

2010



A new approach

SUSTAINABLE
DEVELOPMENT
REPORT



2018

ABOUT THIS REPORT

102-46, 102-48, 102-49, 102-50, 102-51, 102-52, 102-53, 102-54, 102-56

We offer our thirteenth Sustainable Development Report, affirming our commitment to transparency and disclosure. This report was prepared according to the GRI Standards “Core” option.

It adheres to the Global Reporting Initiative (GRI) reporting principles in terms of content and quality for: *Stakeholder Inclusiveness, Sustainability Context, Materiality, Completeness, Accuracy, Balance, Clarity, Comparability, Reliability and Timeliness.*

This report also applies the Principles of Inclusivity, Materiality and Responsiveness defined by AccountAbility AA1000APS (2008).

The report covers the 2018 social, environmental and economic performance of our Mining Division, Transportation Division and Infrastructure Division in the four countries where we operate: Mexico, Peru, Spain and the United States. Throughout the report, we have indicated the mechanisms for measures and calculations, and as applicable, restated data from the previous Sustainable Development Report.

Giving continuity to the practice from previous years, and following the mandate given by the Board of Directors, the report has been verified independently, according to the scope set in the independent assurance report. The report also satisfies the GRI Materiality Disclosures service.

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In Collaboration with RobecoSAM



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LETTER FROM THE PRESIDENT

102-14, 102-15

At Grupo México, sustainable development is at the core of everything we do. Our work strategy is based on three pillars: GROW, PROMOTE and PROTECT. This means creating value, fostering wellbeing and protecting the environment.

This 2018 Sustainable Development Report marks thirteen years since we began to voluntarily report on areas that reflect our vision and commitment to sustainability, according to the internationally accepted methodology of the Global Reporting Initiative. Through this sustained effort, we have shared our progress, identified areas of opportunity and, for the first time this year, laid out three-year goals. Our objective is to achieve ongoing improvement in these areas.

We undertake these goals to address the most critical economic, social and environmental challenges for present and future generations. This is why each goal is aligned with one of the United Nations Sustainable Development Goals (SDG).

The results of our economic, environmental, social and corporate governance strengths are reflected in various ways. Today, we are proud to be included in the Mexican Stock Exchange IPC Sustainability Index for the eighth year in a row and for the second time, the S&P Dow Jones Sustainability MILA Pacific Alliance Index (DJSI MILA).

SAFE FAMILIES

Our people are the backbone of our organization. Their wellbeing and safety are our top priority. A worker in a safe environment means a safe family. This

is why our goal is ZERO accidents. Regrettably, however, three employees and five contract workers lost their lives on the job in 2018. We lost one contract worker in the Mining Division and three employees and four contract workers in the Transportation Division. These losses had a profound impact on families, friends, colleagues, and all of us at Grupo México. We share in the grief of their families and we affirm the commitment of our whole organization to prevent further fatalities. Nothing is more important than making sure our people get home safely.

LASTING INVESTMENTS

Looking ahead, our projects create prosperity today and for the generations to come. The value we generate is distributed among our principal stakeholders. We invested US\$1.687 billion this year generating social impact.

We're aware of the challenges we face to achieve a transformation that translates into a better quality of life for people in the countries where Grupo México operates. In this regard, we are investing in infrastructure that is aligned with Sustainable Development, responding to the environmental and social realities, resolving concrete needs. This year, we focused our investments on roadway infrastructure, power generation and fuel supply.

Climate change is the greatest environmental challenge humanity is facing and we all need to take an active role to protect the environment. The actions that individuals, businesses and governments take over the next decade will have an impact into the next millennium. We are reaching a point of no return. There is no time to waste if we want to keep hope alive.

Grupo México has made the conscious decision to join the fight against climate change. In keeping with the Sustainable Development Goals (SDG), we are committed to ensuring 10% of the power our Mining Division consumes will come from renewable energy sources by 2022. To achieve this, we have authorized an investment of US\$410 million to build two wind farms with an installed capacity of up to 278 Megawatts. These outputs are in addition to the production of our current 72 Megawatt wind farm, "El Retiro", in Juchitan, Oaxaca.

In addition to reducing greenhouse gas emissions, the world needs to use the most advanced technology to capture carbon dioxide: trees. Grupo México produces 5 million trees each year, making us one of the top producers in the country. We are determined to double our efforts to strengthen this important initiative, so that the generations to come will know that we did all we could to protect the environment.

The fuel storage capacity in Mexico is limited which, together with other factors, has meant shortages. In this regard, our Board of Directors has approved a US\$180 million investment to build one storage facility in Monterrey and another in Guadalajara. These facilities will help to increase the inventory capacity in these regions from 7 to 15 days, respectively. These projects form part of a US\$1.040 billion plan to invest in storage facilities, contributing to energy self-sufficiency in Mexico.

In Peru, in addition to completing the US\$1.255 billion Toquepala expansion project, we will invest US\$1.400 billion in the development of our much anticipated Tia Maria mine, which has taken ten years to become a reality. This is a flagship project, a global example of modern mining and sustainable development. The design incorporates the highest social, environmental and engineering standards. It will create 9,000 direct and indirect jobs during construction and 4,800 jobs during operation. This project will continue to generate social benefits and development for the Tambo Valley, the Port of Mollendo, Islay province, the Arequipa region and the all of Peru.

Tia Maria has listened to the concerns of the neighbor communities and will use only desalinated ocean water, so there will be no impact on the water supply in the area. Also, the design includes an important investment to eliminate discharges and prevent the generation of mine waste, reducing the environmental impact and risks to a minimum.

RESPONSIBLE PARTNERSHIPS

We add to the social capital in the communities where we operate. At Grupo México, we listen and we build relationships with our neighbors through our Community Development model, which in Mexico is called Casa Grande and in Peru, Casa Nuestra. We are able to offer numerous educational, cultural and sports programs through these community centers. Also, based on the principle of co-responsibility, we encourage the participation of non-profits. Independent community committees are actively involved in finding solutions to local issues, through project proposals, which receive seed capital from the company to become a reality.

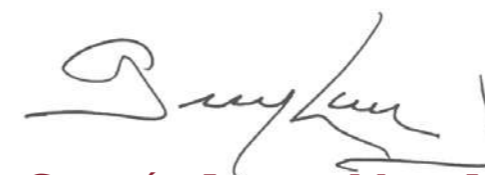
Through the Grupo México Foundation, with the support of the Transportation Division, we deliver free health services to the most remote communities in Mexico with Dr. Vagon, a mobile medical clinic that travels the country by rail. We provided 359,000 comprehensive medical services in 2018 thanks to this unique initiative.

Honoring our commitment to Mexico, in August 2018 we broke ground on the construction of a Specialization Hospital in Juchitan de Zaragoza, Oaxaca. This hospital will serve the 255,315 local residents and other communi-

ties like Santo Domingo de Tehuantepec, Matias Romero Avendaño and Salina Cruz. Thanks to a fundraising campaign run by Cinemex and the Foundation, we raised MX\$10,085,567 pesos, which together with the MX\$167,914,422 pesos contributed by Grupo México Foundation, will bring this project to life and deliver health services to the whole of the Tehuantepec Isthmus region.

In times of constant change, we have been able to face these challenges thanks to the passion, commitment and talent of our people. Growing our capacities and adjusting to the environment, we are able to achieve our goal of strengthening the economies where we operate in benefit of the community. Our vision for Sustainable Development and the commitments we have undertaken to achieve this vision, mean we will continue to team up with the authorities and our stakeholders. Together, we will continue to face challenges and build the foundation for a better quality of life.

Regards,



Germán Larrea Mota Velasco

CHAIRMAN OF THE BOARD

ABOUT GRUPO MÉXICO

INTRODUCTION TO GRUPO MÉXICO

102-1, 102-2, 102-4, 102-5, 102-6, 102-16

Grupo México S.A.B. de C.V. is a diversified company with presence in Mexico, the United States, Peru and Spain. We have extensive experience in the mining sector as one of the largest copper producers in the world and the top producer in Mexico. We are also present in the transportation sector, operating the largest multimodal freight rail-road in Mexico, with growing operations in the United States. We offer specialized infrastructure services and also engineering, power generation, on and offshore exploration and drilling, as well as leasing and operating oilrigs. We have expanded our capacities to hold a concession to operate highways.

All our operations are conducted under a common approach of cost effectiveness and productivity, striving to maintain a financial balance making us a sustainable, strategic and reliable company for our business partners, generating shared value for our stakeholders.

Our Development with Purpose model is built around three pillars: Grow, Promote and Protect. Through these pillars, we nurture the growth of the company, job stability, the health and safety of our collaborators, strengthen the communities with which we interact, and care for the environment. These pillars are the guiding principles for all our Divisions.

We have been trading on the Mexican Stock Exchange since 1996 as Grupo México (GMEXICOB) and the Transportation Division has been trading since 2017 as GMéxico Transportes (GMXT). Our subsidiary Southern Copper Corporation (SCC) trades on the New York Stock Exchange and the Lima Stock Exchange.

OUR PRESENCE

102-4

Grupo México is a global enterprise, which over time has grown and diversified to consolidate as a stable and sustainable company.

Our portfolio of products and services is delivered by three divisions: Mining Division, Transportation Division and Infrastructure Division. Our presence in Mexico, Peru, the United States, Argentina, Chile, Ecuador and Spain is shown following:



Mining Division GEOGRAPHIC LOCATION

ASARCO	
1	Ray - SX/EW Copper Mine
2	Hayden - Copper Smelter
3	Amarillo - Copper Refinery
4	Silver Bell - Mine and SX/EW
5	Tucson - USA Office
6	Mission - Copper Mine

MINERA MEXICO	
7	Agua Prieta - Lime Plant
8	El Pilar - SX/EW Copper Project
9	Buenavista del cobre - Mine and SX/EW
10	Buenavista Zinc - Mine
11	La Caridad - Mine, SX/EW metallurgical complex
12	Pilares - Copper Project
13	Santa Eulalia - Polymetallic underground mine
14	El Arco - Copper mine project and SX/EW
15	Santa Barbara - Polymetallic underground mine
16	Nueva Rosita - Coal and coke
17	Chalchiuites - Underground mine project
18	San Martín - Polymetallic underground mine
19	Charcas - Polymetallic underground mine
20	San Luis Potosí - Zinc refinery
21	Angangueo - Underground mine project
22	Taxco - Polymetallic underground mine
23	México, CDMX - Corporate offices

AMC	
24	Aznalcollar, Spain - Polymetallic underground mine project

SPCC	
25	Chaucha - Copper project
26	Tantahuatay - Gold mine
27	Lima - Corporate offices
28	Los Chancas - Copper project
29	Tía Maria - SX/EW Copper project
30	Cuajone - Copper mine
31	Toquepala - Copper mine and SX/EW
32	Ilo - Metallurgical complex
33	Cantanave - Copper project

LEGEND	
■	MINES
■	PLANTS
■	OFFICES
■	FUTURE MINING PROJECTS

*SX/EW (Copper solvent extraction and electrowinning plant)



Transportation Division GEOGRAPHIC LOCATION

CONNECTIONS	
1	UP
2	UP
3	BNSF / UP
4	BNSF / FWR
5	BNSF / FWR BNSF / UP
6	BNSF / UP
7	BNSF / CN / CSX / NS
8	CSX / NS

■	Ferromex
■	Ferrosur
■	Texas Pacifico
■	Florida East Coast
■	Kansas City Southern
●●●	Trackage rights



Infrastructure Division GEOGRAPHIC LOCATION

ASSETS	
1	Cananea
2	500 MW Combined Cycle Power Plants
3	Monterrey
4	Guadalajara
5	Leon-Salamanca Highway
6	Irapuato
7	Onshore Drilling Poza Rica, Veracruz
8	Corporate Offices, Mexico City
9	El Retiro, 74 MW Wind Farm
10	Tamaulipas Rig
11	Veracruz Rig
12	Sonora Rig
13	Tabasco Rig
14	Zacatecas Rig
15	Campeche Rig
16	Chihuahua Rig
17	Offshore Drilling Cd. del Carmen, Campeche

LEGEND	
■	PEMSA
■	MGE
■	MCC
■	HIGHWAY

CORPORATE STRUCTURE

102-7, 102-8, 102-45



Each Grupo México Division has its own affiliates and subsidiaries:

MINING DIVISION	TRANSPORTATION DIVISION	INFRASTRUCTURE DIVISION
Americas Mining Corporation (AMC)	GMéxico Transportes, S.A.B. de C.V. (GMXT)	México Proyectos y Desarrollos, S.A. de C.V. (MPD)
<ul style="list-style-type: none"> Southern Copper Corporation - Minera México - Southern Perú ASARCO Minera Los Frailes 	<ul style="list-style-type: none"> Ferromex Ferrosur Intermodal México Florida East Coast Holding Corp. Texas Pacífico 	<ul style="list-style-type: none"> México Compañía Constructora Perforadora México Grupo México Servicios de Ingeniería Grupo México Energía Grupo México Autopistas Grupo México Combustibles

EMPLOYEES		
16,492	11,462	3,361

TOTAL OPERATIONS		
- 15 underground and open pit mines	- 11,146 km rail network	- 2 modular rigs
- 52 smelters, refineries and other plants	- 880 locomotives and 26,319 railcars	- 5 jack-up rigs
- 11 explorations	- 8 ocean terminals	- Combined cycle power plants
- Mexico, Peru, USA, Argentina, Chile, Ecuador and Spain	- 5 crossings on the Mexico-USA border	- La Caridad (500 MW)
		- El Retiro wind farm (74 MW)
		- High-specification highways (construction, operation and maintenance)

NET SALES		
US\$7.884 billion	US\$2.360 billion	US\$626 million

MISSION, VISION AND VALUES

MISSION, VISION AND VALUES

102-16

At Grupo México, we operate our business according to our Mission, Vision and Values, which lay the foundation for our relationships with our stakeholders and are outlined in the corporate policies of Grupo México, approved by the Board of Directors.

Mission

To meet the needs of our markets through large scale and long term projects, staying on the cutting-edge in technology, and always committed to our people, the environment, our values and our social responsibility, maximizing the generation of value for our stockholders.

Vision

To be the world leader in efficiency and profitability in our areas of business, prioritizing people and their overall development, guaranteeing the sustainability of our operations.

Values

HONESTY	RESPECT	RESPONSIBILITY
<ul style="list-style-type: none"> Acting with integrity, professional ethics and ongoing improvement. 	<ul style="list-style-type: none"> For all persons, laws and the environment. 	<ul style="list-style-type: none"> Fulfilling our commitments with results.

CORPORATE GOVERNANCE

103-1, 103-2, 103-3

The Grupo México corporate governance structure seeks to ensure that our procedure for strategic decision-making generates value and assurance for investors, and the sustainability of the company, all in adherence of the principles of transparency and accountability. Our ultimate goal is to generate shared value with our stakeholders and honor the trust our investors have placed in us.

GOVERNANCE BODIES

102-18, 102-19, 102-20, 102-21, 102-22, 102-24, 102-26, 102-29,
102-30, 102-31, 102-33

Board of Directors. The Board of Directors is the governing body of Grupo México. Its members are elected annually and are responsible for setting the corporate strategy and evaluating the fulfillment of this strategy. The functions of the board include ensuring the efficient use of resources and available assets, monitoring the social and environmental performance of the company, and overseeing risk management.

In 2018, there were 14 members of the Grupo México Board of Directors, appointed by the General Stockholders' Meeting, 9 of which were independents. The chairman of the board also holds the position of Executive President of Grupo México.

The governance structure is defined according to the guidelines established in the Grupo México Bylaws, approved by the Stockholders' Meeting, which is responsible for the final approval of the management reports presented by the Board of Directors. The holders of Grupo México shares are represented at the stockholders' meeting.

CORPORATE GOVERNANCE

The Stockholders' Meeting appoints the members of the Grupo México S.A.B. de C.V. Board of Directors and verifies the independence of these members as required by the Mexican Securities Market Law.

The Stockholders' Meeting also designates the members of the Executive Committee and the Audit and Corporate Practices Committee, based on their experience and no conflicts of interest, and sets the remunerations for board members.

The Board of Directors met four times in 2018. During these sessions, information was presented on the results of the company's financial and operational indicators, the status of the risk management, and the performance of the principal sustainability indicators.

Committees. The Grupo México corporate governance structure has two committees: the Executive Committee and the Audit and Corporate Practices Committee. Three board members, two of which are independents, sit on the Executive Committee, which conducts a more frequent supervision and prepares the quarterly reports presented to the Board. The chairman of the Board of Directors also presides over the Executive Committee.

The Audit and Corporate Practices Committee is comprised of independent board members. This committee monitors the internal control and audit systems, conducting regular reviews, and is also responsible for due diligence on the implementation of and compli-

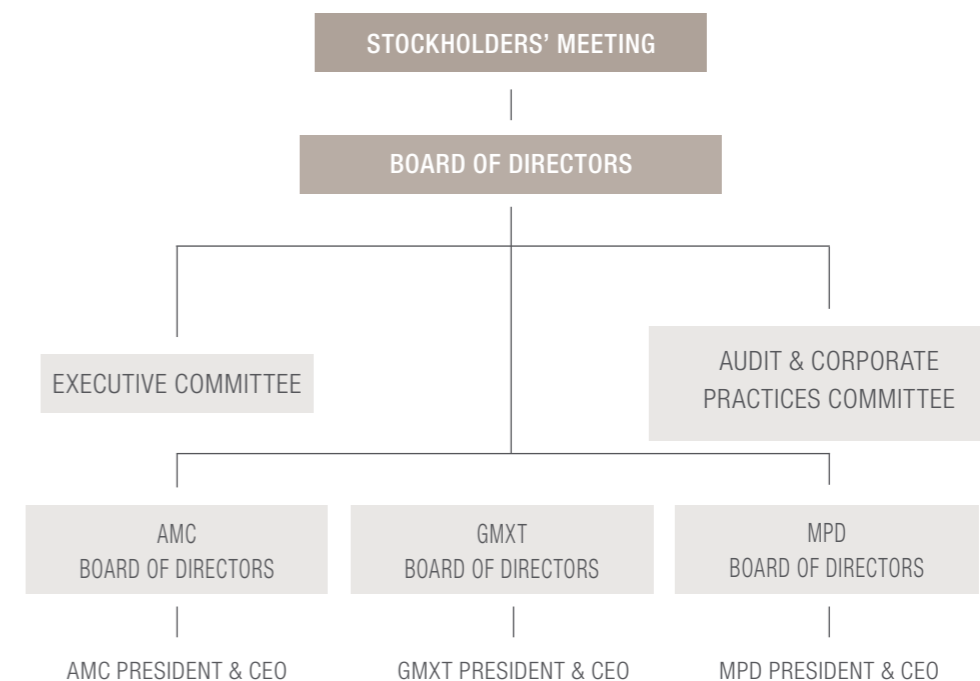
ance with the ethical guidelines laid out in the Code of Ethics. This Committee also sets the fixed salary policies for senior management, and the variable portion of these salaries based on performance.

Each subsidiary has its own management committees addressing different evaluation indicators and responding to stakeholder concerns. The committees and board members submit to a self-assessment process once a year.

It's important to note that our principal subsidiaries have their own boards of directors, which inform the Grupo México S.A.B. de C.V. Board. Their responsibilities include monitoring and assessing the social and environmental performance, the management of which falls to collaborators in the operational areas at the subsidiary level and also teams created for this purpose.

Internal control. Grupo México has an internal control system to ensure its corporate governance is managed appropriately, according to the guidelines of the Board of Directors. The internal control system is reviewed and measured regularly in terms of budgetary, economic, financial, equity, regulatory and management aspects.

There is also an ongoing improvement process that strives to make the operational, financial and administrative processes more efficient, strengthening the transparent disclosure of information to stockholders.



ETHICS AND INTEGRITY

102-16, 103-1

The Grupo México Code of Ethics sets and defines the principles and guidelines of conduct that all collaborators are required to observe, regardless of their position in the company. As a result, the respect, ethics and transparency embodied by our collaborators extends to our stakeholders. This way of working is reflected in our relationships with other members of our value chain, or *business partners*¹, who are required to adopt our standards in order to initiate and maintain a relationship with the company.

The scope of the Code of Ethics guidelines includes our staff, representatives and any person who acts on behalf of Grupo México and its subsidiaries in Mexico and overseas. We also extend the Code of Ethics to our board members, suppliers of goods and services, and contractors, with recommendation for its implementation and observance, actions that are part of the criteria for selection and continuance in our supply chain.

Reflecting our principle of transparency, the Grupo México Code of Ethics is available on the company's website.²

¹ The term "business partner" is used according to the GRI Standards definition to refer to suppliers, agents, lobbyists and other intermediaries, joint venture and consortia partners, governments, customers and clients.

² For more information on the Code of Ethics, visit the Grupo México website at: http://www.gmexico.com/site/nosotros/cultura_corporativa.html

Code of Ethics training

102-17

All our collaborators receive the Code of Ethics when they join the company and they are required to sign a letter of agreement confirming they have read and understood the document, making the commitment to observe it. Collaborators also receive training on the Code when there are revisions or to reinforce their understanding and ensure compliance.

Workshops, talks, and in-person and online trainings were provided to 9,666 collaborators in 2018 to strengthen our commitment to the Code of Ethics.

Conflicts of Interest

102-25

Grupo México has a conflict of interest policy, approved by the Board of Directors, which is mandatory for all our subsidiaries and affiliates.

Our Code of Ethics defines a conflict of interest as any situation where the loyalty of any company member is divided between the legitimate interests of Grupo México and their own, whether these be their personal interests or those of their family members or friends, such that their actions may cease to be objective and impartial, harming the name or property of Grupo México and/or its companies.

Political Engagement

415-1

Grupo México makes no political contributions and does not participate directly in the activities of political parties. The use of Grupo México assets, resources, equipment or trademarks for political contribution or activity is prohibited.

Fighting Corruption

205-1, 205-2, 205-3

Regarding the prevention of acts of corruption, all our collaborators receive training to conduct themselves ethically. Guidelines for analysis and resolution are applied when any act of corruption is suspected, determining the corresponding actions to take. Any supplier or contractor suspected of engaging in illicit practices or corruption will be submitted to a review process to consider their continuation or to end our commercial relationship with them.

Nine cases of practices contrary to our anticorruption and conflict of interest guidelines were reported this year. The employees involved in situations where breach of trust was proven were dismissed.

Reporting Mechanisms

103-2

Recognizing the importance of fostering a safe, respectful environment of trust, we have implemented

various reporting mechanisms to identify and respond to any conduct that would violate the guidelines established in the Grupo México Code of Ethics.

Given this, we have created a multichannel Reporting Line mechanism managed by a third party through a comprehensive reporting system to ensure objectivity. This system is available online to receive reports from both within and outside the company, respecting anonymity without fear of retribution.

Any collaborator, supplier or interested party can file a report via the following:

- Reporting line and suggestion box
- Email
- Website

The independent administrator receives and assesses all reports, ensuring the necessary information has been provided for proper classification and response to then deliver the reports to the Ethics and Discipline Committee, which designates a team to follow up, investigate and notify the interested parties.

The Ethics and Discipline Committee reports the management and results of the Reporting Line to the Audit Committee quarterly and the Committee Secretary notifies the parties involved of the process. The Ethics Committee also periodically shares the results of this mechanism with collaborators to promote its use.

DILIGENCE IN HUMAN RIGHTS

103-1, 103-2, 406-1, 407-1, 408-1, 409-1, 411-1, 412-2, MM6

Personal dignity is at the core of our actions.

In adherence of the United Nations Universal Declaration of Human Rights, and the laws and regulations of the countries where we have presence, Grupo México is committed to respecting and promoting the human rights of all our collaborators and the communities where we operate.

Respect for Labor Rights. We are committed to respecting and promoting the fundamental principles and rights at work, in adherence of the International Labor Organization's Declaration:

- Freedom of association and the right to organize, and the effective recognition of the right to collective bargaining.
- Elimination of forced labor, in all its forms.
- Effective abolition of child labor.
- Elimination of discrimination in respect of employment and occupation.

We have a special interest in maintaining ongoing and direct communication with those who represent our employees covered by collective bargaining agreements within the three divisions of Grupo México to

prevent discord and ensure the stability, continuity and efficiency of our operations. In this regard, it is pertinent to note that we negotiate and review our collective bargaining agreements according to the frequency set by local legislation in the countries where we operate, particularly focusing on the salary and work conditions of our unionized employees.

We have a special interest in maintaining ongoing and direct communication with those who represent our employees covered by collective bargaining agreements within the three divisions of Grupo México to prevent discord and ensure the stability, continuity and efficiency of our operations. In this regard, it is pertinent to note that we negotiate and review our collective bargaining agreements according to the frequency set by local legislation in the countries where we operate, particularly focusing on the salary and work conditions of our unionized employees.

All our operations respect the rights of freedom of association and collective bargaining of our employees and no cases or risks of child, forced or compulsory labor have been reported at any of our business units.

Non-discrimination. We are committed to equal opportunities and we have zero tolerance for harassment and violence, or any type of discrimination on the basis of ethnic origin or nationality, gender, age, disability, social condition, political affiliation, health condition, religious beliefs, immigration status, opinion, sexual preference, or marital status.

Any collaborator who directly or indirectly is witness to or the victim of any form of discrimination is encouraged to report the incident via the Reporting Line. The chapters for each Grupo México division in this report state the number of cases of discrimination this year, noting the actions taken.

Rights of Indigenous Peoples. We respect the rights of indigenous peoples, in adherence of the United Nations Declaration on the Rights of Indigenous Peoples and ILO Convention 169 on indigenous and tribal peoples.

In the United States, our Mission mine in Arizona borders the Tohono O’dham Native American Reserve. We respect the rights of the people living on the reserve and as part of the lease, royalties are paid on tribal lands and preference is given to hiring people from this indigenous community.

During 2018, no dispute was reported involving the use of indigenous lands, the rights of indigenous communities or peoples, in relation to the operations of Grupo México.

Due Diligence. Our responsibility to create the conditions needed to ensure compliance with our Human Rights Policy commit us to implementing processes to identify, prevent, mitigate and remedy any potentially adverse impacts within our subsidiaries.

We have contract clauses in place to ensure respect for human rights and personal dignity extends to our

business partners and that our business partners adhere to the principles and values of Grupo México, as well as local legislation and regulations in the countries where we operate.

Our 2022 goal is to develop programs to promote the respect of human rights in our company and with our main suppliers.

Human rights training. Our collaborators receive training on the Code of Ethics every two years, with particular focus on human rights. Awareness workshops are provided for our collaborators and we are continually developing content to promote knowledge, respect and observance of human rights. A total 40,082 training hours were provided in this area in 2018.

Additionally, our in-house security personnel are trained in the protection and defense of human rights and the employees of all the private security firms with which we have relations receive training and refresher training in this area.

SUSTAINABLE DEVELOPMENT STRATEGY

“A vision without a strategy remains an illusion.” (Lee Bolman)


For Grupo México, strategy means the ability to analyze the present and project into the future to develop appropriate responses to the challenges of today and tomorrow, striving to maximize benefits for the company, our stakeholders, society and the planet.




In an increasingly complex world characterized by urgent social, environmental and economic challenges, we believe it is essential to have an overall vision of long-term sustainability to align the company’s strategy with these challenges. Our response, which we call “Development with Purpose” is built on three pillars around which we design our sustainability strategy:

DEVELOPMENT WITH PURPOSE	
GROW	<p>We invest to generate opportunities and prosperity, making us an engine for positive change for the economies in which we operate.</p> <ul style="list-style-type: none"> • We ensure our continuity, adapting to the needs of our surroundings. • We involve the community in our growth, promoting partnerships with suppliers, working with local suppliers as much as possible. • We operate with transparency, thanks to timely communication with our stakeholders. • Our structure is process and result-oriented.
PROMOTE	<p>We strive to be good neighbors, improving the quality of life of our people and that of our communities.</p> <ul style="list-style-type: none"> • Our teams are made up of capable, motivated people, in keeping with our values, putting the dignity of the individual at the center of all that we do. • We create safe work environments for our collaborators and we operate to the highest standards of occupational health and safety. • We are continually building a work environment where respect, non-discrimination and equality are the norm. • We are working to contribute to the common good of our neighbor communities, fostering collaboration and dialog.
PROTECT	<p>We care for and work to preserve the environment. To build shared value, we know that leaving positive footprints environmentally is the basis for sustainable progress.</p> <ul style="list-style-type: none"> • We mitigate our negative impacts to contribute to national and international environmental goals. • We have established an ongoing improvement process that ensures efficiency and responsible usage of raw materials, energy and water. • We manage our operations focusing on reducing waste and controlling emissions. • We respect and protect the biodiversity in the environments where we operate.



SUSTAINABLE DEVELOPMENT STRATEGY



Corporate Sustainable Development Targets to 2022


 <h3>HEALTH AND SAFETY</h3>	 
<p>Zero fatalities.</p>	
<p>Reduce the injury frequency rate of our employees and contractors by 25% in the Mining Division and 15% in the Transportation Division.</p>	
<p>Implement a Behavior-Based Safety System in 75% of the Mining Division business units.</p>	
<p>Obtain the ISO 45001 certification in all of the Mining Division business units.</p>	
<p>Provide preventive health programs focused on chronic-degenerative diseases to 70% of the mining operations workforce exposed to non-occupational health risks.</p>	
<p>Install traffic equipment for 25 level crossings to reduce accidents in urban and rural areas.</p>	
<p>Implement a comprehensive traffic management plan in all open-pit mine facilities.</p>	



 <h3>HUMAN RIGHTS</h3>	 
<p>Develop programs to promote the respect of human rights in our company and with our main suppliers.</p>	
<p>Institutionalize the process for identifying and responding to the indigenous communities near our operations.</p>	
<p>Implement a grievance mechanism for external stakeholders located near the Mining Division operations.</p>	

 <h3>COMMUNITY DEVELOPMENT</h3>	 
<p>Invest at least 2.5% of net profits in projects that contributing to the United Nations Sustainable Development Goals.</p>	
<p>Ensure that all company-sponsored schools achieve higher academic results than their respective national averages.</p>	
<p>Implement an institutional program that supports the development of small and medium local suppliers.</p>	

 <h3>ENVIRONMENTAL MANAGEMENT</h3>	
<p>Obtain the ISO 14001 certification in all Mining Division business units.</p>	

 <h3>WATER</h3>	
<p>Update water baseline assessments in all Mining Division business units.</p>	
<p>Systematically monitor water resources at catchment level in mining operations located in high water-stressed areas.</p>	

 <h3>CLIMATE CHANGE</h3>	 
<p>Update our climate-related risks and opportunities assessment.</p>	
<p>Increase the use of renewable electricity in the Mining Division to 10%.</p>	
<p>Reduce the intensity of greenhouse gas emissions of the Mining Division by 5%.</p>	

 <h3>BIODIVERSITY</h3>	
<p>Update biodiversity baseline assessments in all Mining Division business units.</p>	
<p>Guarantee the production of 5 million trees per year, and join efforts with reforestation organizations.</p>	

 <h3>MINING RESIDUES (TAILINGS)</h3>	
<p>Implement a policy and standards for a safe management of mining residues.</p>	
<p>Update the safety assessment of all operating mining residues deposits.</p>	
<p>Standardize the Operation, Maintenance, and Monitoring Manuals for all mining residues deposits.</p>	

As part of our strategy, for the first time this year, we have defined corporate sustainable development goals to be achieved within 4 years.

We have also undertaken the commitment to fulfill these goals to address the most critical economic, social and environmental challenges we are facing today and for years to come. Each goal is therefore aligned with the United Nations Sustainable Development Goals (SDG).

By committing to these goals, everyone in our organization understands that with our day-to-day efforts we are contributing to making this vision a success. In parallel, we are ensuring that the most important material aspects for the company are managed effectively and better.

GRUPO MÉXICO RECOGNITIONS AND INITIATIVES

Sustainability indexes. With a view to adopting and fostering best practices, the company has undergone exhaustive evaluation processes conducted by independent experts in sustainability. In particular, we participated in the RobecoSAM Corporate Sustainability Assessment, which looks at financially relevant social, environmental, economic and corporate governance factors. As a result, since October 2017, we have been included in the Dow Jones MILA Pacific Alliance Sustainability Index, a regional indicator that monitors the performance of companies in the Pacific Alliance member countries with the highest sustainability ratings.

Additionally, we have been included in the Mexican Stock Exchange IPC Sustainability Index for the eighth year. This financial indicator recogniz-

es companies for their strategic actions and best practices in environmental, social and corporate governance aspects.

Carbon Disclosure Project. Grupo México is a pioneer in voluntary measuring and reporting greenhouse gas emissions. We have been participating in the GEI Mexico voluntary emissions reporting program since 2005. Also, for the third year, Grupo México submitted its consolidated emissions inventory to the Carbon Disclosure Project, an international benchmark that gathers and publishes relevant information on corporate environmental impact.

RELATIONS WITH OUR STAKEHOLDERS

102-21, 102-40, 102-42, 102-44

At Grupo México, we believe that generating value depends, to a large extent, on ongoing involvement with our stakeholders. The participation of stakeholders gives us a broader perspective on managing the most important issues for each of our sectors. Better initiatives and programs translate into more successful results in terms of economic, environmental and social performance.

To hear the concerns and expectations of our stakeholders, we have set up channels for dialog and communication, according to the needs of our communities, including them, directly or indirectly, in the decision-making for our Development with Purpose strategy. Through various channels and mechanisms, we seek open and transparent communication with our stakeholders, particularly those that are most vulnerable, building a culture of collaboration and sustainability in benefit of everyone.

STAKEHOLDERS (102-40)	AREAS OF INTEREST (102-44)
Customers	<ul style="list-style-type: none"> Quality of our products and services Operational continuity Market value of our products Ethics and integrity
Employees	<ul style="list-style-type: none"> Salaries and benefits Occupational health and safety Internal communication and workplace climate Recognition Training and career development Ethics and integrity
Unions	<ul style="list-style-type: none"> Labor relations Ethics and integrity
Investors	<ul style="list-style-type: none"> Business strategies and models Financial results Share value Corporate governance practices Risk management Ethics and integrity
Suppliers Contractors	<ul style="list-style-type: none"> Contract conditions (payment, termination, etc.) Financial results Occupational health and safety (contractors)
Communities	<ul style="list-style-type: none"> Job creation Quality of life Operational risk management Environmental impacts Community development programs and initiatives
Opinion leaders Civil society Media	<ul style="list-style-type: none"> Ethics and integrity Social and environmental impacts Financial results
Financial institutions	<ul style="list-style-type: none"> Financial results Risk management
Government agencies	<ul style="list-style-type: none"> Risk management Legal compliance
Academic institutions	<ul style="list-style-type: none"> Social and environmental impacts Innovation
Ratings agencies	<ul style="list-style-type: none"> Business strategies and models Financial results Share value Corporate governance practices Risk management Ethics and integrity Transparency

COMMUNICATION AND FEEDBACK WITH STAKEHOLDERS

102-43

Ongoing	Once or twice a year	Bimonthly
Yearly	Quarterly	As arises

COMMUNICATION CHANNELS OR MECHANISMS / STAKEHOLDERS	Customers	Employees	Unions	Investors	Suppliers	Contractors	Communities	Opinion leaders Civil society Media	Financial institutions Government agencies Academic institutions Ratings agencies
Website									
E-Ferromex; E-Ferrosur									
Intranet									
Sustainable Development Report									
Annual Financial Report									
Quarterly Financial Reports									
News bulletins									
In-house company newsletters									
Publication of relevant events									
Press releases									
Stockholders' meetings									
In-person meetings									
CBA review									
Diagnostic studies									
Interviews									
Surveys									
Workplace climate survey									
Telephone consultations									
Ethics reporting line									
Guided tours									
Site visits									
Community committees									
Awareness days									
Community development centers									

SUPPORTING OUTSIDE INITIATIVES AND ASSOCIATIONS

102-12, 102-13

Our commitment to sustainable development extends beyond our operations. We strive to strengthen this commitment and expand its scope through active participation in different associations and initiatives that are aligned with the principles and values of Grupo México. In this way, we generate synergies within the public sector, private initiative and civil society so that everyone benefits from the joint effort to improve the social, economic and environmental conditions in the communities where we operate.

ASSOCIATIONS AND ALLIANCES	
DIVISION	ASSOCIATION
Mining Division: Global	<ul style="list-style-type: none"> International Copper Association (ICA) International Molybdenum Association (IMO) International Zinc Association (IZA)
Mining Division: USA	<ul style="list-style-type: none"> Arizona Mining Association (AMA) North American Metals Council (NA MC) Society for Mining Metallurgy and Exploration (SME) Tucson Metropolitan Chamber of Commerce
Mining Division: Mexico	<ul style="list-style-type: none"> Cámara Minera de México (CAMIMEX) Sociedad Minera de México Asociación de Mineros de Sonora (AMSAC) Comisión de Estudios del Sector Privado para el Desarrollo Sustentable (CESPEDES), del Consejo Coordinador Empresarial (CCE)
Mining Division: Peru	<ul style="list-style-type: none"> Sociedad Nacional de Minería, Petróleo y Energía de Perú (SN MPE) Cámara de Comercio de Lima (CCL) Asociación de Exportadores (ADEX) Confederación Intersectorial de Empresas Privadas (CONFIEP) Sociedad de Comercio Exterior del Perú (ComexPerú) Instituto de Ingeniero de Minas de Perú (IIMP)
Transportation Division	<ul style="list-style-type: none"> Asociación Mexicana de Ferrocarriles (AMF) American Association of Railroads (AAR) The Rail Transportation and Engineering Center (RailTEC) Asociación de Proveedores de Productos Agropecuarios (APPAMEX) Asociación mexicana de Transporte Intermodal (AMTI) Consejo Nacional Agropecuario (CNA) Asociación Nacional de la Industria Química (AN IQ) Asociación Nacional del Plástico (ANIPAC) Comisión Regional de Logística de Guanajuato (CORELO G)
Infrastructure Division	<ul style="list-style-type: none"> Cámara Mexicana de la Industria de la Construcción (CMIC) Asociación de Recursos Humanos de la Industria Petrolera

GENERATING SHARED VALUE

201-1

At Grupo México, we want the economic benefits of our operations to reach our employees, our communities, suppliers and the governments of the countries where we operate.

We promote productive activities designed to economically drive our stakeholders. As a result, we consider the value and economic wellbeing derived from our operations to calculate the Economic Value Distributed.

The economic spillover generated in 2018 created a shared value that positively impacted our stakeholders, who received US\$8.378 billion, representing a 7% increase over last year.

ECONOMIC VALUE GENERATED & DISTRIBUTED			
US\$ Millions			
	2016 ³	2017	2018
Economic Value Generated (EVG)			
Sales	8,173	9,978	10,495
Economic Value Distributed (EVD)			
Operating Costs ⁴	3,653	3,911	4,249
Salaries, Wages and Benefits	1,004	1,103	1,247
Financial Institutions and Stockholders	677	1,125	1,845
Taxes ⁵	938	1,648	975
Investments in Community Development	54	61	62
Total EVD	6,370	7,848	8,378

ECONOMIC VALUE GENERATED & DISTRIBUTED			
US\$ Millions			
	2016	2017	2018
Environmental investments and spending	309	326	264
Investments and spending in Health and Safety	138	130	116

³ Restatement of content 201-1 from previous years to improve adherence to the GRI guidelines.

⁴ Does not include personnel costs (salaries, wages and benefits).

⁵ Grupo México pays taxes according to the local tax laws in the countries where we operate and also has an obligation of transparency on being a publicly traded company.

Supply Chain

102-9

At Grupo México, we contribute to the development of auxiliary industries in the different sectors where we participate: mining, transportation, energy, construction, engineering and drilling. Our operating expenses were US\$4.249 billion in 2018, primarily representing the purchase of products and materials, as well as contracting specialized services.

We seek to strengthen the economy of the regions where we operate and contribute to their social development, by selecting local suppliers and contractors according to our criteria of quality, price, and environmental and labor compliance.

We worked with 7,772 active suppliers in 2018, 89% of which were local.

SUPPLIERS			
Operating Region	Local	Foreign	% local suppliers
Mexico	4,047	396	91%
Peru	1,518	381	80%
USA	1,369	61	96%
Total suppliers	6,934	838	89%
	7,772		



MINING DIVISION

grow

STRUCTURE OF THE DIVISION AND PRINCIPAL SUBSIDIARIES

102-5

Americas Mining Corporation is a leading company in copper mining, with the largest reserves in the world, the lowest extraction costs and the best organic growth portfolio with diversified assets.

The Mining Division of Grupo México is represented by our subsidiary Americas Mining Corporation (AMC), comprised of:

- Southern Copper Corporation
- Minera México, S.A. de C.V.
- Southern Peru Copper Corporation
- Asarco LLC
- Minera los Frailes, S.L.

SIGNIFICANT CHANGES IN THE ORGANIZATION

102-10

The Mining Division reports the following significant changes in 2018:

Reopening of the San Martin Mine in Zacatecas, Mexico: Rehabilitation work began this year on equipment and facilities to restart operations at the San Martin mine during the second quarter of 2019, after being inactive for more than eight years. This mine will add an estimated 7,500 tons of copper to our annual production, 20,000 tons of zinc and 2.8 million ounces of silver.

Toquepala Expansion, Tacna, Peru: Construction of the new copper concentrator in Toquepala was completed in 2018, including high-tech equipment to add 100,000 tons of copper to our annual production.

There were no other significant changes in terms of size, ownership, supply chain or capital structure.

PRINCIPAL PRODUCTS AND MARKETS

102-2, 102-6

Products: The principal activities of our Mining Division are the exploration, exploitation (mining and extraction of raw materials), and production of minerals, metals and other byproducts.

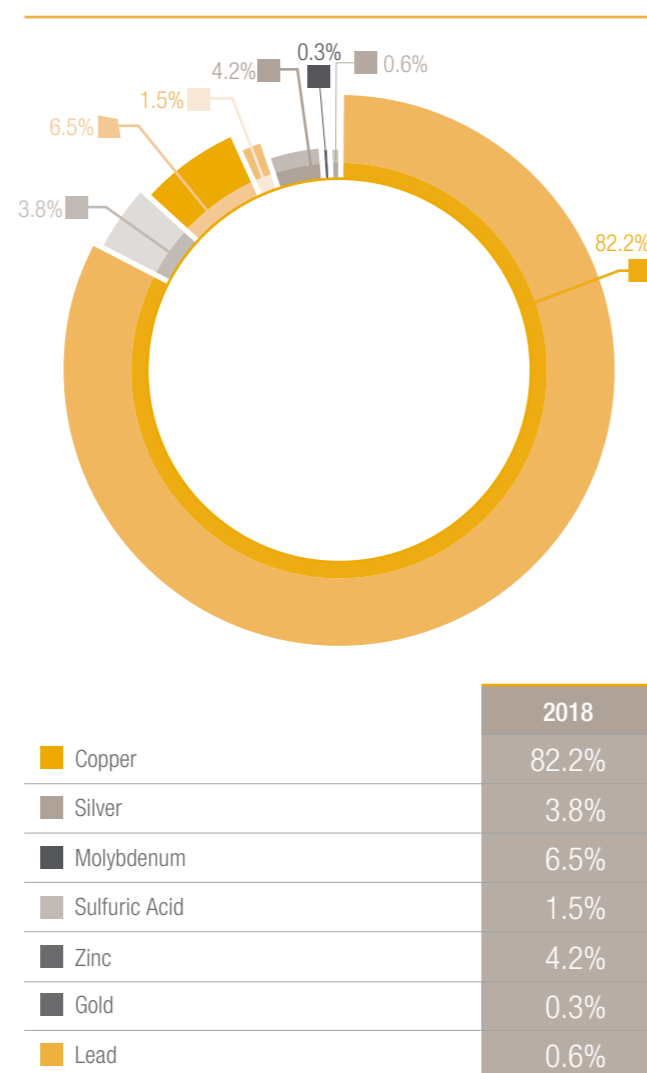
PRODUCTS AND CLIENTS

MINING DIVISION, 2018

	OUR PRODUCTS	OUR CUSTOMERS
COPPER	Copper is the third most used metal in the world and is a basic component for infrastructure and growth. It has exceptional chemical and physical properties, including high electrical conductivity and high resistance to corrosion. It also has excellent malleability and ductility.	Our customers work in the construction industries, the manufacturing of electrical products and electronics, telecommunications, computers, mobile phones, industrial machinery and equipment, consumer products, and are also in the automotive and transportation sectors. Our customers also include metals sellers, smelters, and metal recovery and recycling companies.
MOLYBDENUM	Molybdenum is used primarily to manufacture stainless and special steels. It is used to strengthen steel alloys and to soften tungsten alloys. It is also used as a catalyst in the oil and gas industry, and in fertilizers, dyes, paints, reagents and lubricants.	Our principal customers work in the transformation industry, treating and processing molybdenum, and its derivatives, including molybdenum oxide.
ZINC	Zinc is used primarily to galvanize iron and steel to protect against corrosion, in manufacturing batteries and for architectural purposes. It is also the base for zinc oxide, which is used in tires, paints and livestock feed, among other products.	Our customers are in the steel, electrical and cable industries, sellers of zinc alloy products, and pure metal supply companies.
SILVER	Silver is used in photography, electrical products and electronics, and to a lesser degree, in traditional welding and welding alloys, jewelry, coins, silverwork and catalysts.	Our principal customers are in the hazardous waste treatment and recovery industry, manufacturers of specialty pieces that use metal alloys, and sellers of construction materials.
GOLD	Gold is used in jewelry, in cancer treatments and for other diseases. It is also used in industrial welding, coloring in photography, and also in the aerospace sector, among other uses.	Our customers are active in many sectors, benefiting from the properties of this metal, such as its corrosion resistance, among others.

Results. Mining Division sales increased 4% in 2018, reporting US\$7.884 billion, due to improved metals prices for copper (+4.6%), zinc (+1.5%) and molybdenum (+46%). EBITDA was US\$3.559 billion, a 3% increase over 2017.

Contribution by metal to AMC's 2018 cumulative sales:



INVESTMENTS AND PROJECTS

203-1, 203-2

The Mining Division of Grupo México has set as a goal to become one of the top copper producers in the world. To achieve this, our approach

considers not only the copper price outlooks, but also puts particular emphasis on projects that consider the quality of the assets we operate and develop.

We have designed the next phase of our growth for our AMC operations with the goal of reaching a copper production capacity of nearly 2 million tons by 2027, with a total investment budget of US\$5.400 billion. This will represent a 76% growth compared with our copper production of 1,127,800 tons in 2018.

As part of our growth strategy, we invested US\$1.174 billion in 2018, of which US\$336 million was allocated to our projects in Mexico, US\$639 million to projects in Peru, and US\$199 million in the United States.

Principal Projects

Our investment philosophy is not based on metals prices, but on the quality of the assets we operate and develop. Over the years, our financial discipline has allowed us to continually invest in a large portfolio of projects.

Principal Projects in Mexico

Buenvista Zinc, Sonora. This project is located at the Buenvista del Cobre deposit in Sonora and consists of the construction of a concentrator with a production capacity of 100,000 tons of zinc and an additional 20,000 tons of copper per year. The basic engineering

has been completed and we are currently purchasing the principal components for the project. This investment has a budget of US\$413 million and the project is expected to be completed in 2021. On completion, the new concentrator will double the zinc production of the Mining Division.

This project will exploit the deposit to take advantage of all the mineral resources.

The construction stage will create 1,800 jobs and 490 new direct and 1,470 indirect jobs when in operation.

Pilares, Sonora. Situated 6 km from the La Caridad mine in Sonora, this open pit mine project produces 35,000 tons of copper concentrate per year. The engineering has been completed on the road construction for the mine trucks that will transport the ore from the Pilares pit to the primary crushing plants at the La Caridad mine. The environmental permits are being processed with the government authorities. This project represents an investment of US\$159 million and is expected to be completed early in 2020.

This project will benefit the La Caridad mine with an improved ore grade and will activate an old mine site. The construction stage will create 500 jobs and 280 new direct and 890 indirect jobs when in operation.

Pilares, Sonora. This low capital-intensive copper oxide project is located 45 kilometers northwest of our Buenavista del Cobre mine. The results from the exploration campaign confirmed reserves of 325 million tons with copper grades of 0.287%. El Pilar will operate as an open pit mine with an SX/EW plant, this being an efficient and environmentally friendly technology as it does not generate tailings.

This project will create 1,500 jobs during its construction and 680 new direct and 2,030 indirect jobs during its operation.

El Arco, Baja California. El Arco is a copper, gold, molybdenum and silver deposit located in the middle of the Baja California peninsula. A drilling program was carried out from July 2015 to February 2016 to define the deposit. The results increase reserves to 2.700 billion tons with copper grades of 0.399% and 790.11 grams of gold per ton. This project involves an open pit mine, a concentrator and an SX/EW plant.

This industrial development project is a benchmark for the Baja California peninsula and is expected to drive infrastructure and business activity in the region. It has the potential to increase copper production in Mexico by 30%.

The construction stage will create 6,000 jobs and 2,195 new direct and 6,600 indirect jobs during its operation.

Principal Projects in Peru

Tailings thickeners at the Toquepala and Cuajone concentrator. This project will replace two of the three thickeners at this concentrator with a new high-tech thickener. This change will help to simplify the flotation process and improve water recovery, increasing the percentage of solids in the tailings from 54% to 61% and reducing water consumption. The installation of the equipment was completed in 2018, representing an investment of US\$30 million. This project is expected to be completed early in 2019.

Quebrada Honda - Moquegua tailings dam: This project will increase the height of the existing dam in Quebrada Honda to store future tailings from the Toquepala and Cuajone operations. This project is expected to extend the useful life of the dam by at least 25 years. The first stage of construction has been completed as well as the drainage system. This project has a total investment budget of US\$116 million, US\$107 million has been expended at December 31, 2018.

Tia Maria. Mine project that will process copper oxides from the La Tapada and Tia Maria deposits, both of which are situated in the La Joya desert in the Arequipa region in Peru. The engineering has been completed and having complied with all environmental regulations, the environmental impact assessment has also been completed. We are working with the Peruvian government to receive the construction permit during the first

half of 2019. This project will produce 120,000 tons of SX/EW copper annually (the most environmentally friendly), representing an investment of US\$1.400 billion.

The project will use ocean water processed at a desalination plant, representing an investment of US\$95 million, to avoid using the fresh water in the region. The construction stage will create 9,000 jobs and 4,800 new direct and indirect jobs when in operation.

In addition to our community work in the Tambo Valley, we have developed a successful work program, “*Forjando Futuros*” (Forging Futures) to train 700 people from the province of Islay. At the end of their training, participants are eligible to apply for one of the 3,500 jobs we will create during the construction stage. This action affirms our commitment to creating economic development and wellbeing in the provinces of Islay and Arequipa.

Principal Projects in Spain

Aznalcollar, Andalusia. This project represents our first venture outside the Americas. It is located 35 km from Seville in Spain. We carried out an extensive exploration campaign in 2017, the results of which confirm reserves and infer greater potential and attractive mineral resources than had been estimated initially. We are currently processing the environmental, construction and operating permits with the local authorities. The Mining Division is working on the feasibility study and detailed engineering, which are expected to be completed early in 2019.

This project will reactivate the Aznalcollar mine complex, which closed in 2001, with significant economic spillover in the region. This operation will be supported by a local and national logistics supply chain ensuring highly efficient activities with a minimal need for onsite storage.

The design for the exploitation of the Los Frailes mine meets the highest technical and environmental standards:

- With the water infrastructure in place to optimize water reuse and collecting rainwater, the mine will be self-sufficient and will not consume fresh water from outside the site.
- All electrical power will be from renewable sources, acquired from plants in Andalusia, and the greenhouse gas emissions will be offset from the first year of operation.
- Investments will be made in social improvements and local development projects, including the rehabilitation of the areas involved in the exploitation of the Los Frailes deposit and also those affected by past mine activity.

The construction stage of this project will create 1,100 jobs and 426 new direct and 1,430 indirect jobs will be created for its operation.

EXPLORATIONS

Exploration is a long-term business as it requires significant investment with high levels of risk. Because of this, the Mining Division is undergoing a financial restructuring aimed at acquiring projects that have already completed a certain level of exploration. Thus, although these projects are not yet under construction or in production, the time it will take to get them running is much less than developing a whole new mine operation.

One of the strengths of Grupo México is our ability to diversify our mining and metallurgical operations. This is possible thanks to a combination of exploration techniques, exploitation and our infrastructure.

PRINCIPAL EXPLORATION PROJECTS			
COUNTRY	PROJECTS	COUNTRY	PROJECTS
Mexico	<ul style="list-style-type: none"> • Bella Unión (La Caridad) • Chalchihuites • Campo Medio (Santa Eulalia) 	Peru	• Los Chancas
		Chile	• El Salado
		Ecuador	• Chaucha - Ruta del Cobre
		Argentina	• Proyecto Caldera

CUSTOMER RELATIONS

102-43, 102-44

Customer satisfaction. The satisfaction of our customers is key for all Mining Division subsidiaries as we strive to be recognized for the quality and excellence of our products. Seeking out opportunities for continual improvement, we conduct an annual satisfaction survey with our customers to assess our products and services. The results from these surveys help us to define corrective measures to improve our service for customers who give us a less than satisfactory rating.

The survey also identifies the strengths of our products and services, and we develop processes to continue to perfect them. We monitor the effectiveness of our corrective actions through our interactions with customers.

Our customers gave our performance a rating of 97% in 2018.



MINING DIVISION

promote

WORKFORCE AND LABOR PRACTICES

Workforce

102-8

Our people. The Mining Division team was comprised of 16,492 collaborators in 2018, all working full time. Nearly all our collaborators are under permanent contract, 98%, while the remaining 2% have term contracts, according to the nature of their activities.

TOTAL EMPLOYEES

MINING DIVISION, 2016-2018

YEAR	EMPLOYEES
2016	15,883
2017	15,672
2018	16,492

EMPLOYEES BY REGION AND GENDER

MINING DIVISION, 2018

REGION	EMPLOYEES		GENDER	
	Total	%	Men	Women
Mexico	9,037	55%	8,537	500
Peru	5,101	31%	4,775	326
USA	2,354	14%	2,140	214

EMPLOYEES BY REGION, TYPE OF CONTRACT AND GENDER

MINING DIVISION, 2018

REGION	EMPLOYEES		PERMANENT CONTRACT		TERM CONTRACT	
	Total	%	Men	Women	Men	Women
Mexico	9,037	55%	8,506	491	31	9
Peru	5,101	31%	4,475	295	300	31
USA	2,354	14%	2,140	214	0	0

Contractors. The activities of the Mining Division contribute indirectly to job creation. In 2018, AMC subsidiaries hired 19,025 contract workers, 18,331 of which were men and 694 women.

Freedom of association

102-41, 402-1, MM4

The companies that comprise the Mining Division of Grupo México guarantee freedom of association as a labor right. These relationships foster a positive work environment, which improves productivity. At 2018 close, 12,420 of our collaborators were unionized, representing 75% of the division's workforce.

For Grupo México, strengthening trust between the company and our collaborators is key, including union representatives, for which we maintain ongoing dialog through the human resources department. We communicate operational changes with the advance notice required by law. For example, in the United States, the Worker Adjustment and Retraining Notification Act (WARN) requires 60 days notice for mass layoffs and/or closures.

No recognized strikes or work stoppages affecting the operations of any Mining Division subsidiary were reported in 2018.

Equal opportunity and non-discrimination

103-3, 405-1, 406-1

Our workforce is comprised primarily of men, although with our focus on inclusion and equality, we are especially interested in encouraging women to join our Mining Division. Our recruitment practices encourage women and we guarantee equal conditions. In 2018, 1,040 of our collaborators were women, representing 6% of the workforce.

WOMEN BY EMPLOYEE CATEGORY

MINING DIVISION, 2018

CATEGORY	TOTAL EMPLOYEES	MALE EMPLOYEES	FEMALE EMPLOYEES	% WOMEN
Senior Management & Department Heads	59	52	7	11.86%
Senior Technicians	267	234	33	12.36%
Junior Technicians	1,460	1,256	204	13.97%
Specialists	1,075	877	198	18.42%
Assistants	13,631	13,033	598	4.39%
Total	16,492	15,452	1,040	6.3%

EMPLOYEES BY AGE GROUP

MINING DIVISION, 2018

AGE GROUP ⁶	EMPLOYEES	
	Total	%
18-25	1,138	7%
26-40	7,265	44%
41-50	3,519	21%
51+	4,570	28%

Non-discrimination. In adherence of the principles and values of Grupo México in terms of integration, gender equality, non-discrimination, dignified treatment and capacity development, the Mining Division rejects any act that could be considered discriminatory. Our Code of Ethics includes processes to ensure non-discrimination on the basis of ethnic origin or nationality, gender, age, disability, social condition, political affiliation, health condition, religious beliefs, immigration status, opinions, sexual preference or marital status. The Code of Ethics is our most important instrument to guarantee respect for human rights.

Any collaborator that is witness to or the victim of any form of discrimination, directly or indirectly, is encouraged to report the incident via the Grupo México Reporting Line⁷. This formal mechanism is operated by a third party and offers a phone number, email and website to report incidents.

⁶ Not: The age group ranges were adjusted in 2018 to better reflect our demographics.

⁷ <https://www.lineadedenuncia.com/mineramexico/default.html>

Five cases of discrimination were reported at our US subsidiary in 2018. These cases were investigated and resolved by the company and have been closed without legal action.

Workplace climate. The Mining Division conducts surveys every two years to understand the perceptions our collaborators have of the company and to design actions to increase their commitment. The last survey was conducted in 2017, with the participation of 9,264 collaborators. The major areas of opportunity identified through the surveys were addressed in 2018.

Salaries and salary equality

202-1, 405-2

The average base salary in the Mining Division in 2018 was equal to 9 times the local minimum wage⁸. The base salary includes the basic wage, productivity bonuses, cash benefits and profit sharing, where applicable.

In terms of the base salary for women compared with men, we strive for salary equality in all employee categories regardless of gender.

BASE SALARY OF WOMEN VS. MEN⁹

MINING DIVISION, 2018

REGION	MANAGEMENT	SENIOR TECHNICIANS	JUNIOR TECHNICIANS	SPECIALISTS	ASSISTANTS
MINING DIVISION	1	0.83	0.90	0.86	0.90

Recruitment and retaining personnel

401-1

During 2018, 2,027 new collaborators were added to our mine operations in Mexico, Peru and the United States, and there were 1,244 separations. As a result, the turnover rate this year was 7.5%.

⁸ Considering the Base Salary (BS) and the Minimum Wage (MW), the BS/MW average is calculated weighting the BS and MW for each country where we operate, based on the number of collaborators in the Mining Division in each territory.

⁹ This comparative does not include the operations in Peru. We are working on unifying the employee categories to report for the Mining Division as a whole. Salaries are reported in USD.

TURNOVER RATE BY YEAR

MINING DIVISION, 2016-2018

YEAR	PERCENTAGE
2016	10.31%
2017	9.61%
2018	7.5%

TURNOVER RATE BY GENDER

MINING DIVISION, 2018

GENDER	PERCENTAGE
Men	7.5%
Women	8.8%

TURNOVER RATE BY REGION

MINING DIVISION, 2018

SUBSIDIARY	EMPLOYEES
Mexico	8%
Peru	4.4%
USA	12.5%

NEW HIRES

MINING DIVISION, 2018

REGION	AGE GROUPS ¹⁰				GENDER	
	18-25	26-40	41-50	51+	Men	Women
Mexico	367	654	159	108	1,189	99
Peru	53	387	28	14	457	25
USA	57	111	44	45	217	40
TOTAL	477	1,152	231	167	1,863	164

EMPLOYEE TURNOVER

MINING DIVISION, 2018

REGION	AGE GROUPS ¹⁰				GENDER	
	18-25	26-40	41-50	51+	Men	Women
Mexico	122	350	97	157	671	55
Peru	3	62	27	131	204	19
USA	34	90	56	115	277	18
TOTAL	159	502	180	403	1,152	92

Employee benefits

401-2

To contribute to the employment stability of our Mining Division employees, we offer an attractive benefits package above those required by law:

SALARY-RELATED
Life insurance
Major medical insurance
Family protection insurance
Savings fund
Grocery vouchers
Productivity bonus
Pension fund
OTHERS
Housing assignment
Utilities (power, water, etc.)
Medical clinics
School (elementary and middle school) for children of employees
Employee cafeterias
Sports facilities
Scholarships for employees and their children
Share purchase plan for employees
Retirement plan

¹⁰ The age group ranges were adjusted in 2018 to better reflect our demographics.

TRAINING AND CAREER DEVELOPMENT

TRAINING

103-1, 103-2, 404-1, 404-2

Mining requires highly specialized technical skills, therefore developing talent among our collaborators is a priority. The Mining Division considers training part of our commitment to the communities where we operate and therefore we have designed education programs in collaboration with different organizations and institutions.

We delivered a total 411,755 training hours in the Mining Division in 2018, with an average 24.96 training hours per collaborator.

TOTAL TRAINING HOURS

MINING DIVISION, 2016-2018

YEAR	THOUSANDS OF HOURS
2016	548,118
2017	413,158
2018	411,755

TOTAL TRAINING HOURS BY EMPLOYEE CATEGORY AND GENDER

MINING DIVISION, 2018

EMPLOYEE CATEGORY	TRAINING HOURS		
	Total	Men	Women
Senior Management & Department Heads	2,494	2,389	105
Senior Technicians	8,740	7,219	1,521
Junior Technicians	60,160	53,791	6,369
Specialists	44,546	35,479	9,067
Assistants	295,815	281,000	14,815
Total hours	411,755	379,878	31,877

The skills management and training programs we offer our collaborators in the Mining Division vary according to their activity.

TRAINING PROGRAMS

MINING DIVISION, 2018

MEXICO

Programs are based on the Minera México Corporate, Administrative and Technical Competencies Model, which has a specific profile of required competencies for each position. These competencies are assessed to identify training needs. Dialog between supervisor and collaborator is fundamental in planning their professional development and training.

PERU

The competencies required are defined based on the position, considering the types of tasks performed, the technology available, and possible special projects. These competencies then provide essential input for the Annual Training Plan. The principal programs address: (i) occupational health and safety, (ii) technical competencies, and (iii) behavioral skills (coaching, supervisor responsibilities and management skills).

UNITED STATES

Programs are based on developing leadership skills, such as conflict resolution, mechanisms for employee feedback and adaptive leadership, among others. Management courses are offered on diversity, understanding policies and procedures, gender equality and discrimination. Additionally, courses are held at a creative leadership center, outside the ASARCO facilities, where we strive to maximize the management skills of our collaborators.

In Mexico, we collaborate with the Instituto Nacional para la Educación de los Adultos, and its affiliates, to offer our collaborators the opportunity to complete their elementary, middle and high school education. In 2018, 19 collaborators at our Sonora and Chihuahua operations received their middle or high school diplomas.

Also, we have developed education programs for the mining industry together with the Colegio Nacional de Educación Profesional Técnica and the Instituto Tecnológico de Parral. Thanks to these programs, 83 collaborators graduated in 2018 with electromechanical technician qualifications and another 27 collaborators will soon graduate with mine engineering degrees.

Performance review

103-3, 404-3

Goals are defined for each Mining Division collaborator based on the strategic goals of the business. The annual review looks at competencies and the achievement of goals. This process seeks to strengthen dialog between the collaborator and their supervisor, and to align the projects and teamwork. In 2018, 88% of our non-unionized collaborators received a performance review.

PERFORMANCE REVIEW PROCESSES

MINING DIVISION, 2018

MEXICO

We have a solid Performance Improvement program in place based on setting individual performance goals that are aligned with the strategic objectives of the business. These goals are reviewed frequently to ensure they are achieved and to adjust them to changes in the business strategy. The achievement of the goals and competencies of each collaborator (non-union) is reviewed at the end of each year through a formal feedback session with their supervisor to define the training needs and development for each collaborator.

PERU

A Performance Review Tool is applied to employees that have been with the company for more than 6 months, and includes general criteria, such as applying skills and knowledge, work planning and organization, interpersonal relationships, results, initiative, work attitude and creativity. Additionally, management with employees under their charge are assessed in their management skills, cost control and resource management, safety, problem analysis and decision making, and developing their team.

UNITED STATES

Employees set annual goals together with their supervisors. These goals form the basis for the yearend review, conducted using an online tool. Career planning sessions are then held, where the employee and the supervisor set new goals and discuss skills and areas for improvement for the next performance review.

OCCUPATIONAL HEALTH AND SAFETY

Occupational Safety

103-1, 103-2, 403-1, 403-8

Approach. For Grupo México, caring for the lives, health and wellbeing of our collaborators and their families is the top priority at all our operations. Our most valuable assets is our people. Therefore, one of our goals is to foster a change in the behavior of our employees to reduce risks and minimize accidents at all our operations.

The Mining Division's Comprehensive Workplace Health and Safety Management Systems help us to identify the dangers to which our collaborators are exposed and to maintain safe work environments for all personnel at our mines. These management systems are based on OHSAS 18001 and the legal requirements in the countries where we operate, as well as the health and safety recommendations of mining industry authorities. Our safety specialists review these systems regularly, helping us to implement improvement processes for our work conditions and methods.

The involvement and consultation with our employees is important for implementing and evaluating occupational health and safety management systems. We have the following processes in place to provide information and receive feedback from our collaborators on workplace health and safety:

- On joining the company, and annually thereafter, all our collaborators receive training in occupational health and safety.
- Health and safety talks are given daily before starting work, to inform and caution about the dangers in their work and to communicate relevant events occurring in previous shifts or at other company locations.
- There are different specialized safety training programs in place, which focus on different tasks and organizational levels.

To generate a safe environment and labor practices, all our collaborators are encouraged to report dangers and risky actions, regardless of the circumstance. The Code of Ethics ensures no fear of retribution for these reports.

Occupational health and safety commissions

403-4

The guidelines we set to safeguard the safety of our employees include the implementation of Health and Safety Commissions at all our mines. These voluntary commissions are made up of 50% unionized employees and their representatives and 50% non-unionized employees, who together represent the entire workforce. The commissions oversee safe working conditions for all employees by monitoring all areas of the company, checking the conditions of our facilities and equipment, and they also participate in accident investigations. A log is kept of these actions and their findings are assigned to the different areas to implement corrective actions.

HEALTH AND SAFETY COMMISSIONS

MINING DIVISION, 2018

COUNTRY	DESCRIPTION	% OF THE WORKFORCE REPRESENTED
MEXICO	Our operations in Mexico have a Central Safety Commission comprised of managers, directors and superintendents, which is responsible for ensuring compliance with regulations and defining corrective measures from monitoring operations. Also, the Departmental Safety Commission reviews the work conditions within the Mining Division and is comprised of supervisors, and there is a Health and Safety Commission made up of management and collaborators.	100
PERU	In Peru, we have a Joint Workplace Health and Safety Commission at all our operations, comprised of management and collaborators from all the different areas. This commission reviews the operating conditions to ensure these are optimal, analyzes risks, and follows up on health and safety plans and programs.	100
UNITED STATES	Our mine operations in the United States also have a Health and Safety Commission at each operation, made up of management and collaborators, representing the entire workforce. In addition to participating in the design of the health and safety programs, the commissions regularly inspect the working conditions, participate in accident investigations, and hear concerns from employees on health and safety issues.	100

Our priority in the Mining Division is to create optimal and safe work environments for all our collaborators, through designing and implementing programs that meet the highest standards of occupational health and safety. These programs are aimed at identifying dangers and risk assessment and management.

Risk Management and Occupational Safety Programs

403-2, 403-5

Identifying dangers and risk assessment and control: This methodology invites employees to analyze their day-to-day tasks, identifying the dangers, assessing the risks and implementing the control measures needed to do their work safely. These analyses are then used to improve and/or revise the safe work procedures for each operating task.

Safety Cells. At Grupo México, we focus on the basic work unit at our operations, which we call “Safety Cells”. Since its creation in 2009, this model involves employees in identifying operational risks in a timely manner. The basic premise for involving our collaborators in recognizing dangers inherent to their work is that they, during their day-to-day work, have a clear sense of those areas or processes where it would be necessary or desirable to intervene to improve the safety conditions.

The Safety Cells are organized into brigades tasked with reviewing and following the established safety protocols, as well as supporting personnel training. In addition to identifying potential risks, they help to develop response and mitigation strategies.

Total Safety Culture (TSC). Launched in 2017, this project encourages the active participation of senior management, mine managers and superintendents in workplace health and safety management, fostering commitment and leadership in safety at all levels of the organization.

Behavior-Based Safety (BBS). The Mining Division strives to achieve a culture of excellence in safety, for which we have implemented our “Behavior-Based Safety” program, where all our collaborators share the responsibility to observe, care for and ensure safety in all areas of our operations.

This program is a tool based on observing the behaviors of our employees to detect areas of opportunity and offer positive feedback to foster a culture of prevention and self-care.

Mine rescue brigades. All our mine operations have emergency brigades, formed by volunteer mine workers who come to the aid of their colleagues in the event of any emergency requiring immediate action. It is essential that these brigades receive proper training to know how to act.

In the Mining Division, we train these brigades in the necessary skills in the event of a disaster.

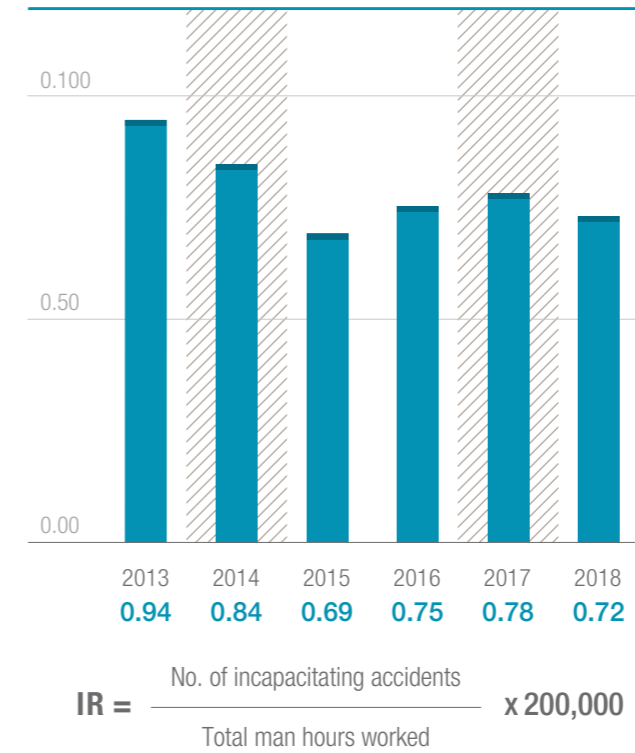
Certifications. During 2018, 63% of our subsidiaries were OHSAS 18001 certified. We also obtained 39 Occupational Health and Safety certificates, 27 of which resulted from voluntary compliance with the Self-Management Workplace Health and Safety Program (PASST in Spanish) operated by the Mexican Department of Labor and Social Welfare.

SAFETY CERTIFICATIONS AND RECOGNITIONS

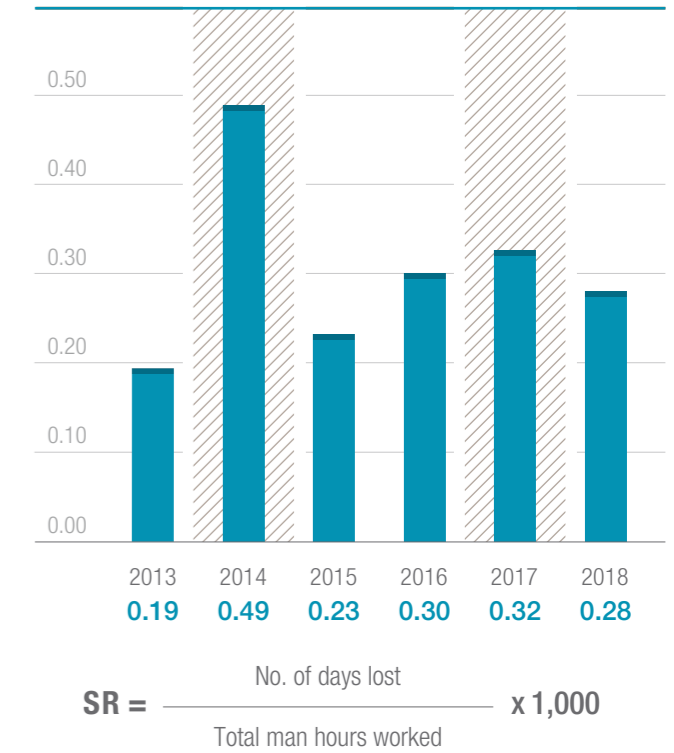
MINING DIVISION, 2018

CERTIFICATION	OPERATIONS CERTIFIED
OHSAS 18001:2007	12 units certified in Mexico and Peru
Workplace Health and Safety Program	27 units certified
The Mexican Mining Chamber (CAMIMEX) Casco de Plata "Jorge Rangel Zamorano" prize, for reporting the lowest incident rates in the industry.	Mexicana del Cobre "La Caridad" Mine Metallurgical Complex Rod Plant

INCIDENT RATE (IR)
MINING DIVISION, 2013-2018



SEVERITY RATE (SR)
MINING DIVISION, 2013-2018



Occupational Safety Performance

103-3, 403-9

There was one accident in 2018 at our Santa Barbara mine in Mexico, during which regrettably one contract worker lost their life. We grieve this loss and it motivates us to double our efforts in safety and to raise awareness among both company and contract personnel. We continue to work on optimizing preventive measures to eliminate unsafe conditions and behaviors until we have reached our goal of "Zero Accidents".

Our efforts to increase safety programs and investments over the last five years have produced significant results, such as reducing our occupational accident rate by 23%.

Additionally, the occupational accident rate for all our Mining Division operations has remained at 38% below the average for the mining industry in the United States, according to the Mine Safety and Health Administration (MSHA).

2022 Occupational safety targets:

- *Zero fatalities.*
- *Reduce the injury frequency rate of our employees and contractors by 25% in the Mining Division.*
- *Implement a Behavior-Based Safety System in 75% of the Mining Division business units.*
- *Obtain the ISO 45001 certification in all of the Mining Division business units."*
- *Implement a comprehensive traffic management plan in all open-pit mine facilities.*

Occupational Health

103-1, 403-3, 403-6

Approach. At Grupo México, we are not only concerned about ensuring our collaborators have the necessary safety conditions in the workplace, we're committed to their overall wellbeing. In this regard, we offer talks and hold campaigns on the prevention and early detection of chronic degenerative diseases, and we add to these recommendations to reduce risks. Changes in the family, not just in individuals, are needed to reduce these diseases. A healthy collaborator is key to improving productivity and family stability, and to reducing government spending in medical services and pensions.

Our challenge is to continue to reduce the risk factors among our personnel that can be prevented through a culture of self-care. Smoking, obesity, poor eating habits, a sedentary lifestyle, among others, are the areas around which we have designed our health strategy.

Specialized medical services are available at all our Mining Division operations for all personnel and contract workers, to address, inform and educate on topics of the prevention of workplace and general diseases and illnesses, control measures to reduce exposure to dangers, as well as providing first aid and medical consultations. These services are provided by qualified medical personnel.

In Peru, in addition to these medical services, we have 3 hospitals in Cuajone, Ilo and Toquepala offering health services, advice, training and preventive health consultations. These services are also available for the families of our Mining Division collaborators in these regions.

The Mining Division has specific programs that focus on preventing illnesses and promoting health both in and outside the workplace:

Wellbeing Program

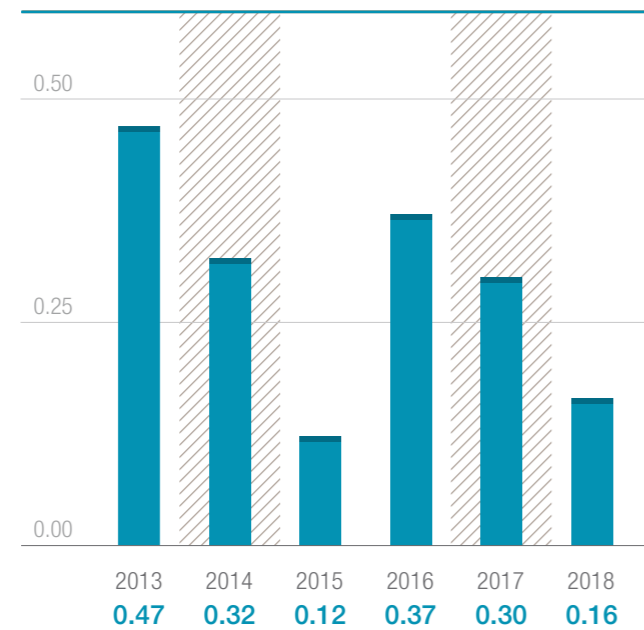
The exponential increase in chronic degenerative diseases in Mexico in the last twenty years is a threat that considerably lowers the quality of life and productive years of all our employees. In response to the threat that our people will be affected by chronic degenerative diseases, we have implemented preventive programs that go beyond an emphasis on occupational health by covering the general health of our employees and their families.

We provided the following in 2018:

- 29,670 first contact medical services for Minera México personnel, family members and contract workers
- 1,124 new hire medical exams
- 3,662 medical exams for occupationally exposed personnel, including lab work, hearing tests and pulmonary function tests
- 2,443 biological monitoring tests
- 2,774 talks on occupational and general health topics with 35,319 participants
- 2,036 vaccinations
- 942 health inspections of cafeterias and sanitation services
- 8,726 five-level health tests, which consist of determining body mass index, blood pressure test, blood sugar testing, cholesterol and triglycerides
- A total of 163 self-help group sessions with 2,945 participants
- 4,372 individual nutrition consults and 283 talks with 3,966 participants
- 941 physical training sessions and health breaks in the workplace
- 281 prostate cancer tests
- 192 tuberculosis skin tests
- 141 cervical cancer tests
- 141 breast cancer tests
- 123 HIV tests
- 2,712 eye exams
- 5,345 deparatization treatments

Healthy lifestyle. We offer workshops on prevention and self-care for our collaborators, their families and the general public to raise awareness on behaviors that help to live a healthy lifestyle.

OCCUPATIONAL DISEASE RATE (ODR)
MINING DIVISION, 2013-2018



$$\text{ODR} = \frac{\text{No. of cases of occupational diseases}}{\text{Total man hours worked}} \times 200,000$$

Performance in Occupational Health

103-2, 103-3, 403-10

We have reduced our occupational disease rate by 66% over the last 5 years as a result of our various education, risk control and prevention, and illness treatment programs.

2022 Mining Division occupational health target:

- Provide preventive health programs focused on chronic-degenerative diseases to 70% of the mining operations workforce exposed to non-occupational health risks.

Investment in occupational health and safety. We invested US\$116 million in occupational health and safety in 2018.

INVESTMENT AND SPENDING IN WORKPLACE SAFETY

US\$ Millions

MINING DIVISION, 2018

CATEGORY	AMOUNT 2018
Administrative costs	3.38
Training	1.17
Personal protective gear	8.47
Industrial hygiene studies	1.2
Engineering works	94.2
Total	108.4

INVESTMENT AND SPENDING IN WORKPLACE HEALTH

US\$ Millions

MINING DIVISION, 2018

CATEGORY	AMOUNT 2018
Health awareness, promotion and protection	.81
Detection and prevention	1.23
Treatment	5.52
Rehabilitation	0.23
Total	7.79

COMMUNITY DEVELOPMENT

103-1, 103-2, 103-3, 203-1, 203-2, 413-1, 413-2, MM6, MM7

Community Development Model

Grupo México's Sustainable Development approach puts people at the center of decision-making to involve them in transforming their environment. The model prioritizes collaboration with the communities where the company operates through active listening tools and ongoing dialog, to understand the needs of the community for their development.

The model operates by "stages", which are articulated as a process of linkage and inclusion for all members of our communities, including government and educational institutions. In this way, we build a structure based on shared responsibility and collaborative work to foster a vision of wellbeing for present and future generations.

The Grupo México Community Development model is based on 3 fundamental stages:



Good neighbors

The first stage of the Community Development model is focused on generating a positive and healthy interaction with our neighbors. We conduct our work in strict adherence of procedures that care for the environment and our workforce. We have also designed communication channels for open, close and ongoing dialog with our communities. Our Code of Ethics, the guiding principles for our day-to-day actions, sets out our vision for social responsibility.

We opened a reporting mechanism to the public in 2018 to present complaints and concerns regarding our industrial processes, making this a tool for transparency and effective response. By year close, we had received 2 complaints involving ethics issues.

Although our social linkage model is based on collaboration and co-responsibility with the communities where we operate, Grupo México is aware that emergency situations require a strong, immediate response. We are committed to and join in humanitarian aid efforts when needed to build solidarity among Mexicans.

Economic development

The second stage of our Community Development model strives to regenerate, strengthen and even create social weave and economic value. The key strategies to achieve these goals include the following:

Forjando Futuros (Forging Futures): Program that offers professional and practical training and for suppliers to maximize their competitive advantages in different industries. In 2018, the program was active in the Jorge Basadre, Candarave and Tacna provinces in Peru, supporting 80 people in the educational development and professional practice, and 5 suppliers to improve their business skills.

Social infrastructure: Projects that focus on connectivity, transport, health and creating public spaces that support and add value to the day-to-day life of the communities where we operate.

- **Cananea-Bacoachi Highway:** In 2018, we continued our work on the Cananea-Bacoachi highway in Sonora, which includes conservation works for roadways, drainage, pavement and ditches, and the installation of signage and security devices. This project has created 220 direct jobs and generated 395,000 man-hours. A total US\$12.8 million has been invested in this project to benefit 10 local communities.
- **Cularjahuira Dam:** In collaboration with the Ministry of Agriculture and Irrigation in Peru and the District Municipality of Camilaca, we began construction on a dam with a storage capacity of 2.5 million m³ to boost the water capacities in the region. In 2018, the dam exceeded 70% physical performance. This project, 60% financed by Southern Copper and 40% by the Peruvian Ministry of Agriculture and Irrigation, will benefit 585 users in Camilaca.

Human Developmente

Grupo México is committed to the human development of all our employees and the communities where we operate. In Mexico, our community linkage model is called Casa Grande, and in Peru, Casa Nuestra. This model of community centers in the places where we operate, implements programs and projects that focus on education, health, culture and caring for the environment. We have 16 community centers in Mexico and 10 in Peru.

Grupo México Schools: Supporting quality education, Grupo México allocated US\$6.5 million in 2018 to four schools in Mexico and seven in Peru. These elementary and middle schools, the students at which are mostly children of our employees, follow a bilingual English program and have obtained scores above the local and regional average in official evaluations. They also boast a zero dropout rate and a failing rate of 0.1%.

Continuing Education: We offer programs and initiatives for employees and their families to continue their studies. In this regard, we have built alliances with the Department of Education in Mexico and in Peru, with the Ministry of Education whereby collaborators can complete their high school or earn a degree.

Art and Culture: We launched a landmark project for the Community Development model in October 2018,

creating a youth orchestra in Nacoziari, Sonora with 110 children and youth between 9 and 19 years of age. The project builds teamwork skills, artistic sensitivities, and motivation to achieve goals through music. The orchestra is 40% children of company employees and 60% children and youth from the community.

Our Human Development actions in the communities where we are present build an environment of trust to develop projects together with the community. We created a model of open invitations to present proposals for social impact projects to receive funding. Community Committees set the guidelines for the open invitation, the members of which are volunteers and community leaders, who review the projects submitted ensuring they meet the impact requirements. These Committees also decide which projects will receive financing or seed capital. Grupo México participates only as witness to the process and as the primary funder to allow the Committees and communities to decide which projects best address their social realities.

We held 2,689 activities in 2018, 279 programs and projects, involving 12,748 community and company volunteers, reaching 88,130 people with seed capital and productive projects. With these efforts, we encourage development generators and proactive leaders who strengthen the wellbeing of their communities.

Camino a la vida: Grupo México has invested in the purchase and maintenance of a 12-passenger van since 2011. The van drives a route twice a week, taking patients with chronic illnesses from Cananea to hospitals and medical centers in Nogales and Hermosillo. This project seeks to improve the quality of life of these patients and give them and their families emotional, psychological and financial relief. This project partners with Centro de Recepción y Evaluación de Casos and with health agencies in Hermosillo and Nogales. In 2018, this project gave 1,495 hours of service, for a total 11,960 hours since it was started in 2011.

Patsari Stoves: To reduce the damage to health and the environment caused by traditional wood-based cooking techniques, Grupo México has started a program to install Patsari stoves in six communities in Taxco, Guerrero. This program requires a strategy that includes preparing diagnostics, training, selection of users, construction, installation, and monitoring of the stoves. In 2018, 140 stoves were installed, representing a benefit for 560 people in 6 different communities.

Social investments

203-1

In 2018, the Mining Division invested US\$57.69 million to contribute to economic development and creating opportunities for our communities.

VOLUNTARY SOCIAL INVESTMENT AND SPENDING

MINING DIVISION, 2018

	US\$ MILLIONS
Community development programs, social linkage and productive projects	\$ 8.4
Infrastructure, works projects and equipping neighbor communities	\$ 27.32
Infrastructure in SCC neighborhoods	\$ 21.97
Total	\$ 57.69

2022 Community Development targets:

- Institutionalize the process for identifying and responding to the indigenous communities near our operations.
- Implement a grievance mechanism for external stakeholders located near the Mining Division operations.
- Invest at least 2.5% of net profits in projects that contributing to the United Nations Sustainable Development Goals.
- Ensure that all company-sponsored schools achieve higher academic results than their respective national averages.
- Implement an institutional program that supports the development of small and medium local suppliers.





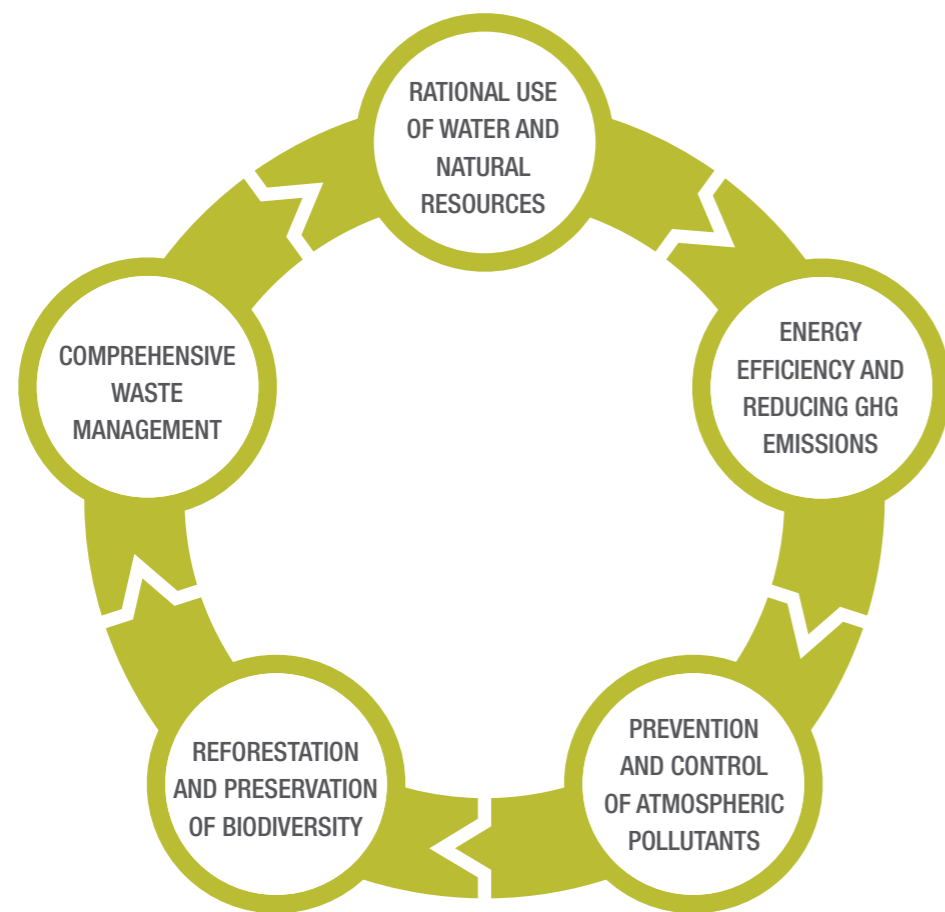
MINING DIVISION

protect

MANAGEMENT APPROACH

103-1, 103-2

Our priorities and principal commitments to sustainable development include mitigating the impacts of our operations on the environment. To assure this, documenting systems have been implemented at all our operations, such as comprehensive resource management, water management, reforestation and biodiversity, reducing greenhouse gas (GHG) emissions, and energy efficiency.



Environmental investment

The Mining Division invested US\$264 million in environmental projects in 2018.

ENVIRONMENTAL INVESTMENTS

MINING DIVISION, 2018

CONCEPT	US\$ MILLIONS
Water	\$ 29.35
Air	\$ 86.73
Soil	\$ 15.40
Waste	\$ 124.89
Biodiversity and reforestation	\$ 2.44
Management	\$ 4.76
Total	\$ 263.57

ENVIRONMENTAL MANAGEMENT AND PERFORMANCE

Water

103-1, 103-2, 103-3, 303-1, 303-2, 303-3, 306-1, 306-5

Approach. Water is the most important input in our extractive processes. The Mining Division installs the latest technologies to increase recovery and reuse in our processes. To ensure we are managing water properly, our mine operations incorporate the following actions to maximize the efficient use and reuse of water:

Closed circuits. The different mineral extraction processes produce tailings. These tailings contain water and solids which pass through the thickeners where most of the water is recovered and the excess flows to the tailings dams through a decanting process, recovering the water stored there. This water is pumped back to the concentrators to be reused, forming a closed circuit of fresh and recovered water.

Thickeners for water recovery. Thickeners help to recover more water from the metallurgical process through the sedimentation of the solids from flotation, removing mine waste, meaning this waste is thickened into a sludge with 48-60% solids (tailings). The purpose of this process is to improve water recovery, reducing the consumption of fresh water by replacing it with recovered water

Wastewater treatment plants. As an alternative to using fresh water, we treat and use the wastewater produced by our neighbor communities. Our plants in Cananea and San Luis Potosi treat more than 120 liters per second, collecting city water for reuse in our operations and nurseries. This strategy indirectly benefits 70,500 residents of these cities, in addition to improving the urban sanitation and availability of clean water.

The smelter also has a process water recovery system in place. The recovery starts with a system that collects wastewater from the different processes. This wastewater is then subjected to flocculation-coagulation processes, producing clarified water, which is filtered through sand and anthracite, activated charcoal filters, 10 and 5 micron multimedia filters, and lastly, the water is demineralized using inverse osmosis and then returned to the process. The discharge water from this plant is reused at the dust and effluent plant, creating a zero discharge process.

Water consumption and recovery. In 2018, 70% of the total water consumed at our mine operations was recovered water. We consumed 153.11 million m³ of first use water and 351.93 million m³ of recovered water.

WATER CONSUMPTION BY SOURCE AND USAGE

Millions m³

MINING DIVISION, 2016-2018

CONSUMPTION OF FIRST USE WATER BY SOURCE	2016	2017	2018
Underground	99.58	99.08	91.53
Surface	50.5	46.92	60.73
Desalinated	0.82	0.66	0.84
Subtotal	150.93	146.66	153.11
Recovered water	358.57	370.87	351.93
Total	509.5	517.53	505.05
Percentage of usage	70%	72%	70%

Mining Division water management targets:

- Update water baseline assessments in all Mining Division business units.
- Systematically monitor water resources at catchment level in mining operations located in high water-stressed areas.

Energy and energy efficiency

302-1

Energy consumption.¹¹ The Mining Division's energy mix in 2018 was comprised of 50.56% fuel, primarily diesel and natural gas. Our power is generated by third parties or other subsidiaries of Grupo México, as part of our self-supply strategy.

ENERGY CONSUMPTION

MINING DIVISION, 2018

YEAR	PETAJOULES 2017	PETAJOULES 2018
Fuel	51.59%	50.56%
Electricity	48.41%	49.44%

TOTAL ELECTRICITY CONSUMPTION

MINING DIVISION, 2016-2018

YEAR	PETAJOULES
2016	24.98
2017	24.65
2018	24.83

TOTAL FUEL CONSUMPTION

MINING DIVISION, 2016-2018

YEAR	PETAJOULES
2016	25.68
2017	26.34
2018	25.39

¹¹ The calorific values reported by the Mexican authorities in the Official Federal Gazette in 2019 were used to calculate the fuel consumption in energy units. Consumptions are reported based on estimates and/or direct readings, depending on the process at our Mining Division operations.

FUEL CONSUMPTION DETAILED

MINING DIVISION, 2018

YEAR	PERCENTAGE 2018
Diesel	69.85%
Natural Gas	23.99%
Fuel Oil	3.69%
LP Gas	1.46%
Gasoline	1.01%

Energy efficiency. One of the principles of our environmental strategy is energy efficiency. Our goal is to produce more with less. To achieve this, we are working on redesigning, converting and adapting equipment, improving and reorganizing processes, and training our collaborators to optimize energy usage.

Climate change

103-1, 103-2, 103-3, 201-2, 305-1, 305-2, 305-5

Effects of climate change. The ultimate goal of our commitment to the fight against climate change and its effects is to ensure the safety of our collaborators and our neighbor communities. In this regard, Grupo México places special emphasis on understanding the effects and risks to our operations. Some of the major risks associated with climate change include intense rains and droughts. To address this, we are developing engineering projects to reinforce our water management systems and increase water reuse in our production chain.

Greenhouse Gases Emissions (GHG). The Mining Division is proactive in adopting best practices in managing GHG inventories. We participate in different local and international programs, such as the GEI Mexico Program and the Carbon Disclosure Project.

Also, in compliance with the National Emissions Register under the 2012 Mexican Climate Change Law, the Mining Division prepares GHG inventories, which are then verified independently. We have been taking this action since before it became mandatory, anticipating regulatory changes as a result of the effects of climate change.

In the United States, our emissions are regulated by the Environmental Protection Agency (EPA), which requires us to report emissions from fixed combustion sources. In Peru, we are not yet required to report or calculate our emissions.

However, the Mining Division is committed to preparing a consolidated inventory of greenhouse gas emissions, which we present annually in this Sustainable Development Report and to the Carbon Disclosure Project.

In 2018, our Scope 1 emissions were equivalent to 1,965,293 tons of CO₂eq, and for Scope 2, we report 2,871,578 tons of CO₂eq. This means that nearly 40% of our GHG emissions come from the direct consumption of fuels and 60% are indirect emissions from energy consumption in our Mining Division.

GREENHOUSE GAS EMISSIONS¹²

Millions of tons CO₂eq

MINING DIVISION, 2018

Type	2018
Direct Emissions ¹³	1.96
Indirect Emissions ¹⁴	2.87

Mitigating Greenhouse Gases. We are working to mitigate emissions, taking actions aimed at: (i) more efficient energy use; (ii) developing and consuming energy from clean and renewable sources, and (iii) promoting the capture of greenhouse gases, including reforestation projects to increase carbon absorption.

Our mine operations have mitigated the indirect GHG emissions by consuming clean energy supplied by our Infrastructure Division affiliates, which generate electrical power through their combined cycle power plants and the "El

¹² Operational controls were considered this year in the consolidation of emissions.

¹³ The tons CO₂eq calculation for direct emissions includes CO₂, CH₄ and N₂O.

The methods and fuel emission factors published by the Mexican authorities in the Official Federal Gazette in 2015 were used to calculate the GHG emissions and are aligned with the guidelines of the Intergovernmental Panel on Climate Change (IPCC).

The calorific values published in the Official Federal Gazette in 2019 (CONUEE February 2019) were used for the estimates.

¹⁴ The tons CO₂eq calculation for indirect emissions includes CO₂ gases.

The methods and emission factors reported (market function) directly by the electricity suppliers or taken from the public information for those companies that did not provide this information were used to calculate the GHG emissions.

Retiro” wind farm. By replacing traditional energy sources with more efficient and renewable sources, in 2018 the Mining Division reduced its emissions by 367,413 tons of CO₂eq.

During the year, we also capitalized on the power generated from our own energy sources. In Mexico, we capture smelter gases from the heat recovery boilers to generate energy. In Peru, we generate power from renewable sources with two hydroelectric plants, with a joint capacity of 9 MW.

Modernization of the Hayden Smelter. This project in Arizona was completed in 2018 to bring us into full compliance with the environmental regulations set by the US Environmental Protection Agency (EPA). The smelter has the latest technology in converter furnaces and in the collection and management of vapor and dust. This project will improve operating efficiency, reducing the emissions released into the environment, capturing up to 99% of the SO₂ emissions. At 2018 close, this project was in the ramp up phase reaching 80% capacity, expecting to reach 100% operating capacity during the first quarter of 2019.

2022 Mining Division climate change targets:

- Update our climate-related risks and opportunities assessment.
- Increase the use of renewable electricity in the Mining Division to 10%.
- Reduce the intensity of greenhouse gas emissions of the Mining Division by 5%.

Materials

301-1

The nature of our operations requires processing, primarily, ore from deposits. Using pyrometallurgic and hydrometallurgic processes, we extract copper, zinc, silver, gold and molybdenum for sale. In 2018, the Mining Division processed a total 501,650,000 tons of ore.

ORE PROCESSED

MINING DIVISION, 2018

YEAR	THOUSANDS OF TONS
2016	447,100
2017	489,070
2018	501,650

Waste management and emergency response

103-1, 103-2, 103-3, 306-2, 306-3, 306-4, MM3

Mine waste management. The mine waste produced by our operations is classified and handled according to industry best practices and in adherence of local regulations.

Our infrastructure and engineering works comply with the design and operation established in environmental regulations.

Final disposal of tailings. Tailings are solid particles produced during the crushing process at our concentrators, which are mixed with water and sent to tailings dams.

Grupo México adheres to the highest standards of quality and engineering practices for the construction and operation of tailings dams. We strive for our operations to not only comply with, but to surpass local regulations and the recommendations of the International Commission on Large Dams (ICOLD). We have also set up a committee of in-house and independent specialists to regularly review the safety and operation of each dam. Additionally, and with the support of the best industry experts, we launched a monitoring program in 2018 for all tailings dams to ensure their stability.

MINE WASTE

MINING DIVISION, 2018

MATERIAL	THOUSANDS OF TONS	PERCENTAGE %
Overburden	428,848,009	69.7%
Tailings	184,531,912	30%
Slag	1,849,422	0.3%
Total	615,229,343	100%

2022 mining residues (tailings) management targets:

- Implement a policy and standards for a safe management of mining residues.
- Update the safety assessment of all operating mining residues deposits.
- Standardize the Operation, Maintenance, and Monitoring Manuals for all mining residues deposits.

Waste management. In our efforts to optimize resources, we strive to reincorporate the waste we generate into our production processes through reuse and recycling. Such is the case of the anodic muds from the electrowinning process, sulfuric acid and degraded organic solvent. We also look for the most viable option to exploit much of our non-hazardous waste, like scrap iron, tires, plastics, wood, paper, etc., which is used by third parties or is incorporated into our improvement programs in areas impacted by our operations.

We produced 10,470 tons of non-mine hazardous waste and 46,454 tons of non-hazardous waste in 2018, 65% of which was recycled, reused or treated by third parties.

FINAL DISPOSAL OF NON-HAZARDOUS WASTE

MINING DIVISION, 2018

NON-HAZARDOUS WASTE	TONS
Recycling	8,995.35
Reuse	21,747.87
Composting	316.95
Recovery, including energy recovery	52.3
Waste incineration	352.09
Landfill	14,867.70
Other	122.03
Total Non-Hazardous Waste	46,454.29

FINAL DISPOSAL OF HAZARDOUS WASTE

MINING DIVISION, 2018

HAZARDOUS WASTE	TONS
Recycling	1,111.27
Reuse	5,516.81
Recovery, including energy recovery	1.17
Waste incineration	9.57
Onsite confinement	3,183.03
Other	648.63
Total Hazardous Waste	10,470.49

In 2018, a total of 6,276 tons of non-mine hazardous waste were transported from our operations to treatment centers or sent for disposal by certified specialists, complying with local regulations. Additionally, no hazardous waste was imported or exported out of the countries where we operate.

Emergency response. We have infrastructure, human resources and procedures in place at our operations to ensure the safe storage and handling of materials, products and byproducts. We have comprehensive emergency response plans that are immediately activated to minimize impacts in the event of accidental spills.

There was no spill having a significant impact¹⁵ on the environment at our mines in 2018.

Biodiversity

103-1, 103-2, 103-3, 304-1, 304-2, 304-3, 304-4

Management. We are aware of the impacts that mining can have on biodiversity. This is why the Grupo México Mining Division has set as a goal the development of specific programs to manage and respond to the biodiversity in the countries where we operate. Our programs include:

¹⁵ The Mining Division considers a spill significant when remediation actions are required.

1. Mitigate the environmental impacts of our operations, implementing compensation measures, such as the rescue and relocation of species, soil conservation, restoration and reforestation.
2. Develop closure plans to restore and recover the environmental conditions after our mining rights are exhausted.
3. Restore and, wherever possible, improve the conditions of the environment where our operations had been active, monitoring water bodies and the flora and fauna at our operations, to implement ongoing improvement actions according to local regulations.

We manage our interactions with protected natural areas and zones with biodiversity value participating in programs to improve understanding and achieve their goals. We operate ongoing protection programs for the flora and fauna at and around our operations to preserve native species in the ecosystems where we operate.

Binational Program for the Conservation of the Mexican Gray Wolf. The Mexican gray wolf (*canis lupus baileyi*) is in danger of extinction because of the eradication programs started in the 1950s in the United States and Mexico. To revert this, the “Mexico-US Binational Mexican Gray Wolf Recovery Program” was created in 1987.

Grupo México decided to join the Binational Program in 2013, creating an Environmental Management Unit (UMA in Spanish) with facilities designed specifically to house a family of wolves and provide a similar environment to their natural habitat. With this, we launched the Grupo México Mexican Wolf Protection and Conservation Project, the mission of which is the reproduction and successful release of the Mexican gray wolf into the wild. The Grupo México UMA is one of the Mexican institutions with the best facilities and strategic locations to achieve the goals of reproduction and release.

Since the start of the Binational Program, 433 wolves have been born. Of these, 51 have been released into the wild, 23 of which were born at the UMA, and we have carried out 5 releases with 25 wolves.

Expanding our conservation efforts, we have included other priority species in the region, like the Gould Turkey, designing a comprehensive program of reproduction and release for this species, which has experienced a decrease in

its wild populations, reduced habitat, and indiscriminate hunting. Grupo México has increased the population of this species in captivity and established the bases to reintegrate it into the wild in conditions that will guarantee survival, including raising awareness and environmental education in the community.

Ite Bay Remediation Program. We continue to make important investments and maintenance actions as part of this program in Tacna, Peru. We have carried out a successful environmental remediation program in this reserve, comprised of the most extensive coastal wetlands with the greatest diversity of water birds in Peru.

Thanks to the remediation program, the Tacna regional government has declared the Ite Bay flora and fauna of regional interest, considered one of the seven natural wonders of Tacna.

The Ite Bay Remediation Program was started as part of the Environmental Management and Improvement Program commitment the company signed with the Peruvian government in 1997 to remediate an area impacted by dried tailings deposits. This effort has translated into the creation of a vital natural habitat for the biodiversity of the region.

Although the Peruvian government ended the commitment in 2002, we continue our maintenance activities in this area, particularly in terms of water management and control to ensure the long term stability of the wetlands.

- 12 kilometers long and 1,500 meters wide
- #1 in diversity of water birds in the country
- Home to more than 76,000 birds of 126 different species
- Candidate to be included in the Ramsar List of Wetlands of International Importance
- Popular tourist attraction, with economic spillover

Protected species. We identify and monitor the species found around our operations and projects to mitigate our potential impact, taking actions to protect, rescue and relocate flora and fauna as necessary. The number of species on the International Union for Conservation of Nature (IUCN) red list identified around our operations is listed following.

PROTECTED SPECIES IUCN CLASSIFICATION

MINING DIVISION, 2018

CATEGORY	No. SPECIES
Endangered	1
Threatened	4
Near threatened	8
Low concern	321

Reforestation and Restoration. We have the largest tree production capacity in the mining industry in Mexico, producing 6,411,458 trees in 2018. Over the last 5 years, we've increased our annual tree production by 187%. We have 6 tree nurseries and greenhouses at our operations. These nurseries contribute to the biodiversity and to enriching the flora and fauna.

One of the commitments of the Mining Division is the restoration of the biodiversity at our impacted mines, seeking to contribute to the preservation of their ecological value. These efforts are aimed at creating buffer zones and natural corridors for the reproduction and conservation of the local flora and fauna.

The Mining Division restored a total area of 94.2 hectares in 2018, through the construction of 18,876 meters of embankments and barriers to help control soil erosion and also to collect rainwater in the area. 113,518 local plant species were planted in these areas.

2022 Mining Division biodiversity management targets:

- *Update biodiversity baseline assessments in all Mining Division business units.*
- *Guarantee the production of 5 million trees per year, and join efforts with reforestation organizations.*

CLOSURE PLANS

MM10

Approach. Mining is cyclical and operations are shut down when a deposit reaches its end, for which closure plans are designed and put in place, including financial provisions to guarantee the preservation and restoration of the sites.

Our mine operations in the United States, Peru and Mexico take the necessary actions to ensure compliance with the obligations set by environmental regulations on mine closures.

As part of our efforts to surpass the current standards, the Mining Division has started to update and consolidate the current closure plans for our operations in Mexico.

COMPLIANCE

Environmental certifications

103-3

The importance of obtaining and renewing environmental certifications is fundamental to reinforce the environmental commitment of all our operations, as well as the actions we have undertaken to control, reduce and mitigate our environmental impacts. In 2018, we received 11 Clean Industry and 7 Environmental Quality certifications given by the Mexican Environmental Protection Agency (PROFEPA). We also renewed ISO 14001 certification at 8 of our mine operations.

Mining Division - Protect

The facilities certified in 2018 are listed following:

ENVIRONMENTAL QUALITY AND CLEAN INDUSTRY CERTIFIED FACILITIES

MINING DIVISION, 2018

FACILITY	CERTIFICATION
Light Smelter Equipment Shop	Environmental Quality
Central Smelter Maintenance Shop	Environmental Quality
Smelter Auxiliary Services	Environmental Quality
Dust and Effluent Treatment Plant	Clean Industry
Precious Metals Plant	Clean Industry
Oxygen Plant 1	Clean Industry
Oxygen Plant 2	Clean Industry
Oxygen Plant 3	Clean Industry
Supply Maintenance Shop	Environmental Quality
Lime Plant	Clean Industry
Guaymas Ocean Terminal	Environmental Quality
Copper Rod Continuous Casting Plant	Environmental Quality
Hydrometallurgical Plant - La Caridad	Clean Industry
Mine Concentrator Services - La Caridad	Clean Industry
Concentrator - La Caridad	Clean Industry
Industrial Minera México - Central Shop	Environmental Quality
Acid Plant 1	Clean Industry
Acid Plant 2	Clean Industry

2022 Mining Division environmental management target:

- Obtain the ISO 14001 certification in all Mining Division business units.

Fines and sanctions

307-1

No Mining Division subsidiary received any significant fine or sanction¹⁶ in 2018 for violations of environmental regulations in the regions where we operate.

¹⁶ The Mining Division defines significant fines and/or sanctions as those in excess of US\$50,000.





TRANSPORTATION DIVISION

grow

The Transportation Division operates the railroad with the greatest coverage and connectivity in Mexico, with growing presence in the United States. Our mission is to provide a safe, efficient and reliable service that contributes to boosting the competitiveness of the countries where we operate.

The management and operation of the Transportation Division is based on three guiding principles: Safety, Service and Productivity. Operating safety is key at all levels of our organization, minimizing the impact and occurrence of potential risks, identifying these before they happen, helping us to reach our goal of zero accidents.

We are also committed to delivering the best service to our customers to offer solutions that increase productivity, through improved efficiency in our railroad operation and auxiliary services.

STRUCTURE OF THE DIVISION AND PRINCIPAL SUBSIDIARIES

102-5

The Transportation Division is represented by the subsidiary Grupo México Transportes S.A.B. de C.V. (GMXT), which in turn is comprised of the following subsidiaries:

Ferrocarril Mexicano, S.A. de C.V. (Ferromex)
Ferrosur, S.A. de C.V. (Ferrosur)
Intermodal México, S.A. de C.V. (IMEX)
Texas Pacific LP, Inc. (TXP)
Florida East Coast Holdings Corp. (FEC)
Raven Transport, Inc.

SIGNIFICANT CHANGES IN THE ORGANIZATION

102-10

There were no significant changes in size, structure, ownership, capital or in the supply chain of the Transportation Division in 2018.

PRINCIPAL SERVICES AND MARKETS

102-2, 102-6

Grupo México delivers railroad freight transportation, multimodal and auxiliary services through the Transportation Division.

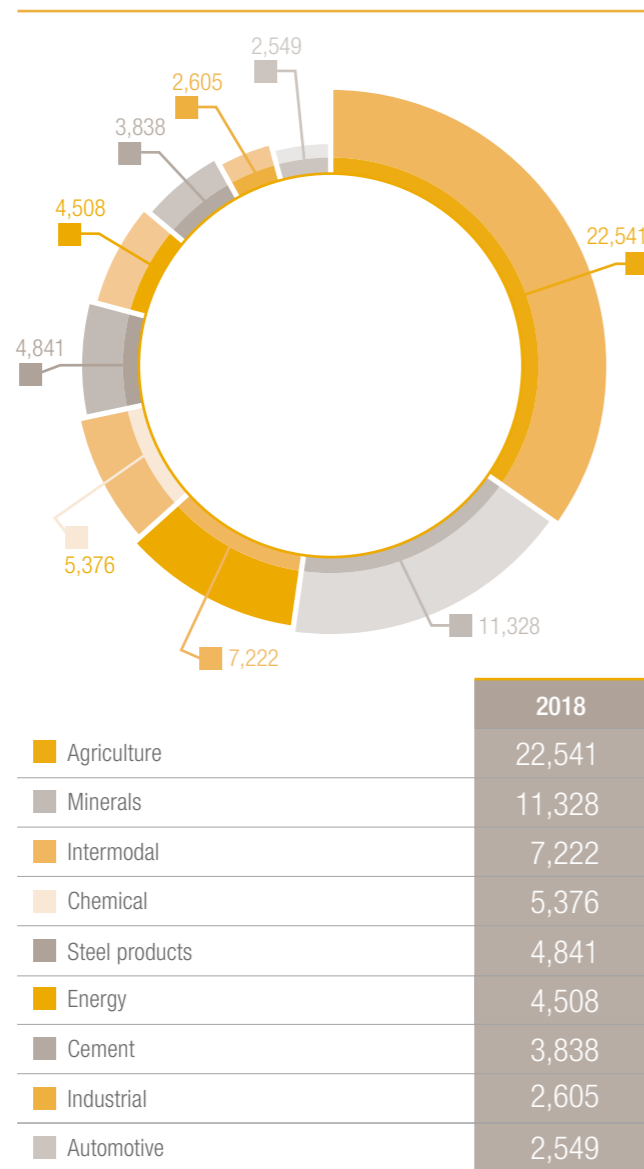
RAILROAD TRANSPORTATION	MULTIMODAL AND AUXILIARY SERVICES
<ul style="list-style-type: none"> • Presence in 24 Mexican states and 2 US states (Texas and Florida). 	<ul style="list-style-type: none"> • Door to door freight services.
<ul style="list-style-type: none"> • Our operations impact and are part of the value chain of 80% of the economic activities in Mexico. 	<ul style="list-style-type: none"> • Coverage in 12 Mexican states.
<ul style="list-style-type: none"> • 11,136 km rail network. 	<ul style="list-style-type: none"> • 9 intermodal terminals.
<ul style="list-style-type: none"> • Fleet of 880 locomotives and 26,319 railcars of different types. 	<ul style="list-style-type: none"> • 44 trucks, 327 tractor-trailers, 764 containers and 1,321 chassis for trucking services, machinery and various vehicles for our maintenance and transportation operations.

The Transportation Division connects to five border points between Mexico and the United States, and serves four ports on the Pacific and three on the Gulf of Mexico. There is also a rail ferry service that runs between Coatzacoalcos, Veracruz and Mobile, Alabama.

Markets served. The principal customers served by the Transportation Division are active in the agricultural, automotive, cement, energy, mining, steel, chemical, intermodal and consumer goods industries.

The volumes transported in 2018, in tons-kilometer, were 10% higher than in 2017. This growth was primarily driven by the agriculture, mineral and intermodal segments.

CONTRIBUTION BY SEGMENT
TONS-KILOMETER



Results. Transportation Division sales were US\$2.360 billion in 2018, a 15% increase over 2017, with record EBIT-DA of US\$1.013 billion, representing a 16% increase over last year.

INVESTMENTS AND PROJECTS

203-1, 203-2

In the 20 years Ferromex has been in operation, we have invested US\$6.925 billion in the Transportation Division. These investments have been used primarily for capacity development of the railroad infrastructure, to increase the fleet and for track maintenance. Eighty percent of the concessioned lines have been reconstructed, doubling the volume of freight transported, making Mexico more competitive.

The impacts of these investments are seen in different regions around the country. One example is the Bajío in central Mexico, where the railroad connection is a value added that industries look for when they are setting up and investing, creating direct and indirect jobs, as is the case of the automotive industry. This translates into a boost for regional growth and the development of highly integrated production chains.

In 2018, GMXT expanded its total investment budget by 108%. Company estimates show that as the railroad is a strategic sector, for each formal job created in the sector, four indirect jobs are created in the rest of the economy, generating important benefits for the community.

These investments, totaling US\$470.36 million, were made in key areas to grow the company. The major projects undertaken this year are detailed following:

Maintenance

We invested US\$227million primarily in track maintenance and improvement, replacing track, sleepers, ongoing track monitoring, as well as intensive preventive and corrective works on bridges and trackage rights.

Our efforts also focused on the maintenance and inspection of track machinery and rail equipment to ensure a safer and more efficient operation for both our personnel and the freight. Ongoing maintenance has a direct economic impact by creating indirect jobs and preventing accidents. Also, industries are able to move their supplies and products with dynamic and accessible schedules, adding the possibility of integrated border crossings for freight, fostering competition.

Efficiency and growth

We invested US\$86 million in the acquisition of new systems and train equipment to improve operating efficiency through technological innovation. This was complemented with the construction and reconfiguration of yards to reduce classification times, resulting in better service for our customers.

- a) *Trip Optimizer*. Monitoring system that registers different indicators. This technology tracks and evaluates different variables to develop more efficient schedules for the rail equipment, reducing fuel consumption in AC locomotives. These units offer benefits like better track adhesion, tractive force and improvements in fuel performance. Currently, 84% of our trains are moved with these kinds of locomotives, estimating fuel savings of between 7% and 8%. This will help to reduce both the operating costs and the greenhouse gas (GHG) emissions.
- b) *Reconfiguration of the Monterrey Yard*. The exponential growth of the Altamira, Tamaulipas-Monterrey, Nuevo Leon industrial corridor brought with it the need to expand the capacity of the rail yard to facilitate the movement of freight to efficiently serve the growing market in the northeast of the country. This project was started in 2017 and completed its first phase in 2018, building additional dispatch and classification tracks. The second phase will build railcar shops and a fueling zone for locomotives.

Strategic projects

We invested US\$91 million in four major projects::

- a) *Railroad Bypasses*. The goal of these unique projects in the modern history of the Mexican railroad is to respond to the growth needs of new industries and improve the interaction of the railroad with urban populations, by avoiding trains crossing through central urban areas. Because of their magnitude, these projects generate positive impacts, like the creation of new direct and indirect jobs and the vitalization of the regional economy.

Also, removing the operation from densely populated and high traffic areas, improves rail transit flow reducing energy consumption and the risks of accident at level crossings.

Celaya Bypass. This project will move approximately 22 trains daily away from the center of the city of Celaya, Guanajuato, building a 25 kilometer main line and also an operating yard, an interchange track, a siding and 7 split-level crossings. The bypass will improve service for the industrial sector in central Mexico, making it a more attractive location for new automotive plants, among others, responding to the growth of the automotive industry. The project reports 39% progress.

Monterrey Bypass. This project will improve the efficiency of the Ferromex operation in Monterrey by reducing interactions with another railroad operating in the city and mitigating the effect on the local population. The bypass will move up to 19 trains daily away from the center of the city of Monterrey, Nuevo Leon. This project reported 57% progress at yearend 2018.

- b) *Reconstruction of the Ojinaga, Chihuahua-Presidio Texas International Bridge*. The reconstruction of the Presidio-Ojinaga International Bridge that crosses the Rio Bravo at the Chihuahua-Texas border will restore the rail operation to open the way for new business in the energy (oil and gas) and agricultural sectors between the United States and Mexico. The project will reconstruct the 241.4 meter bridge and build an 832 meter line between the bridge and the Texas Pacifico rail yard.

The rehabilitation of this border rail crossing will help to revive the economy in this border region. The project will also build a facility for the Mexican Federal Tax Service and the Servicio Nacional de Sanidad, Inocuidad y Calidad Agroalimentaria (SENASICA).

The reactivation of the “Q” line on the Mexican side of the border will be very important, expecting increased commercial activity, with benefits for the region.

c) *Security Control Center.* A new video-surveillance and operations center was installed in 2018 to protect our personnel, premises and rail cargo at our Ferromex facilities in Guadalajara. More than 30 employees monitor the entire network 24x7. A video-surveillance system was installed at strategic points on our rail network, to improve our theft and train vandalism indicators.

d) *Installation of electronic barriers at level crossings (pro bono investment).* Ferromex has made addressing accidents at level crossings a priority. The company unilaterally decided to invest in this project in the absence of federal or local government resources to prevent and avoid this serious situation. In this context, we began a project to install electronic barriers and both horizontal and vertical signals to prevent accidents at 27

high-risk crossings along our rail lines. For more information about this project, see the chapter Transportation Division - promote, which offers a case study on “Signaling at level crossings”.

OUR STAKEHOLDERS

102-43, 102-44

With our operation in 24 Mexican and two US states, we have identified four key stakeholder groups: customers, communities-society; public sector (federal, state and municipal authorities; legislative representatives) and workers. We have ongoing open dialog with all these groups to address different matters in relation to our operation, and also of interest or concern to the company and the communities through which we pass.

In 2019, we will be working to periodically report indicators on our linkage with our stakeholders, with the goal of institutionalizing GMXT communication channels to listen and respond to the needs of the community and the local authorities.

Customer relations

Quality policy. Our commitment is to deliver to our customers a safe, efficient and reliable transportation service, contributing to strengthening the connectivity and competitiveness of the markets we serve and their industries. We have the vision of being the best option for transporting freight.

Customer satisfaction. We conduct monthly customer satisfaction reviews based on four variables: meeting transit times; responding to requests for empty cars; theft of goods; resolution and follow-up on customer complaints. This information is reviewed quarterly with customers who, through their opinions, weight the importance of each variable from their experience with our service. In 2018, the Customer Satisfaction Rate was 85.71%, which reflects ongoing improvement and motivation to perform better.

Our goal for 2019 is to achieve 95% satisfaction.



TRANSPORTATION DIVISION

promote

WORKFORCE AND LABOR PRACTICES

Workforce

102-8

We closed 2018 with a workforce of 11,462 collaborators distributed through the Northern, Pacific and South-Central regions of Mexico, and also the subsidiaries IMEX, Texas Pacifico and Florida East Coast.

97% of our collaborators hold permanent contracts, which gives our workforce stability.

TOTAL EMPLOYEES

TRANSPORTATION DIVISION, 2016-2018

YEAR	EMPLOYEES
2016	10,077
2017	11,230
2018	11,462

EMPLOYEES BY TYPE OF CONTRACT

TRANSPORTATION DIVISION, 2018

PERMANENT		FIXED TERM		TOTAL
Male	Female	Male	Female	
10,607	523	320	12	11,462

EMPLOYEES BY TYPE OF WORKDAY

TRANSPORTATION DIVISION, 2018

FULL-TIME		PART-TIME		TOTAL
Male	Female	Male	Female	
10,985	473	3	1	11,462

EMPLOYEES BY REGION

TRANSPORTATION DIVISION, 2018

REGION	PERMANENT	FIXED-TERM
Corporate	376	4
Field	8,678	278
Intermodal	643	48
Texas Pacifico	59	0
Florida East Coast	1,374	2
Total	11,130	332

Freedom of association

102-41, 402-1

We have 8,022 unionized employees in the Transportation Division, representing 70% of the workforce. We respect the labor rights established by the International Labor Organization and we guarantee freedom of association, maintaining ongoing dialog with our collaborators and union representatives.

Although the collective bargaining agreements do not specify the minimum advance notice required for significant operational changes, the different subsidies of the Transportation Division have established advance notice times of 1 to 2 weeks to communicate, via email and announcements, any change that could materially affect our personnel.

Equal opportunity and non-discrimination

103-3, 405-1, 406-1

The Transportation Division promotes equal opportunity and continuation of employment without discrimination and under equal conditions. There is a cross-disciplinary approach to gender, where both men and women have access to well-paid work, in decent and safe working conditions.

Because of its nature, the railroad sector is predominantly male. In 2018, 95% of our workforce were men. However, at the corporate level we have made important progress, where 36% of personnel are women.

Of particular significance is the number of women holding senior level positions. There are currently three female heads of major departments in the Transportation Division: Finance, Government Relations and Communications and Customer Relations.

PARTICIPATION OF WOMEN BY EMPLOYEE CATEGORY

TRANSPORTATION DIVISION, 2018

ORGANIZATIONAL LEVEL	WOMEN	%	MEN	%	TOTAL EMPLOYEES
Senior Management & Supervisors	40	13.7	251	86.3	291
Senior Technicians	39	19	166	81	205
Junior Technicians	168	14.4	1,002	85.6	1,170
Specialists	266	17.7	1,236	82.3	1,502
Assistants	22	0.3	8,272	99.7	8,294
Total	535		10,927		11,462

EMPLOYEES BY AGE GROUP

TRANSPORTATION DIVISION, 2018

AGE GROUP	% EMPLOYEES	# EMPLOYEES
18-25	6.4	733
26-40	43	4,892
41-50	24	2,723
51+	27	3,114
Total	100 %	11,462

Non-discrimination. In the Transportation Division, and throughout Grupo México, we respect the rights of our collaborators and we actively fight discrimination. The Code of Ethics is our most important instrument to protect and promote respect for human rights. The document outlines the bylaws that govern us, guaranteeing equal treatment regardless of ethnic origin, gender, age, disability, social condition, political affiliation, religious beliefs, health condition, immigration status, opinion, sexual preference or marital status.

No cases of discrimination were reported in the Transportation Division in 2018.¹⁷

Reporting and suggestions line. The Transportation Division has a public reporting mechanism that is easily accessed through the Ferromex website, called “Ayúdanos a ser mejores” (help us to improve).¹⁸ Anyone can submit comments, complaints and suggestions anonymously or directly.

The platform is not exclusive to employees, and is open to customers, suppliers and to the public wanting to contact the company. The internal audit department receives the reports and comments, channeling and following up on the issues with the corresponding areas, ensuring prompt response.

Salaries and salary equality

202-1, 405-2

The Transportation Division does not use minimum wage as the basis for calculating the compensation packages for its collaborators, as we offer competitive salaries and benefits above those set by law (productivity bonuses, cash benefits and profit sharing, where applicable).

It should be noted that the average base salary in the Transportation Division for the lowest level was equal to 3.75 times the minimum wage in 2018. However, considering the lowest level for the companies operating solely in Mexico (Ferromex, Ferrosur, and IMEX), the average salary increases to 9.96 times the local minimum wage.

There is no difference in base salary between men and women. The company follows a technical assessment system that looks at the roles and responsibilities of each position, not the person. Therefore, our benefits and salary package is competitive between men and women in similar positions. Also, there is a salary table that reviews performance without distinction of gender.

¹⁷ Does not include the subsidiary FEC. We are working on consolidating criteria for this subsidiary to be included in the next Sustainable Development Report.

¹⁸ <https://www.ferromex.com.mx/contacto/denuncias.jsp>

BASE SALARY WOMEN VS. MEN *					
REGION	SENIOR MANAGEMENT & SUPERVISORS	SENIOR TECHNICIANS	JUNIOR TECHNICIANS	SPECIALISTS	ASSISTANTS
Corporate	0.91	0.98	0.97	1.09	N/A
Field	1.04	0.83	0.98	0.94	0.67
Intermodal	1.01	1.06	1.20	1.23	0.72
Texas Pacifico (USD)	0.78	0.96	1.17	0.89	N/A
Florida East Coast (USD)	1.05	0.98	0.85	0.83	0.88

* Salaries reported in USD.

Recruitment and retaining personnel

401-1

Two of the biggest challenges we face in managing human talent are due to the nature of the company: a high degree of specialization required for certain areas of the operation and generational replacement. We have taken important steps to meet these needs and respond to a dynamic context, and to reduce the mobility indicators of our human capital, offering benefits above those required by law, training and attractive career plans. In 2018, there were 1,014 new hires in the Transportation Division.

TURNOVER RATE BY YEAR	
TRANSPORTATION DIVISION, 2016-2018	
YEAR	PERCENTAGE
2016	11.2%
2017	7.17%
2018	11.37%

TURNOVER RATE BY AGE GROUP	
TRANSPORTATION DIVISION, 2018	
AGE GROUP	PERCENTAGE
18-25	14%
26-40	11%
41-50	8%
51+	14%

TURNOVER RATE BY GENDER		
TRANSPORTATION DIVISION, 2018		
GENDER	SEPARATIONS	TURNOVER RATE
Men	1,189	10.9%
Women	114	21.3%

NEW HIRES						
TRANSPORTATION DIVISION, 2018						
REGION	AGE GROUPS				GENDER	
	18-25	26-40	41-50	51+	MEN	WOMEN
Corporate	9	33	4	0	18	28
Field	179	345	35	9	547	21
Intermodal	20	61	10	3	82	12
Texas Pacifico	1	5	3	2	11	0
Florida East Coast	42	121	68	64	259	36
Total	251	565	120	78	917	97

STAFF TURNOVER						
TRANSPORTATION DIVISION, 2018						
REGION	AGE GROUPS				GENDER	
	18-25	26-40	41-50	51+	MEN	WOMEN
Corporate	7	29	4	4	20	24
Field	25	219	87	294	606	19
Intermodal	35	126	30	4	189	6
Texas Pacifico	2	5	3	4	13	1
Florida East Coast	35	164	99	127	361	64
Total	104	543	223	433	1,189	114

The increase in the Transportation Division turnover rate in 2018 is due to the layoffs in the subsidiary Raven Transport Inc., which is included in this report for the first time. The turnover rate for Raven Transport Inc. is considerably higher compared to the other Transportation Division subsidiaries.

Employee benefits

401-2

Contributing to the wellbeing of our collaborators and their families, we offer the following benefits above those required by law:

UNIONIZED PERSONNEL	ADMINISTRATIVE PERSONNEL
- Savings fund	- Transportation service
- Assistance for school supplies	- Grocery vouchers
- Vouchers for basic foodstuffs	- Savings fund
- Life insurance	- Major medical insurance
- Incentives to get involved in sports	- Pension plan
- Sports facilities for railroad employees	- Cafeteria service
- Travel expenses, where applicable	- Personal loans
- Holidays according to the union calendar	- Loan to purchase computer equipment
- Assistance for funeral expenses	- Parking
- Transportation service	

TRAINING AND CAREER DEVELOPMENT

Training

103-1, 103-2, 404-1, 404-2

The railroad sector demands a highly specialized type of training for personnel. Because of this, the Transportation Division offers a comprehensive training program that seeks to continually improve the performance and skills of our collaborators.

In 2018, we delivered 409,520 training hours*, with an average 44 hours per collaborator.

TOTAL TRAINING HOURS¹⁹

TRANSPORTATION DIVISION, 2016-2018

YEAR	THOUSANDS OF HOURS
2016	310
2017	387
2018	410

TRAINING HOURS BY EMPLOYEE CATEGORY AND GENDER

TRANSPORTATION DIVISION, 2016-2018

CATEGORY	MEN	WOMEN	TOTAL
Senior Management	7,588	864	8,452
Senior Technician	297	12	309
Junior Technicians	2,206	236	2,442
Specialist	3,492	152	3,644
Assistant	394,149	524	394,673
Total	407,732	1,788	409,520

2019 Goal

- Train more than 6,385 collaborators (including unionized personnel)
- Deliver more than 440,000 training hours with workshops and courses aimed at the different employee categories.

The Transportation Division does not currently have a formal program to aid an employee's transition out of the company, by retirement or separation. This represents an area of opportunity for the Transportation Division, seeking to implement adaptation or ongoing employability programs for collaborators who leave the company.

¹⁹ The total training hours reported do not include the subsidiaries FEC, TXP and IMEX. We are working on consolidating criteria for these subsidiaries to be included in the next Sustainable Development Report.

Performance review

103-3, 404-3

In 2018, 78% of administrative personnel were reviewed, representing 28% of the total Transportation Division workforce. This process aims to assess the performance of employees during the year, to identify areas of opportunity and training needs to then set goals for the next year.

STAGES OF THE PERFORMANCE REVIEW

TRANSPORTATION DIVISION

Definition of goals	Carried out at the beginning of the year, based on criteria known to the collaborator and their supervisor.
Follow-up on goals	Supervisors follow up with each collaborator during the year.
Annual performance review	The collaborator is reviewed at the end of each year and asked for written comments on weaknesses and areas of opportunity.

OCCUPATIONAL HEALTH AND SAFETY

Occupational safety

103-1, 103-2, 103-3, 403-1, 403-2, 403-4, 403-7, 403-8, 403-9

Approach. The Grupo México Transportation Division is committed to dedicating resources and efforts to create safe workplace environments for all our collaborators. In this regard, we have Occupational Health and Safety Management Systems in place at all our business units and processes, designed to comply with and exceed the requirements of the different regulatory agencies in the countries where we operate. Although these systems are not mandatory, we have implemented them to ensure the physical integrity and wellbeing of our collaborators, contractors, customers and stakeholders.

Our management systems consider all applicable regulations as set by the Mexican Ministry of Labor and Social Welfare, the Federal Railroad Administration (FRA), and the Occupational Safety and Health Administration (OSHA), ensuring the proper observance of these standards through audits and field supervision.

We have the following processes in place to engage employees in the implementation and evaluation of the Occupational Health and Safety System, offering information and to receive feedback from our collaborators on workplace health and safety issues:

- All our collaborators receive training in occupational health and safety when they join the company and annually thereafter.
- We use bulletin boards, IT platforms and a variety of visuals to communicate health, safety and other relevant information to reduce unsafe acts and events that could trigger a workplace illness.
- Health and safety talks are given daily before starting work, the goal of which is to inform and caution about the implicit dangers in the activities and communicate relevant events occurring in previous shifts or at other company locations.

Occupational health and safety committees

403-5

Our collaborators have the opportunity to voluntarily participate in the Health and Safety Commissions, which meet monthly. These commissions are made up of 50% unionized employees and their representatives and 50% non-unionized employees. The commissions participate in accident investigations and monitor the areas of the company to check the work conditions. A log is kept

of these actions and their findings are assigned to the different areas to implement corrective actions.

Risk Management and Incident Investigation

403-2

The Transportation Division applies a Safe Workplace Analysis process, which involves identifying dangers and assessing occupational safety risks, and also defining controls to mitigate or eliminate these risks. Safe workplace procedures are designed or revised as a result of this process for all our activities.

In addition, there are various mechanisms available to employees to report unsafe conditions and acts, which include:

- Direct reporting to the immediate supervisor or Human Resources representative
- Intranet page
- Participation in inspections and tours by the local health and safety commissions.
- Reports, which can be filed anonymously. A no retribution policy has been implemented, as laid out in the Grupo México Code of Ethics.

The Transportation Division has a process for investigating incidents related to workplace safety. After safeguarding personal integrity, the operation is stopped, and the local health and safety commission investi-

gates the incident applying methodologies like the “5 Whys”, to identify the root cause of the incident and define corrective and preventive actions. All initial incident investigations are conducted within 24 hours following the event.

The processes for identifying and assessing risks, incident investigation and following up on reports of unsafe conditions and acts, is reinforced with ongoing training and with audits and regular inspections.

Occupational Safety Programs. We have a Zero Tolerance program aimed at reducing risky behavior and adopting best practices in workplace safety to strengthen the culture of prevention in the company. This plan was developed based on a review of accidents in prior years where the causes were determined and control measures put in place. The principal tool in the program is ongoing communication with employees through different mechanisms.

2018 Performance. The safety of our personnel is our top priority, therefore we deeply regret the loss of three collaborators and four contract workers in 2018 due to causes related to factors beyond the control of the company. In solidarity, the company supported their families to receive the financial compensations stipulated by the Mexican Labor Law, and we assisted with

funeral arrangements and delivery of the life and family insurance settlements, as well as the processing of orphan and widow pensions.

The Transportation Division is committed to improving and strengthening our safety policies and controls to guarantee a safe workplace for all our collaborators.

Of note is that 7,100 collaborators were trained in occupational health and safety, providing more than 44,500 man/hours of training in 2018. As part of the training program, 1,259 operating personnel received refresher training in the following areas:

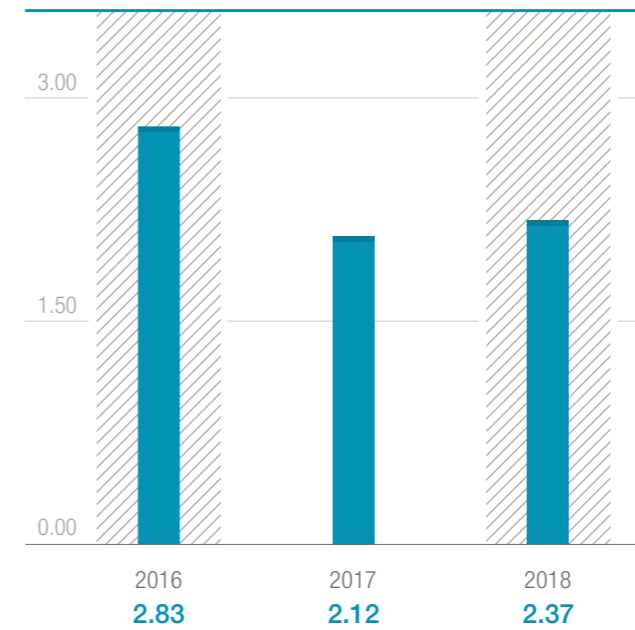
- Defensive driving
- Hoisting
- Cutting and welding
- Risk analysis
- Accident investigation

2022 Transportation Division Safety targets:

- *Zero fatalities.*
- *Reduce the injury frequency rate of our employees and contractors by 15% in the Transportation Division.*
- *Install traffic equipment for 25 level crossings to reduce accidents in urban and rural areas.*

INCIDENT RATE (IR)

TRANSPORTATION DIVISION, 2016-2018

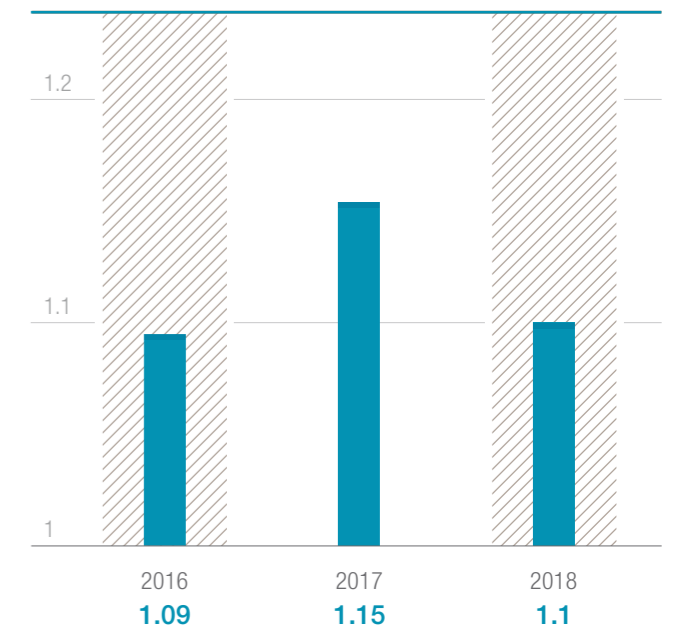


$$IR = \frac{\text{No. of incapacitating accidents}}{\text{Total man hours worked}} \times 200,000$$

Our incident rate increased 11% in 2018, compared with the previous year.

SEVERITY RATE (SR)

TRANSPORTATION DIVISION, 2016-2018



$$SR = \frac{\text{No. of days lost}}{\text{Total man hours worked}} \times 1,000$$

Our severity rate decreased 4% in 2018, compared with the previous year.

Occupational health

103-1, 403-3, 403-6, 403-10

Approach. To foster a healthy workplace, we continually monitor and train our personnel in occupational health.

We have medical services to attend to, inform and orient all our collaborators and contract workers on the prevention of general and workplace diseases that could affect their performance, so that they can perform their work in safe conditions.

The services include:

- Medical exams on joining the company, periodically and others.
- Medical consultations for general health issues.

- Daily health assessment of crews before they start each trip.

There are also specific programs focusing on:

OCCUPATIONAL HEALTH PROGRAMS FOR COLLABORATORS
Comprehensive health monitoring programs. Periodical medical examinations.
Monitoring and prevention programs for illnesses related to exposure to agents in the workplace (noise, vibration, welding smoke).
Health promotion and education programs (high blood pressure, diabetes, nutrition, obesity, etc.).
Vaccination campaigns (tetanus, hepatitis, influenza).
Aptitude monitoring (physicals, alcohol and drug testing, fatigue).

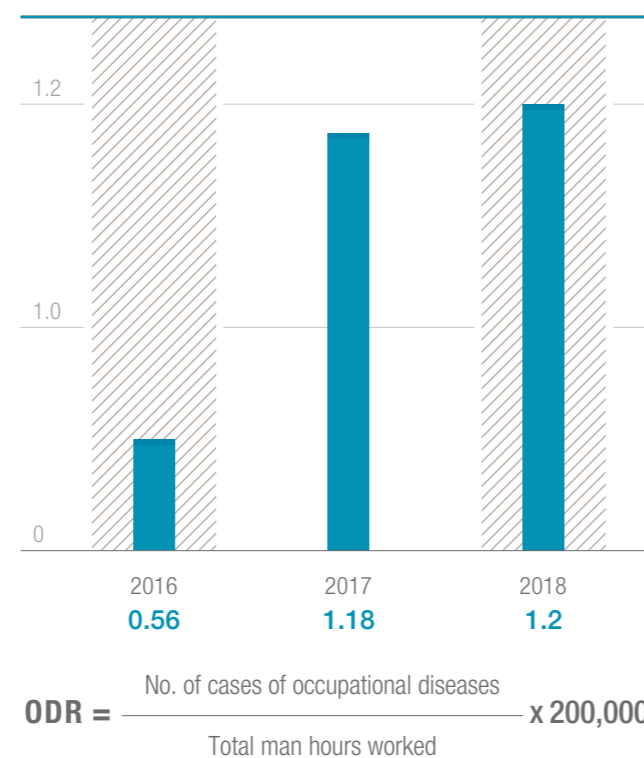
All these programs are aimed at the timely detection of risk factors that could lead to health problems for our collaborators.

Medical services are available at all work centers and for all shifts. Qualified medical personnel attend to our collaborators and contract workers in our company infirmaries. We also hold health fairs which address topics including weight control, controlling high blood pressure, diabetes, nutrition, vaccinations, mammograms, etc.

Performance. In 2018, 145 cases of occupational diseases were detected, related to deafness and back problems, associated with the seniority and age of our train personnel. To prevent the recurrence of these types of situations, we are working on strengthening in-house campaigns that show and promote the correct use of personal protective equipment and the correct performance of duties to prevent potential health risks.

OCCUPATIONAL DISEASE RATE (ODR)

DIVISIÓN TRANSPORTES, 2016-2018



2019 Occupation health goal

- Reduce our occupational disease rate by 8%.

LOCAL COMMUNITY ENGAGEMENT

413-1, 413-2

For the Grupo México Transportation Division, it is essential that we maintain a relationship of respect and linkage with the residents of the communities through which our trains pass. To achieve this, we invest financial, technical and human resources in designing and executing actions that generate respectful interaction with the community in benefit of the residents.

In 2018, the subsidiaries Ferromex, Ferrosur and Intermodal México were recognized as Socially Responsible Companies for the fourth, third and second years, respectively. This recognition is given to companies that participate in the annual evaluation conducted by the Centro Mexicano para la Filantropía A.C. (CEMEFI) and which meet different standards of social responsibility, including socially responsible management, quality of life in the workplace, business ethics, community linkage, and caring for the environment.

LINES OF ACTION IN OUR COMMUNITY ENGAGEMENT

Solidarity

Dr. Vagon: "The Health Train". Offers free medical services in remote communities where the train travels.

Donations. Deliver and mobilize support in areas affected by natural disasters.

Ferromex community centers. Create spaces for recreation and the development of the communities through which the train passes.

Support for indigenous communities

Community transportation. Making passenger services on the Chihuahua-Pacific (Chepe) railroad available to communities in Chihuahua and Sinaloa, contributing to the economic and social development of these communities.

Free transportation of goods. Transporting foodstuffs and supplies free of charge to vulnerable groups in the Sierra Tarhumara.

The railroad and the community

Roadworks. Projection and completion of works projects to improve roadways, with safety as a priority.

Campaigns and workshops. Promote road culture and respect for the rules of the road and interaction with the railroad

Tourism strengthening

Fostering tourism and job creation in the Sierra Tarhumara through the services of the Chihuahua Pacifico train, Chepe.

2019 Goals

- Institutionalize a formal process to receive and respond to complaints from the local communities.
- Add new allies to strengthen the “Watch for the Train” communication strategy.

Solidarity

Dr. Vagón. The Health Train celebrated four years in operation in 2018, delivering 864,458 free comprehensive medical services to 215,764 patients in 154 communities in 24 Mexican states, traveling a total 63,697 kilometers.

Ferromex and Ferrosur personnel collaborate on this project to prepare the infrastructure and the operation necessary for the train to get to hard to reach areas and offer the service.

Dr. Vagon is a train equipped with a mobile clinic. It has 17 cars with doctor's offices, labs, specialization offices, pharmacy (audiometry, hearing devices and eyeglasses) and a cafeteria for the doctors that travel to the vulnerable communities in our country. All our health services are provided free of charge.

Since its beginning, this program has had a positive impact on the communities benefited, and as a result we have increased the days of operation in each community from 12 to 20. This represented a significant

change for the program, serving 10,000 people on each Dr. Vagon route, reflecting a growth of 60%.

The Health Train has also become an important support for communities in emergency situations in Mexico because of natural disasters, changing the train's scheduled route. In 2018, heavy rains in the states of Sonora and Sinaloa caused serious flooding, affecting thousands of people in various communities. In response, Dr. Vagon visited the affected communities over twenty days and provided 36,346 medical services to 9,309 patients.

Donations. Every year, our subsidiary Florida East Coast runs the Santa Train to the Florida communities through which the train passes. In 2018, the train delivered 20,000 toys and books to children. Also, employees donated more than US\$75,000 to the United Way, which supports education, financial stability and health programs.

Ferromex Caommunity Centers. US\$120,000 was invested in 2018 in the municipality of Felipe Pescador, Zacatecas, under a collaboration agreement with the municipal government to build a multiple purpose community center. This center will be used as meeting point for the community, where the state authorities will offer workshops and activities. The new community center is expected to play an important role integrating local youth and the elderly.

Supporting indigenous communities

Community transportation. In 2018, we affirmed our commitment to the community by continuing to issue reduced rate cards to isolated low-income communities, whose only means of transportation is the train. With these cards, users pay only 20% of the ticket price to travel in economy class. This program operates in collaboration with the State Commission on Indigenous Peoples and the Chihuahua and Sinaloa municipal authorities along the Chihuahua Pacifico train route.

RESULTS OF THE REDUCED RATE CARD PROGRAM 2018		
NEW CARDS ISSUED	VALID CARDS	PASSENGERS TRANSPORTED
4,366	35,258	51,388 people

2019 Goal in support of indigenous communities

- Issue more than 3,000 additional cards for this program.

This effort helps passenger train users to access medical services, educational institutions, commercial areas, in addition to arriving on time for their jobs outside the Sierra.

Free transportation of goods. As part of our social commitment in support of the communities of the Sierra Tarahumara, we offer free transportation of goods, principally basic foodstuffs and supplies donated by government agencies and charity organizations.

We transported 440 tons of goods and construction materials in 2018 to benefit 68,851 people in four Mexican states (Chihuahua, Sinaloa, Oaxaca, Mexico City) in the Tarahumara communities of Creel, Temoris, Cuauhtemoc and Bahuichivo, among others.

The organizations that benefited from the transportation of goods and construction materials this year include:

- Mexican Red Cross
- Complejo Asistencial Clínica Santa Teresita
- Banco de Alimentos Cuauhtémoc
- Comunidad Educativa Yermista
- Grupo Cementos de Chihuahua

The railroad and the community

Infrastructure development. In Mexico, we are working on projects aimed at improving road safety in the communities through which the train passes. As part of our commitment to contribute to improving the quality of life in our local communities, we made three important infrastructure investments in 2018:

The projects undertaken were:

- Construction of labs and restrooms at Technical Middle School #43.
- Construction of a new media room at the Luis Donaldo Colosio High School.
- Installation of a 21 meter dome at the Xochicalco Preschool. This initiative will benefit more than 300 students.

Works projects in benefit of the community

203-1, 203,2

Bypasses. Construction continues on these unique railroad projects to build bypasses in Monterrey and Celaya, projects that will trigger an economic spill-over for the region, bringing important benefits and increasing the value of the neighboring lands. These bypasses will also significantly reduce accidents at level crossings with the improved urban traffic. Lastly, we expect a decrease in vandalism in the urban areas. US\$167 million is budgeted for the construction of the bypasses.

Works projects for the community of Santa Maria Moyotzingo, municipality of San Martin Texmelucan, Puebla. Various initiatives were undertaken with an investment of US\$185,000 to improve the infrastructure at the schools in this community. These actions will increase safety and improve the environment for these elementary, middle and high school students.

Pedestrian bridges. We invested US\$1.1 million in the construction of 2 pedestrian bridges for people to cross the Irapuato yard and the closed yard at Laurelal in Veracruz. The goal these projects was to facilitate safe pedestrian transit and to improve the interaction of the community with the railroad.

Training on accident prevention: We are continually working with different groups and sectors to raise awareness on the importance of respecting the rules of the road at level crossings to prevent accidents. The Transportation Division currently presides over the Asociación Mexicana de Ferrocarriles Communication Committee, which led to “Cuidado con el Tren” (watch out for the train) campaign ads being aired during the official airtime of the Department of Transport and Communications. Ferromex donated all the rights to this campaign. The radio spots were aired in Sinaloa, Aguascalientes, Guanajuato, Jalisco, Michoacan, Coahuila, San Luis Potosi, Estado de Mexico and Puebla.

In partnership with the Mexican Railroad Association and the Mexican Red Cross “Cuidado con el Tren” workshops were held in schools in areas near the train routes in states where we have higher accident rates. In 2018, workshops were held together with the Red Cross for 4,000 elementary school students in Piedras Negras, Coahuila; Cordoba, Veracruz; Zacatecas, Zacatecas; Tierra Blanca, Veracruz; Ramos Arizpe, Coahuila, and Saltillo, Coahuila.

Also, as part of this collaboration, we installed interactive modules related to the campaign at the Trompo Magico Museum in Guadalajara and the Explora Science Museum in Leon. These modules offer information for visitors about the railroad to raise awareness on the importance of following road and pedestrian safety near the train. We collaborated with the Explora Science Museum on a project to paint a locomotive, a boxcar and a passenger car to preserve the legacy of the railroad.

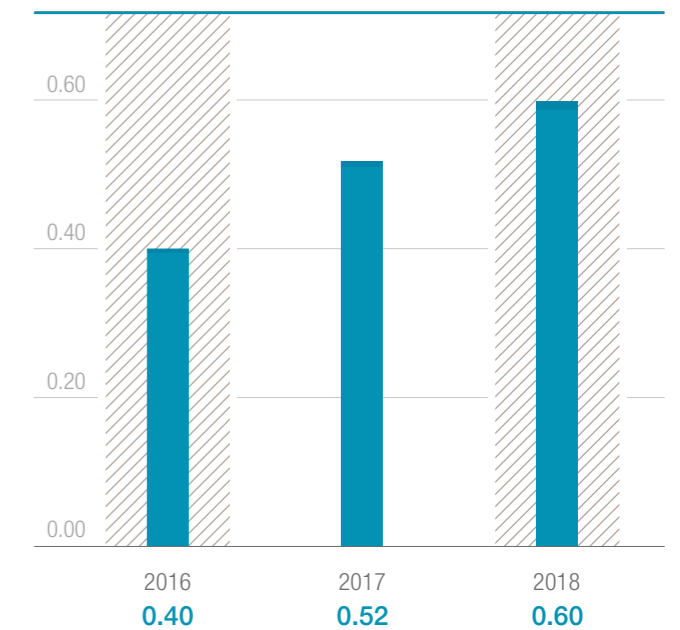
Texas Pacifico and the Florida East Coast Railway (FEC) work closely with the organization Operation Lifesaver promoting railroad safety. The FEC participates in an Awareness Week each year on train safety, as part of the National Railroad Safety Week in collaboration with the local police, handing out safety leaflets at designated crossings, where approximately 2,000 drivers receive this information.

Also, the FEC participates in the annual meeting of Florida Operation Lifesavers (FOL) where, with other FOL volunteers, they review the events of the previous year and design strategies for action and collaboration.

ACCIDENT RATE

Accidents / MMTKB

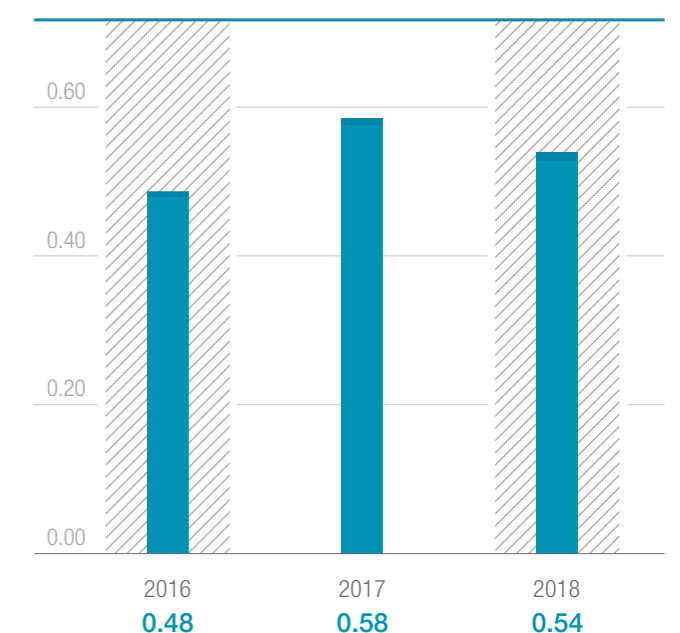
FERROMEX & FERROSUR



ACCIDENT RATE

Accidents / MMTKB

TRANSPORTATION DIVISION



CASE STUDY

Signals at level crossings

Background

The most common train accidents occur at rail crossings because of lack of awareness or information. The majority of collisions and fatalities are caused by people gambling they can beat the train.

These incidents can and must be avoided with a culture of prevention, and therefore it is a priority for the Transportation Division to implement actions that foster safety in the communities through which the train passes.

There were a total 495 incidents at Ferromex/Ferrosur level crossings in 2018, caused by driver or pedestrian error. Because of these accidents, a study was conducted of the conditions of the level crossings along the rail lines, finding that of the total 3,938 crossings, 3,416 are authorized and 522 are illegal crossings, identified as such because they were created by the public, without permission.

The crossings were classified into different levels of risk according to the number of accidents reported at them annually:

HIGH	MEDIUM	LOW
219	513	3,206

Actions

In 2018, Ferromex and Ferrosur jointly carried out an initiative to install electronic barriers at 27 high-risk railroad crossings, representing an

investment of US\$3.8 million. These 27 crossings were involved in 20% of the accidents reported.

The equipment installed consists of automatic barriers and signaling, which are activated 30 seconds before the train passes, warning drivers and pedestrians that the train is coming. Additionally, visual signals were installed on roads and highways cautioning drivers they are approaching a railroad crossing, so that drivers will reduce their speed and take precautions.

The state and municipal authorities are largely responsible for monitoring the condition and signaling at level crossings, therefore we collaborate with the authorities to safeguard the equipment and ensure its continual operation.

Benefits

The greatest benefit is the change in culture among our society through awareness of respecting the signals and the passing of the train. Communities in Hidalgo, Guadalajara, Aguascalientes, Guanajuato, Chihuahua, Durango, Veracruz, Colima and Sinaloa have benefited from the installation of electronic barriers. These efforts are aimed at reducing the number of accidents at railroad crossings, sharing the responsibility between the community and the company.

The importance of these actions means saving lives and decreasing roadway accidents.

2019 Goal

- *Install 75 electronic barriers at high-risk crossings along the rail line. These crossings have been involved in 27% of the accidents reported in recent years.*

Tourism strengthening

Chepe Regional and Chepe Express. The Transportation Division continues to support tourism in Chihuahua and Sinaloa, through a diversification of train services. We are currently working on inclusion mechanisms to offer better service to differently abled passengers.

The Chepe Regional train runs from Los Mochis, Sinaloa to Chihuahua, Chihuahua, with stops at different stations along the route. The train has become the vehicle for accessing the Copper Canyons, while providing visitors with information about the Tarahumara culture and enjoyment of the natural resources in this region. We have worked with various state agencies to respect the traditions of the Raramuri indigenous community in Chihuahua.

In May, the new service, Chepe Express, celebrated one year in operation running the Los Mochis, Sinaloa, Creel, Chihuahua route. The goal of this project is to diversify and expand the service options for Mexican and international passengers, promoting tourism in the area, in benefit of regional economic development.





TRANSPORTATION DIVISION

protect

ENVIRONMENTAL MANAGEMENT AND PERFORMANCE

Energy and energy efficiency

302-1, 302-4

Energy consumption. Our energy supply is primarily diesel, which we use to operate our locomotives. Diesel represents 99% of the total energy consumed by our transport operations.

FUEL CONSUMPTION

TRANSPORTATION DIVISION, 2016-2018

YEAR	TERAJOULES
2016	16,794
2017	19,908
2018	19,537

FUEL CONSUMPTION

TRANSPORTATION DIVISION, 2016-2018

FUEL	TERAJOULES
Diesel	18,900.53
LP Gas	3.89
Natural Gas	0.06
Gasoline	632.83
Total	19,537.30

The fuel consumption in energy units was calculated using the calorific values reported by the Mexican authorities in the Official Federal Gazette in 2019. The consumptions reported are measured for all our Transportation Division operations.

POWER CONSUMPTION

TRANSPORTATION DIVISION, 2016-2018

YEAR	TERAJOULES
2016	107
2017	127
2018	147

DIESEL SAVINGS

AESS System and manual operation

TRANSPORTATION DIVISION, 2016-2018

YEAR	MILLIONS OF LITERS SAVED
2016	12.25
2017	16.87
2018	13.01

Energy efficiency. Our Transportation Division strives to safely and efficiently move more with less, taking different actions to improve operating processes and contribute to better energy efficiency. The Transportation Division reported fuel performance of 3.93 liters of diesel per thousand tons-kilometer of freight transported (L/MTKB).

FUEL PERFORMANCE (L/MTKB) FERROMEX

TRANSPORTATION DIVISION, 2016-2018

YEAR	(L/MTKB)
2016	4.2
2017	3.88
2018	3.86

FUEL PERFORMANCE (L/MTKB) FERROSUR

TRANSPORTATION DIVISION, 2016-2018

YEAR	(L/MTKB)
2016	6.25
2017	6.07
2018	6.23

FUEL PERFORMANCE (L/MTKB) FLORIDA EAST COAST*

TRANSPORTATION DIVISION, 2016-2018

YEAR	(L/MTKB)
2017	2.22
2018	2.26

* Liters of diesel equivalent are reported for FEC, as their locomotives can also operate with liquid natural gas.

Climate change

103-1, 103-2, 103-3, 201-2, 305-1, 305-2, 305-5

Effects of climate change. Climate change is a global challenge that affects all industries. However, it is a growing risk for the operations of our Transportation Division, for which we have prepared action plans.

At Grupo México, we identify and monitor the risks associated with our operations, and we implement initiatives to be better prepared to address damages to the railroad. We have developed action protocols to respond to any event affecting our operations, from damages to the signaling systems to landslides and floods.

We have specific action plans for different scenarios, aimed at minimizing the impact:

- Action plans and dissemination of the measures to be used in the event of any natural phenomena.
- Multi-year program to reinforce bridges, unpaved and paved roads for drainage and natural water channels.
- Adjustments to train scheduling.

All our infrastructure construction and expansion projects are designed according to technical criteria set by the Mexican Water Board (CONAGUA) and the International Boundary and Water Commission (IBWC), to support and reduce the impacts of meteorological phenomena and the surface water flows in the railroad infrastructure and operation.

Greenhouse Gases Emissions (GHG). The railroad releases only a quarter of the greenhouse gas emissions (GHG) that trucks release, per ton-kilometer transported, measured in millions of CO₂ equivalents. In 2018, we emitted a total of 1,462,754 tons of CO₂eq, 0.9% of which came from power consumption and the other 99.1% from the use of fossil fuels.

GREENHOUSE GAS EMISSIONS²⁰

Millions of tons CO₂eq

TRANSPORTATION DIVISION, 2018

Direct Emissions ²¹	1.45
Indirect Emissions ²²	0.01

Mitigation of Greenhouse Gases. The Transportation Division has taken various important actions to reduce the consumption of diesel, including purchasing AC locomotives (high-technology trains with better track adherence, tractive force), installing operating and fuel optimization devices in locomotives, such as automatic start/stop systems, and better operating practices to improve the flow of the railroad. Also, 35% of the Florida East Coast (FEC) fleet of locomotives have the flexibility to operate with diesel or liquid natural gas. This helps us to optimize operating costs and reduce the environmental impact by generating less greenhouse gases. These technologies and using renewable energy led in 2018 to the mitigation of 72,214 tons of CO₂eq, equal to taking 15,332 cars off the road for a year.

²⁰ Operational controls were considered for the consolidation of the emissions.

²¹ The tons CO₂eq calculation for direct emissions includes CO₂, CH₄ and N₂O.

The methods and fuel emission factors published by the Mexican authorities in the Official Federal Gazette in 2015 were used to calculate the GHG emissions and are aligned with the guidelines of the Intergovernmental Panel on Climate Change (IPCC).

The calorific values published in the Official Federal Gazette in 2019 (CONUEE February 2019) were used for the estimates.

²² The tons CO₂eq calculation for indirect emissions includes CO₂ gases.

The methods and emission factors reported (market function) directly by the electricity suppliers or taken from the public information for those companies that did not provide this information were used to calculate the GHG emissions.

MITIGATION ACTIONS

TRANSPORTATION DIVISION, 2018

INITIATIVES	TONS CO ₂ EQ
Savings of 13,015,819 liters of fuel with Automatic Engine Start Stop (AESS) systems	40,430.15
Consumption of 13,514,098 KWh of renewable electricity from the Infrastructure Division's "El Retiro" wind farm	7,121.93
Savings of 7,939,405 liters of fuel with LNG locomotives	24,661.63
Total	72,213.71

The railroad continues to be an excellent option for transporting freight, being four times more efficient in fuel consumption than trucks. This means that a single train, equal to 300 freight trucks, releases 75% less greenhouse gas emissions. In this manner, we are contributing to considerably reducing pollution and the effects of climate change.

Materials

301-1, 301-2

The railroad operations of the Transportation Division use primarily track, sleepers and ballast.

MATERIALS

TRANSPORTATION DIVISION, 2016-2018

MATERIAL	2016	2017	2018
Ballast (m ³)	337,016	352,992	433,398
Sleepers (pieces)	664,814	338,637	593,901
Track (tons)	33,788	28,564	1,920,830
Smelter slag used as ballast (m ³)	110,878	87,776	22,598

RENEWABLE MATERIALS

TRANSPORTATION DIVISION, 2018

MATERIAL	QUANTITY
Wood sleeper (piece)	256,014
Wood (kg)	15,484
Cardboard (kg)	5,088

NON-RENEWABLE MATERIALS

TRANSPORTATION DIVISION, 2018

MATERIAL	QUANTITY
Concrete sleeper (piece)	337,887
Ballast (m ³)	433,398
Track (tons)	1,920,830
Carbon steel (kg)	6,844

Grupo México has a program to reuse smelter slag as a ballast substitute.

MATERIALS RECYCLED / REUSED

TRANSPORTATION DIVISION, 2018

MATERIAL	QUANTITY	PERCENTAGE
Slag (m ³)	22,598	5%

Waste management and incidents involving hazardous chemicals

103-1, 103-2, 103-3, 306-2, 306-3

Waste management. We generated 8,230 tons of waste this year, 1,430 tons of which was considered hazardous, which were handled, stored and sent for recycling or final disposal in strict adherence of regulations.

A large portion of this waste is reused by authorized third parties and the rest is sent for controlled confinement. The Transportation Division does not generate significant waste requiring special handling. A third party handled the disposal of all waste.

FINAL DISPOSAL OF HAZARDOUS WASTE	
TRANSPORTATION DIVISION, 2018	
TYPE OF DISPOSAL	TONS
Recycling	876.19
Recovery, including energy recovered	0.25
Waste incineration	553.62
Total Hazardous Waste	1,430.06

FINAL DISPOSAL OF NON-HAZARDOUS WASTE	
TRANSPORTATION DIVISION, 2018	
TYPE OF DISPOSAL	TONS
Recycling	261.60
Recovery, including energy recovered	2.16
Waste incineration	73.41
Landfill	6,463.37
Total Non-Hazardous Waste	6,800.55

Our approach is the same with waste requiring special handling, some of which is reused and/or recycled, such as scrap steel, obsolete vehicles or machinery, and wood sleepers.

Incidents involving hazardous chemicals. We have mechanisms and procedures in place to prevent and take action in emergency situations involving hazardous chemical products.

There are safety commissions made up of firefighters, civil protection and local industrial sectors in place in nine Mexican states. These commissions, among other things, conduct chemical drills and develop response protocols to protect the first responders (fire and/or civil protection) to accidents involving hazardous materials.

We also have a contingency program, which defines the guidelines for the prevention of chemical accidents, the restoration of environmental impacts, and the return to normal operations.

ACTION PROTOCOL IN CASE OF CHEMICAL SPILLS	
Prevention	The prevention actions the safety commission will take are defined.
Response	The chemical emergency contingency plan is activated in the event of an incident.
Remediation	With the emergency under control, the track is reported as clear and the damages to the line and surrounding areas are surveyed.
	The damages to equipment and infrastructure are assessed and quantified, as well as the environmental restoration at the scene of the accident (as applicable).

Spills. The Transportation Division subsidiaries reported no significant spill in 2018.

Water²³

303-1

The Transportation Division uses water primarily for washing locomotives and cars, and also for the cooling systems. In 2018, we consumed 263,746 m³ of water.

74% of first use water came from underground sources (wells) and the other 26% from a third party water supply (city, treated water and trucks). There was a 9% increase in water consumption this year, due to the incorporation of the subsidiary FEC. We also have an awareness program to promote efficient water usage among our collaborators.

WATER CONSUMPTION - UNDERGROUND	
TRANSPORTATION DIVISION, 2016-2018	
YEAR	m ³
2016	163,661
2017	185,777
2018	203,708

²³The total water consumption reported does not include the subsidiary TXP. We are working on consolidating criteria for this information to be included in the next Sustainable Development Report.

WATER CONSUMPTION - SURFACE

TRANSPORTATION DIVISION, 2016-2018

YEAR	m³
2016	136,118
2017	66,826
2018	70,714

The water consumption is obtained from monthly logs and the water bills provided by the regulatory bodies in each location and by third parties (water trucks).

Biodiversity

304-1, 304-3, 304-4

Our Transportation Division operations are generally not located in protected areas, with the exception of 25.23 kilometers of track that cross an area that was declared protected after the track was built. These protected zones are located in the states of Coahuila, Colima, Sinaloa, Sonora and Veracruz.

When our operations could impact the biodiversity by passing through zones declared protected, we comply with the requirements of the environmental authorities from the design stage, construction and operation. We also have monitoring mechanisms in place for clearing vegetation and soil erosion and compaction.

We routinely monitor and assess potential impacts to establish preventive and corrective measures. In this regard, we have restoration plans in place that include reforestation and subsequent maintenance to ensure the survival of specimens that are relocated. Also, fauna that may be affected are rescued and relocated.

No protected species, according to the NOM-059-SEMARNAT-2010 and the International Union for the Conservation of Nature (IUCN) classifications, were found or relocated around our rail operations and projects in 2018.

COMPLIANCE

Environmental certifications

In 2018, we received 8 new and renewed 5 environmental quality certifications at our operations given by the Mexican Environmental Protection Agency (PROFEPA). This voluntary program requires an environmental audit to review the company's environmental risk processes and regulatory compliance.

ENVIRONMENTAL QUALITY CERTIFICATES

TRANSPORTATION DIVISION, 2018

FERROMEX	FERROSUR
Ciudad Juarez	Shop and Fueling Zone in Tierra Blanca
Chihuahua	Shop and Fueling Zone in Veracruz
Nogales	Railcar shop in Coatzacoalcos
Torreón	Shop and Fueling Zone in Orizaba
Sufragio - Sinaloa	Fueling Zone in Puebla
Mazatlan	
Guadalajara - Roundhouse	
Railcar Shop - Roundhouse	

Fines and sanctions

307-1

Fines and sanctions. No Transportation Division subsidiary received any significant²⁴ fine or sanction in 2018 for violations of environmental regulations in the regions where we operate.

²⁴ The Transportation Division defines significant fines and/or sanctions as those in excess of US\$50,000.



INFRASTRUCTURE DIVISION

grow

STRUCTURE OF THE DIVISION AND PRINCIPAL SUBSIDIARIES

102-5

The Infrastructure Division of Grupo México is represented by the subsidiary México Proyectos y Desarrollos, S.A de C.V. (MPD), comprised of:

México Compañía Constructora, S.A. de C.V. (MCC)
Grupo México Servicios de Ingeniería, S.A. de C.V. (GMSI)
Controladora de Infraestructura Petrolera México, S.A. de C.V. (PEMSA)
Controladora de Infraestructura Energética México, S.A. de C.V. (CIEM)
Concesionaria de Infraestructura del Bajío, S.A. de C.V. (CIBSA)

SIGNIFICANT CHANGES IN THE ORGANIZATION

102-10

There were no significant changes in size, structure, ownership, capital or the supply chain in the Infrastructure Division in 2018.

PRINCIPAL SERVICES AND MARKETS

102-2, 102-6

Customers and services. Through the Infrastructure Division of Grupo México, we offer engineering and construction services, power generation, and also onshore and offshore drilling, as well as the leasing and operation of oilrigs. We also operate and maintain highways under concession.

The Grupo México Infrastructure Division has more than 80 years experience, completing over 200 major projects in 24 Mexican states. We're prepared to participate in major projects in Mexico and to contribute to the national development. Today, we are financially solid, which means we can offer competitive market conditions and security for our partners.

CONSTRUCTION	ENGINEERING SERVICES
Public and private infrastructure projects, including: hydroelectric and storage dams, highways, thermoelectric plants, railroad projects, mining projects, manufacturing plants, petrochemical plants, and residential projects.	Comprehensive engineering services for industrial projects, principally in the mining, metals, chemical, petrochemical and oil sectors.

DRILLING	POWER GENERATION
<ul style="list-style-type: none"> • Drilling for the exploration of oil, water and geothermal energy, including related services, such as directional drilling, cementation and drilling fluids. 	<ul style="list-style-type: none"> • Power generation through two natural gas combined cycle power plants (La Caridad I and La Caridad II), with an installed capacity of 520 MW, and a 74 MW wind farm (El Retiro) with 37 wind turbines.
<ul style="list-style-type: none"> • Onshore and offshore drilling equipment leasing (5 jack-up and 2 modular rigs). 	

HIGHWAY INFRASTRUCTURE OPERATION
<ul style="list-style-type: none"> • Operation and maintenance of the Salamanca-Leon highway, with an average daily traffic of 20,168 vehicles (2018).

Results. Infrastructure Division sales in 2018 were US\$625 million, a 7% increase over 2017. EBITDA was US\$270 million, representing a year-over-year increase of 24%. These growths are primarily thanks to greater usage of the PEMSA equipment, improved power generation by our combined cycle power plants, as well as increased traffic on the Salamanca-Leon highway.

México Compañía Constructora sales were US\$156.8 million, a 13% increase over 2017, while Grupo México Servicios de Ingeniería reported a 3% year-over-year increase with sales of US\$17.3 million.

The Infrastructure Division, through Controladora de Infraestructura Petrolera México, closed 2018 with 5 rigs in operation, earning revenues of US\$140 million and EBITDA of US\$69 million. The weighted operating efficiency of the rigs during the year was 98.4%. PEMSA is currently the Mexican company with the most rigs operating in the Gulf of Mexico.

The principal factors that drove these record results were: the operational increase in the Nacozari, Sonora power plants, as a result of the increased demand from our self-supply partners, the sale of electricity to the wholesale electricity market, and direct sales to CFE and MEM, which contributed revenue of US\$39.7 million with a sales volume of 585,552 MWh. Thanks to all this, EBITDA increased 16% over 2017, reporting a profit margin of 41%. With this, the combined cycle power plants are the first in Mexico to operate under the 2 production structures simultaneously, legacy (self-supply) and sale to the wholesale electricity market. Meanwhile, the El Retiro wind farm produced 198,336 MWh, a 15% increase in production over 2017, generating revenues of US\$18.8 million and EBITDA of US\$12.7 million, a 260% growth over last year.

Grupo México reported a record US\$40 million in revenue from the Salamanca-Leon highway, and an average daily traffic of 20,168 vehicles, representing a 15% increase in revenue over 2017. The increase in daily traffic in 2018 was 10% over 2017. Also, the highway received a rating of 471 out of 500 points on the service evaluation conducted by the Department of Transport and Communications.

INVESTMENTS AND PROJECTS

203-1, 203-2

This division of Grupo México has been contributing to the development of infrastructure in Mexico for over eighty years. In 2018, we invested US\$93 million in projects. Some of our principal projects are described following:

Silao Bypass Project. A 30-year concession was signed in 2018 to build, operate, exploit, preserve and maintain the Silao Bypass, which

will be a 17.4 kilometer high-specification highway connecting the Bajío inland port and Silao with the Guadalajara highway.

Given the development opportunities that come with the operation of concessioned highways, we have set ourselves the goal of expanding our participation in the sector in the coming years, with the added value of the possibility of offering users a high quality service.

Fuel Storage Terminal and Wind Power Projects.

Fuel storage capacity in Mexico is limited. In response to this, the Board of Directors has approved a US\$180 million investment for the construction of two storage facilities, one in Monterrey and the other in Guadalajara. These facilities will increase the inventory capacity in these regions by 7 and 15 days, respectively.

In addition, an investment of US\$410 million was approved to acquire wind farms with a capacity of up to 270 MW, located in the north of the country and in the Tehuantepec Isthmus region. This action will increase the wind power capacity in Mexico by 5%.

Mining sector projects. México Compañía Constructora continued with the reinforcement and maintenance of the containment walls of Tailings Dam No. 3 at the Mining Division's Buenavista del Cobre operation and work also continued on phase 2 of a new tailings dam to guarantee a 10-meter dam wall. This project

generated approximately 1,064 direct jobs and 95 indirect jobs, adding 54 suppliers in 6 communities near Nacozari, Sonora.

In this same regard, work continued on the construction of the containment wall for Tailings Dam No. 7 at the Mining Division's La Caridad mine, in Nacozari de Garcia, Sonora, creating an average 700 direct and 17 indirect jobs in 2018, generating economic benefits for 22 local suppliers.

In 2018, Grupo México Servicios de Ingeniería, completed the engineering for the Toquepala expansion project for the Mining Division, which required 450,000 man/hours. We were also awarded a contract in Peru for 65,000 man/hours for various engineering projects.

Railroad sector projects. Construction has been completed on the expansion project for the automotive terminal in Monterrey and work has begun on the Monterrey bypass, the purpose of which is to move the train outside of the city. Meanwhile, construction has started on the Celaya bypass for the Transportation Division, reporting 28% progress. Both projects created, on average, 2,262 direct jobs and 95 indirect jobs in 2018, generating synergies with 95 construction material suppliers, fuel services, maintenance and parts for the equipment and machinery.

Grupo México Servicios de Ingeniería provided Ferrromex and Valero Energy with the engineering for the Monterrey transfer terminal, with a capacity of 600,000 to 3 million barrels per year. The project consisted of the engineering, construction and startup of a transfer station, while the construction was subcontracted to a third party company. Lastly, we are providing the engineering projection for the construction of a 20 mile rail line for Texas Pacifico, with which Grupo México Servicios de Ingeniería enters the US market.

Projects for the Grupo México Foundation. México Compañía Constructora began construction of the Specialization Hospital in Juchitan, Oaxaca, with an approximate construction area of 6,800 m². The hospital will offer the following specializations: cardiology, endocrinology, gynecology-obstetrics, intensive care, pediatrics, neonatology, anesthesiology, clinical psychology, stomatology, nutrition, preventive medicine, and surgery. The hospital is planned to have an installed capacity of 9 doctor's offices for outpatients and hospitalization with 30 inpatient and 30 outpatient beds. MCC's involvement in this project created approximately 217 direct jobs in 2018, benefiting 15 communities and 27 local suppliers in the region of Juchitan, Oaxaca.

Maintenance of the combined cycle power plants. As part of our scheduled maintenance plan, in 2018 we made modifications to the gas turbine at the "La Caridad II" plant to improve the productivity and profitability of the plant. This modification will extend the maintenance periods from 2 to 4 years, reducing downtime, positively impacting the environment.

Servicios Integrales de Ingeniería. Grupo México Servicios de Ingeniería was contracted by the company Cydsa to develop an engineer-

ing, procurement and construction project for the remediation of brine pools. This includes the design and construction of peripheral buildings and accesses to the gas storage plant in the salt caverns in Coatzacoalcos, Veracruz.

CUSTOMER RELATIONS

102-43, 102-44

Quality Management. In the Infrastructure Division, we are continually striving to deliver our services to the highest standards of quality. To achieve this, we maintain close contact with our customers. We have designed various tools to hear their opinions: logs, notices, meeting minutes, complaint and suggestion boxes, satisfaction surveys and, in compliance with the regulatory standards, website and email, among other media. The information we gather through these channels is analyzed and used to develop strategies to enhance the experience and improve the satisfaction of our customers and users.

México Compañía Constructora has maintained its ISO 9001 quality management certification for twelve years. Meanwhile, PEMSA renewed its ISO 9001 certification and, since 2018, all its business units and operations are ISO 9001 certified. Also, Concesionaria de Infraestructura del Bajío, as operator of the Salamanca-Leon highway, celebrates its third year with an ISO 9001 certified quality management system.



INFRASTRUCTURE DIVISION

promote

WORKFORCE AND LABOR PRACTICES

Workforce

102-8

EMPLOYEES BY SUBSIDIARY

INFRASTRUCTURE DIVISION

SUBSIDIARY	EMPLOYEES 2018
MCC	2,066
GMSI	377
CIEM	94
PEMSA	591
CIBSA	233
Total	3,361

In 2018, we had an average total workforce of 3,361 collaborators in our 5 principal subsidiaries. Due to the nature of our operations, 59% of our collaborators are under term contracts. All collaborators worked full time, which gives stability to our workforce.

TOTAL EMPLOYEES

INFRASTRUCTURE DIVISION, 2018

YEAR	EMPLOYEES
2016	2,556
2017	3,362
2018	3,361

EMPLOYEES BY AGE GROUP

INFRASTRUCTURE DIVISION, 2018

AGE GROUP	EMPLOYEES
18-25	415
26-40	1,567
41-50	746
51+	633
Total	3,361

Contract workers. The Infrastructure Division contracted 54 collaborators from different specialized maintenance companies in 2018.

Freedom of association

102-41, 402-1

We had 1,989 unionized employees in the Infrastructure Division in 2018, representing 59% of the workforce. We guarantee freedom of association and have mechanisms in place for ongoing dialog with our personnel and their union representatives. Issues involving work conditions and workplace health and safety are addressed periodically, in compliance with Mexican labor laws.

Although there are no advance notice terms formally established in the collective bargaining agreements, we always notify the union leaders and non-unionized employees in a timely manner of any significant change in the organization.

Equal opportunity and non-discrimination

103-3, 405-1, 406-1

As with the Mining and Transportation divisions, the workforce of the Infrastructure Division is made up of mostly men. We have been working hard to promote a greater participation of women. In 2018, 10% of our workforce were women.

PARTICIPATION OF WOMEN BY EMPLOYEE CATEGORY

INFRASTRUCTURE DIVISION, 2018

CATEGORY	TOTAL EMPLOYEES	NUMBER OF MEN	NUMBER OF WOMEN	% WOMEN IN TOTAL EMPLOYEES
Senior Management & Department Heads	14	13	1	7
Managers & Assistant Managers	130	117	13	10
Middle Management (Supervisor / Coordinator / Foreperson)	421	327	94	22
Analysts & Assistants	449	352	97	22
Administrative personnel	315	260	55	17
Operating personnel	2,032	1,956	76	4
Total	3,361	3,025	336	10

Non-discrimination. At Grupo México, including the Infrastructure Division, we respect the rights of all our collaborators. The Code of Ethics is our guiding reference for fighting discrimination and operating according to our principles and values. Our companies have zero tolerance for discrimination on the basis of ethnic origin, race, gender, disability, social condition, political affiliation, health condition, religious beliefs, immigration status, opinions, sexual preference or marital status.

In adherence of these principles, México Compañía Constructora employed local personnel in 2018 for the construction of the Specialization Hospital in Juchitan. These collaborators speak Zapoteco and Mixteco. Therefore, tools were developed for local communication regarding the project, including health and safety talks, which are given in these indigenous languages as well as in Spanish. For the Infrastructure Division, these collaborators are an example of our commitment to inclusion and diversity. The knowledge and values they have contributed to this project have aided in creating a safe and cordial work environment.

Any collaborator that is witness to or the victim of any form of discrimination is encouraged to report the incident via the Grupo México Reporting Line. This formal reporting mechanism is operated by a third party and offers a phone number, email and website to report incidents.

No case of discrimination was reported in the Infrastructure Division in 2018.

For more information on our Code of Ethics and Reporting Procedure, see the section on Human Rights in the Corporate Governance chapter.

Equal opportunity. As an example of our commitment to being inclusive in our employment opportunities, the 5 Infrastructure Division subsidiaries have signed onto the Éntrale alliance, an initiative that calls the business sector in Mexico to commit to the inclusion of differently abled persons to expand their employment possibilities. An example of this is the incorporation of differently abled collaborators into the CIBSA workforce, affirming our commitment to creating inclusive, equal opportunity work environments.

Workplace climate. The Infrastructure Division conducts surveys to assess the workplace climate at its operations every two years. The first of these was conducted in 2017 with the subsidiary CIBSA and then in 2018, with MCC and CIEM. In 2019, the surveys will be conducted with the subsidiaries PEMSA and GMSI. The goal of these surveys is to identify opportunities for improvement in aspects like culture, leadership and work systems.

The first results of these surveys gave rise to the Cultural Transformation towards Total Quality program, the goal of which is to achieve a change in the behavior of the Infrastructure Division leadership, fostering leadership focused on total quality and continual improvement in our work processes, and to generate a single culture where all our collaborators know their company.

Salaries and salary equality

202-1, 405-2

The salary package the Infrastructure Division offers includes the basic wage, productivity bonuses, cash benefits and profit sharing, where applicable. In 2018, the average in the Infrastructure Division was equal to more than 6.2 times the local minimum wage.²⁵

In terms of the base salary for women in relation to men, we continue working to ensure equal pay across all employee categories.

²⁵ Considering the Base Salary (BS) and the Minimum Wage (MW), the BS/MW average is calculated weighting the BS and MW published in the Official Federal Gazette, based on the number of Infrastructure Division collaborators in each territory. The Base Salary includes the basic wage, productivity bonuses, cash benefits and profit sharing, where applicable.

BASE SALARY OF WOMEN VS. MEN							
EMPLOYEE CATEGORY							
SUBSIDIARY	SENIOR MANAGEMENT & DEPARTMENT HEADS	MANAGERS & ASSISTANT MANAGERS	MIDDLE MANAGEMENT (SUPERVISOR / COORDINATOR / FOREPERSON)	ASSISTANTS & ANALYSTS	ADMINISTRATIVE PERSONNEL	STAFF	OPERATING PERSONNEL
GMSI	1.2	0.9	0.8	0.9	0.7	1.2	0.8
CIEM	N/A	0.8	0.8	N/A	1.0	1.6	N/A
PEMSA	N/A	0.8	0.5	0.9	1.3	1.3	N/A
CIBSA	N/A	N/A	1.1	1.0	1.0	N/A	N/A
MPD	0.6	N/A	N/A	N/A	N/A	3.4	N/A

* N/A: Not applicable as there are not currently any women in these positions.

Recruitment and retaining personnel

401-1

During 2018, the average workforce of the Infrastructure Division was 3,361 collaborators, which remained relatively unchanged from 2017, with a turnover rate of 23%. This turnover rate is due to the nature of the sectors in which the division is active, as our hiring is based on the demand and temporality of our projects.

NEW HIRES						
INFRASTRUCTURE DIVISION, 2018						
SUBSIDIARY	AGE GROUPS				GENDER	
	18-25	26-40	41-50	51+	Men	Women
MCC	491	1,059	542	491	2,428	155
GMSI	14	66	27	14	88	33
CIEM	2	7	2	0	8	3
PEMSA	17	120	54	23	193	21
CIBSA	47	101	29	13	122	68

TURNOVER RATE	
INFRASTRUCTURE DIVISION, 2016-2018	
GENDER	PERCENTAGE
2016	15%
2017	21%
2018	23%

Due to the labor dynamics of the construction sector, GMSI and MCC, both engaged in the construction of industrial works projects for the public and private sectors, present high turnover rates as personnel are hired for a specific project, therefore the employment relationship ends when the project is complete, safeguarding their rights, in compliance with Art. 35 of the Mexican Labor Law.

Employee benefits

401-2

The Grupo México Infrastructure Division contributes to the wellbeing of our collaborators, offering the following benefits above those required by law:

SALARY RELATED	OTHER
Life insurance	Transportation service
Major medical insurance	Cafeterias for collaborators
Savings fund	Scholarships for employees and their children
Grocery vouchers	Share purchase plan for employees (management)
Retirement plan	

TRAINING AND CAREER DEVELOPMENT

Training

103-1, 103-2, 404-1, 404-2

Achieving a high level of quality through our broad range of services requires constant learning and training to develop a high degree of specialization. In 2018, we delivered a total 25,089 training hours.

TRAINING HOURS BY EMPLOYEE CATEGORY AND GENDER

INFRASTRUCTURE DIVISION, 2018

CATEGORY	TOTAL TRAINING HOURS	TRAINING HOURS - MEN	TRAINING HOURS - WOMEN
Senior Management & Department Heads	40	32	8
Managers & Assistant Managers	2,048	1,840	208
Middle Management (Supervisor / Coordinator / Foreperson)	5,951	5,467	484
Analysts & Assistants	5,530	4,816	714
Administrative personnel	1,512	984	528
Operating personnel	10,008	9,600	408
Total	25,089	22,739	2,350

The most important part of our company is our people, which is why we make every effort to ensure that the training we offer all our collaborators is relevant to the nature of the operations, to our context and to their skills and needs. In 2018, 155 training events were held, of the 195 scheduled, 13 of which were special training programs for the 5 Infrastructure Division subsidiaries. Overall, 86% of our collaborators attended at least 2 training events this year.

The training programs finalized include the course “Wholesale Electricity Market”, provided to employees of our subsidiary México Generadora de Energía, who received specialized training, including technical and financial as-

pects. At Grupo México Servicios de Ingeniería, 24 of our employees completed the Leadership Training Program, the goal of which is to develop leadership skills, focus on objectives and communication for Supervisors. At each shift change, our PEMSA collaborators working on our rigs receive training before boarding, therefore every 14 days an average 350 employees received training on industry best practices, focused on efficiency and productivity.

We also help our collaborators with their professional development, offering financial support for outside training and education.

Our strategy for identifying and developing talent has helped us to create specific programs like Top 25 Collaborators with High Potential, Professionals in Development, MBA Executives, etc.

Universidad I. The Universidad I project was launched in 2017, a virtual campus of the Infrastructure Division that started to be developed in 2016. With the creation of this platform, we will institutionalize the processes to professionalize the workforce, through useful content according to the needs of each subsidiary.

The goal of Universidad I is to promote a culture of self-training, focusing content on the needs of the sectors in which we participate and generating didactic models that ensure the effectiveness of the learning and its application in the real world.

This virtual university has three areas to achieve its strategic goals:

- **Institutional programs** – Covers the institutional competencies programs for our collaborators, occupational health and safety, and also training in the use of institutional tools.
- **Technical programs** – Offers training programs on general technical topics, specific technical skills for each sector in which we operate, and also the development of highly specialized skills and competencies.
- **Special programs** – Includes career plans and succession plans, and also support to complete bachelor and master’s degrees and diploma courses, in special cases. During its first year, we launched Universidad I with training and certification on the Code of Ethics, as part of the institutional programs track. We also proposed adding 700 collaborators. At December close, we had this number of students and the SAP platform (Systems, Applications and Products) provided essential support for the training program.

The Infrastructure Division’s policies and procedures can also be consulted through the Universidad I platform, and in 2019 we are planning to offer courses developed by the Grupo México Foundation.

In addition, and as an example of our commitment to the development of our collaborators and reducing the education gap, CIBSA entered into a partnership with Instituto de Alfabetización y Educación Básica para Adultos (INAEB) in Guanajuato. Since 2017, 6 of our employees have completed their basic education under this program, which, with the support of in-house tutors trained by the INAEB, will be expanded to employees at the highway facilities who want to complete their basic education.

Success Factors. We've implemented the Success Factors model to unify a framework of competencies for all the industries in which the Infrastructure Division operates, considering our broad spectrum of activities. This model includes modules to manage remuneration processes, recruitment and performance.

Performance review

103-3, 404-3

Our Infrastructure Division has a talent development plan, which includes a process for review. This plan arose in 2016 to open opportunities for our collaborators, and also to increase productivity, estimate potential and to detect training needs and recognize talent.

The Talent Development Plan is comprised of the following elements:

TALENT DEVELOPMENT PLAN	
INFRASTRUCTURE DIVISION	
Strategic Map for the Infrastructure Division	We plan the goals for the company, identifying the cause-effect relationship between the components of the strategy.
Competencies Model	Based on the structure used in the Mining Division, but adapted to the needs of the Infrastructure Division. The model includes a profile of specific competencies for each position, which are reviewed to identify and define the training needs.
Talent Platform	SAP Success Factors and KHOR, platforms that encompass the definition, description and follow-up on each employee's career goals.

PERFORMANCE REVIEW BY EMPLOYEE CATEGORY

INFRASTRUCTURE DIVISION, 2018

CATEGORY	TOTAL EMPLOYEES	TOTAL EMPLOYEES WHO RECEIVED A FORMAL PERFORMANCE REVIEW
Senior Management and Department Heads	14	14
Managers and Assistant Managers	130	128
Middle Management (Supervisor / Coordinator / Foreperson)	421	67
Analysts & Assistants	449	122
Administrative personnel	315	124
Operating personnel	2,032	0
Total	3,361	458

The performance review is currently performed manually, however we are planning to move this to the platform “RH Contigo” (HR With You), setting SMART goals with subsequent assessment on the achievement of these goals, as well as defining improvement plans. The goal is to manage the performance of all Infrastructure Division administrative personnel using this system.

OCCUPATIONAL HEALTH AND SAFETY

Occupational safety

103-1, 103-3, 403-1, 403-2, 403-4, 403-5, 403-8, 403-9, CRE 6

Approach. For all Grupo México, including the Infrastructure Division, workplace safety is our highest priority. In keeping with this level of commitment, we have established actions to guarantee the physical safety of our personnel and our contractors.

Occupational Health and Safety Commissions. We have Health and Safety Commissions to ensure our worksites do not put our collaborators at risk. These commissions are comprised of volunteer employees, 50% unionized and their representatives and 50% non-unionized, who together represent the entire workforce. The primary function of the commissions is to identify unsafe conditions and actions, to then communicate these to senior management, for the recommendations to be implemented. These bodies meet quarterly and tour all the facilities at our operations.

Identification of Dangers and Risk Assessment. The implementation of our management systems includes a process for identifying dangers and assessing risks, which are communicated to our workforce. All collaborators are encouraged to immediately report any unsafe condition or action to those tasked with monitoring occupational health, safety and hygiene. These reports are investigated and controls put in place to minimize the probability of risk. Controls are implemented as part of our systematic approach to increasing health and safety in the workplace, eliminating the dangers, and reducing or controlling the risks, giving preference to the implementation of controls according to the following order: eliminate, substitute, engineering controls, administrative controls and personal protective gear.

To ensure safety remains a priority at our operations, employees receive constant training on identifying dangers and risk assessment and they are encouraged not to put their physical safety at risk, suspending dangerous tasks, without facing any type of reprisal.

Our occupational health and safety systems include protocols for investigating incidents. The goal is to identify the root cause to then take corrective actions to prevent recurrence, through the ongoing improvement of the existing controls or setting new controls according to the order mentioned.

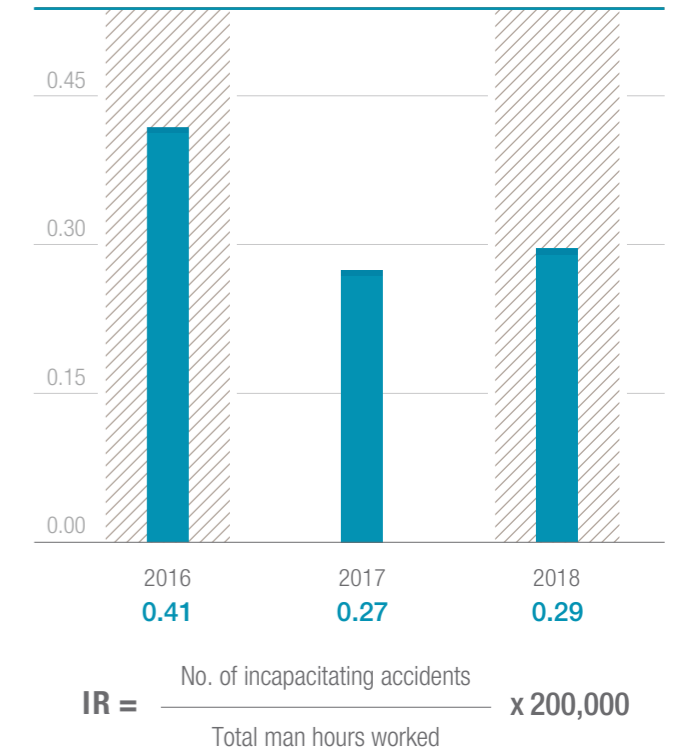
Certifications and Programs. In 2018, our subsidiary México Compañía Constructora renewed its OHSAS 18001 management systems certification for the twelfth consecutive year. Also, all PEMSA business units and operations are ISO 45001 certified, being the first Infrastructure Division company to receive this certificate. To consolidate our efforts, we also adhere to the Workplace Health and Safety Self-Management Program (PASST 1st level).

All our management systems and safety initiatives cover all employees of the subsidiaries where these have been implemented and 100% of our contract workers. These systems support our efforts to safeguard the physical integrity of our collaborators, comply with federal health and safety regulations, and are verified independently or by the federal authorities to ensure proper implementation under Mexican and international laws and regulations.

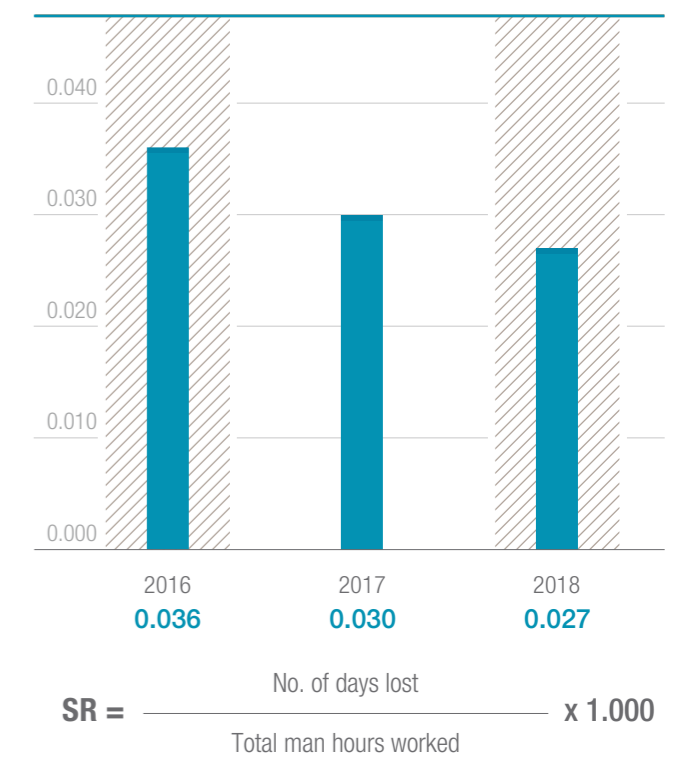
We developed an Institutional Safety and Protection On Board program for our oilrig onboard personnel, the goal of which is to develop and foster a culture of safety on oilrigs. The core areas the program covers are fire evacuation and general rig evacuation procedures, handling spills and man overboard protocols. We also maintain Ship and Port Facility Protection certifications under the International Ship and Port Facility Code (ISPS Code), and follow the guidelines set by the International Safety of Life at Sea Convention (SOLAS), accrediting our safety management and compliance with the Guidelines on Implementation of the International Safety Management (ISM).

Performance. There were 13 incapacitating accidents in 2018, increasing our accident rate 7.5% over last year. No fatalities were reported. Our “La Caridad I” and “La Caridad II” combined cycle power plants closed 2018 with 1,922 days without an incapacitating accident, equal to 7 years of operation and more than 5 million man hours accident-free.

INCIDENT RATE (IR)
INFRASTRUCTURE DIVISION, 2016-2018



SEVERITY RATE (SR)
INFRASTRUCTURE DIVISION, 2016-2018



Working in a culture of safety is our priority. One of the key resources for reducing our incident rates is prevention training. México Compañía Constructora began a Culture Transformation to Safety program in 2018, focusing on changing behaviors in the workforce to reinforce the message that safety is everyone's responsibility. The program is being implemented in different phases: in 2018, we completed the diagnostic stage and provided workshops on changing cultures and paradigms. The program will continue in 2019, with the goal of getting our people home safe.

Occupational Health

103-1, 403-3, 403-10

Approach. In the Infrastructure Division, we're committed to protecting the health of our personnel. We are also constantly looking to extend the culture of prevention in health and safety to the families of our collaborators and to the communities where we operate through education programs, consulting, risk control and prevention, and also the treatment of diseases and illnesses. Our operations have qualified medical personnel to give preventive follow-up and provide immediate response to any incident that may arise. Also, all our operations have safety and first aid trained and certified personnel to respond to any emergency, in compliance with federal regulations.

Our Infrastructure Division collaborators reported no work-related illnesses this year.

COMMUNITY ENGAGEMENT

203-2, 413-1, 413-2, CRE 7

CASA GRANDE

The Infrastructure Division strives to maintain strong ties with the community, identifying together needs and opportunities to improve the quality of life of local residents. To achieve this, we've adopted and put into practice the Mining Division's Casa Grande community development model. For more information on this model, see the Community Linkage section in the Mining Division chapter.

Social Inclusion and Impact Assessment. It's important for the Infrastructure Division that our actions in the community be supported by studies, direct consultations and reliable sources of information with valuable contributions as to the status and possibilities for sustainable development in the community.

We prepare social viability studies, shared value diagnostics and social impact assessments for our energy sector projects, as required by the Mexican Department of Energy for energy and hydrocarbon projects. The goal is to identify the social and environmental impacts in the area of influence of a project, considering the identification, characterization, prediction and valuation of the potential consequences resulting from the project, to take mitigation measures and develop social management plans.

These types of studies are prepared considering our principal stakeholders in the areas impacted by the project. In this regard, we maintain close relationships with community leaders, non-profit organizations, government agencies, community associations and organized groups, among others.

Community Committees were formed from these activities and are key to developing a community linkage model. These committees help us to define an agenda and mechanisms for community engagement, such as our invitations to submit project proposals to receive funding. With this model, we ensure the representation of various sectors of the community in the decision-making to promote economic, social and cultural development.

Also, as part of our actions to positively impact community development, the subsidiaries of the Infrastructure Division endeavor to contract local personnel, while boosting competition in the region by purchasing products and services from local suppliers.

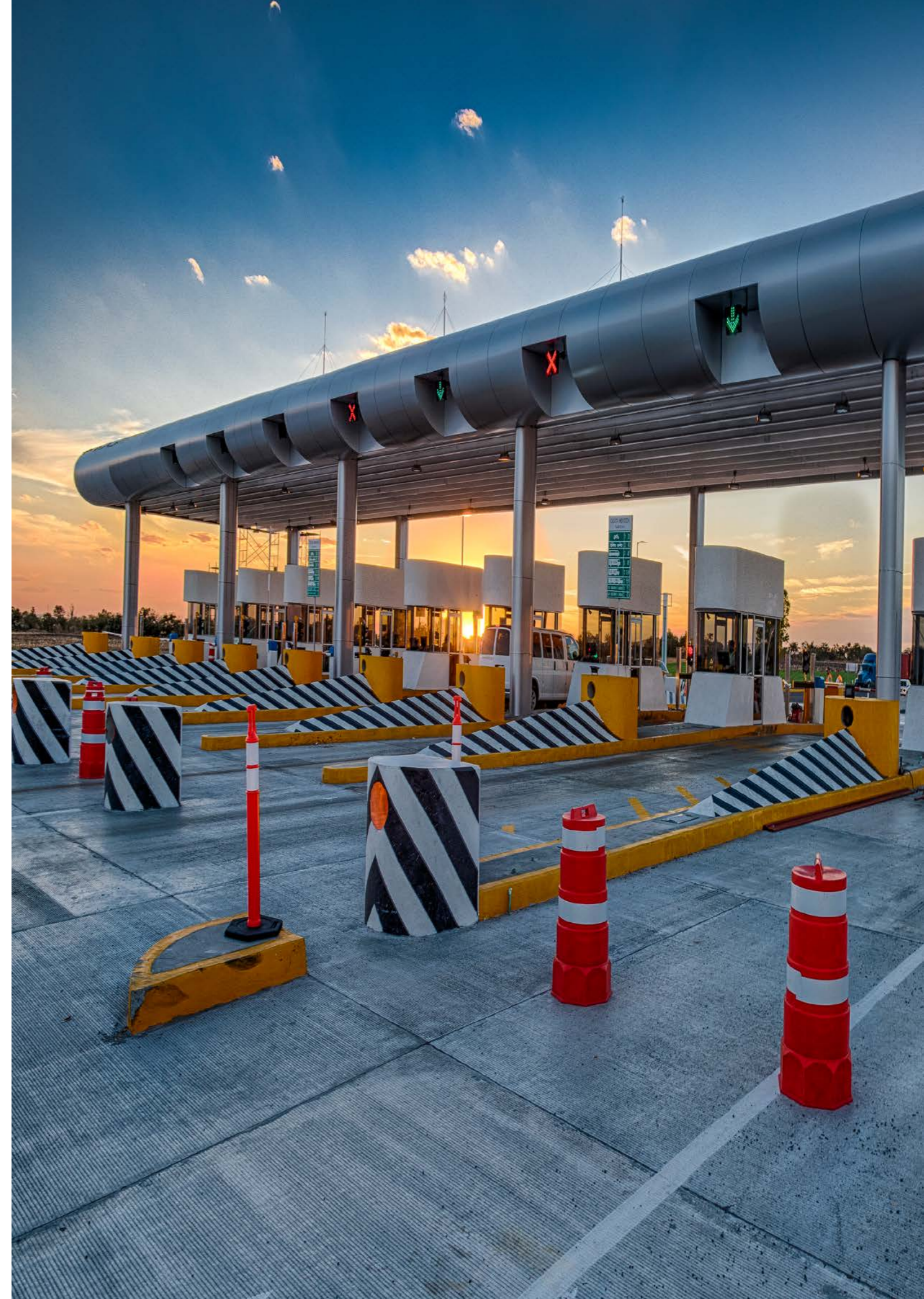
Principal actions 2018.

Operadora de Infraestructura del Bajío (OIBSA) launched Casa Grande Móvil in July 2018. This mobile classroom mounted on a truck, has a capacity of 58 people. Casa Grande Móvil represented an investment of more than US\$155,000, as a strategic community linkage solution and adaptation of the Casa Grande Community Development model to our highway operations. The project is designed to strengthen the positioning of the company at the operations and in the neighboring communities along 80 kilometers of highway, including more than 50 communities, with 60,000 residents. Casa Grande Móvil visited 19 communities in 2018, offering educational, environmental and productive trainings to 3,161 participants.

We launched invitations to submit social and productive project proposals in the neighbor communities to the “El Retiro” wind farm in Juchitan, Oaxaca. The proposals were reviewed by the Community Committees, the members of which are volunteers from the community and the company. The successful projects received seed capital from the company and support for their implementation. Six social projects and 2 productive projects in Juchitan were approved in 2018. These projects impacted 780 people and represented an investment of US\$9,875. Our Highway and Ciudad del Carmen operations are planning to publish invitations to submit productive projects in 2019.

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INFRASTRUCTURE DIVISION

protect

ENVIRONMENTAL MANAGEMENT AND PERFORMANCE

Energy and energy efficiency

302-1, 302-4

Energy consumption. During 2018, the Infrastructure Division consumed 28,144 terajoules of fossil fuels and 5.9 terajoules of electricity, for a total 28,149.9 terajoules. 96% of the energy consumed by the Infrastructure Division is the natural gas needed for our Controladora de Infraestructura Energética México (CIEM) combined cycle power plants.

The calorific values reported by the Mexican authorities in the Official Federal Gazette in 2019 were used to calculate the fuel consumption in energy units. The consumptions reported are measured for all our Infrastructure Division operations.

FUEL CONSUMPTION

INFRASTRUCTURE DIVISION, 2016-2018

YEAR	TERAJOULES
2016	24,731
2017	27,820
2018	28,144

FUEL CONSUMPTION BY SUBSIDIARY

INFRASTRUCTURE DIVISION, 2018

SUBSIDIARY	TERAJOULES
MCC	530
CIEM	26,924
PEMSA	676
CIBSA	14

CONSUMPTION BY TYPE OF FUEL

INFRASTRUCTURE DIVISION, 2018

FUEL	TERAJOULES
Diesel	1,183
Gasoline	39
Liquid Petroleum (LP) Gas	0.03
Natural Gas	26,922

POWER CONSUMPTION

INFRASTRUCTURE DIVISION, 2016-2018

YEAR	TERAJOULES
2016	7.24
2017	4.38
2018	5.88

Energy efficiency. We report a 2% year-over-year efficiency improvement in producing electrical power, reflecting the decreased heat rate of our “La Caridad I” and “La Caridad II” combined cycle power plants. This means we have optimized the fuel consumption needed to generate each MWh of electricity.

Electricity generation. During 2018, CIEM reported a new record in generating electricity from its combined cycle power plants, producing 3,731 GWh. This represents a 3% increase over 2017 and as a result, 585,552 MWh were sold on the wholesale electricity market.

The “El Retiro” wind farm in Juchitan, Oaxaca, generated 198 GWh in 2018, a 15% increase in output compared to 2017.

Climate change

103-1, 103-2, 103-3, 201-2, 305-1, 305-2, 305-5, 305-7

Risks of climate change. The activity of the Infrastructure Division is subject to different risks, including unusual or unexpected climatological conditions. Such events can also damage or destroy the assets or production facilities, and cause personal injury as well as damages to the environment. Because of this, we have plans in place to respond to these types of events.

Climate change is a global challenge. Added to this we are experiencing intensified weather phenomena, such as hurricanes, droughts and rains, which generate risks to our Infrastructure Division operations. The accumulation of greenhouse gases (GHG) is triggering transformations in the weather and in response, we are working to reduce the emissions from our activities.

Given the above, we're looking at the viability of significantly increasing our participation in different power generation projects using renewable energies, principally wind power.

Greenhouse Gas Emissions (GHG). In 2018, the GHG emissions of the Infrastructure Division totaled 1,604,301 tons of CO₂eq.

GREENHOUSE GAS EMISSIONS ²⁶	
Millions of tons CO ₂ eq	
INFRASTRUCTURE DIVISION, 2018	
Direct Emissions ²⁷	1.60
Indirect Emissions ²⁸	0.0009

Other emissions. The Infrastructure Division has continual monitoring systems in place for fixed-source NOx emissions. This system ensures our emissions fall within the permitted limits. We reported 1,134 tons of these compounds in 2018.

Mitigation of Greenhouse Gases. We contributed to reducing CO₂ emissions thanks to the diversification of our energy matrix. The “El Retiro” wind farm, which started operations in 2014, has 37 wind turbines and the power the wind farm produces feeds other Grupo México subsidiaries. In 2018, the wind farm produced 198,336 MWh, preventing the release of 104,523 tons of CO₂eq (Scope 2), considering the CO₂ greenhouse gas emissions in the calculation. This is equal to taking 22,192 cars off the road for a year.

²⁶ Operational controls were considered this year in the consolidation of emissions.

²⁷ The tons CO₂eq calculation for direct emissions includes CO₂, CH₄ and N₂O.

The methods and fuel emission factors published by the Mexican authorities in the Official Federal Gazette in 2015 were used to calculate the GHG emissions and are aligned with the guidelines of the Intergovernmental Panel on Climate Change (IPCC).

The calorific values published in the Official Federal Gazette in 2019 (CONUEE February 2019) were used for the estimates.

²⁸ The tons CO₂eq calculation for indirect emissions includes CO₂ gases.

The methods and emission factors reported (market function) directly by the electricity suppliers or taken from the public information for those companies that did not provide this information were used to calculate the GHG emissions.

The Infrastructure Division also operates two combined cycle power plants, “La Caridad I” and “La Caridad II”, which produced 3,731 GWh to supply power to various Grupo México subsidiaries. Although most of this power was used to supply the operations of the Mining Division, a surplus 585,552 MWh was produced, which was supplied to the wholesale electricity market, achieving an efficiency of 0.4176 tons of CO₂eq per MWh in emissions intensity. This indicator falls below the National Power Sector’s Emissions Factor set by the power regulatory board at 0.527 tons of CO₂eq per MWh. This means we mitigated 408,338 tons of CO₂eq, considering the Scope 2 CO₂ greenhouse gas emissions in the calculation.

Water

303-1, 303-2, 306-1, 306-5

In 2018, our total water consumption was 4,985,079 m³, 83% of which was from underground sources. Most of this consumption is used in the cooling processes at our combined cycle power plants, which have reached optimal performance in water usage with 7 concentration cycles, avoiding significant consumption of fresh water.

TOTAL WATER WITHDRAWN	
INFRASTRUCTURE DIVISION, 2018	
SOURCE	m ³
Underground	4,171,912
Surface (fresh water)	57,137
Surface (salt water)	57,825
City water supply (system and/or truck)	698,205
Total	4,985,079

WATER CONSUMPTION

INFRASTRUCTURE DIVISION, 2018

SUBSIDIARY	m ³
CIEM	4,215,886
PEMSA	751,465
CIBSA	13,178
MCC	4,550
TOTAL	4,985,079

In 2018, water discharges totaled 760,282 m3 for the whole of the Infrastructure Division. These discharges were handled according to federal regulations and requirements, therefore no receiving water bodies were affected.

Materials

301-1

The many projects of the Infrastructure Division, particularly our well drilling and construction activities, require construction materials and for equipment maintenance.

MATERIALS

INFRASTRUCTURE DIVISION, 2018

MATERIAL	UNIT	QUANTITY
Inert rock	m ³	6,880,159
Industrial products	ton	104,902
	m ³	731,934
Drilling products	ton	4,840
		56

Waste management and emergency response

306-2, 306-3

Waste management. In 2018, we disposed of a total 398 tons of solid hazardous waste and 282 m3 hazardous liquids, which were handled, stored and sent for recycling or final disposal in strict adherence of regulations. We also produced 514 tons and 1,314 m3 of non-hazardous solid waste, much of which was reused or recycled by third parties.

WASTE

INFRASTRUCTURE DIVISION, 2018

MATERIAL	UNIT	QUANTITY
Hazardous waste ²⁹	solids (ton)	398
	liquids (m ³)	282
Sludges (water treatment plant)	solids (ton)	5,133
Non-hazardous waste	solids (ton)	514
	containers ³⁰ (m ³)	1,314
Waste requiring special handling	solids (ton)	46

Emergency response. There were no significant spills, as defined by Mexican regulations, at any of our Infrastructure Division operations in 2018.

Biodiversity

304-1, 304-2, 304-3, 304-4

The operations of the Infrastructure Division are generally situated in areas with little biodiversity value. In addition to holding all required permits, we ensure our operations have no impact on the local flora and fauna. Only the administrative offices of PEMSAs in Ciudad del Carmen, over an 0.19 km2 area, are located in a protected area, "Laguna de Términos"³¹. There is no significant effect on this zone, due to the type of activity conducted there.

²⁹ All hazardous waste is temporarily stored according to local regulations and transported by a third party for final disposal.

³⁰ This non-hazardous waste is measured in m3 as for some operations, the control unit is the container capacity in volume units.

³¹ Laguna de Terminos is a high-value coastal eco-zone where sea turtles and migratory birds nest.

All Infrastructure Division projects adhere to regulations and strict standards, preparing environmental impact assessments as necessary, as well as reporting our performance to the authorities. This means conducting a complete analysis of our planned worksites, and also acknowledging our impacts and identifying the species with which we share the space to develop an action plan.

One example of our commitment to biodiversity is that in 2018, we launched a reforestation and restoration program for the migratory bird nesting area in the Playa Norte coastal dunes, in Ciudad del Carmen, Campeche. This project was endorsed and authorized by the Mexican environmental authorities, with the involvement of the Comisión Nacional de Áreas Naturales Protegidas (CONANP), Dirección de Medio Ambiente y Aprovechamiento Sustentable (DMAAS), the Agencia Nacional de Seguridad Industrial y de Protección al Ambiente del Sector Hidrocarburo Unidad de Gestión Industrial (ASEA) and citizen engagement. The program will reforest 2 hectares over 10 years, planting endemic vegetation, like the sea grape (*Coccoloba uvifera*) and icaco (*Chrysobalanus icaco*).

PROTECTED SPECIES IUCN CLASSIFICATION

INFRASTRUCTURE DIVISION, 2018

CATEGORY	No. SPECIES
Low concern	15

PROTECTED SPECIES NOM-059-SEMARNAT CLASSIFICATION

INFRASTRUCTURE DIVISION, 2018

CATEGORY	No. SPECIES
In danger of extinction	0
Threatened	1
Subject to special protection	1

COMPLIANCE

Environmental certifications

México Compañía Constructora renewed its ISO 14001 management system certification for the twelfth year in 2018. Also, and since 2018, all our PEMSA business units are ISO 14001 management system certified.

PEMSA held 7 Clean Industry and Environmental Quality certificates in 2018, while the “La Caridad” combined cycle power plant renewed its certification. These certifications are given by the Mexican Environmental Protection Agency (PROFEPA), under a voluntary program that requires an environmental audit to review the company’s environmental risk processes and regulatory compliance.

CLEAN INDUSTRY AND ENVIRONMENTAL QUALITY CERTIFIED FACILITIES

INFRASTRUCTURE DIVISION, 2018

“La Caridad” combined cycle power plant
Zacatecas jack-up rig
Campeche jack-up rig
Chihuahua jack-up rig
Tabasco jack-up rig
Veracruz modular rig
Cement plant
Carmen sector offices

Fines and sanctions

307-1

No Infrastructure Division subsidiary received any fine or sanction³² from the environmental authorities in 2018.

³² The Transportation Division defines significant fines and/or sanctions as those in excess of US\$50,000.



grupo méxico foundation

Dr. Vagon: The Health Train

Dr. Vagon, The Health Train, started operations four years ago, launching an innovative project without precedent in Mexico. Thanks to the commitment and cooperation of all our partners, we deliver a comprehensive medical service to each patient that visits us in any Mexican state. In 2018 alone, the train traveled to 13 states and 49 communities, delivering more than 359,000 medical services.

Thanks to the success of the Health Train on each of its scheduled routes over the last four years, we increased the days of service from 12 to 20, growing our capacity to receive 10,000 patients per route, a 60% increase.

Fundación Farmacias del Ahorro has been an essential partner in this program, donating more than 114,000 free medications so that each patient who visits the Health Train leaves with the treatment prescribed by their specialist.

In February, Fundación Audiotech joined the Health Train team, and with their help, together with Fundación MVS Radio through the program “Ponte Oreja”, we provided more than 25,000 audiology services, including ear exams, hearing tests and speech tests. Also, 602 hearing devices and 5 bone conduction hearing devices were fitted. Three hundred and sixty ear irrigations were performed and 194 repairs and maintenance of hearing devices.

The optometry service performed 52,734 eye exams and diagnoses for 15,127 patients. Thanks to the collaboration of Essilor, we donated more than 14,000 pairs of prescription eyeglasses.

In Mexico, 26 million people live with some type of physical disability. The public health services are insufficient and unable to effectively treat these patients, which makes the chiropractic and physical therapy services the Health Train offers the only health service that provides this type of therapy free of charge. More than 9,000 people received 50,987 services in 2018, including assessments, diagnoses and physical therapy, under the goal of promoting prevention of skeletal muscle and neurosensory problems. In parallel, 5,619 rehabilitation devices were given to these patients, to continue their therapies at home.

Complementing the services the Health Train offers, more than 37,000 scans were performed in chiropractic and physical therapy, thanks to our partnership with Laboratorios Lapi.

We added a new women’s health car to the Health Train this year, which performed more than 6,000 cervical screenings and colposcopies for the early detection of cervical cancer. These services were possible thanks to the collaboration of Onko Solutions. Adding to this, FUCAM performed more than 7,000 mammograms, detecting 114 suspected cases of breast cancer, which were then channeled to receive additional studies and to follow up with each patient.

Following the flooding in Sinaloa and Sonora caused by Tropical Depression 19, Dr. Vagon, The Health Train traveled to Culiacan, Salvador Alvarado, El Fuerte and Navojoa, offering medical attention to 9,309 patients over 20 days providing 36,346 medical services.

The Grupo México Foundation strives to address all areas of preventive health for the people who visit the Train, inviting patients to participate in different health education workshops while they are waiting for their appointments. More than 1,400 workshops were held this year for 51,176 participants on the following topics:

- Cancer in men and women
- Domestic violence
- Breast self-exam
- Addictions
- Teenage pregnancy
- Healthy lifestyles
- Oral hygiene
- Family planning
- Vaccinations
- Maternal mortality
- Respiratory diseases
- Health emergencies
- Diarrheal diseases
- Natural disasters

In parallel to the services the Health Train offers, we have been operating a psychological support hotline 01 800 DR VAGON (3782466) since 2017, which has provided advice to many people on the following issues:

- Divorce
- Domestic violence
- Addictions
- Self-esteem and personal development
- Depression and anxiety

Cine Vagon

In collaboration with Cinemex and Ferromex we operate a project without precedent: Cine Vagon, which takes *the magic of the movies* to the communities the Health Train visits. We held 164 showings this year, where 34,400 people enjoyed a variety of movies portraying universal values promoting families spending time together.

Cine Vagon is fitted with screens, the best sound and projection equipment, comfortable seats and a concession stand. We give out fresh popcorn and a drink at each showing, as well as healthy snacks and treats for all the children who join us.

We added Corazon Films to our list of distributors this year and we renewed the participation of Videocine and Sony, to provide a more varied and extensive list of offerings.

Results

- 359,663 free comprehensive medical services
- 95,283 patients served
- 114,187 free prescription medications
- 25,765 audiology services and 5 bone conduction hearing devices
- 360 ear irrigations
- 194 repairs and maintenance of hearing devices
- 14,227 pairs of eyeglasses donated
- 5,619 rehabilitation devices donated
- 37,807 x-ray scans
- 6,288 cervical screenings and colposcopies
- 7,291 mammograms
- 1,414 Health education workshops
- 51,176 participants in workshops
- 164 Cine Vagon screenings
- 34,400 Cine Vagon guests
- 49 communities visited in 13 Mexican states
- 17,627 kilometers traveled on Ferromex rail lines

Mexicanos Sembrando

Our tree planting program “*Mexicanos Sembrando*” reforested 1,451 hectares in 2018, planting and caring for 1,451,508 trees in 18 Mexican states, impacting 15,252,818 people. This was possible due to partnerships with different municipal and state governments and environmental organizations, but also thanks to the dedication and enthusiasm of our employees and their families who were part of the 6,934 volunteers who participated in our Tree Planting Days held in various Mexican states where we operate.

1,847 volunteers participated in our 8th Grupo México Foundation Tree Planting Day, employees of Grupo México, Ferromex, Ferrosur, Intermodal and Cinemex, planting 20,000 trees in the Huixquilucan forest, in the Estado de Mexico. This event has grown significantly each year, with more and more companies joining us, committed to preserving and caring for the environment. Thanks to the volunteers who joined us from Sura, Fundación Posadas, Hogan Lovells, KPMG, ManPower, Grisi, Fundación Chedraui and Nutriwell, we achieved our goal of reforesting 20 hectares at the “La Glorieta” site.

Besides this tree planting day, we held others in communities where we operate. 2,587 volunteers participated in these events, planting trees in six Mexican states (Michoacan, Zacatecas, Guerrero, Coahuila, Chihuahua, San Luis Potosi).



	STATE	TREES PLANTED	HECTARES REFORESTED
1	Aguascalientes	80,011	80
2	Baja California	20,000	20
3	Chiapas	46,000	46
4	Chihuahua	275	1
5	Coahuila	33,200	33
6	Estado de México	149,981	150
7	Guerrero	1,500	2
8	Hidalgo	72,797	73
9	Jalisco	300,000	300
10	Michoacán	79,748	80
11	Oaxaca	20,000	20
12	Puebla	140,000	140
13	San Luis Potosí	101,250	101
14	Sonora	12,500	13
15	Sinaloa	10,000	10
16	Tamaulipas	269,746	270
17	Veracruz	113,000	113
18	Zacatecas	1,500	2
	Total	1,451,508	1,451

Editorial Fundación Grupo México

Because of its importance in our traditions, we have chosen *Calabaza* (Squash) to highlight in the latest Editorial Fundación Grupo México production, the ninth in our series.

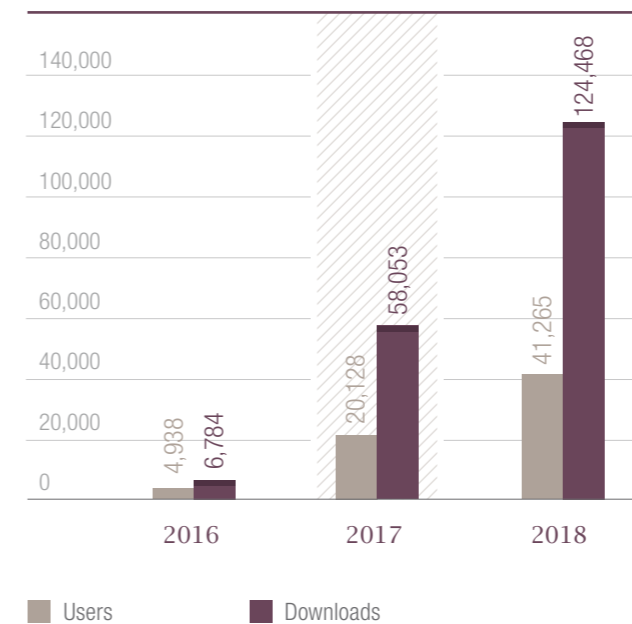
We decided to support Asociación por el Bien Común del Sur (ABCOSUR I.A.P.) with the funds raised from the sale of the book. This non-profit contributes to improving the quality of life of youth and their families in the south of the Yucatan peninsula, building their knowledge, skills and attitudes through programs that include providing meals, a homework center, and sports and artistic activities. The organization encourages parents, teachers and the community to participate, with the goal of reducing violence and criminal activity in the community, as well as decreasing marginalization.

The book *Calabaza, Fruto del Huerto Mexicano* (Squash, Fruit of the Mexican Orchard) has been nominated for the “Best in the World” Gourmand World Cookbook Award in the single-subject category, and will be on display at the UNESCO - which has shown interest in promoting and disseminating Mexican gastronomy. The ceremony will be held in Paris, France in March 2019.

‘Educación para la salud y la vida’ materials

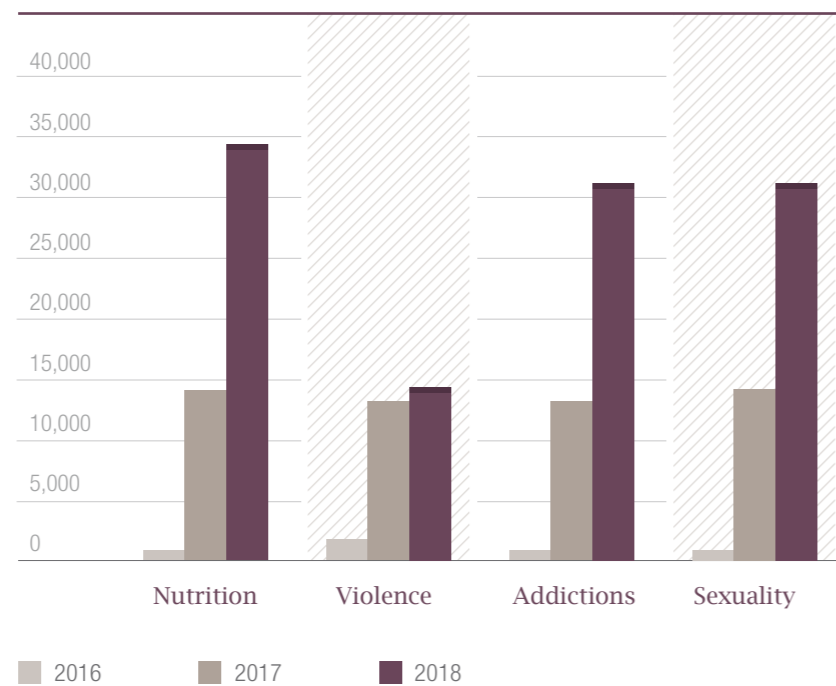
We have been working with government agencies since October 2016 to complement the educational materials provided to elementary and middle school students in Mexico. Through our *Materiales Educativos para la Salud y la Vida* (Health and Life Educational Materials) and our platform www.educacionsaludyvida.org and [.com](http://www.educacionsaludyvida.com), we have impacted the whole student community: teachers, parents and students, to reduce the social problems we experience today.

Educational Platform



Our platform currently has 41,265 registered users and we have logged 124,468 downloads of our materials.

DOWNLOADS



We visited 165 public and private schools this year (106 elementary and 59 middle schools) to train and include our educational materials as support tools in schools not associated with the Sindicato Nacional de Trabajadores de la Educación (SNTE) (Mexican Teachers Union); independently of the work conducted with union affiliated schools. During these visits, we trained 9,768 teachers on the platform and using the materials in the classroom.

3,271 legal and psychological consults were provided on our two discussion forums, where our users share experiences about violence, sexuality, addictions and nutrition. Various experts in these areas collaborate with us and have provided 22 articles written for our educational platform. In parallel, 10 interactive capsules have been developed for our YouTube channel with experts on the same topics as our educational materials, to expand the educational offerings on our digital platform.

Two additional materials are being prepared with experts in psychology and psychiatry. They address Mental Health issues in a responsible and understandable way. These materials will be ready to be added to our series in 2019.

We were exhibitors at the International Book Fair in Saltillo, Coahuila. Thanks to the success of our conferences, we were invited to present our collection of health and life educational materials at the “Guadalajara International Book Fair”, considered the most important book fair for Spanish speakers. We also participated in the Third International Convention on Institutional Capacity Building, organized by Vis Foundation México and held in Mexico City.

We participated in the Second International Convention on Education and Research, held by the International Association for Educational Development and Peace Culture in Cancun, Quintana Roo, where we represented Mexico on the international stage, presenting our educational materials as a contribution to academic innovation for elementary and middle school students. The convention was designed to showcase different educational visions from Latin American countries with speakers from Chile, Ecuador, Peru, Argentina, Cuba and Mexico.

Workshops

En Fundación GM creemos que es a través de las alianzas que se generan los cambios significativos, por eso trabajamos de la mano con Fundación Nemi desde hace cinco años brindando diversos talleres a 118,783 jóvenes de secundaria y bachillerato desde el inicio del programa; los cuales tienen como objetivo proporcionar herramientas básicas para la vida y así generar una mejor sociedad. Durante este año se beneficiaron a 50,493 jóvenes de secundaria y bachillerato de 85 escuelas en seis Estados de la República (Sonora, Baja California Sur, Zacatecas, Chihuahua, San Luis Potosí, Baja California) a través de 500 talleres sobre:

- Violence
- Sexuality
- Nutrition
- Addictions
- Financial Education
- Life Plan
- Smart Communication
- Self-Esteem
- Entrepreneurship
- Cyberbullying

Humanitarian Aid

With the support of Ferromex, 68,851 people in four Mexican states (Chihuahua, Sinaloa, Oaxaca, Mexico City) benefited this year from the free transportation of 440 tons of dry goods to support five organizations: Mexican Red Cross, Grupo Cementos de Chihuahua, Complejo Asistencial Clínica Santa Teresita, Banco de Alimentos de Cuauhtémoc A.C. and Comunidad Educativa Yermista.

World Food Day

Grupo México Foundation has participated in World Food Day since 2014, through our partnership with Fundación CMR. The goal of this project is to eliminate malnutrition in children under five years of age. This project benefited six organizations in six Mexican states in 2018, reaching 2,250 children suffering from severe malnutrition.

	ORGANIZATION BENEFITED	PEOPLE IMPACTED
1	Chiapas Asociación Mexicana de Transformación Rural y Urbana	90
2	Estado de México Fundación para la Asistencia Educativa	250
3	Yucatán Asociación Salud y Bienestar Social	60
4	Campeche Yes-Youth Education Support Mexico	150
5	Guerrero Infancia y Senectud en Plenitud	200
6	San Luis Potosí Fundación nutriendo para el futuro	1,500

Plaza Movil Parral

Thanks to our partnerships with Instituto Chihuahuense de Educación para los Adultos (ICHEA), Fundación del Empresario Chihuahuense (FECHAC) and Proeduca Chihuahua A.C., we supported more than 3,000 adults over 15 years of age to complete their basic education. Without doubt, this represents an important step forward for the community of Parral, Chihuahua, where our *Plaza Móvil* program works to eradicate illiteracy in the 40 communities in the municipality. This year, 1,268 adults participated in the program, 442 of whom completed their elementary education and 826 completed their middle school diploma.

Benefit Premieres

This program offers various non-profits a funding tool for their social projects. Grupo México Foundation supported 28 organizations in 2018 through 35 premieres to benefit 13,548 people.

Twelve film distributors currently support the program, thanks to the transparency with which we report the results of each premiere. We continue to look for new partnerships to increase the number of offerings and hold more premiere events each year.

“Cineminuto” Social Messages

Grupo México Foundation is committed to disseminating the work of various organizations, free of charge. We donate airtime at Cinemex theaters across the country, to inform and raise awareness with millions of moviegoers as to the social projects of the 13 organizations we support each year with this program. In 2018, 3,445 Cineminutos were shown at 265 complexes nationwide over 4 weeks, reaching 33,684,085 moviegoers. The organizations benefited were:

	INSTITUTION	CAUSE
1	FUCAM A.C.	Services for women with breast cancer
2	Antes de Partir A.C.	Support for terminally ill pediatric patients
3	Fundación Lorena Ochoa A.C.	Education for underprivileged children
4	Fundación Genera A.C.	Access to formal education for the underprivileged
5	Children International Jalisco A.C.	Services for underprivileged children at community centers
6	Fundación Nacional de Mujeres por la Salud Comunitaria A.C.	Prevention of mother-to-child transmission of HIV
7	Animal Defense Heroes A.C.	Protection of animals through lobbying lawmakers
8	Expo Fundación Y Congreso	Professionalization of non-profits
9	Fundación Nemi A.C.	Financial support for non-profits
10	Fundación CMR A.C.	Food to prevent child malnutrition
11	Fundación Del Empresariado Chihuahuense, A.C.	Education for children and youth in the Sierra Tarahumara
12	Educación para Compartir A.C.	Developing better citizens from childhood, through play
13	Juguetón A.C.	National toy drive for underprivileged children

Cinemex Run

For the 9th year, the magic of the movies took to the streets of Mexico City. More than 6,000 runners participated with the goal of supporting Fundación Nacional de Mujeres por la Salud Comunitaria A.C., which works to prevent mother-to-child transmission of HIV. The donation received from the run provided formula for 300 babies in Veracruz, Tabasco and Mexico City, preventing infection from mother to child.

The Cinemex concession stands offered moviegoers a combo package with an exclusive design for the organization benefited. A percentage of the combo price was collected over 8 weeks at all our theaters and then donated to the organization to support the continuity of their social projects.

SOCIAL MARKETING CAMPAIGNS	
We held three campaigns in 2018:	
ORGANIZATION	PEOPLE IMPACTED
Nutrition Comedor Santa María	8,500 children
Prevention of mother-to-child transmission of HIV Fundación Nacional de Mujeres por la Salud Comunitaria, A.C.	300 children
Rehabilitation for victims of sexual abuse Fundación Vida Plena Ing. Daniel Lozano Aduna I.A.P.	245 children

Expo Fundación y Congreso

The fifth Expo Fundación y Congreso was successfully held in June. The Expo is a space for training non-profits and strengthening social efforts in Mexico. This event offers attendees innovative conferences and workshops on positioning and visibility, as well as fundraising, to maximize the impact of their organizations.

Once again, Mexican and international speakers participated in the event, experts on social, philanthropic and human development topics, highlighting: Gaby Vargas, who shared keys to the powerful tool of communication, Miriam Amaro, Alejandro Bonilla, Fernando Frydman, Roberto Carvallo, among others, offering attendees workshops to position their cause and generate the resources they need to move forward. We gave the event a motivational boost with international boxer Ricardo “Finito” López and the event closed with “The Power of Storytelling” delivered by Martha Debayle.

EFICINE 189 Support

Grupo México Foundation is committed to supporting Mexican cinema, for which we receive, review and select cinematographic projects with great potential to support the successful projects through the Mexican Cinema Tax Incentive program and ensure their production.

In 2018, we supported eleven projects, two of which were approved by the CIEFICINE:

- Lecciones para Canallas
- Supernova

Marquee Campaign

This program offers the opportunity to increase visibility and raise awareness for the work of the organizations we support with advertising spaces at 270 Cinemex complexes nationwide. Thirteen campaigns were held in 2018, displaying 3,510 posters for 45 million moviegoers. The organizations benefited were:

	ORGANIZATION	CAUSE
1	FUCAM A.C.	Services for women with breast cancer.
2	Antes de Partir A.C.	Support for terminally ill pediatric patients.
3	Fundación Lorena Ochoa A.C.	Education for underprivileged children.
4	Sindicato Nacional de Trabajadores de la Educación	Awareness of the teaching profession, in celebration of Teachers Day.
5	Expo Fundación Y Congreso	Promotion for the event <i>Expo Fundación y Congreso</i> .
6	Fundación Nacional de Mujeres por la Salud Comunitaria A.C.	Prevention of mother-to-child transmission of HIV.
7	Pacientes de Corazón A.C.	Services for people with cardiovascular problems.
8	Sociedad Mexicana de Medicina de Emergencia, A.C	Stroke awareness campaign.
9	Fundación Kristen A.C.	Prevention of birth defects.
10	Fundación CMR A.C.	Prevention of child malnutrition.
11	Banco de Alimentos de México I.A.P.	Awareness of food waste.
12	Fundación Farmacias del Ahorro A.C.	Social and health programs.
13	Juguetón A.C.	National toy drive for underprivileged children.

Juchitan Hospital

With a total investment of 178 million pesos, comprised of funds raised from the 2017 campaign following the September earthquakes and \$140 million pesos contributed by Grupo México, decision was made to undertake a high-impact broad scope project for those affected by the earthquakes: the construction of a specialization hospital in Juchitan de Zaragoza, Oaxaca, which will benefit 255,315 residents. Construction of the hospital broke ground in August 2018, reporting 23.45% progress at yearend. To honor our commitment to Mexico, we post regular updates on the project on our website and social networks.

CAI Monterrey

Grupo México Foundation has always been committed to creating new comprehensive growth opportunities for underprivileged youth. In this regard, since 2012 the CAI Monterrey has offered a Stylist program with workshops like barbering, coloring, nail art and professional make-up encouraging entrepreneurship and self-employment. In six years, the program has delivered 18 workshops for 2,453 people.

Grupo México Foundation Volunteer Day

Our sixth Volunteer Day was held Saturday, October 13, 2018, thanks to the generosity, solidarity and work of 30,163 volunteers who signed up to participate in benefit of more than 98,000 people in 3 countries (Mexico, Peru and the United States).

This program is only possible thanks to our Grupo México, Southern Copper Corporation, ASARCO, Ferrromex, Ferrosur and Cinemex employees and their families. It is with their commitment and collaboration that we were able to restore schools, public spaces, migrant centers, social organizations and shelters in all the communities where we operate.

The Grupo México Foundation Volunteer Day activities this year included:

- Indoor and outdoor painting
- Infrastructure improvements
- Refurbishment of recreational spaces
- Indoor and outdoor cleaning
- Tree planting in green spaces

The communities benefited were:

Mexico

- BAJA CALIFORNIA SUR: Guerrero Negro
- CAMPECHE: Ciudad del Carmen
- COAHUILA: Torreón, Nueva Rosita
- CHIHUAHUA: Chihuahua, Santa Bárbara, Aquiles Serdán, Hidalgo del Parral
- GUANAJUATO: Silao, León, Irapuato
- GUERRERO: Taxco
- JALISCO: Guadalajara
- MICHOACÁN: Angangueo
- OAXACA: La Ventosa
- SAN LUIS POTOSÍ: Charcas, San Luis Potosí
- SONORA: Baviácora, Fronteras, Guaymas, Agua Prieta, Hermosillo, Cananea, Nacoziari de García
- ZACATECAS: Sombrerete, Chalchihuites
- VERACRUZ: Veracruz
- CIUDAD DE MÉXICO: CDMX - Mexico City

USA

- TEXAS: Amarillo
- ARIZONA: Tucson, Green Valley, Hayden, Marana, Kearny

Peru

- TACNA: TACNA
- MOQUEGUA: ILO, MOQUEGUA
- AREQUIPA: DEAN VALDIVIA, PUNTA DE BOMBÓN, COCACHACRA

Vacations with Purpose

This program was started in May 2017 to offer Grupo México employees international experiences in philanthropy. In the first year, ten employees had the opportunity to share social practices in Peru. Thanks to the success of the program, in this second year of operation, the invitation was extended to 15 employees, to increase the number of work hours donated to the community and the number of people directly or indirectly impacted.

The 15 volunteers collaborated for seven days in the Catorce and Naranjo municipalities in the state of San Luis Potosi, representing a total 840 hours of volunteer service impacting 740 people in different communities.

This year, the volunteers:

- Prepared adobe for the ecotourism community center
- Refurbished roads to reactivate the local economy
- Performed maintenance on irrigation canals
- Restored murals
- Painted and cleaned elementary schools
- Built and installed eco-stoves to reduce respiratory and eye diseases among local residents

This program benefited 4 communities:

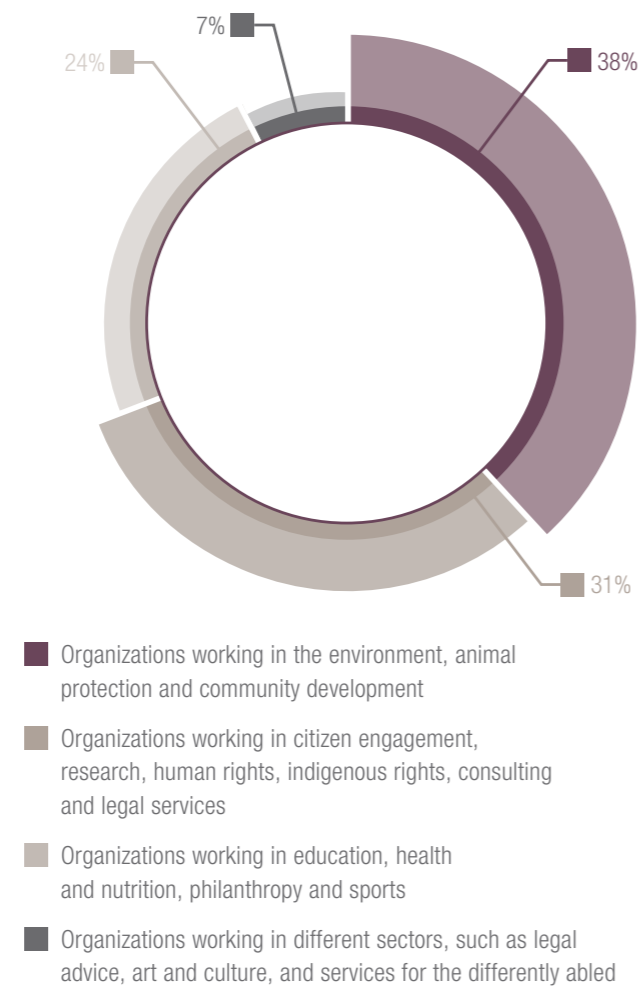
- Flor del Desierto
- La Cañada
- La Huasteca
- Cerro de San Pedro

Red de Asociaciones y Fundaciones Empresariales (Network of Organizations and Corporate Foundations)

After three years, the Network platform (<https://redasociaciones.com>) has 172 member corporate foundations, socially responsible companies, social agencies, academies / universities and government entities. Also, we are aligned with Sustainable Development Goal number 17 of the United Nations 2030 Agenda.

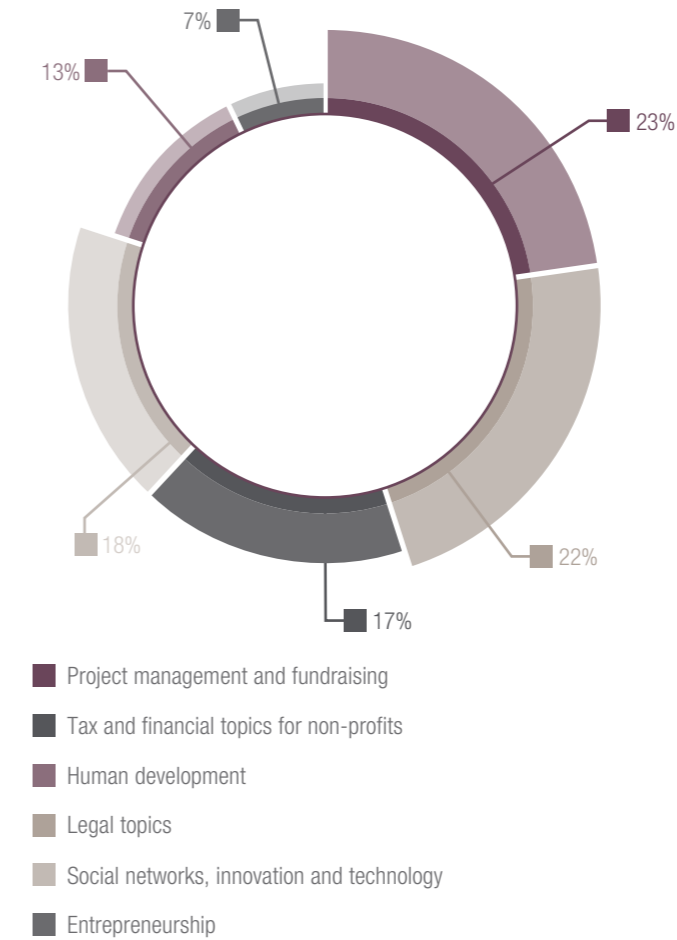
We closed 2018 with 3,800 non-profits registered on the platform, through which we facilitated various partnerships and joint ventures. Some of the principal areas include:

Non-profits



An essential part of the Network is the training tools made available to the member non-profits. We provided 85 in-person workshops this year, a 150% increase over 2017, 425 in-person training hours and 55 online hours, through workshops, conferences, gatherings, talks and webinars on different topics:

Trainings



Thanks to our partnerships with different organizations, 3,490 people from non-profits, corporate foundations and companies around Mexico received training.

In addition to the workshops, five diploma courses were offered in capacity building, in partnership with various corporate foundations and consulting firms. These courses were delivered over the year with the goal of ensuring the continuity of the projects and to reinforce the knowledge acquired by each participant.

SUBJECT	GOALS AND RESULTS
Strengthening and empowering non-profits	Capacity building in: theory of change, storytelling, social marketing and emotional intelligence for non-profits. <ul style="list-style-type: none"> 12 in-person sessions 48 training hours 28 non-profits supported in Mexico City and Estado de Mexico one virtual support group
Capacity building and financial sustainability for non-profits	Share knowledge and tools for non-profits to improve their financial health in the operation of their projects. <ul style="list-style-type: none"> 12 in-person and online sessions 36 training hours 13 non-profits trained
Capacity building for women entrepreneurs and business owners	Strengthen the knowledge, capacities and skills of participants to take their creative ideas and initiatives forward. <ul style="list-style-type: none"> 3 modules 14 in-person sessions 64 training hours 5 support manuals linkage and network building
Capacity building network for financial sustainability	Strengthen the knowledge, capacities and skills of participants to take their creative ideas and initiatives forward. <ul style="list-style-type: none"> partnership between Fundación Caaarem, DakShina and the Network 12 non-profits trained
Nex Fundraising Diploma Course	Share information about proactive executive boards and strategic volunteering, international cooperation and governance, positioning and social marketing, strategic planning <ul style="list-style-type: none"> 6 modules 12 in-person sessions 35 non-profits trained in Jalisco 4 months of accompaniment partnership between corporate foundations, Nex Fundraising and the Network

Without doubt, the professionalization of the member organizations of the network would not be possible without our partners. Thanks to them, we are able to offer such a broad range of training topics. Our principal partners are:

- Thomson Reuters con la Fundación TrustLaw
- Centro Mexicano Pro Bono (CEMPRO)
- Colegio Vizcaínas
- VOZ MCM Telecom
- Red EmporArte
- Asociación Gente de Alto Impacto
- Hidalgo State Department of Artisanal and Social Development
- Queretaro State and Municipal Governments

The Network provided 129 free legal consults to non-profits, aiding in their constitution and proper operation. These consults can be offered free of charge thanks to agreements between the Network and organizations like AppleSeed México, Red Pro bono México, CEMPRO and major firms like Hogan Lovell's BSTL, and Fundación Basham, among others, who provide lawyers pro bono for these consultations. The topic areas supported include: tax and labor issues, notaries, changes in their organizational purpose, modifications of powers of attorney, Mexican non-profit registry (CLUNI) formalities, obtaining tax exemption status, advice on establishing a foundation or organization, among others.

We received the Corresponsables Award for the Most Innovative Program of the Year. Also, the Network was an honorary member of the review panel for the Mexican Youth Institute (IMJUVE) Collective Youth Social Projects Contest (PROJUVENTUDES 2018).

The Centro de Investigación y Desarrollo de Tecnología y Ciencias Aplicadas, A.C. awarded Grupo México Foundation the Alas de Plata prize in the category Best Foundation, for our efforts in reaching the most beneficiaries and associations through the Network.

2017-2018 COMPARATIVE

Dr. Vagon, The Health Train

Project	2017	2018	2017-2018	2017	2018	2017-2018	2017	2018	2017-2018
	Patients		Increase	Medical services		Increase	Workshops held		Increase
Dr. Vagon, The Health Train	61,212	95,283	56%	266,440	359,663	35%	1,028	1,414	38%

Project	2017	2018	2017-2018	2017	2018	2017-2018	2017	2018	2017-2018
	Workshop participants		Increase	Prescription medications		Increase	Kilometers traveled		Increase
Dr. Vagon, The Health Train	45,806	51,176	12%	79,013	114,187	45%	15,443	17,627	14%

2017-2018 COMPARATIVE

Mexicanos Sembrando

Project	2017	2018	2017-2018	2017-2018	2017	2018	2017-2018	2017	2018	
	States		People impacted	Increase	Trees donated		Increase	No. Volunteers		
Tree planting	18	18	8,524,762	15,252,818	79%	839,247	1,451,508	73%	2,702	6,934

2017-2018
Increase
157%

2017-2018 COMPARATIVE

Education

Project	2017	2018	2017	2018	2017-2018	2017	2018	2017-2018
	States		Visits		Increase	Consultations		Increase
Educational materials for Health and Life	32	32	20,128	41,265	105%	1,381	3,271	137%

Project	2017	2018	2017-2018
	People impacted		Increase
Humanitarian Aid	59,781	68,851	59,781

Project	2017	2018	2017	2018	2017-2018
	States		People impacted		Increase
Educational Workshops	5	6	19,846	50,493	154%

Project	2017	2018	2017	2018	2017-2018
	States		People impacted		Increase
Plaza Móvil	1	1	543	1,268	134%

Project	2017	2018	2017-2018	2017	2018	2017-2018	2017	2018	2017-2018
	People impacted		Increase	Beneficiary organizations		Increase	Volunteers		Increase
Grupo México Foundation Volunteer Day	95,000	98,287	3%	45	46	2%	29,101	30,163	4%

Project	2017	2018	2017-2018	2017	2018	2017	2018	2017-2018
	People Impacted		Increase	Beneficiary organizations		Volunteers		Increase
Vacations with Purpose	621	740	19%	4	4	10	15	50%

2017-2018 COMPARATIVE

Red de Asociaciones

Project	2017	2018	2017-2018	2017	2018	2017-2018	2017	2018	2017-2018
	Organizations benefited		Increase	Indirect beneficiaries		Increase	Members		Increase
Network of Associations	1,530	3,800	148%	76,500	190,000	148%	92	172	87%

2017-2018 COMPARATIVE

Conciencia Cinemex and Support for Organizations

Project	2017	2018	2017	2018	2017	2018	2017-2018
	Events		States		Institutions		Increase in Institutions
Benefit Premieres	31	35	10	23	24	28	17%

Project	2017	2018	2017	2018	2017	2018	2017-2018
	Campaigns		States		People impacted		Increase
Social Marketing Campaigns	3	3	32	32	2,620 3 Institutions	9,045 3 Institutions	245%

Project	2017	2018	2017	2018	2017	2018	2017-2018
	Events		States benefited		People impacted		Increase
Carrera Cinemex	1	1	1	3	70 1 Institution	300 1 Institution	329%

Project	2017	2018	2017	2018	2017	2018	2017-2018
	Events		States		People impacted		Increase
Foundation Expo	1	1	1	1	354 152 Institutions	397 283 Institutions	12%

Project	2017	2018	2017-2018	2017	2018	2017-2018
	Campaigns		Increase	Impacts		Increase
Marquee Campaigns	11	13	18%	32,042,216 11 Institutions	45,668,064 13 Institutions	43%

Project	2017	2018	2017-2018	2017	2018	2017-2018
	Showings		Increase	People reached		Increase
Cine Vagon	102	164	61%	22,680	34,400	52%

ASSURANCE REPORT

Deloitte.

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Informe de Revisión Independiente del Informe de Desarrollo Sustentable 2018 de Grupo México, S.A.B. de C.V., para la Administración de Grupo México
Responsabilidades de Grupo México y del revisor independiente

La Administración de Grupo México es responsable de la preparación del Informe de Desarrollo Sustentable 2018 (IDS 2018), que comprende el periodo del 01 de enero al 31 de diciembre de 2018, así como el contenido del mismo, asegurando definir, adaptar y mantener los sistemas de gestión y control interno de los que se obtiene la información, y que éstos a su vez estén libres de error material debido a fraude o error. Nuestra responsabilidad es emitir un informe independiente basado en los procedimientos aplicados en nuestra revisión.

Este informe ha sido preparado exclusivamente en interés de Grupo México de acuerdo con los términos de nuestra carta arreglo de fecha 9 de octubre de 2014, por lo que no asumimos responsabilidad alguna frente a terceros distintos a la Dirección de Grupo México y no tiene la intención de ser ni debe ser utilizado por alguien distinto a ésta.

Alcance de nuestro trabajo

El alcance de nuestra revisión independiente fue limitado, es sustancialmente inferior al de un trabajo de seguridad razonable, por lo tanto, la seguridad proporcionada es también menor. El presente informe en ningún caso puede entenderse como un informe de auditoría.

Hemos realizado la revisión del IDS 2018 conforme a los siguientes aspectos y/o criterios:

- GGF
- a) La revisión de los indicadores de desempeño en sustentabilidad mencionados más adelante, reportados de acuerdo a la opción de Conformidad Esencial y señalado en el Índice de Contenido GRI del IDS 2018.
 - b) La consistencia entre la información contenida en el IDS 2018 y la evidencia de respaldo proporcionada por la administración.

Hemos cumplido con los requerimientos de independencia y ética del Código de Ética Profesional para Contadores Públicos, emitido por el Consejo de Normas Internacionales de Ética para Contadores (IESBA), el cual se fundamenta en los principios de integridad, objetividad, competencia profesional y con la debida diligencia, confidencialidad y comportamiento profesional.

Estándares y procesos de revisión independiente

Hemos llevado a cabo nuestro trabajo con base en la Norma Internacional de Trabajos de Aseguramiento (ISAE) 3000, *Trabajos de Aseguramiento Distintos a Auditorías o Revisiones de Información Financiera Histórica (Assurance Engagements Other than Audits or Reviews of Historical Financial Information)*, emitida por el Consejo de Normas Internacionales de Auditoría y Aseguramiento (International Auditing and Assurance Standards Board).

Nuestro trabajo de revisión ha consistido en la formulación de preguntas a la Dirección, así como a las diversas áreas de Grupo México que han participado en la elaboración de

verification letter

ASSURANCE REPORT

los indicadores y en la aplicación de ciertos procedimientos analíticos y pruebas de revisión por muestreo que se describen a continuación:

- Reuniones con el personal de Grupo México para conocer los principios, sistemas y enfoques de gestión aplicados.
- Análisis de los procesos para recopilar, validar y consolidar los datos presentados en los indicadores del IDS 2018 incluidos en el alcance de esta revisión.
- Análisis de la cobertura, relevancia e integridad de la información incluida en el IDS 2018 en función del entendimiento de Grupo México, de los requerimientos de los grupos de interés sobre los aspectos materiales identificados.
- Revisión con base en muestras seleccionadas de la evidencia que respalda la información de los indicadores asegurados en la Revisión Independiente e incluidos en el IDS 2018.
- Revisión de calidad por un socio independiente al proyecto que verifique la congruencia de este entregable con la propuesta de trabajo, así como la calidad del proceso de trabajo y su producto final.

La siguiente tabla detalla los indicadores de desempeño en sustentabilidad revisados conforme a lo establecido en los Estándares GRI:

102-15	103-2	302-1	305-2	403-1	413-1
102-16	203-1	303-1	306-2	403-4	G4-MM3
102-41	205-1	304-1	306-3	403-9	G4-MM4
102-43	205-2	304-2	401-1	404-1	G4-MM6
102-44	205-3	305-1	401-2	412-2	G4-MM10

Estos indicadores fueron seleccionados para su revisión independiente con base en los siguientes criterios:

- Materialidad de Grupo México referenciada en este IDS 2018.
- Información proporcionada durante reuniones con el personal entrevistado.
- Revisión de las evidencias proporcionadas por los participantes de Grupo México en este proyecto.

ASSURANCE REPORT

Conclusiones

Con base en el trabajo efectuado descrito en este informe, los procedimientos llevados a cabo y la evidencia obtenida, nada llamó nuestra atención que nos lleve a creer que los indicadores dentro del alcance de la revisión y comprendidos en el IDS 2018 del periodo comprendido entre el 01 de enero y el 31 de diciembre de 2018, no están preparados en todos los aspectos materiales, de conformidad con los criterios establecidos en los Estándares Global Reporting Initiative (GRI). Para aquellos indicadores de los Estándares GRI en donde Grupo México no reportó de forma cuantitativa (cifras) se revisó únicamente la información cualitativa que incluye procedimientos, políticas, evidencia de actividades realizadas, entre otros.

Alternativas de acción

Deloitte ha proporcionado a Grupo México un reporte con las alternativas de acción más significativas para la elaboración futura de Informes, las cuales no modifican las conclusiones expresadas en el presente informe.

Deloitte Asesoría en Riesgos, S.C.

Afiliada de Firma Deloitte Touche Tohmatsu Limited



Rocío Canal Garrido
Directora de Deloitte Asesoría en Riesgos
31 de mayo de 2019

GRI CONTENT INDEX²⁹
102-55

GRI
content
index



GRI CONTENT INDEX²⁹
102-55



For the Materiality Disclosures Service, GRI Services has reviewed that the GRI content index is clear, and that the references for Contents 102-40 to 102-49 correspond to the indicated sections of the report. The service was performed on the Spanish version of the report.

GRI STANDARD	DISCLOSURE	DESCRIPTION	PAGES				
			GRUPO MEXICO	MINING DIVISION	TRANSPORTATION DIVISION	INFRASTRUCTURE DIVISION	EXTERNAL ASSURANCE
GRI 101 Foundation, 2016	101	Foundation	GRI 101 does not include any disclosures				
ORGANIZATIONAL PROFILE							
GRI 102 General Disclosures, 2016	102-1	Name of the organization	9				
	102-2	Activities, brands, products, and services	9	49	97	142	
	102-3	Location of headquarters	Back cover				
	102-4	Location of operations	9	10,11	12, 13	14,15	
	102-5	Ownership and legal form	9	42	96	142	
	102-6	Mercados servidos	9	42	96	142	
	102-7	Scale of the organization	16, 17				
	102-8	Information on employees and other workers		52	106	150	
	102-9	Supply chain	38				
	102-10	Significant changes to the organization and its supply chain		42	97	142	
	102-11	Precautionary Principle or approach	At Grupo México, we ensure all our operations are respectful of society and the environment, therefore we have included good risk management in precautionary approach. The company and its different subsidiaries are ISO 9001, ISO 14001, OHSAS 18001 and ISO 45001 certified, proof of our commitment to reducing uncertainty and risk in our operations.				
	102-12	External initiatives	36				
	102-13	Membership of associations	36				
STRATEGY							
GRI 102 General Disclosures, 2016	102-14	Statement from senior decision-maker	4				
	102-15	Key impacts, risks, and opportunities	4	"For more information, see the Grupo México 2018 Annual Report, pages 17-36, available in Spanish at https://www.bmv.com.mx/docs-pub/infoanua/infoanua_917749_2018_1.pdf "			X

ETHICS AND INTEGRITY							
GRI 102 General Disclosures, 2016	102-16	Values, principles, standards, and norms of behavior	9, 19, 23				x
	102-17	Mechanisms for advice and concerns about ethics	24				
GOVERNANCE							
GRI 102 General Disclosures, 2016	102-18	Governance structure	21				
	102-19	Delegating authority	21				
	102-20	Executive-level responsibility for economic, environmental, and social topics	21				
	102-21	Consulting stakeholders on economic, environmental, and social topics	21, 33				
	102-22	Composition of the highest governance body and its committees	17	"For more information, see the Grupo México 2018 Annual Report, page 154, available in Spanish at https://www.bmv.com.mx/docs-pub/infoanua/infoanua_917749_2018_1.pdf "			
	102-23	Chair of the highest governance body	"For more information, see the Grupo México 2018 Annual Report, page 150, available in Spanish at https://www.bmv.com.mx/docs-pub/infoanua/infoanua_917749_2018_1.pdf "				
	102-24	Nominating and selecting the highest governance body	21				
	102-25	Conflicts of interest	24				
	102-26	Role of highest governance body in setting purpose, values, and strategy	21				
	102-28	Evaluating the highest governance body's performance	21				
	102-29	Identifying and managing economic, environmental, and social impacts	21				
	102-30	Effectiveness of risk management processes	21				
	102-31	Review of economic, environmental, and social topics	21				
	102-33	Communicating critical concerns	21				
	102-35	Remuneration policies	"For more information, see the Grupo México 2018 Annual Report, pages 154, 157, 159, 163, 164, available in Spanish at https://www.bmv.com.mx/docs-pub/infoanua/infoanua_917749_2018_1.pdf "				
102-36	Process for determining remuneration						
STAKEHOLDER ENGAGEMENT							
GRI 102 General Disclosures, 2016	102-40	List of stakeholder groups	34				
	102-41	Collective bargaining agreements		53	107	151	x
	102-42	Identifying and selecting stakeholders	33				
	102-43	Approach to stakeholder engagement	35	49	102	147	x
	102-44	Key topics and concerns raised	33, 34	49	102	147	x

REPORTING PRACTICE							
GRI 102 General Disclosures, 2016	102-45	Entities included in the consolidated financial statements	"For more information, see the Grupo México 2018 Annual Report, page 171, available in Spanish at https://www.bmv.com.mx/docs-pub/infoanua/infoanua_917749_2018_1.pdf "				
	102-46	Defining report content and topic Boundaries	Inside back cover				
	102-47	List of material topics	Inside back cover				
	102-48	Restatements of information	Inside front cover				
	102-49	Changes in reporting	Inside front cover				
	102-50	Reporting period	Inside front cover				
	102-51	Date of most recent report	Inside front cover				
	102-52	Reporting cycle	Inside front cover				
	102-53	Contact point for questions regarding the report	Inside front cover				
	102-54	Claims of reporting in accordance with the GRI Standards	Inside front cover				
	102-55	GRI content index	205				
	102-56	External assurance	201				
MATERIAL TOPICS							
ENVIRONMENTAL							
GRI 103: Management Approach, 2016	103-1	Explanation of the material topic and its Boundary		78			x
	103-2	The management approach and its components		78			x
	103-3	Evaluation of the management approach		91, 92			
ENERGY							
GRI 103: Management Approach, 2016	103-1	Explanation of the material topic and its Boundary		82	132	169	
	103-2	The management approach and its components		84	134	170	
	103-3	Evaluation of the management approach		83, 84	133, 134	171	
GRI 302: Energy, 2016	302-1	Energy consumption within the organization		80	130	168	x
	302-4	Reduction of energy consumption			130	168	
WATER							
GRI 103: Management Approach, 2016	103-1	Explanation of the material topic and its Boundary		79			
	103-2	The management approach and its components		80			x
	103-3	Evaluation of the management approach		79, 80			
GRI 303: Water, 2016	303-1	Water withdrawal by source		79, 80	137, 138	171, 172	x
	303-2	Water sources significantly affected by withdrawal of water		79		171	
	303-3	Water recycled and reused		79, 80		171	

BIODIVERSITY							
GRI 103: Management Approach, 2016	103-1	Explanation of the material topic and its Boundary		87			
	103-2	The management approach and its components		87			x
	103-3	Evaluation of the management approach		90, 91			
GRI 304: Biodiversity, 2016	304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas		88	138	174	x
	304-2	Significant impacts of activities, products, and services on biodiversity		87, 88		174	
	304-3	Habitats protected or restored		90	138	174	x
	304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations		90	138	174	
G4: Sector Disclosures - Mining and Metals	MM10	Number and porcentaje of operations with closure plans		91			x
EMISSIONS							
GRI 103: Management Approach, 2016	103-1	Explanation of the material topic and its Boundary		82	132	169	
	103-2	The management approach and its components		84	134	170	x
	103-3	Evaluation of the management approach		83, 84	133, 134	171	
GRI 305: Emisiones, 2016	305-1	Direct (Scope 1) GHG emissions		82	132	169	x
	305-2	Energy indirect (Scope 2) GHG emissions		82	132	169	x
	305-5	Reduction of GHG emissions		82	132	169	
	305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions				169	
EFFLUENTS AND WASTE							
GRI 103: Management Approach, 2016	103-1	Explanation of the material topic and its Boundary		85	134		
	103-2	The management approach and its components		86	137		x
	103-3	Evaluation of the management approach		86	136, 137		
GRI 306: Effluents and Waste, 2016	306-1	Water discharge by quality and destination		79		172	
	306-2	Waste by type and disposal method		85 - 87	135 - 137	173	x
	306-3	Significant spills		87	137	173	x
	306-4	Transport of hazardous waste		87	109		
	306-5	Water bodies affected by water discharges and/or runoff		79		172	

SOCIAL							
OCCUPATIONAL HEALTH AND SAFETY							
GRI 103: Management Approach, 2016	103-1	Explanation of the material topic and its Boundary		61, 66	114, 117	159, 162	
	103-2	The management approach and its components		66, 68	116, 118		x
	103-3	Evaluation of the management approach		64, 66, 68	116, 117, 118	160, 161	
GRI 403: Occupational Health and Safety, 2018	403-1	Occupational health and safety management system		61	114	159	
	403-2	Hazard identification, risk assessment, and incident investigation		63	114	159	
	403-3	Occupational health services		66 - 68	117	162	
	403-4	Worker participation, consultation, and communication on occupational health and safety		62	114	159	x
	403-5	Worker training on occupational health and safety		63	114	159	
	403-6	Promotion of worker health		66 - 68	117, 118		
	403-8	Workers covered by an occupational health and safety management system		61	114	160	
	403-9	Work-related injuries		65	117	159	x
	403-10	Work-related ill health		68	117, 118	162	
TRAINING AND EDUCATION							
GRI 103: Management Approach, 2016	103-1	Explanation of the material topic and its Boundary		58	112	156	
	103-2	The management approach and its components		58	112	156	x
	103-3	Evaluation of the management approach		60	114	158	
GRI 404: Training and Education, 2016	404-1	Average hours of training per year per employee		58	112	156	x
	404-2	Programs for upgrading employee skills and transition assistance programs		58	112	156	
	404-3	Percentage of employees receiving regular performance and career development reviews		60	114	158	
NON-DISCRIMINATION							
GRI 103: Management Approach, 2016	103-1	Explanation of the material topic and its Boundary	21, 22				
	103-2	The management approach and its components	24				x
	103-3	Evaluation of the management approach		54	108	152	
GRI 406: Non-discrimination, 2016	406-1	Incidents of discrimination and corrective actions taken	25	53	108	152	
HUMAN RIGHTS ASSESSMENT							
GRI 103: Management Approach, 2016	103-1	Explanation of the material topic and its Boundary		21, 22			
	103-2	The management approach and its components		24			x
	103-3	Evaluation of the management approach		54	108	152	

GRI 412: Human Rights Assessment, 2016	412-1	Operations that have been subject to human rights reviews or impact assessments		27			
	412-2	Employee training on human rights policies or procedures		27			x
LOCAL COMMUNITIES							
GRI 103: Management Approach, 2016	103-1	Explanation of the material topic and its Boundary		49			
	103-2	The management approach and its components		70, 73			x
	103-3	Evaluation of the management approach		70, 74			
GRI 413: Local Communities, 2016	413-1	Operations with local community engagement, impact assessments, and development programs		70	119	162	x
	413-2	Operations with significant actual and potential negative impacts on local communities		70	119	162	
G4: Sector Disclosures - Mining and Metals	MM6	Number and description of significant disputes relating to land use, customary rights of local communities and indigenous people	26	70			x
MODERATE RELEVANCE TOPICS FOR GRUPO MEXICO'S STAKEHOLDERS*							
ECONOMIC							
ECONOMIC PERFORMANCE							
GRI 201: Economic Performance, 2016	201-1	Direct economic value generated and distributed	37				
	201-2	Financial implications and other risks and opportunities due to climate change		82	132	169	
MARKET PRESENCE							
GRI 202: Market Presence, 2016	202-1	Ratios of standard entry level wage by gender compared to local minimum wage		39	70	96	
INDIRECT ECONOMIC IMPACTS							
GRI 203: Indirect Economic Impacts, 2016	203-1	Infrastructure investments and services supported		44, 70, 74	99, 122	144	x
	203-2	Significant indirect economic impacts		44, 70, 74	99, 122	162, 163	
ANTI-CORRUPTION							
GRI 205: Anti-corruption, 2016	205-1	Operations assessed for risks related to corruption		24			x
	205-2	Communication and training about anti-corruption policies and procedures		24			x
	205-3	Confirmed incidents of corruption and actions taken		24			x
ENVIRONMENTAL							
MATERIALS							
GRI 301: Materials, 2016	301-1	Materials used by weight or volume		84, 85	134, 135	172	
	301-2	Recycled input materials used			134, 135		
G4: Sector Disclosures - Mining and Metals	MM3	Total amounts of overburden, rock, tailings, and sludges and their associated risk		85			x

ENVIRONMENTAL COMPLIANCE							
GRI 307: Environmental Compliance, 2016	307-1	Non-compliance with environmental laws and regulations		92	139	175	
SOCIAL							
EMPLOYMENT							
GRI 401: Employment, 2016	401-1	New employee hires and employee turnover		55	110	154	x
	401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees		57	112	155	x
LABOR/MANAGEMENT RELATIONS							
GRI 402: Labor/Management Relations, 2016	402-1	Minimum notice periods regarding operational changes		53	107	151	
G4: Sector Disclosures - Mining and Metals	MM4	Number of strikes and lock-outs exceeding one week's duration, by country		53			x
DIVERSITY AND EQUAL OPPORTUNITY							
GRI 405: Diversity and Equal Opportunity, 2016	405-1	Diversity of governance bodies and employees		53	107	151	
	405-2	Ratio of basic salary and remuneration of women to men		55	109	153	
FREEDOM OF ASSOCIATION AND COLLECTIVE BARGAINING							
GRI 407: Freedom of Association and Collective Bargaining, 2016	407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk			25		
CHILD LABOR							
GRI 408: Child Labor, 2016	408-1	Operations and suppliers at significant risk for incidents of child labor			25		
FORCED OR COMPULSORY LABOR							
GRI 409: Forced or Compulsory Labor, 2016	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor			25		
RIGHTS OF INDIGENOUS PEOPLES							
GRI 411: Rights of Indigenous Peoples, 2016	411-1	Incidents of violations involving rights of indigenous peoples			26		
SUPLEMENTOS SECTORIALES							
G4: Sector Disclosures - Mining and Metals	MM7	The extent to which grievance mechanisms were used to resolve disputes relating to land use, customary rights of local communities and indigenous peoples, and the outcomes		70			
G4: Sector Disclosures - Construction and Real Estate	CRE6	Percentage of the organization operating in verified compliance with an internationally recognized health and safety management system				159	

* Grupo México has decided to continuously and voluntarily publish our performance on the following topics that we consider relevant for our stakeholders.

Our material aspects

102-45, 102-46, 102-47, 102-49, 103-1

The indicators covered in the Grupo México 2018 Sustainable Development Report were selected based on the results of our 2018 revised materiality analysis.

The material aspects of Grupo México identified for each of the principal sectors in which we operate (mining, transportation, engineering and construction, energy and drilling) are:

MATERIAL ASPECT	INTERNAL LIMITS						EXTERNAL LIMITS
	MINING SECTOR	TRANSPORTATION SECTOR	CONSTRUCTION SECTOR	ENERGY SECTOR	DRILLING SECTOR	ENGINEERING SECTOR	
Water							Local communities
Biodiversity and the environment							
Training and career development							
Commitment and workplace climate							
Human rights							Local communities
Economic performance							Local communities
Effluents and waste							
Emissions							
Ethics and integrity							Authorities
Management of the supply chain							Suppliers and contractors Local communities
Risk management and legal compliance							Authorities Local communities
Corporate governance							Authorities Local communities
Community relations							Local communities
Customer relations							Local communities
Occupational health and safety							Employees and contractors



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