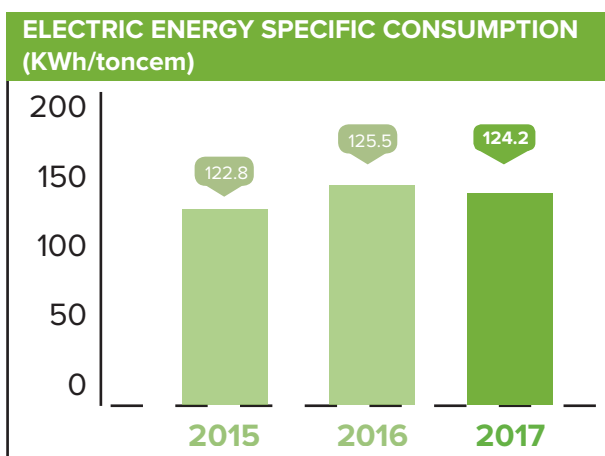
Managing these industrial byproducts poses challenges of availability, logistics, safety, quality and production. These 81 thousand tons represented a 10.9% substitution of fossil fuels, which has helped us reduce our CO₂ emissions (see the Emissions Section).

ENERGY CONSUMPTION FOR CEMENT PRODUCTION				
	UNITS	2015	2016	2017
Electric energy consumption	MWh	429,244	439,727	519,330
Thermal energy consumption	TJ	10,851	11,493	13,917
Fossil fuels thermal energy consumption	TJ	9,975	10,298	12,399
Alternative fuels thermal energy cons.	TJ	876	1,195	1,518
% Thermal energy substitution	%	8.1%	10.4%	10.9%
Thermal energy Specific Consumption	MJ/t Clinker	3,586	3,769	3,797
Electric energy Specific Consumption	KWh/t cem	122.8	125.5	124.2

We will continue to increase fossil fuel substitution at our plants in Mexico and the United States, pursuing our goal of 13.5% by 2020.

Throughout 2017, our specific electric power consumption was 124.2 kWh per ton of cement, including electric power consumed by our activities from the reception of raw materials to the cement silo. Total electric power consumption was 519 thousand MWh.

During that same period, the specific consumption of thermal energy in the cement kilns was 3,797 MJ per ton of clinker; it has gone up in the last two years due to the increase in natural gas consumption. Total thermal energy consumption was 13.9 thousand TJ, of which 1.5 thousand TJ were generated through alternative fuels, to substitute coal and natural gas.



These increases are attributable to the inclusion of the Odessa Plant, increase in production and change in the cements mixture.

FROEE Chihuahua

In order to increase the use of alternative fuels, the Chihuahua Plant started the implementation of a project named Fraccion Residual Organica de Eficiencia Energetica (FROEE) (Organic Residual Fraction of Energy Efficiency), which is divided into two stages.

Stage I (2017)

The first stage involved the process of receiving industrial waste (mainly plastics), primary shredding, separation of unwanted solids and metals, and secondary shredding. These reception and shredding processes created alternative fuels of a size adequate to be fed to the pre-heater, and supported further growth in fossil fuels substitution.

Thanks to this project the amount of industrial plastic waste received went up to 1,200 tons per month, reaching a total of 2,550 tons available to co-process.

Stage II (2018)

The second stage includes receiving shredded material from the primary and secondary shredding process described in the first stage followed by mechanical transportation, buffering, a weighing system and then feeding a new main burner prepared for an increase in the flow of alternative fuels.





MATERIALS USED (301-1, 301-2)



The raw materials **needed** to be transformed into cement are limestone, shale, clays, sands, iron and gypsum, as well as coal and natural gas as the main fuels. Within the Sustainability Strategy we look for other raw materials and fuels that reduce dependence on **non-renewable sources**.

We currently used secondary raw materials from other industrial processes, as well as alternative fuels.



ENVIRONMENTAL RESPONSIBILITY AWARD 2017

The Chihuahua State Government and the State Congress recognized GCC in the “Enterprises” category for our actions in favor of the environment for mitigating the impact of our operations. This award is granted to organizations, companies and individuals that have instituted outstanding policies, processes or actions to reduce environmental impact, as well as for generating sustainable labor practices.

This time, GCC Mexico Division received the award for its best practices implemented in the Juarez, Samalayuca and Chihuahua Plants for the use of alternative fuels instead of fossil fuels; the development and production of special and composite cements, which are less intensive in energy consumption; and for growing trees and plants in our nurseries.

**RAW MATERIALS USED FOR CEMENT PRODUCTION
(THOUSAND METRIC TONNES)**

	2015	2016	2017
Non- renewable raw materials	5,421	5,335	6,611
Renewable raw materials	117	111	139
Percentage of recycled raw materials	2.2%	2.1%	2.1%
Non-renewable auxiliaries (coal)	402	375	423
Renewable auxiliaries (residues)	50	65	81

In 2017, we used 139 thousand tons of raw material residual from other industrial processes, which represents a 2% substitution of natural raw materials.



EMISSIONS



CARBON EMISSIONS (305-1, 305-2, 305-4,305-5)

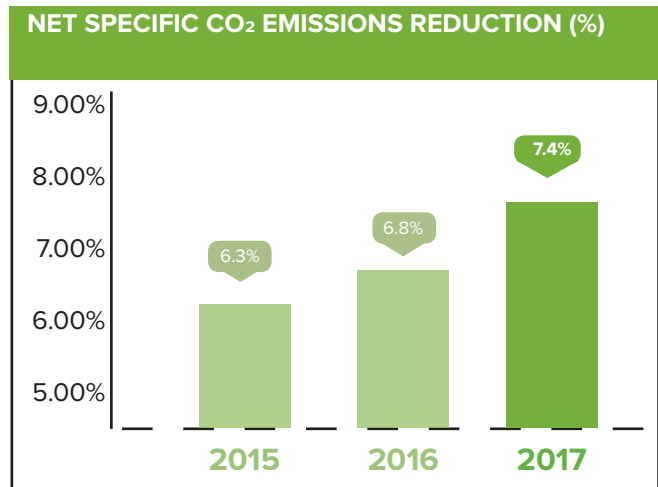
One of our commitments is to reduce greenhouse gas emissions through a decrease in the use of fossil fuels and the production of composite cements. Our challenge is to mitigate CO₂ emissions through specific projects in the cement plants.

The 2020 aim is a 9% reduction in the specific net emissions of CO₂ compared to the Base year 2005. So far this year we have achieved a 7.4% reduction in CO₂ intensity / tonne of cement.

CO₂ DIRECT AND INDIRECT EMISSIONS (THOUSAND TONNES)

	UNITS	2005	2015	2016	2017
Net CO ₂ direct emissions	thousand Tons	2,439	2,576	2,596	3,085
Indirect CO ₂ emissions	thousand Tons	382	282	314	392
Cementing product	thousand Tons	3,060	3,449	3,493	4,177
Net specific CO ₂ emissions	KgCO ₂ /t.cem	797	747	743	738
CO ₂ emissions reduction / base year	%		6.3%	6.8%	7.4%

This reduction of specific CO₂ specific emissions was achieved by the co-processing of industrial waste instead of fossil fuels, production of composite cements and the optimization of the productive processes.



SEMARNAT GRANTS GCC AN AWARD FOR “CLEAN TRANSPORTATION”

In the Seventh Clean Transportation Awards granted by the Ministry of the Environment and Natural Resources (SEMARNAT), GCC's transport operations were recognized with this award for its sustainable transport practices throughout the year.

“Clean Transportation” is a nationwide program that evaluates transportation units throughout the country, both freight and passenger, for the reduction of greenhouse gas emissions and fuel consumption. GCC, together with 129 other companies, received the award, for preventing close to 2.1 million tons of CO₂ emissions.



OTHER EMISSIONS (305-7)

The kiln combustion process emits substances such as NO_x, SO_x and dust in addition to CO₂. We are committed to going beyond the legal requirements to mitigate these emissions as well as CO₂ and have carried out actions such as the use of more efficient sleeves in the dust collectors, ammonia addition and activated carbon.

For gas measurement in the United States plants we use CEM's (Continuous Emission Monitors). In the Mexico plants we make measurements using precise tests. For the consolidated report we employ the approach established by the Cement Sustainability Initiative (CSI), "Guidelines for Emissions Monitoring and Reporting in the Cement Industry".

The table below shows the tons emitted in 2017:
(grams/ck metric tonne) :

UNITS		2015	2016	2017
NO _x	gr/tonclinker	1,484	1,479	1,643
SO _x	gr/tonclinker	108	148	127
Dust	gr/tonclinker	34	36	37

1) Information taken from the kilns with Continuous Emission Monitors (CEMs)

The increase in emissions reflects the incorporation of the Odessa Plant and the change in product mix. It is important to point out that all our emissions are below the standards set by environmental regulations.



BIODIVERSITY (304-1, 304-4)

The extraction of necessary raw materials from quarries introduces alterations in the surrounding ecosystem and biodiversity. At GCC we establish reclamation plans for the proper mitigation of these impacts. None of the quarries are in a protected area or an area that has been designated as having a high biodiversity value.

Our cement plant quarries currently have reclamation plans and 57% are in the implementation stage. Some of these plans include growing native trees and plants from the region in our own nurseries, to be planted later.

OPERATIONS LOCATED IN OR ADJACENT TO PROTECTED AREAS OR HIGH BIODIVERSITY VALUE AREAS

	2015	2016	2017
Active sites in MX	16	16	15
Active sites in USA	8	8	10
Sites with high biodiversity value in MX or USA	0	0	0
% Sites with high biodiversity value	0.0%	0.0%	0.0%

CHIHUAHUA PLANT NURSERY

At the plants in Mexico we develop nurseries that support projects to sustain biodiversity in our quarries and the communities where we operate. We have a production sequence for ornamental and forestry species with controlled conditions that favor their germination and growth.

FORESTRY PRODUCTION

The forestry production from our nurseries is aimed at environmental reclamation and compensation projects. Production reached over 20 thousand trees and plants this year.

Forestry species: Huizache (*acacia farnesiana*), Mezquite (*prosopis*), Chamizo (*adenostoma fasciculatum*), Ocotillo (*fouquieria splendens*).

ORNAMENTAL PRODUCTION

In addition to reclaiming our quarries, GCC supports reforestation projects promoted by municipal and state authorities, as well as the reforestation of urban zones: parks, schools and employee projects. We donate over 3 thousand plants for these purposes every year.

Ornamental species: Moro (*inula helenium*), Fresno (*fraxinus*), Arce (*acer campestre*), Tuya (*thuja*), Palma (*ricinus communis*), Lila (*syringa*).



RECLAMATION OF “MARIA EUGENIA” QUARRY

In pursuit of the comprehensive protection of ecosystems in mining (quarries exploitation), GCC has developed processes to reclaim the ecosystem using techniques and methodologies that ensure the survival of the native species (flora) in the region.

The reclamation program at the Maria Eugenia quarry was divided in two stages:

The first stage employed the method “stone barrier laid-out in level curves” (work type classified by the National Forestry Commission) for reclamation and soil preservation work. The method favors water availability, an increase in the amount of filtered water and reduces erosion by improving the quality of downstream water for forestry vegetation.

The second stage considers reforestation with native species, using a technique that provides water required for their proliferation until the wet season. This stage will be implemented during the rainy season in mid-2018, to guarantee the survival of the small plants, together with the techniques chosen for this project.



Water is one of the resources used in our cement manufacturing processes. Some GCC plants are located at areas suffering from water shortage. To reduce adverse impacts we practice proper water-care techniques; measuring consumption and identifying areas of opportunity, especially in the cement grinding processes, raw materials transfer and cooling down equipment in kilns.

Most of the water used by the cement plants is groundwater. During 2017 we used 623 thousand cubic meters of water to manufacture cement, with a specific consumption of 149 L/ton of cement produced.

TOTAL VOLUME OF WATER WITHDRAWAL			
	2015	2016	2017
Surface waters, including wetlands, rivers, lakes and oceans	0	3%	0
Groundwater	99%	96%	98%
Municipal water supply or other public or private water services	1%	1%	2%
Residual waters from another organization	0	0	0
Rainwater collected and stored directly by the organization	0	0	0
Total water extracted (thousand m ³)	1,902	1,770	1,646

PEOPLE AND COMMUNITY

In GCC we acknowledge that our people are our most important asset, and are firmly committed to fostering a safe and productive labor environment. We offer professional development opportunities to all our employees, we favor in-house promotion and encourage continuous improvement and a high-performance culture.







GCC PEOPLE

NEW HIRES BY AGE, REGION AND GENDER

2017	MEXICO		UNITED STATES	
Age	Men	Women	Men	Women
Under 30	109	23	56	4
30 to 50	120	8	110	13
Over 50	6	0	31	4
TOTAL	235	31	197	21

GREAT PLACE TO WORK

One of our goals is making of GCC one of the best companies to work for. To achieve this goal, each year the organization's environment is assessed, and actions plans are implemented to strengthen the organizational culture and enhance the company's work environment.

GCC has been recognized for several years by the **Great Place to Work Institute Mexico**, as a great place to work for in this country. Some of the characteristics that identify us are:

- The confidence we instill in our employees.
- The collaboration and companionship in our day-to-day environment.
- The pride and commitment to the job we do.

GREAT
PLACE
TO
WORK®

2017

Los Mejores Lugares
para Trabajar™

México

BENEFITS (401-2)

At GCC, we are aware of the importance of granting benefits to our employees. We offer competitive benefits that provide protection and peace of mind to enhance their living standards.

A Some of the benefits offered to our **non-union employees** in addition to those **required by law** are:



HEALTH INSURANCE



WELLNESS PROGRAM



SUPPLEMENTARY INSURANCE



SENIORITY AWARDS



RETIREMENT PROGRAM



SCHOLARSHIPS



EMPLOYEE DISCOUNTS



HEALTH & SAFETY

Responsibility for health and safety (403 -1) (403 -2) (403 – 3)

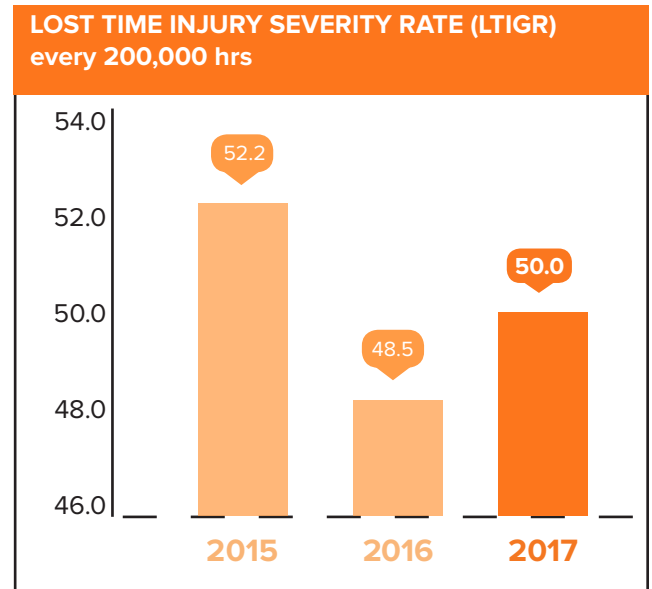
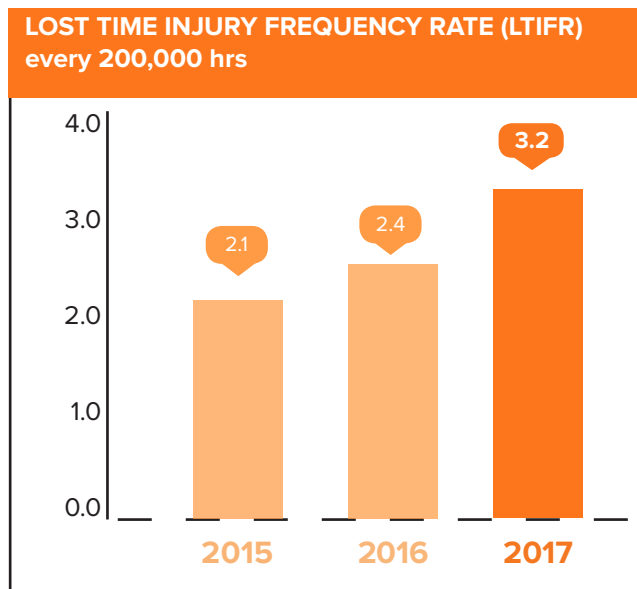
At GCC, we are committed to carrying out our operations safely and efficiently, as well as securing the well-being of anyone inside our premises and in our collaborators' families.

GCC's safety and health practices focus on **keeping safe** (1) people's integrity and (2) the equipment and facilities. Any employee, supplier or contractor may stop any process or activity that could be considered risky.

We are all responsible for behaving in a way that fosters health and safety, as well as reporting any potential risk. We are committed to carrying out every action responsibly, and to minimize the number of incidents.

In the last two years we have kept a **zero-fatality** index in both Divisions.

Below you will find, our accidents frequency and seriousness rating.



We are currently implementing an institutional program to improve safety, occupational health, and welfare for our employees and contractors. Our goal is not only to comply with the regulations in force at the sites where we operate, but also improve our welfare, vehicle driving, training and safety practices for anyone who enters our premises.



UNMP COMPREHENSIVE HEALTH PROGRAM 2017, CHIHUAHUA PLANT

To meet the goals of the Safety and Health at Work System (SASST), in 2017 the Raw Materials Unit (UNMP) in our Chihuahua Plant worked for the second year in a row in the “UNMP Comprehensive Health Program”, which included nutrition, psychology and physical exercise.

Some of the benefits from working in favor of these areas are:

- **Nutrition**

Nutritional education offered our staff the knowledge required to make a change of habits and move forward to a healthier life style. The effort involved their families as well.

- **Psychology**

Psychological support is aimed at awakening the desire for commitment and motivation to improve the participants' health and adopt healthy habits.

- **Physical activation and labor pause**

These activities brought physical and psychological benefits to our staff. The benefits that stand out include improving physical condition, preventing and controlling cardiovascular disease and reducing stress levels, in addition to favoring fellowship among the personnel.

TALENT MANAGEMENT (404-2)



Our talent attraction processes are carefully designed to identify potential professional expertise, abilities, skills and congruence with the company's values.

In **GCC** we stand-out for our efforts aimed looking after and developing our people through specific programs aimed at:

- **Developing and retaining our people.**
- **Promoting the proper use of knowledge and experience that make our company competitive.**
- **Maintaining competitiveness, in terms of opportunities, compensation and benefits.**
- **Keeping a sound, healthy and mutually beneficial relationship with the labor unions**

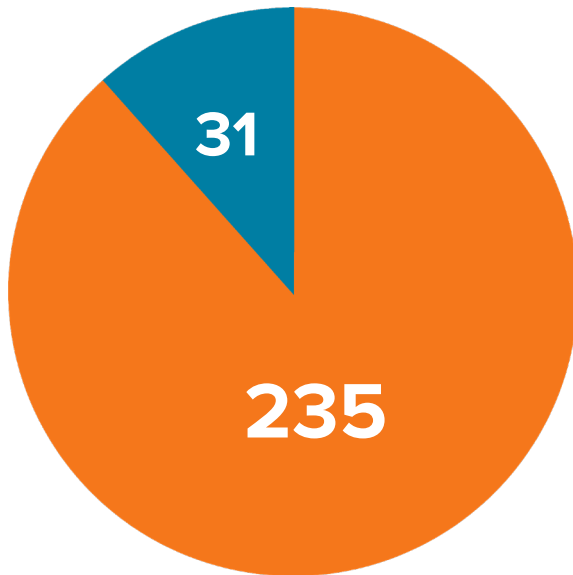
735 DAYS WITHOUT LOST TIME INJURIES REPORTED AT THE ODESSA PLANT IN TEXAS

At GCC, we are committed to carrying out every action responsibly to minimize the number of incidents. In May 2017, the Portland Cement Association (PCA) in the United States recognized our Odessa Plant, together with 8 other plants, for excellent performance in protecting safety in cement manufacturing; there are currently 100 plants operating in the USA.

In April 2018, PCA once again recognized the Odessa Plant granting the "2018 Chairman's Safety Performance Award" for its excellent performance in safety during 2017.

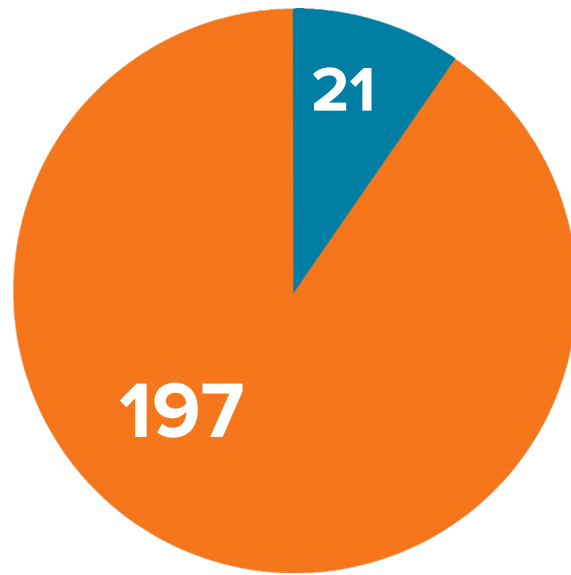
NEW HIRES

NEW HIRES MEXICO



■ WOMEN
■ MEN

NEW HIRES UNITED STATES



■ WOMEN
■ MEN



GCC PEOPLE MODEL

The GCC People Model aims to align and encourage the whole organization's efforts to generate a culture focused on people, innovation and accountability. As part of the model, the first stage of the implementation of SuccessFactors, a Human Resources System, was completed in 2016. In 2017 the implementation and consolidation of this System was completed by incorporating the compensation, development and succession, and online training modules. The move standardized processes and made the Human Resources area more efficient throughout the organization.

GCC is currently assessing the performance of non-union personnel through the Performance Management System (SADES), that sets objectives and annual goals that are reviewed 3 times a year. For the operating teams in Mexico there is a skills certification program to promote development within the organization, contributing to human capital skills and knowledge management.

(404-3) All non-union employees receive a performance evaluation every year based on objectives.

PERCENTAGE OF EMPLOYEES WHO RECEIVE REGULAR PERFORMANCE EVALUATIONS (BY LABOR RANKING)

MEXICO	EMPLOYEES	EVALUATED
Executive and management	189	189
Specialist	977	977
Operator	1,860	0
TOTAL	3,026	39%





GCC FOUNDATION

A key axis for sustainable growth is society. GCC and its Foundation actively participate through programs to foster culture, education, sports and welfare among our collaborators at the communities where we serve.

The GCC Foundation is an initiative established in 2004 with the commitment of assisting the comprehensive development of the communities where we operate through specific actions and programs, as well as channeling resources in three major areas:

1. Education and Promoting Culture.
2. Infrastructure.
3. Social Wellness.

GCC PROMOTES HEALTH AND SPORTS

In order to foster welfare for our employees, their families and the communities in general, we organize Health Fairs and prevention programs in Mexico every year.

We have also joined breast cancer awareness campaigns in some communities where we serve in Mexico and the United States; painting some ready-mix trucks pink and dispensing economic contributions as a sign of solidarity with this cause.

For sports, we promote in-house tournaments and we sponsor baseball, soccer and tennis teams externally in the State of Chihuahua.

Baseball

GCC has been sponsoring the Chihuahua Baseball State League for over 20 years now, the most important semi-professional baseball league in the State, consisting of 10 teams from different cities. This is the most popular sport in Chihuahua, with great sportsmanship.

Cycle Race

In 2017, GCC was again one of the sponsors in the XXI 100 Km Chupacabras Cycle Race, the most important extreme sporting event in Chihuahua. This is one of the most challenging races in Mexico, with 30k, 60k and 100k routes in the Sierra de Juarez, which attracts cyclists from all over the world. GCC hence reconfirms its commitment to take a message of inspiration and motivation to the community through the sports culture.

Cementos de Chihuahua Race

In 2017, the XXXI Cementos de Chihuahua Traditional Race took place in Ciudad Juarez; every year this race attracts local, national and international runners enticed by the demanding route. In addition to the 10k race for the competitive runners in 24 categories, a 3k recreational race is organized for families.





HUMAN RIGHTS

We observe applicable labor laws, including proper payment of salaries, wages and fees, and reject forced or child labor at all times. GCC believes in the power of acting with integrity and that is why we give special consideration to human rights.

That is why we seek to:

- (i) Emphasize the observance of fundamental rights, and comply with legal provisions regarding slavery and child labor at all times, and avoid any kind of discrimination.
- (ii) Make labor decisions taking only individual merits into consideration, avoiding discrimination for any reason, factor or individual characteristic, such as age, race, ethnic origin, religion, different capabilities, marital status or sexual preference, among others.
- (iii) Acknowledge the right to freedom of association.
- (iv) Give priority to providing a safe, healthy, productive and dignified work environment.
- (v) Improve our processes and procedures to minimize any impacts to the environment and the communities where we operate.

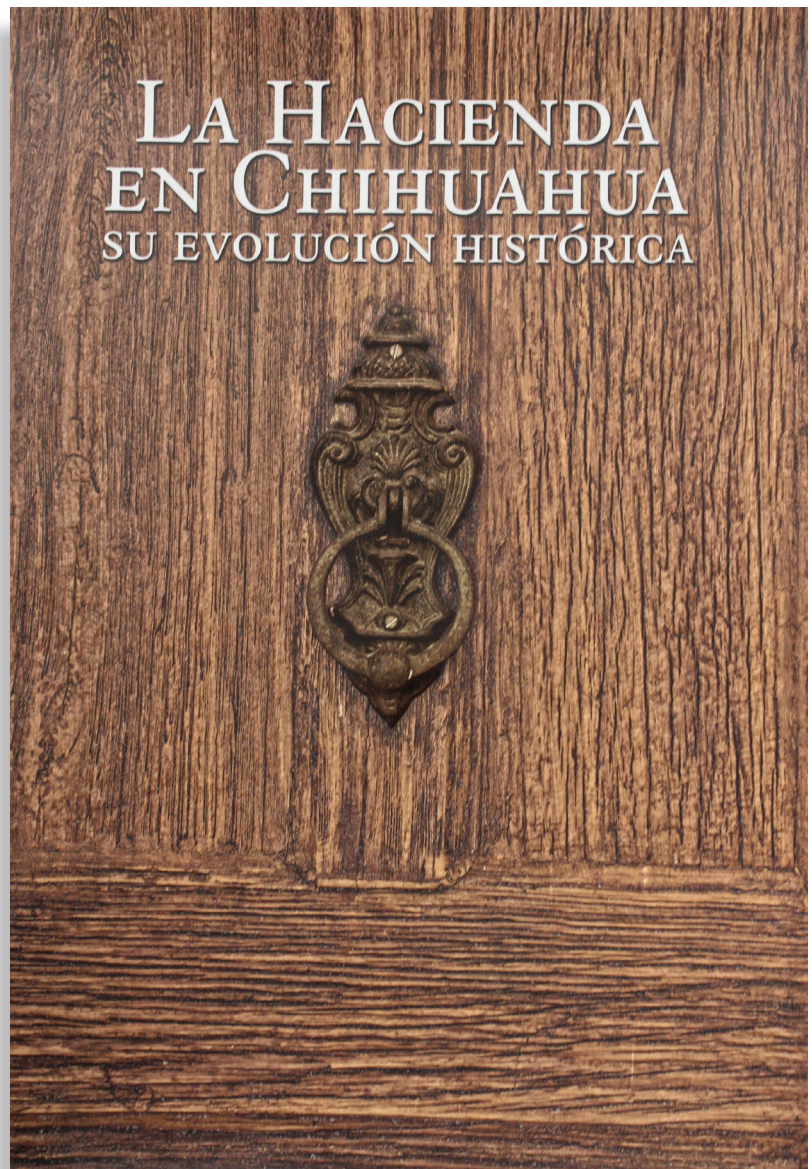
GCC EDITORIAL COLLECTION

In order to keep on preserving the historical and cultural heritage of the State of Chihuahua, since 1997 we have been publishing a book every year to promote the historical and artistic wealth and culture, leading to what we now know as GCC Editorial Collection.

**The 2017 issue of this collection was:
Haciendas in Chihuahua, Their Historical
Evolution.**

This book depicts how haciendas are palpable and evident proof, and an ever-lasting link to the history of Chihuahua and its people. **Haciendas in Chihuahua, Their Historical Evolution** is a precise and novel approach to one of the most important economic and social factors that have taken place throughout the State's history. The Haciendas played a decisive role in the growth, development and physiognomy of Chihuahua's society; their footprint remains in the rural areas to date, in their antique constructions that are being preserved.

For further information on this book and GCC Editorial Collection, please visit our web page: **www.gcc.com** or contact our Corporate Communication area in the email: **comunicacion.corporativa@gcc.com**.



GCC SUPPORTS EDUCATION THROUGH THE PROGRAM “CLASS OF EXCELLENCE”.

Among the actions undertaken by GCC to contribute to the community's development, we recently awarded students with scholarships for their outstanding academic performance to encourage their post-graduate professional instruction.

GCC participates in the State Program “Class of Excellence of 2017”, which awarded 8,819 scholarships that provide for continuity in the path of students with high academic performance. The scholarships ensure that young people are in a position to pursue a graduate school education and become assets that contribute to the development of their own persona, their families and the community. GCC has been participating since 2013, providing support to students from several towns in the State of Chihuahua.





BUILDING A SUSTAINABLE CHIHUAHUA

The main purpose of the initiative “Building a Sustainable Chihuahua”, where 30 organizations participate, is to promote sustainable construction in the State of Chihuahua, to address the community’s needs based on a shared vision; economically feasible and environmentally responsible. This initiative addresses the main challenges in the State, as well as possible solutions in 4 major topics.

- **Water**
- **Urban development, housing and mobility.**
- **Energy**
- **Sustainable Education**



**CONSTRUYENDO
UN CHIHUAHUA**
Sustentable

To support the implementation of possible solutions, GCC has launched annual calls to Chihuahua's society to partly finance the wining projects.

The wining projects in 2017 are:

- 1. Centro de Desarrollo Alternativo Indígena A.C. (CEDAIN):** Integral and Sustainable Development for the Tarahumara Region (2nd Stage).
- 2. Movimiento Hambre Cero:** Chihuahua Zero Hunger Movement.
- 3. Instituto Internacional de Recursos Renovables A.C. (IRRI):** Sustainable housing at Morelos Municipality in Chihuahua.
- 4. Federación Mexicana de Asociaciones Privadas de Salud y Desarrollo Comunitario A.C. (FEMAP):** Progressive, sustainable and resilient housing.
- 5. FESTA HIDROGEL:** Substitution of the use of potable water at the industry for restored water.
- 6. Tecnológico de Monterrey, Campus Chihuahua (ITESM):** Agricultural and Green Areas Precise Irrigation System.
- 7. Centro de Desarrollo de Estudios Superiores A.C. (CDES):** ISO 17024:2012 International Certification for Sustainable Projects Management.

THE INITIATIVE "BUILDING A SUSTAINABLE CHIHUAHUA" ORGANIZES THE THIRD SUSTAINABLE CONSTRUCTION FORUM

GCC and the Initiative Building a Sustainable Chihuahua held the Third Sustainable Construction Forum, "Towards a Responsible Development," gathering over 200 attendees. The main topics discussed included business sustainability, education, relationship between the company and the community and the great changes that our planet will experience.

This initiative arises from the interest in encouraging solutions that actually respond to the most urgent needs in Chihuahua. Building a Sustainable Chihuahua is made up of experts in the construction industry, academics, civil society organizations, companies, government agencies and Grupo Cementos de Chihuahua, together we identify the challenges faced by the State and the possible ways to overcome them.

EXHIBITS

Below you will find, a summary of the associations where we are members, our awards and certifications.

05





ASSOCIATIONS, AWARDS AND CERTIFICATIONS

ASSOCIATIONS	
MEXICO DIVISION	GCC UNITED STATES DIVISION
Asociación Nacional de Industriales de Vigueta Pretensada.	American Association of State Highway Transportation and Organizations.
Asociación Nacional de Industriales del Presfuerzo y la Prefabricación.	American Concrete Institute.
Bolsa Mexicana de Valores.	American Society for Testing Materials.
Cement Sustainability Initiative (CSI)	Associated General Contractors of America.
Cámara Nacional de Comercio Servicio y Turismo.	Colorado, New Mexico and South Dakota Chambers of Commerce.
Cámara Mexicana de la Industria de la Construcción.	Cement and Concrete Reference Laboratory regulatory body for lab certification.
Cámara Nacional de la Industria Transformación.	Cement Association of Canada.
Cámara Nacional del Cemento.	Cement Employers Association.
Centro Chihuahuense para la Calidad y Productividad.	Cement Sustainability Initiative.
Colegio de Arquitectos de la Ciudad de México.	Department of Labor and Transportation.
Colegio de Ingenieros Civiles de México.	Environmental Protection Agency.
Confederación Patronal de la República Mexicana.	Equal Employment Opportunity Commission.
Consejo Coordinador Empresarial.	International Organization for Standardization - Worldwide Federation of National Standards Bodies to Facilitate Exchanges.
Great Place to Work Mexico.	Malcolm Baldrige National Quality.
Instituto Mexicano del Cemento y del Concreto.	National Ready Mix and Concrete Association.
	The Portland Cement Association.
	Occupational Safety and Health Administration.
	The Portland Cement Association

AWARDS AND CERTIFICATIONS
GCC MEXICO DIVISION
Socially Responsible Company (SRC) granted by Centro Mexicano para la Filantropía (CEMEFI) for thirteen years in a row in 2017.
Environmental Responsibility Award 2017 granted by the State of Chihuahua Ministry of Urban Development and Ecology.
SEMARNAT acknowledgment for participating in the Environmental Leadership Program for Competitiveness to the companies in the Chihuahua area in 2012.
SEMARNAT acknowledgment for the public inventory of greenhouse gas emissions from our operations since 2004.
Great Place to Work Award 2017.
National Quality Award 2017 granted by the Ministry of the Economy through Instituto para el Fomento de la Calidad Total, A.C.
National Technology Award 2004.
Occupational Health and Safety System Certification, as per NMX-SAST-001-IMNC-2008 since 2006.

GCC CEMENTO, CHIHUAHUA PLANT

National Labor Award 2017, granted by the Ministry of Labor and Social Welfare.

National Energy Savings Award in 2010, granted by the Ministry of Energy and Comision Federal de Electricidad.

Green Company, **certified** from 2009 to date by the State of Chihuahua Government.

Environmental Management System **certified** under ISO 14001 International Standard since January 2001.

Quality Management System **certified** under ISO 9001 International Standard since January 2001.

“Clean Industry” **certified** by the Federal Environment Protection Agency (PROFEPA) from 1999 to 2012 and as of 2015 in force up to 2017.

“Environmental Compliance” 2010 **certificate**, granted by the State of Chihuahua Ministry of Urban Development and Ecology and Instituto Tecnológico de Monterrey, Chihuahua Campus (2009-2010)

GCC CEMENTO, SAMALAYUCA PLANT

National Quality Award 1999 granted by the Ministry of the Economy through Insituto para el Fomento de la Calidad Total, A.C.

National Energy Savings Award in 1996, granted by the Ministry of Energy and Comision Federal de Electricidad.

Environmental Management System **certified** under ISO 14001 International Standard since January 2002.

Quality Management System **certified** under ISO 9001 International Standard since January 2001.

Environmental Excellence Award 2005, 2006 **granted** by the Federal Environment Protection Agency (PROFEPA).

“Clean Industry” **certified** by the Federal Environment Protection Agency (PROFEPA) since 1999.

GCC CONCRETO

Green Company, certified from 2007 to date (2011, 9 plants) by the State of Chihuahua Government.

Clean Industry certified since 2009 for Homero and Jarudo plants (in force up to 2017 and 2016).

“Environmental Compliance” 2010 certificate for Homero and Jarudo plants, granted by the State of Chihuahua Ministry of Urban Development and Ecology and Instituto Tecnológico de Monterrey, Chihuahua Campus.

NMX-414-ONNCCE-200 certificates for products quality (concrete, blocks and bricks).

NMX-CC-9001-IMNC-2008 / ISO 9001:2008 certificate for Concrete Quality Management System.

NMX-EC-17025-IMNC-2006 lab quality certified before the Mexican Certification Agency EMA.

Family of products with thermal and sustainable features to support INFONAVIT'S green mortgage program (blocks and bricks manufactured with thermal concrete – pumice) and LEED certified by USGBC (reflectance index).

GCC TRANSPORT

Recognition as founding partner of the Clean Transportation Program sponsored by the Ministry of the Environment and Natural Resources and the Ministry of Communications and Transport.

Clean Transport Award by the Ministry of the Environment and Natural Resources (since 2011 in Juarez and since 2012 in Chihuahua).

GCC CORPORATE IN DENVER

Award of Excellence for Mix Design Innovation (ACI), GCC received an award in the 42nd Annual ACI Awards Program. GCC received the "Excellence Award for Innovation in the Design of Mixtures" for an experimental demonstration of soil which proved to be a thin layer of a commercial slab using our expansive cement (Komponent) and internal curing.

GCC DACOTAH, RAPID CITY PLANT

The Wyoming Chapter of the Associated General Contractors of America (AGC) presented to GCC Dacotah a Safety Award for achieving a Zero Incident Rate for 25,000 hours worked.

Excellence Award for one decade (2002-2011) of proper water management compliance.

Sustainability Award 2014 granted by Rapid City, South Dakota.

HPR Award from FM Global This award is granted to the sites where all loss-prevention critical measures have been implemented to protect buildings, machinery and their contents from possible losses due to human factors or natural hazards, making of Rapid City Plant the first cement plant from Latin America and Mexico to receive this award and one of the few cement plants in the United States receiving such recognition from FM Global.

FM Global Highly Protected Risk Award 2015, granted to GCC Dacotah, Rapid City, SD. As recognition for their commitment to safety, reducing risks and preventing fatalities.

GCC RIO GRANDE, PUEBLO PLANT

Environmental Innovation Award 2011, second place, granted by Portland Cement Association and Cement Americas Magazine.

2008 Colorado Performance Excellence Award in the Peak category; GCC Pueblo together with GCC US Division have earned the Peak Award, the most prestigious recognition.

GCC RIO GRANDE, TIJERAS PLANT

New Mexico Quality Awards: GCC Rio Grande was presented in 2003 the ZIA Award to Excellence in Performance, recognizing the company's commitment to progress towards excellence in business, education, government and medical care.

2003 GCC Tijeras earned the New Mexico Performance Excellence Award in Zia Category, the highest in the State, after winning in 2001 the Roadrunner Category.

GCC PERMIAN, ODESSA PLANT

2017 Safety Performance Award for zero incidents granted by the Portland Cement Association (PCA).

MID CONTINENT CONCRETE, TULSA PLANT

Special Commendation 2015 – Environmental Excellence Award granted by the National Ready Mix Concrete Association (NRMCA).

2015 the Tulsa Plant was certified for Environmental Product Declaration by the National Ready Mix Concrete Association (NRMCA).

TABLE OF CONTENTS, GRI

(Global Reporting Initiative)

GRI Standard	CONTENTS	PAGE OR URL	OMISSION OR RESPONSE
FOUNDATION			
101	a. Reporting Principles		
	b. Use of GRI Standard to draft Sustainability Reports		
	c. Claims related to the use of GRI Standards		
ORGANIZATIONAL PROFILE			
102-1	Name of the organization.		Grupo Cementos de Chihuahua, S.A.B. de C.V
102-2	Activities, brands, products, and services.	12	In this Report .
102-3	Location of headquarters.		Calle Vicente Suaréz y 6ta, S/N, Zona Industrial Nombre de Dios, Chihuahua Chih., México
102-4	Location of operations.	15	Mexico, United States of America
102-5	Ownership and legal form.	7	Grupo Cementos de Chihuahua, S.A.B. de C.V
102-6	Markets served.	7	In this Report.
102-7	Scale of the organization.	10	In this Report.
102-8	Information on employees and other workers.	9	In this Report.
102-9	Supply chain.	11	In this Report.
102-10	Significant changes to the organization and its supply chain.		No significant change in the organization's structure, capital or size during the reporting period.
102-11	Precautionary Principle or approach.	41	GCC is committed to mitigating any environmental impacts from our operations by managing emissions, biodiversity, water, etc.
102-12	External initiatives.	13	In this Report.
102-13	Membership of associations.	13	In this Report.
STRATEGY			
102-14	Statement from senior decision-maker.		Messages from the Chairman of the Board and the CEO
102-15	Key impacts, risks, and opportunities.		In our Report to the Mexican Stock Exchange 2017.
ETHICS AND INTEGRITY			
102-16	Values, principles, standards, and norms of behavior.	27	In this Report.
102-17	Mechanisms for advice and concerns about ethics.	27	In this Report.
GOVERNANCE			
102-18	Governance structure.	25	In this Report.
102-19	Delegating authority.	26	At the Board of Directors Meetings, the Chairman of the Board delegates on the CEO responsibility on economic, social and environmental topics.
102-20	Executive-level responsibility for economic, environmental, and social topics.	26	In this Report.
102-21	Consulting stakeholders on economic, environmental and social topics.		In this Report.
102-22	Composition of the highest governance body and its committees.	25	In this Report.
102-23	Chair of the highest governance body.	25	In this Report.
102-24	Nominating and selecting the highest governance body.		In this Report.
102-25	Conflicts of interest.		In this Report.
102-26	Role of highest governance body in setting purpose, values and strategy.	25	In this Report.
102-27	Collective knowledge of highest governance body.	25	The members of the Board of Directors have abilities and expertise on economic, environmental and/or social topics.

102-28	Evaluating the highest governance body's performance.		No information on performance assessment available.
102-29	Identifying and managing economic, environmental, and social impacts.	25	In this Report
102-30	Effectiveness of risk management processes.		There is a Risk Management and Internal Audit area.
102-31	Review of economic, environmental, and social topics.		The managing team and the shareholders meet every month to verify the organization's progress on economic, environmental and social topics.
102-32	Highest governance body's role in sustainability reporting.	6	The Chairman of the Board evaluates and approves the Report drafted, as well as the Message to the Stakeholders.
102-33	Communicating critical concerns.		Board of Directors meetings held every month with a previously defined agenda.
102-34	Nature and total number of critical concerns.		Strategic risks follow-up, among others.
102-35	Remuneration policies.		There is no policy, but an agreement is entered where compensation is considered.
102-36	Process for determining remuneration.		The Directors define it as per the responsibilities, attendance and tasks within our organization's structure.
102-37	Stakeholders' involvement in remuneration.		The Directors define it as per the responsibilities, attendance and tasks within our organization's structure.
102-38	Annual total compensation ratio.		Information unavailable. Currently, GCC has no information compiled on the compensation paid to each of the employees for all the countries where it operates.
102-39	Percentage increase in annual total compensation ratio.		No information compiled for all the countries where we operate.
STAKEHOLDER ENGAGEMENT			
102-40	List of stakeholder groups.	30	In this Report.
102-41	Collective bargaining agreements.		28% of our employees are covered under a collective bargaining agreement.
102-42	Identifying and selecting stakeholders.	30	In this Report.
102-43	Approach to stakeholder engagement.		We generate shared value for all our stakeholders in order to address common challenges.
102-44	Key topics and concerns raised.		Economic, social and environmental topics are raised, generating follow-up on such topics.
REPORTING PRACTICE			
102-45	Entities included in the consolidated financial statements.		In our Report to the Mexican Stock Exchange 2017.
102-46	Defining report content and topic Boundaries.		GRI's recommendations are considered on the material topics for the construction industry.
102-47	List of material topics.		Being defined.
102-48	Restatements of information.		No significant changes.
102-49	Changes in reporting.	5	In this Report.
102-50	Reporting period.	5	January 1 to December 31, 2017.
102-51	Date of most recent report.		2016.
102-52	Reporting cycle.		Annual.
102-53	Contact point for questions regarding the report.	5	In this Report.
102-54	Claims of reporting in accordance with the GRI Standards.		"In accordance" core option.
102-55	GRI content index.		In this Report.
102-56	External assurance.	5	In this Report.
MANAGEMENT APPROACH			
103-1	Explanation of the material topic and its boundaries.	41	In this Report.
103-2	The management approach and its components.	41	In this Report.
103-3	Management approach assessment.	41	In this Report.

ECONOMIC PERFORMANCE			
201-1	Direct economic value generated and distributed.	35	In this Report.
201-2	Financial implications and other risks and opportunities due to climate change.		The Annual Report mentions the risks and opportunities making reference to coal consumption.
201-3	Defined benefit plan obligations and other retirement plans.		The Organization has implemented a mechanism to meet retirement plans obligations as per timing and cash flow.
201-4	Financial assistance received from government.		In Mexico, CONACYT support is available for several projects.
MARKET PRESENCE			
202-1	Ratios of standard entry level wage by gender compared to local minimum wage.		GCC makes no gender distinction; also, there are no positions earning the minimum wage.
202-2	Proportion of senior management hired from the local community.		100% in Mexico and 73% in the United States.
INDIRECT ECONOMIC IMPACTS			
203-1	Infrastructure investments and services supported.	35	In this Report.
203-2	Significant indirect economic impacts.		In the Economic Impacts Annual Report.
PROCUREMENT PRACTICES			
204-1	Proportion of spending on local suppliers.	39	In this Report.
ANTI-CORRUPTION			
205-1	Operations assessed for risks related to corruption.		All the Organization's companies are ruled by the Federal Law of Prevention and Identification of Operations with Resources from Illegal Origin.
205-2	Communication and training about anti-corruption policies and procedures.		GCC has anti-corruption policies aimed to prevent any corruption related incident, since they are against the Organization's Code of Ethics and the company's values.
205-3	Confirmed incidents of corruption and actions taken.		No corruption incident confirmed during the reporting period.
ANTI-COMPETITIVE BEHAVIOR			
206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices.		No anti-competitive behavior to date.
MATERIALS			
301-1	Materials used by weight or volume.	47	In this Report.
301-2	Recycled input materials used.	47	In this Report.
301-3	Reclaimed products and their packaging materials.		Information unavailable.
ENERGY			
302-1	Energy consumption within the organization.	43	In this Report.
302-2	Energy consumption outside of the organization.		There is no energy consumption outside the organization.
302-3	Energy intensity.	43	In this Report.
302-4	Reduction of energy consumption.	43	In this Report.
302-5	Reductions in energy requirements of products and services.		No information available on reductions in energy requirements of products and services.
WATER			
303-1	Water withdrawal by source.	54	In this Report.
303-2	Water sources significantly affected by withdrawal of water.		No affected water sources have been identified to date.
303-3	Water recycled and reused.		Recycled water is used at the plants for trees and roads irrigation.
BIODIVERSITY			
304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas.	25	In this Report.
304-2	Significant impacts of activities, products, and services on biodiversity.		There is an impact on biodiversity at the Cement Plants quarries.
304-3	Habitats protected or restored.		The Cement Plants quarries have reclamation plans.
304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations.	54	In this Report.

EMISSIONS			
305-1	Direct (Scope 1) GHG emissions.	49	In this Report.
305-2	Energy indirect (Scope 2) GHG emissions.	49	In this Report.
305-3	Other indirect (Scope 3) GHG emissions.		The consolidated information on the Organization's indirect emissions (CH ₄ , HFC, etc.) is not currently available.
305-4	GHG emissions intensity.	49	In this Report.
305-5	Reduction of GHG emissions.	49	In this Report.
305-6	Emissions of ozone-depleting substances (ODS).		No ODS produced.
305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions.	51	In this Report.
EFFLUENTS AND WASTE			
306-1	Water discharge by quality and destination.		Water is mainly discharged to municipal sewage.
306-2	Waste by type and disposal method.		A consolidated report of the waste generated is not currently available.
306-3	Significant spills.		No significant spills during the reporting period.
306-4	Transporte de residuos peligrosos.		No se tiene cuantificado este indicador.
306-5	Cuerpos de agua afectada por vertidos de agua y/o escorrentías.		No se tienen afectaciones en cuerpos de agua.
ENVIRONMENTAL COMPLIANCE			
307-1	Non-compliance with environmental laws and regulations.		No significant non-compliance.
SUPPLIER ENVIRONMENTAL ASSESSMENT			
308-1	New suppliers that were screened using environmental criteria.		Procurement Department is working on the new agreements to add environmental criteria and measure this indicator.
308-2	Negative environmental impacts in the supply chain and actions taken.		Corporate Procurement Department is also working on measuring this type of indicators.
EMPLOYMENT			
401-1	New employee hires and employee turnover.	57	In this Report.
401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees.	58	In this Report.
401-3	Parental leave.		This information is not currently available.
LABOR-MANAGEMENT RELATIONS			
402-1	Minimum notice periods regarding operational changes.		Notice periods defined in the bargaining agreements.
OCCUPATIONAL HEALTH AND SAFETY			
403-1	Workers representation in formal joint management-worker health and safety committees.	59	In this Report.
403-2	Types of injury and rates of injury, occupational diseases, lost days, absenteeism, and number of work-related fatalities.	59	In this Report.
403-3	Workers with high incidence or high risk of diseases related to their occupation.		The Organization is working on occupational health to identify such diseases.
403-4	Health and safety topics covered in formal agreements with trade unions.		Health and safety issues are covered in the collective labor agreement.
TRAINING AND EDUCATION			
404-1	Average hours of training per year per employee.		A consolidated report of hours of training is not currently available.
404-2	Programs for upgrading employee skills and transition assistance programs.	61	In this Report.
404-3	Percentage of employees receiving regular performance and career development reviews.	63	In this Report.
DIVERSITY AND EQUAL OPPORTUNITY			
405-1	Diversity of governance bodies and employees.		281 women and 2745 men work for the company.
405-2	Ratio of basic salary and remuneration of women to men.		No information available.

NON-DISCRIMINATION			
406-1	Incidents of discrimination and corrective actions taken.		No discrimination incidents.
FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING			
407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk.		This type of information is unavailable.
CHILD LABOR			
408-1	Operations and suppliers at significant risk for incidents of child labor.		This type of information is unavailable.
FORCED OR COMPULSORY LABOR			
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor.		This type of information is unavailable.
SECURITY PRACTICES			
410-1	Security personnel trained in human rights policies or procedures.		The full staff is familiar with the Ethics Code, which discusses Human Rights.
RIGHTS OF INDIGENOUS PEOPLES			
411-1	Incidents of violations involving rights of indigenous peoples.		There has been no problem related to rights of indigenous peoples at the sites where we have presence.
HUMAN RIGHTS ASSESSMENT			
412-1	Operations that have been subject to human rights reviews or impact assessments.		This type of information is unavailable.
412-2	Employees training on human rights policies or procedures.		All the employees, both in Mexico and in the United States, receive training on the Ethics Code.
412-3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening.		This type of information is unavailable.
LOCAL COMMUNITIES			
413-1	Operations with local community engagement, impact assessments, and development programs.		Currently, all of our main operations are involved in some kind of activity with the community.
413-2	Operations with significant actual and potential negative impacts on local communities.		We have not identified any operating center with a negative impact.
SUPPLIER SOCIAL ASSESSMENT			
414-1	New suppliers that were screened using social criteria.		This type of information is unavailable.
414-2	Negative social impacts in the supply chain and actions taken.		This type of information is unavailable.
PUBLIC POLICY			
415-1	Political contributions.		No political contributions were made.
CUSTOMER HEALTH AND SAFETY			
416-1	Assessment of the health and safety impacts of product and service categories.		PRO-NOM-OO6-STPS-2017 is currently under assessment for materials handling.
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services.		No claims on this type of cases have been received.
MARKETING AND LABELING			
417-1	Requirements for product and service information and labeling.		The norm on cement sacks labeling is observed in Mexico.
417-2	Incidents of non-compliance concerning product and service information and labeling.		No claims on this type of cases have been received.
417-3	Incidents of non-compliance concerning marketing communications.		No incidents of non-compliance concerning marketing.
CUSTOMER PRIVACY			
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data.		No substantiated complaints concerning breaches of customer privacy or losses of customer data.
SOCIOECONOMIC COMPLIANCE			
419-1	Non-compliance with laws and regulations in the social and economic area.		No non-compliance with laws and regulations in the social, economic and environmental areas identified during the reporting period.

CSI TABLE

(Cement Sustainability Initiative)

CO ₂ & ENERGY MANAGEMENT	UNIT	2015	2016	2017
Total CO ₂ emissions - gross	million tons CO ₂ /year	2.60	2.64	3.13
Total CO ₂ emissions - net	million tons CO ₂ /year	2.57	2.60	3.08
Specific CO ₂ emissions - gross	Kg CO ₂ /cementitious material ton	755	756	749
Specific CO ₂ emissions - net	Kg CO ₂ /cementitious material ton	747	743	738
FUELS & MATERIALS USE				
Specific heat consumption of clinker production.	MJ/ton Clinker	3,586	3,769	3,797
Alternative fuels rate (% of thermal energy consumption).	%	3.2%	4.8%	3.9%
Biomass Fuel rate (% of thermal energy consumption).	%	4.9%	5.6%	7.0%
Alternative Raw Materials Rate (% of total raw materials used to produce cement).	%	2.2%	2.1%	2.1%
Clinker/ Cement Ratio	%	87.9%	87.4%	87.8%
OCCUPATIONAL HEALTH AND SAFETY				
Number of fatalities (directly employed)	#	2	0	0
Fatality index for direct employees.	Number of fatalities per 10,000 directly employed	9.05	0.00	0.00
Number of fatalities in contractors (indirectly employed).	#	0	0	0
Number of fatalities (3rd party).	#	1	0	0
Number of Lost Time Injuries "LTI's" (directly employed).	#	45	50	71
Lost time injury frequency rate (LTIFR) for direct employees.	Number of lost time injuries x 1,000,000 hours/total actual hours worked in one year.	8.27	9.46	12.81
Number of LTI's (indirectly employed and contractors).	#	NA	NA	NA
EMISSIONS MONITORING & REPORTING				
Absolute NO _x emissions	ton NO _x / year	2,766	2,732	3,726
Specific NO _x emissions	g ton NO _x / ton clinker	1,484	1,479	1,643
Absolute SO _x emissions	ton SO _x / year	202	273	288
Specific SO _x emissions	g ton SO _x / ton clinker	108	148	127
Absolute particulate material emissions	g ton SO _x / ton clinker	64.0	67.3	68.8
Specific particulate material emissions	g ton PM / ton clinker	34.3	36.4	36.5
Overall coverage rate of clinker produced with monitoring of all pollutants (particulate material, NO _x , SO _x , VOC/THC, heavy metals)	%	33%	80%	85%
Coverage rate continuous measurement of clinker produced with continuous monitoring of main pollutants, dust, NO _x , SO _x	%	33%	62%	62%
LOCAL IMPACTS				
Sites with quarry rehabilitation plans in place	%	50%	57%	57%
Sites with community engagement plans in place	%	100%	100%	100%
BIODIVERSITY				
Number of quarries within, containing, or adjacent to areas designated for their high biodiversity value, as defined by GRI 304-1 (number and coverage)	#	0	0	0
Quarries with high biodiversity value where biodiversity management plans are actively implemented	%	0	0	0
WATER				
Total water withdrawal "GRI 303-1"	lt/ton cement	552.3	505.3	393.6
Total water discharge "GRI 306-1"	lt/ton cement	332.1	286.1	244.6
Total water consumption	lt/ton cement	220.3	219.2	149.0
Facilities with water recirculation systems	%	16.7%	14.3%	14.3%



