

SUSTAINABLE DEVELOPMENT

REPORT

2022



Index

SUSTAINABLE DEVELOPMENT REPORT 2022

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1 Introduction

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1.4
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Structure



1.1
About this
Report
GRI 2-3, 2-4, 2-5

We present our fifteenth Sustainable Development Report, reaffirming our commitment to transparency. This report has been prepared according to the Global Reporting Initiative (GRI) Standards “Core” option, as well as the “Mining and Metals” sector supplement.

In accordance with Grupo México’s definition of materiality, for each material topic we have included the general management approach for Grupo México, as well as the particulars for each division, followed by the applicable GRI indicators, for each of our three divisions: Mining, Transportation and Infrastructure. The structuring of the material topics is also based on [IFRS S1](#) (International Financial Reporting Standards) Exposure Draft “General Requirements for Disclosure of Sustainability-related Financial Information”, where applicable. Additionally, this report is also aligned with the Sustainability Accounting Standards Board (SASB) and the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD).

This report applies the principles for preparing reports in terms of defining the content and quality in reference to: Stakeholder Inclusion, Sustainability Context, Materiality, Completeness, Accuracy, Balance, Clarity, Comparability, Reliability and Timeliness, as defined by the GRI.

The report includes the social, environmental and economic performance for the period January to December 2022 for our three divisions in the three countries where we operate: Mexico, Peru and the United States. We have added brief notes on some of the relevant events that have occurred in 2023.

Throughout the report, mechanisms for measurement and calculation formulas are indicated, and, where applicable, restated data from the previous Sustainable Development Report.

This report has undergone independent review, according to the scope defined in the independent [assurance report](#), prepared according to the

“International Standard on Assurance Engagements, other than Audits or Reviews of Historical Financial Information” ISAE 3000 issued by the International Auditing and Assurance Standards Board (IAASB). Grupo México is included in the following sustainability indexes:

S&P/BMV Total Mexico ESG Index

Member of

Dow Jones Sustainability Indices

Powered by the S&P Global CSA



FTSE4Good

For more information about this report, please contact desarrollo.sustentable@mm.gmexico.com

1.2

Letter from
the Chairman
of the Board

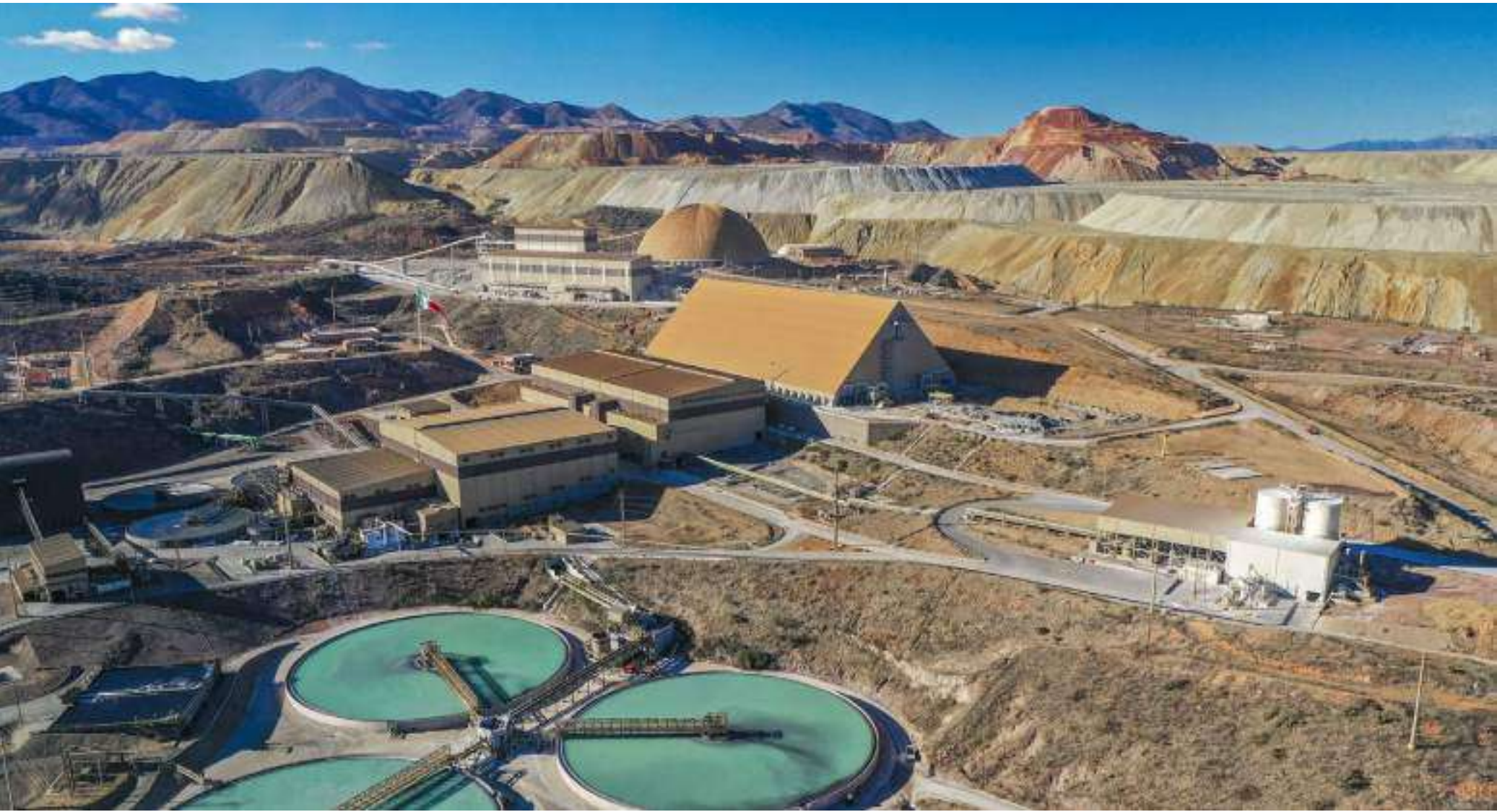
GRI 2-3, 2-4, 2-5

We have been publishing our Sustainable Development Report for the last 15 years to provide transparency and report on the ongoing improvement of our operations. Each year we have enriched it with a special focus on climate change strategy, which includes our emissions reduction goals. This year, we share our progress and targets in promoting diversity and inclusion both across the company and with our neighbor communities.

We have progressively improved our performance when it comes to specialized independent evaluations. Our score on the Corporate Sustainability Assessment was 35 points above the average for the Mining and Metals industry. These results have meant the inclusion of Grupo México in the Sustainability Yearbook 2023 for the second year in a row, which means we are among the 15% top rated companies in sustainability. Additionally, we received The Copper Mark certification in 2022 for our La Caridad open pit mine and our Sonora Metallurgical Complex (smelter and refinery), which verifies our responsible copper production. Our goal is to receive this certification for all our Mining Division operations.

In line with our Sustainable Development Corporate Goals, we have invested more than US\$300 million over the last four years in social and community projects in support of the United Nations Sustainable Development Goals.

At Grupo México, we are firmly committed to mitigating climate change and to providing the products and services the global energy transition is demanding: copper, renewable energy and clean transportation. We updated our strategy in 2022 to contribute to curbing climate change by setting new targets in reducing our greenhouse gas emissions. We developed a GHG emissions reduction roadmap, basing the first phase primarily on investing in renewable energy. This commitment is reflected in our US\$250 million investment in the construction of the 168 MW Fenicias wind farm in Nuevo Leon, Mexico.



Buenavista del Cobre, Sonora, Mexico

Also in 2022, we strengthened our culture of risk prevention. We implemented a Critical Risks Log for environmental and workplace health and safety aspects in the Mining Division, informed by practices recommended by the International Council on Mining and Metals (ICMM). As a result of this and other initiatives, our Mining Division reduced its accident rate by 34%. Our Infrastructure and Transportation divisions also reduced their accident rates by 24% and 12%, respectively, translating into a total 13% decrease for all of Grupo México.

We embody and promote respect for human rights at Grupo México. We have strengthened our programs to positively impact the quality of life of our neighbor communities in aspects like education, health and employment. An example of this is our *Mobile Documentary Filmmaking Workshop*, which has provided capacity building programs to more than 600 students in six different communities. Some of the work produced from this workshop have already received important recognitions.

1.2 Letter from the Chairman of the Board

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Mining Division, Sonora, Mexico

We appreciate the culture and plurality of each country and community that embraces us. Valuing diversity and non-discrimination, and encouraging openness to different ways of thinking are essential to ensuring our workplaces support the optimal development of our employees and stakeholders. We continue to advance our agenda of diversity and inclusion across the whole of our company. Of note is that the number of women in our Mining Division increased by 15% in 2022 and by 11% across Grupo México.

Sustainability is at the center of everything we do at Grupo México. We collaborate with the authorities and stakeholders to drive economic growth, care for the environment, and generate social wellbeing in the countries and regions where we operate. We know the success of our business model will only continue to be possible if we are in balance and harmony with our environment.

Sincerely,
GERMÁN LARREA MOTA VELASCO

1.3
About
Grupo México
GRI 2-1, 2-2, 2-6, 2-7

With operations in Mexico, the United States, Peru and Spain, we have extensive experience in the mining sector, where we are a world leader in copper production. In the Transportation Division, we deliver railroad freight transportation services throughout Mexico and in the states of Texas and Florida in the United States. In our Infrastructure Division, we provide specialized engineering, construction, power generation, exploration, onshore and offshore drilling, and oil platform leasing and operation services. We also operate fuel terminals and highway concessions in Mexico.

We strive to maintain a financial balance that makes us a sustainable and reliable company for our partners, generating shared value for our stakeholders.

Grupo México (GMEXICO) has been listed on the Mexican Stock Exchange since 1966, and our Transportation Division (GMXT) since 2017. Our Mining Division subsidiary, Southern Copper Corporation (SCCO) is listed on the New York Stock Exchange and the Lima Stock Exchange.

All the information on the corporate structure and the subsidiaries that make up our company is available in the [Annual Report](#), on our website [gmexico.com](#)

> Grupo México is the fourth largest company in Mexico in terms of market capitalization.



Buenavista del Cobre, Sonora, Mexico

1.4 Our presence

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Our Presence

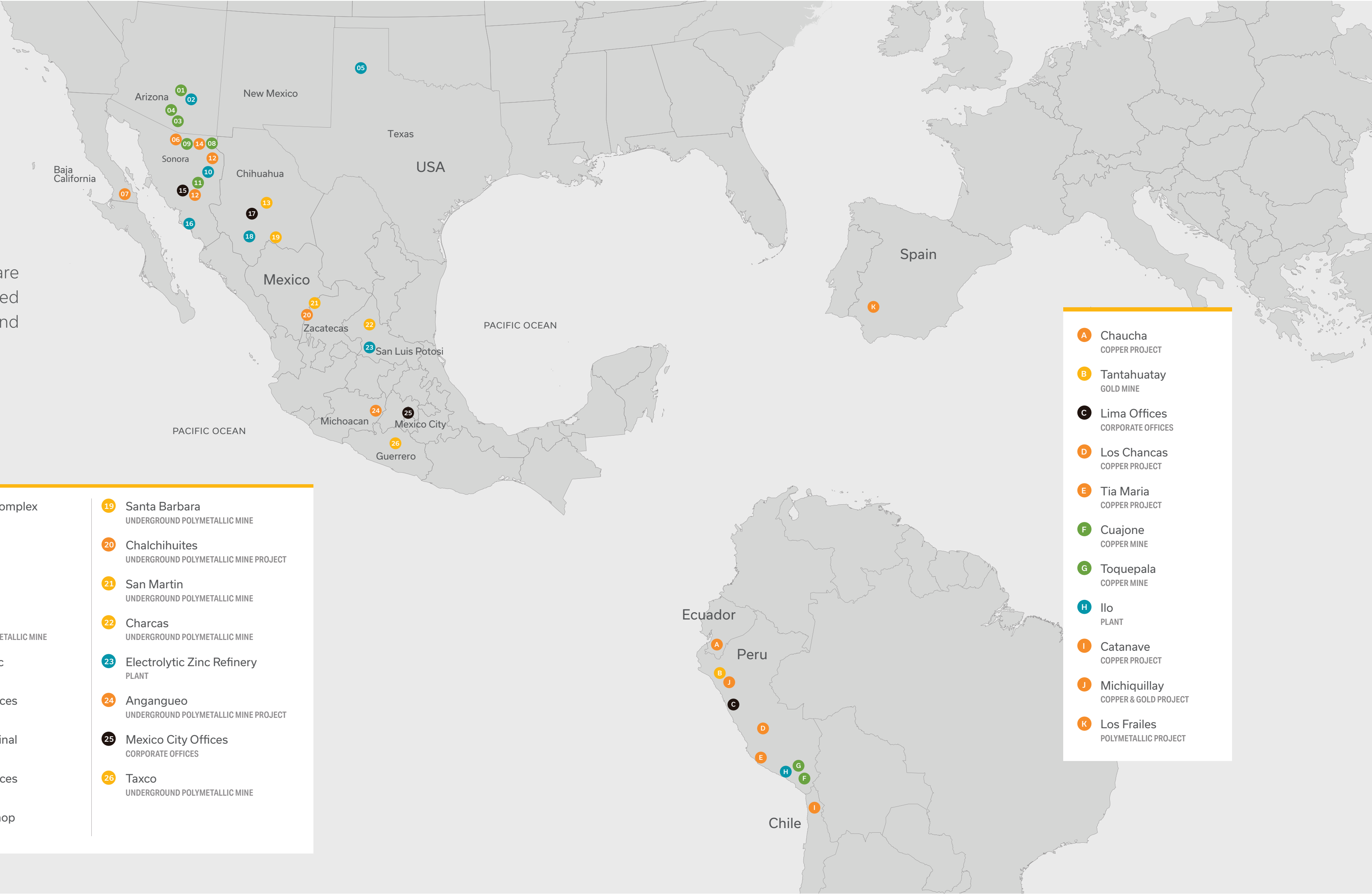
Corporate Structure

1.4
Our
Presence

The assets of the three divisions are distributed in Mexico, Peru, the United States, Argentina, Chile, Ecuador and Spain, as follows:

Mining

01 Ray MINE	10 Metallurgical Complex PLANT	19 Santa Barbara UNDERGROUND POLYMETALLIC MINE
02 Hayden PLANT	11 La Caridad MINE	20 Chalchihuites UNDERGROUND POLYMETALLIC MINE PROJECT
03 Mission MINE	12 Pilares COPPER PROJECT	21 San Martin UNDERGROUND POLYMETALLIC MINE
04 Silver Bell MINE & PLANT	13 Santa Eulalia UNDERGROUND POLYMETALLIC MINE	22 Charcas UNDERGROUND POLYMETALLIC MINE
05 Amarillo PLANT	14 Buenavista Zinc ZINC PROJECT	23 Electrolytic Zinc Refinery PLANT
06 El Pilar COPPER PROJECT	15 Hermosillo Offices CORPORATE OFFICES	24 Angangueo UNDERGROUND POLYMETALLIC MINE PROJECT
07 El Arco COPPER PROJECT	16 Guaymas Terminal PLANT	25 Mexico City Offices CORPORATE OFFICES
08 Lime Plant PLANT	17 Chihuahua Offices CORPORATE OFFICES	26 Taxco UNDERGROUND POLYMETALLIC MINE
09 Buenavista del Cobre MINE	18 Central Workshop PLANT	









- A Chaucha
COPPER PROJECT
- B Tantahuatay
GOLD MINE
- C Lima Offices
CORPORATE OFFICES
- D Los Chancas
COPPER PROJECT
- E Tia Maria
COPPER PROJECT
- F Cuajone
COPPER MINE
- G Toquepala
COPPER MINE
- H Ilo
PLANT
- I Catanave
COPPER PROJECT
- J Michiquillay
COPPER & GOLD PROJECT
- K Los Frailes
POLYMETALLIC PROJECT

1.4 Our presence

1.4
Our
Presence

Infrastructure

-  Energy
-  Highways
-  Oil and gas
-  Fuel terminal
-  Construction
-  Engineering

- | | |
|---|---|
| 01 La Caridad Combined Cycle Power Plant
NACOZARI, SONORA | 08 "Tamaulipas" Platform |
| 02 Cadereyta Fuel Terminal
NUEVO LEON | 09 "Veracruz" Platform |
| 03 Fenicias Wind Farm
NUEVO LEON | 10 "Tabasco" Platform |
| 04 El Retiro Wind Farm
JUCHITAN, OAXACA | 11 "Zacatecas" Platform |
| 05 Salamanca-Leon Highway | 12 Offshore Drilling Base
CIUDAD DEL CARMEN, CAMPECHE |
| 06 Silao Bypass | 13 "Campeche" Platform |
| 07 Onshore Drilling Base
POZA RICA, VERACRUZ | 14 "Chihuahua" Platform |



1.4 Our presence

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1.4
Our
Presence

GMXT Network

- Ferromex
- ... Rights of way
- Texas Pacific
- Florida East Coast
- Connections



1.5
Corporate
Structure

The percentage of Company ownership in each subsidiary is noted.



1.5 Corporate Structure

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Mining
Division

16,316
Number of employees 2022

- Operations:
- 15 underground and open pit mines
 - 52 smelters, refineries and other plants
 - 1 exploration project
 - Mexico, Peru, USA, Argentina, Chile, Ecuador and Spain

US\$10,968 billion
Net Sales



Transportation
Division

10,677
Number of employees 2022

- Operations:
- 6,925 mile (11,146 km) rail network
 - Fleet of 880 locomotives and 26,319 railcars of different types
 - 8 port terminals
 - 5 crossings on the Mexico- USA border

US\$2,646 billion
Net Sales



Infrastructure
Division

2,526
Number of employees 2022

- Operations:
- 2 modular rigs
 - 5 jack-up rigs
 - La Caridad combined cycle power plants (500 MW)
 - El Retiro wind farm (74 MW)
 - High-specification highways (construction, operation and maintenance)
 - 1 fuel shipping terminal

US\$255 million
Net Sales

The Divisions of Grupo Mexico conduct transactions with affiliated entities; intercompany billing for the presentation of Grupo Mexico’s consolidated financial statements is eliminated, because of this, there is a difference between the consolidated figures and those reported by each Division separately.

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2 Shared Value

2.1
Economical
Contributions



2.2
Supply Chain
Management



2.3
Investments in Sustainable
Development



2.4
Contributions to the Sustainable
Development Goals (SDG's)



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2.1 Economical Contributions

2.1.1
Highlights



2.1.2
Management
and Compliance



2.1.3
Governance



2.1.4
Metrics and
Targets



Shared value

Looking to the future

At Grupo México, we generate value in the places where we operate and we’re committed to contributing to the Sustainable Development Goals, serving as an agent of change to build a more sustainable society.

Meeting our tax obligations provides governments with resources to allocate for community wellbeing. Also, our operations create direct and indirect jobs, and our investments and business activities drive economic growth in the regions where we operate.

We favor local economic development by purchasing locally and we promote sustainable practices in our value chain. We invest in the environment, safety and community development, and align with the Sustainable Development Goals to achieve our sustainability targets.

Sector and universal principles and initiatives in sustainability are shifting paradigms around the world. Our organizational structure positions us to provide the products and services that society is demanding, adding to our contribution to a more and more sustainable society.

The energy transition will be heavily reliant on copper, the principal product of our Mining Division. Playing an essential role in electrification and the production of clean energies, both business and society expect copper to come from sources of responsible production. This has been the impetus for our commitment to certify all our copper production under independent standards.

Because of its advantages in terms of efficiency, environmental impact, safety and profitability, the railroad is becoming a more popular option for companies and governments around the world, particularly where nearshoring will increase demand for freight transportation. To address this demand, our Transportation Division offers general rail and intermodal freight services, and also auxiliary services like terminal management and intra-terminal hauling, in North America.

The experience of our Infrastructure Division in engineering, large-scale construction projects and industrial plants, clean energy and offshore and onshore drilling in Mexico, position our organization as a leader in these industries.

With this combination of products and services, we are driving growth in the countries and regions where we operate, while also supporting the economic development of our different stakeholders: investors, employees, suppliers, contractors, governments, and neighbor communities.

We generate shared value by:



2.1 Economical contributions

2.1.1 Highlights

At Grupo México, our responsible and sustainable fiscal strategy supports us to generate shared value and create economic and social benefits in the countries where we operate.



US\$11.925 BN

Total economic value generated



US\$693 M

Paid out in salaries and benefits, above the industry average, to our more than 29,000 employees in Mexico, Peru and the United States.



We are among the companies that pay the most taxes in Peru and Mexico.



US\$156 M

Invested in community and social programs and donations, generating sustained growth and development in the communities where we operate.

2.1.2 Management and Compliance

Compliance and sustainability are two key aspects of our business at Grupo México and our social responsibility in the countries and jurisdictions where we operate. In this regard, we ensure:

- Prompt payment of all our taxes and related payments, ensuring we are in full compliance with all federal, state and municipal tax laws and regulations.
- Full compliance with all relevant international tax laws and regulations.
- All our business is conducted at market value in compliance with transfer pricing regulations.
- Grupo México is contributing to the public spending in the countries and the places where we operate, for the benefit of all.

We strictly abide by our [Code of Ethics](#), which governs our actions in terms of legal, professional and ethical obligations, guided by our values: honesty, respect and responsibility. The Grupo México Code of Ethics requires transparency in our information, ensuring this is complete and available as an accurate reflection of the status of our business and our strategy.

Adhering to these directives, we ensure that our financial statements, regulatory reports and other public documents are accurate, complete and timely, and that they meet all legal requirements. Additionally, our Code of Ethics requires that our transactions with related parties be conducted always according to market conditions and with transparency.

Our principles guide us in fostering ethical and sustainable value chains, based on fair competition and a strict anti-corruption policy (for more information, consult our Anti-Corruption Policy). Both our Code of Ethics and our company policies prohibit any type of corruption, including bribes, illicit payments and trading influences, and sanction both those who would offer and those who would accept such conducts, and also any person participating in any act of bribery.

Our Anti-Money Laundering and Counter-Terrorism Financing Policy defines the controls and the standards of conduct necessary to do business with integrity and to manage the risks and controls associated with money laundering. These guidelines commit us to analyzing the fiscal implications of our transactions, and also to clear accounting records for all payments made to government entities, helping to detect and prevent any type of fiscal or financial risk, guaranteeing full compliance with the authorities in all the countries where we operate.

Extractive Industries Transparency Initiative (EITI)

Southern Copper Corporation played an essential role in the process that led to Peru becoming an EITI Compliant Country in 2012, actively participating on the Board and in the multidisciplinary group from 2005 to 2022.

As part of our commitment to open communication with the tax authorities, we support the Extractive Industries Transparency Initiative (EITI), a voluntary global initiative that promotes transparency and disclosure of payments to governments and extractive industry revenues. Therefore, our reports follow these guidelines to inform the governments in Peru and Mexico, who in turn report to the EITI.

We voluntarily align with the spirit and requirements of the EITI Standard to disclose the payments we make to governments each fiscal year. Greater transparency improves understanding around the management of natural resources, strengthens public and corporate governance, reduces corruption, and facilitates providing the necessary information to contribute to greater transparency and accountability in the extractive industry.

In 2012, Peru was the first Latin American country to become an EITI Compliant Country. Eight National Transparency reports and 15 Regional Transparency Assessments support the disclosure of payments that companies report having made to the government and also the transfers national governments have made to their subnational governments and public universities, and how the recipients used the funds received.

Southern Peru was part of the EITI Peru Multi-Stakeholder Group from 2005 to 2022, and from 2016 to 2022, a Southern Copper Corporation representative was a member of the EITI International Board, being the only Latin American mining company to become an EITI supporting company.

From our executive leadership and throughout SCC, our commitment to this initiative has been clear and solid signed we joined the EITI. We will continue to offer fiscal transparency through our reporting and communications, while also participating in actions together with industry chambers and associations, like the Mexican Mining Chamber, to report our fiscal performance to the EITI in Mexico.

References:

- 1. <https://www.eiti.org/supporter/southern-copper>
- 2. <https://eitiperu.minem.gob.pe/index.php/informes>



2.1.3

Governance

Our Tax offices are responsible for our fiscal management and are part of the Administration and Finance departments of each Grupo México division.

The second level of oversight is provided by the Administration and Finance departments and the Grupo México Administration and Control Department through their review and validation of our compliance with these aspects.

Meanwhile, the Grupo México Corporate Audit Department and the respective Corporate Audit departments of each division, independently and objectively, review the efficacy of our financial controls. These structures play an important role in identifying and mitigating our fiscal risks, and ensure our long-term financial stability..



[] Independent auditors

2.1 Economical Contributions

2.1.4 Metrics and Targets

Economic Value Generated and Distributed
GRI 201-1

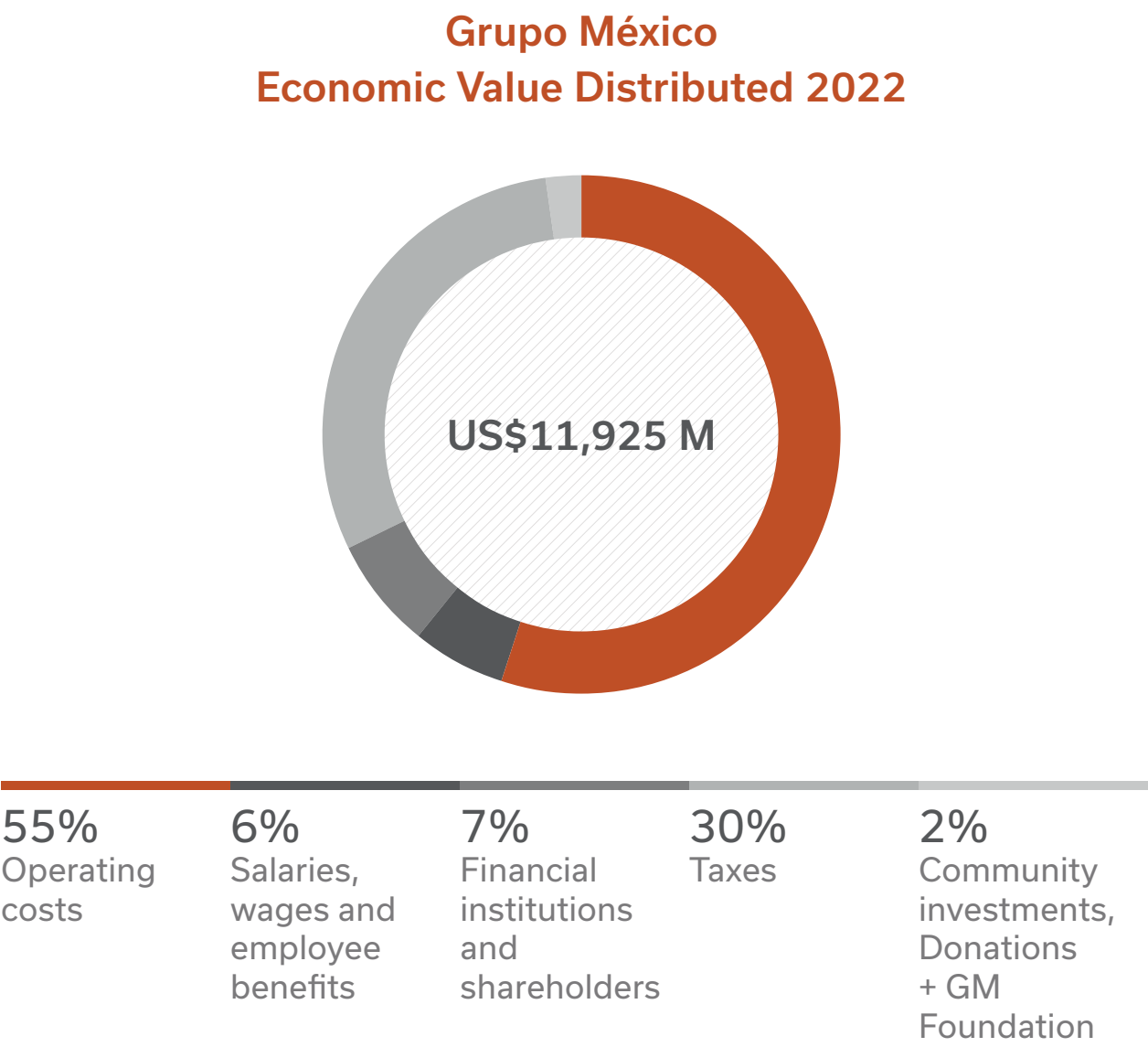
Stakeholders received 83% (US\$11.925 billion) of our total economic value generated, primarily in the form of operating costs, taxes, payments to financial institutions and investors, and salaries, wages and employee benefits.

Our 2022 Economic Value Generated and Distributed was distributed as follows:

US\$ million	2022	2021	2020	2019
Economic Value Generated (EVG) - Sales	14,349	14,777	11,252	11,021
Economic Value Distributed (EVD)	11,925	10,182	8,435	8,685
Operating costs	6,613	5,522	5,072	5,063
Salaries, wages and employee benefits	693	963	870	996
Financial institutions and shareholders	832	1,006	1,157	1,132
Taxes ¹	3,632	2,612	1,249	1,437
Community investments	144	68	39	40
Grupo México Foundation and donations	12	11	48	17
Economic Value Retained (EVR) = EVG - EVD	2,424	4,594	2,820	2,336

¹Includes mining rights, concession fees and other taxes.

> The operations of Grupo México generated a total economic value of US\$14.349 billion in 2022.



Copper metallurgy, Sonora, Mexico

2.1 Economical Contributions

The following table summarizes the distribution by division²:

US\$ millions

Division	# Employees	Economic Value Generated (EVG)	Economic Value Distributed (EVD)							Economic Value Retained
		Sales	Operating costs ³	Salaries, wages and employee benefits ³	Financial institutions and shareholders	Taxes	Community investments	Donations + GM Foundation	Total VED	
Total MIN DIV	16,316	10,968	4,749	538	378	2,494	71	2	8,230	2,738
SCC	15,016	9,945	4,086	413	343	2,482	70	2	7,397	2,548
Mexico (MM)	10,050	6,301	2,538	197	43	1,530	13	1	4,323	1,978
Peru (SPCC)	4,947	3,909	1,810	206	300	952	58	0.4	3,325	583
EUA (ASARCO)	1,319	1,024	660	123	35	11	0.3	0.01	830	194
Total TRA DIV	10,677	2,713	1,386	107	432	372	72.5	0.2	2,370	343
Total INF DIV	2,526	668	478	49	21	767	0.4	-	1,315	(647)
GM Foundation	-	-	-	-	-	-	-	10	10	-
Total Grupo México 2022	29,519	14,349	6,613	693	832	3,632	144	12	11,925	2,424
2021	29,090	14,777	5,522	963	1,006	2,612	68	11	10,182	4,981
2020	29,586	11,252	5,072	870	1,157	1,249	39	48	8,435	2,820

²The final figures may vary from those reported in our 2022 Financial Statements, due to the time elapsed between the publication of this report and the independent audit and assurance conducted by the financial areas.

³The total Operating costs and Salary, wages and employee benefits include amounts for our projects in Spain, Ecuador and Chile, and eliminations between companies.

Revenue (Sales) and taxes

Our [quarterly and annual financial statements](#) provide perspectives on both the current and future fiscal impact associated with the accounting profit of the organization.

The taxes paid during the 2022 fiscal year are summarized following by division and country:

Taxes: revenue and taxes by jurisdiction GRI 207-4										
	Mining			Infrastructure			Transportation		Consolidated	
US\$ thousands	Mexico	Peru	USA	España	Ecuador	Chile	Mexico	Mexico	USA	Grupo México
Revenue from third parties sales	6,108,146	3,898,306	961,666	-	-	-	664,107	1,975,253	444,795	13,870,313
Revenue from intra-group transactions with other fiscal jurisdictions	193,064	10,211	61,888	-	-	-	-	364,855	345	
Earnings before taxes	3,082,347	1,506,211	161,671	14,383	(26,579)	(1,963)	70,844	731,890	120,180	5,292,595
Tangible assets other than cash and cash equivalents	7,054,898	3,889,949	1,657,151	485	3,650	13,909	1,652,576	2,335,457	1,320,084	19,702,083
Corporate income tax paid on a cash basis	1,450,461	951,121	11,106	-	-	-	63,322	182,815	22,536	2,765,783
Corporate income tax accrued on profit/loss	1,028,938	474,924	50,541	4,238	-	-	27,712	196,229	11,281	1,893,216

2.1 Economical Contributions

Revenue and taxes by country										
	Mining			Infrastructure			Transportation		Consolidated	
US\$ millions	Mexico	Peru	USA	España	Ecuador	Chile	Mexico	Mexico	USA	Grupo México
Revenue										
Revenue from unrelated parties	6,108.1	3,898.3	961.7	-	-	-	243.7	1,976.0	445.0	13,870.3
Revenue from related parties	193.1	10.2	61.9	-	-	-	420.5	365.0	-	-
Taxes paid / (refunded)										
Corporate tax	1,224.5	785.4	-	-	-	-	59.1	182.0	23.0	2,307.6
Other taxes	305.8	165.8	11.1	-	-	-	1.8	7.0	13.0	555.2
Total supported taxes	1,530.3	951.1	11.1	-	-	-	60.9	189.0	36.0	2,862.9
Additional information										
Number of employees	10,901	4,546	1,351	35	-	-	2,526	9,814	856	30,086
Tangible assets (\$ millions)	7,054.9	3,889.9	1,657.2	0.5	3.7	13.9	1,652.6	2,335.5	1,320.1	19,702.1

Tax expense and tax rates										
	Mining			Infrastructure			Transportation		Consolidated	
US\$ millions	Mexico	Peru	USA	España	Ecuador	Chile	Mexico	Mexico	USA	Grupo México
Earnings / (loss) before taxes (US\$ millions)	3082.3	1506.2	161.7	14.4	-26.6	-2.0	70.84	731.89	120.18	5,292.60
Income tax on earnings (US\$ millions)	1,028.94	474.92	50.54	4.24	0.00	0.00	27.71	196.23	11.28	1,893.22
Tax rate on the financial statements	33%	32%	31%	29%	0%	0%	39%	27%	9%	36%
Statutory tax rate	30.0%	29.5%	21.0%	25.0%	25.0%	25.0%	30.0%	30.0%	21.0%	30.0%

2.1 Economical Contributions

Economical Contributions

Supply Chain Management

Investments in Sustainable Development

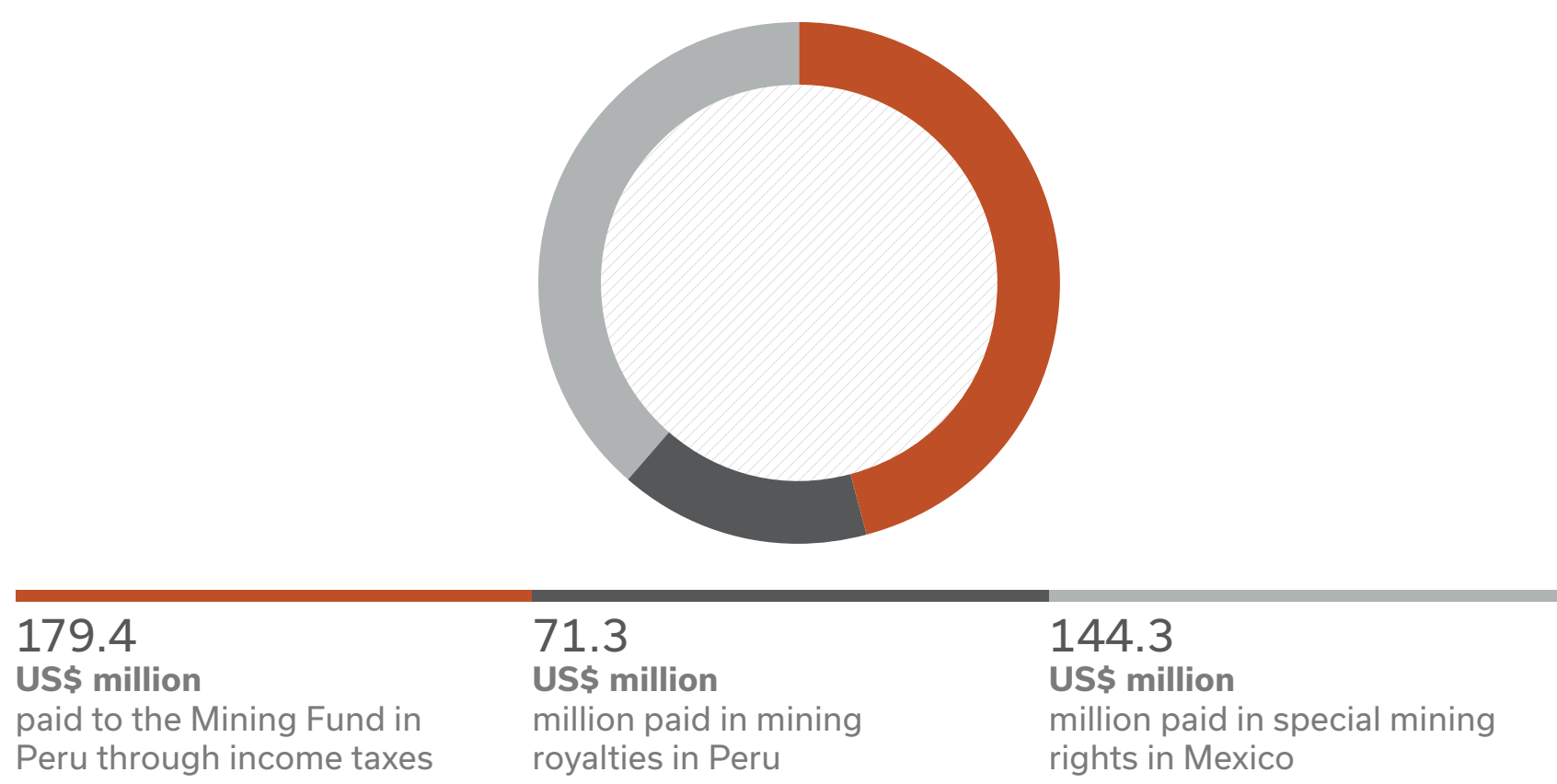
Contributions to the Sustainable Development Goals (SDG's)

Payments to governments

We are committed to not supporting jurisdictions with weak tax laws and to not supporting tax structures lacking in commercial substance used for tax evasion. We therefore disclose our payments to governments and, where applicable, note in detail our role in delivering social and economic benefits in the areas where we operate.

Our neighbor communities benefit from the fiscal policies like the Mining Funds in Mexico and Peru. These funds, each with their own characteristics, support investment in sustainable projects through the payment of taxes to provide infrastructure in areas like education, health and water security (for more information, consult the Investment in Infrastructure and supported services, and significant economic impacts, in the section on [Local Communities](#)).

We paid more than US\$390 million in special taxes in Mexico and Peru in 2022, distributed as follows:



We have 14 company procedures and 24 policy documents in place to ensure transparency in our contributions of these resources and, in general, all our social investments, actions that support the recent ISO 9001:2015 certification of our community processes at Southern Perú operations.

Mining Fund and special mining rights – Mexico

The Mining Fund was created with the 2014 reforms of the Mexican Federal Duties Law, establishing payments of Special, Additional and Extraordinary Rights by mining companies. The Fund for the Regional Sustainable Development of Mining States and Municipalities was designated as the vehicle for using and distributing 77.5-80% of the resources collected, while the remainder was allocated to the Federal Treasury.

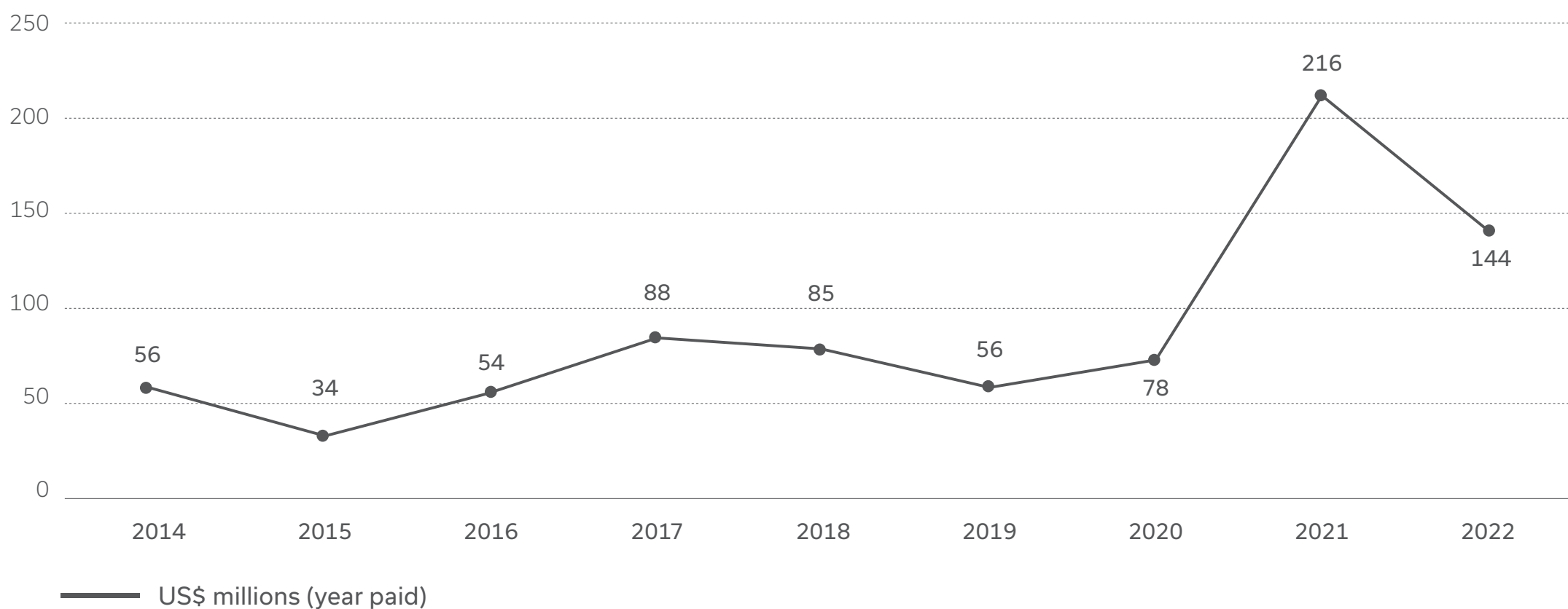
The Ministry of Agricultural, Territorial and Urban Development administered the Mining Fund from 2014 to 2017, allocating these resources to the mining states and municipalities according to the value of their extractive activity, and to Regional Committees, composed of federal, state, municipal, community and mining company representation, to support physical infrastructure investment projects submitted for approval.

The Trust for the Fund for the Development of Mining Production Areas was dissolved in 2020 by presidential order, and the unassigned resources from the period 2014-2017 plus the total from 2018-2020 were returned to the Federal Treasury.

Today, the government distributes the resources collected from Special, Additional and Extraordinary Mining Rights to different entities, including the Ministry of Education and the Ministry of Health to invest in projects to improve schools, the services and infrastructure of the healthcare sector, and public infrastructure with a positive social, environmental and urban development impact.

The Special and Extraordinary Mining Rights that Grupo México has paid in Mexico are summarized following:

Special and Extraordinary Mining Rights paid (Mexico)



2.1 Economical Contributions

Economical Contributions

Supply Chain Management

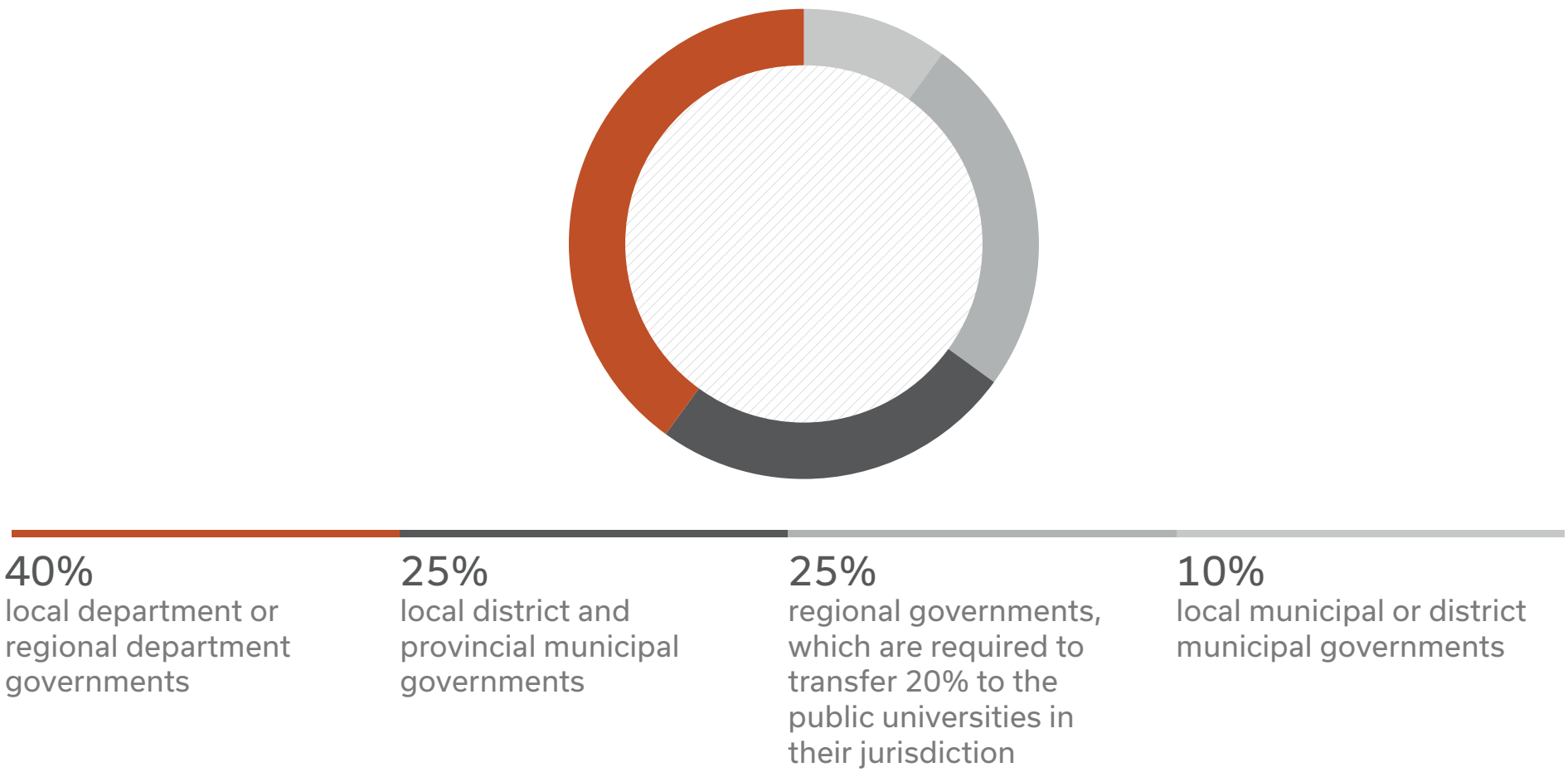
Investments in Sustainable Development

Contributions to the Sustainable Development Goals (SDG's)

Mining Fund and Royalties – Peru

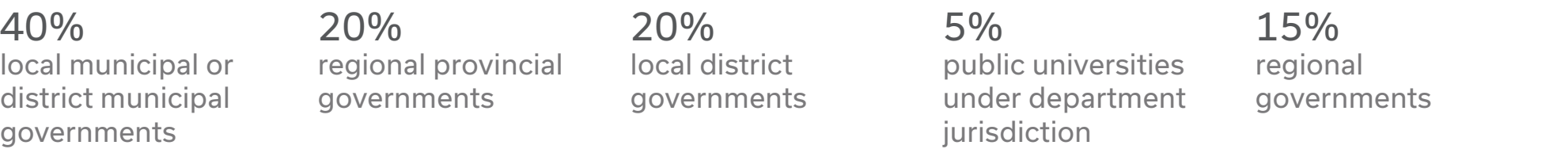
The Mining Fund (or *Canon Minero*) supports community projects and accounts for a large portion of our tax expense. Local governments (provincial and district municipalities) and regional governments receive the total tax revenue collected by the State proportionate to the economic exploitation of the mineral resources (metal and non-metal).

The Ministry of the Economy and Finance set the criteria for distributing the Mining Fund resources to the regional and local governments, considering aspects such as population and requirements of basic needs. The distribution is detailed following:



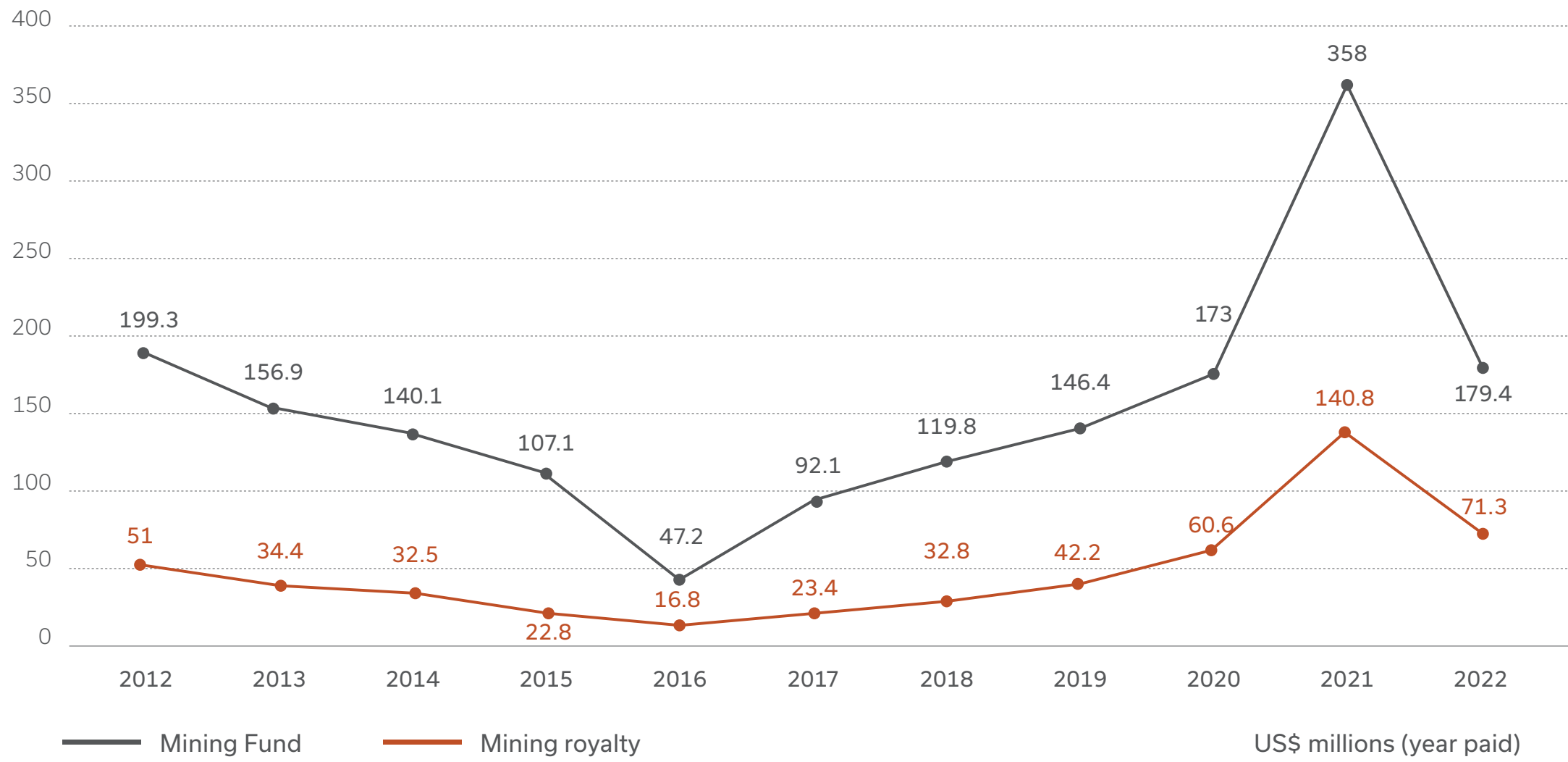
The mining royalty is a financial amount that we pay to the State for the exploitation of metal and non-metal mineral resources.

The funds collected from the mining royalty are distributed based on indexes the Ministry of the Economy and Finance approve monthly considering defined directives (percentages, criteria, indicators), official information provided by the National Institute of Statistics and Information and the National Customs and Tax Administration Office (in Spanish, SUNAT), and also the amounts collected by the State, as follows:



The historic amounts Grupo México has contributed to the Mining Fund and royalties in Peru are summarized following:

Amounts paid to the Mining Fund and royalties (Peru)



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2.2 Supply Chain Management

2.2.1
Highlights



2.2.2
Governance



2.2.3
Strategy and
Management



2.2.4
Metrics
and Targets



2.2 Supply Chain Management

At Grupo México, we recognize that sustainability is not only practiced within an organization, it must also extend throughout the value chain to ensure a responsible supply that is mindful of the environment as well as people, and which is also resilient to climate change and social conflicts.

2.2.1 Highlights In 2022:



We worked with

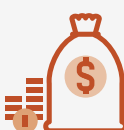
8,229

suppliers across the 3 divisions of Grupo México



US\$4,544 BN

On purchases of goods and services



90%

of our spending on suppliers this year was with local¹ and national² suppliers across the 3 divisions



US\$1,312 BN

Invested in local supply, with a total **1,647** suppliers



1,232

Suppliers identified as Critical³, representing **16%** of our total suppliers this year



Mining Division collaborator, Mexico

¹ The term 'local supplier' refers to suppliers that provide goods or services in the same state as where our operations are located.
² Refers to a supplier that is in the same country where they provide the goods or services. Local providers are not included in the count of national suppliers.
³ For more information consult [Critical Suppliers](#).

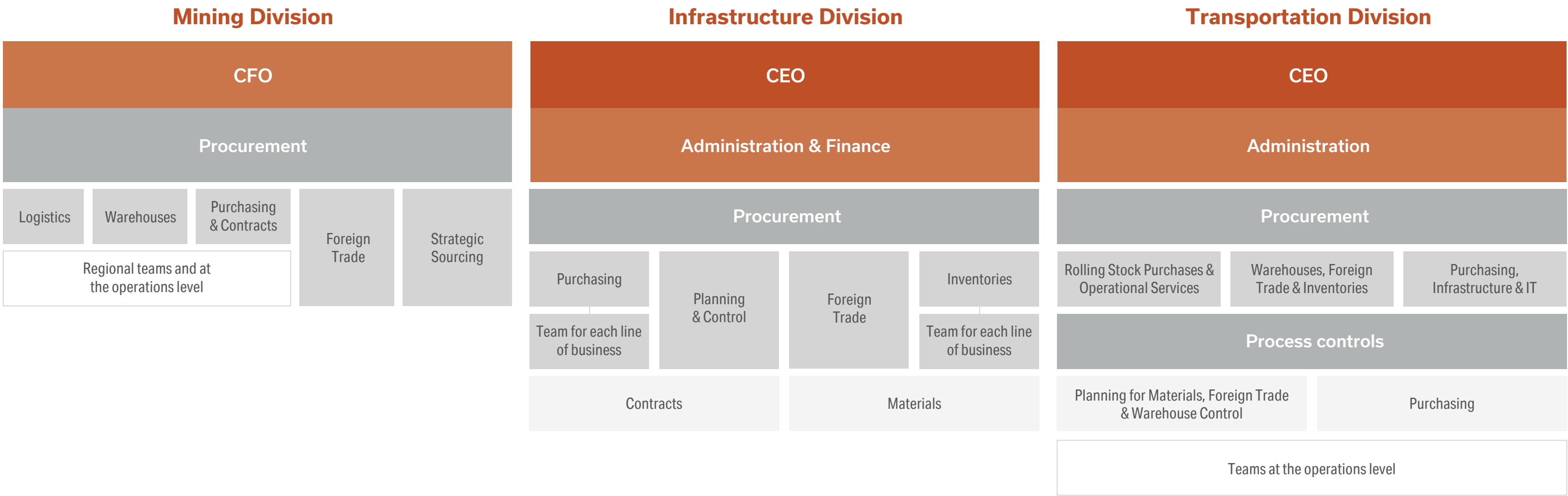


Collaborator in Buenavista del Cobre, Sonora, Mexico

2.2.2 Governance

The Procurement departments in each division develop and implement management frameworks for our supply processes. Meanwhile, the Sustainable Development departments in each division advise on ongoing improvement and best practices for environment, social and governance aspects through the value chain, and also on assessment and certification processes.

Governance structure



In general, the Procurement departments have a corporate structure that includes Strategic Sourcing and Foreign Trade, together with Purchasing, Logistics, Inventory and Warehouse teams, which may have local teams for each site or region depending on the Division or line of business.

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2.2.3

Strategy and Management

To minimize the risks associated with our supply chain and to foster a company that is more and more mindful of the environment, health and safety, human rights, and respect for the communities where we operate, we have extended our [Sustainability Policies](#) to our suppliers. These policies are applicable to both Grupo México employees and to our suppliers and contractors, requiring all to act in accordance with our [Code of Ethics](#).

Over the last year, we have focused on strengthening the resilience of our supply chain. In 2022, we published a [Code of Conduct for Suppliers, Contractors and Relevant Business or Commercial Partners](#) for the Mining Division, and more recently, a corporate [Code of Conduct for Business Partners](#). These policy documents formalize the minimum requirements expected from our value chain in terms of:



Risk management



Community relations



Ethics, integrity and transparency



Environment



Human rights



Product sustainability



Labor aspects

Suppliers and contractors who provide goods and/or services to the company, and affiliates, subsidiaries and sites, are required to comply with these codes, in all jurisdictions where we have operations.

The contracting processes outlined in the codes require all our suppliers to meet the following requirements:



01

Accept the Grupo México [Code of Ethics](#)



02

Accept the Grupo México [General Human Rights Policy](#)



03

Register their employees with the corresponding government services agency (social security or equivalent) in the countries where we operate



04

Provide proof of good standing with the corresponding tax authorities



05

Sign the Data protection notice, Letter of consent and Related parties disclosure statement



Copper cathodes, Sonora, Mexico

ESG Management

Regarding climate change, we believe that to contribute to emissions reduction in the sectors where we operate, we need to encourage our value chain to also join the effort. In this regard, we have opened dialogues with our customers to collaborate on the disclosure of information in reference to our operational emissions.

Additionally, our [Code of Conduct for Suppliers, Contractors and Relevant Business or Commercial Partners](#) invites our commercial partners to estimate their carbon footprint and to report their emissions, and also to take reduction actions.

➤ For the fourth year in a row, we are recording and reporting the Scope 3 emissions of our value chain.

These efforts help us to identify the suppliers with the highest contributions to our Scope 3 emissions. For more information, consult the [Scope 3 Emissions](#) section in the chapter on [Climate Change](#).

In 2023, we will begin to develop an emissions reduction strategy that will include joint actions with our suppliers and customers to improve the ESG performance of our value chain.

Procurement Strategy by Division

Each division’s strategy has its own approach and indicators, as described following:

Mining Division

The principal goals of our procurement departments are to optimize quality, reduce supply costs, follow up on agreed discounts, and the preparation and fulfillment of supply agreements.

As part of our ongoing improvement, the Mining Division has undertaken a project to standardize technical specifications, take advantage of new technologies, optimize logistics processes, and improve efficiency in prices and performance.

The key indicators for the management of this area include:

- Negotiated annual discounts
- Managed spending
- Supply fulfillment
- Number of local suppliers
- Total spending with national suppliers
- Total spending with local suppliers

Our [Code of Conduct for Suppliers, Contractors and Relevant Business or Commercial Partners](#) took effect in 2022 and was provided to each of our suppliers.

ESG Initiatives

The Copper Mark

In 2022, The Copper Mark responsible production certification process for two of our mines in Sonora (METCO and OMINA – La Caridad) strengthened our ESG management system, particularly in the area of commercial relations.

In this regard, we designed and shared a sustainability self-assessment with our relevant⁴ business partners, covering topics that included human rights, working conditions, the environment and anti-corruption, to determine where they are in their respective sustainability strategies and actions.

In 2023, we will continue to strengthen our due diligences processes for mined ore with a new procedure and training.

⁴ Following the Pareto model, we identified the relevant business partners that represent the largest share of our spending (80%), ensuring our strategic and necessary contractors and suppliers for the operation, and also service providers, are included in the analysis. According to this model, METCO and La Caridad have a total 84 relevant business partners.

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Infrastructure Division

The supply chain strategy of the **Infrastructure Division** focuses on automating and making processes more efficient to reduce the purchase cycle, reduce expenses, and to receive goods and services in a timely manner.

The five main priorities of the general management strategy are:

Discounts and Foreign Trade

Paperless initiatives

Savings in logistics

Automation of systems (Webdox, Xternall, Fiori, Wherex)

Delivery times and reducing factoring costs

The following environmental, social and governance (ESG) goals are identified for these priorities:

- Testing sustainable products for the different lines of business
- CO₂ reductions from the sale of scrap
- Paperless initiatives to reduce deforestation

Transportation Division

For the **Transportation Division**, maintaining an efficient supply chain in terms of quality, cost and delivery time is essential to continue providing a safe and quality freight transportation service.

The procurement department plays an essential role in the operation, seeking ongoing improvement and strengthening of our filters and processes. Some of the principal indicators and strategies for this area are:

Supplier assessments

Total spending with national suppliers

Total spending with foreign suppliers

Identify critical suppliers

Negotiation strategies with suppliers

The negotiation strategies of the Transportation Division's procurement department resulted in savings of US\$6.9 million in 2022⁵.

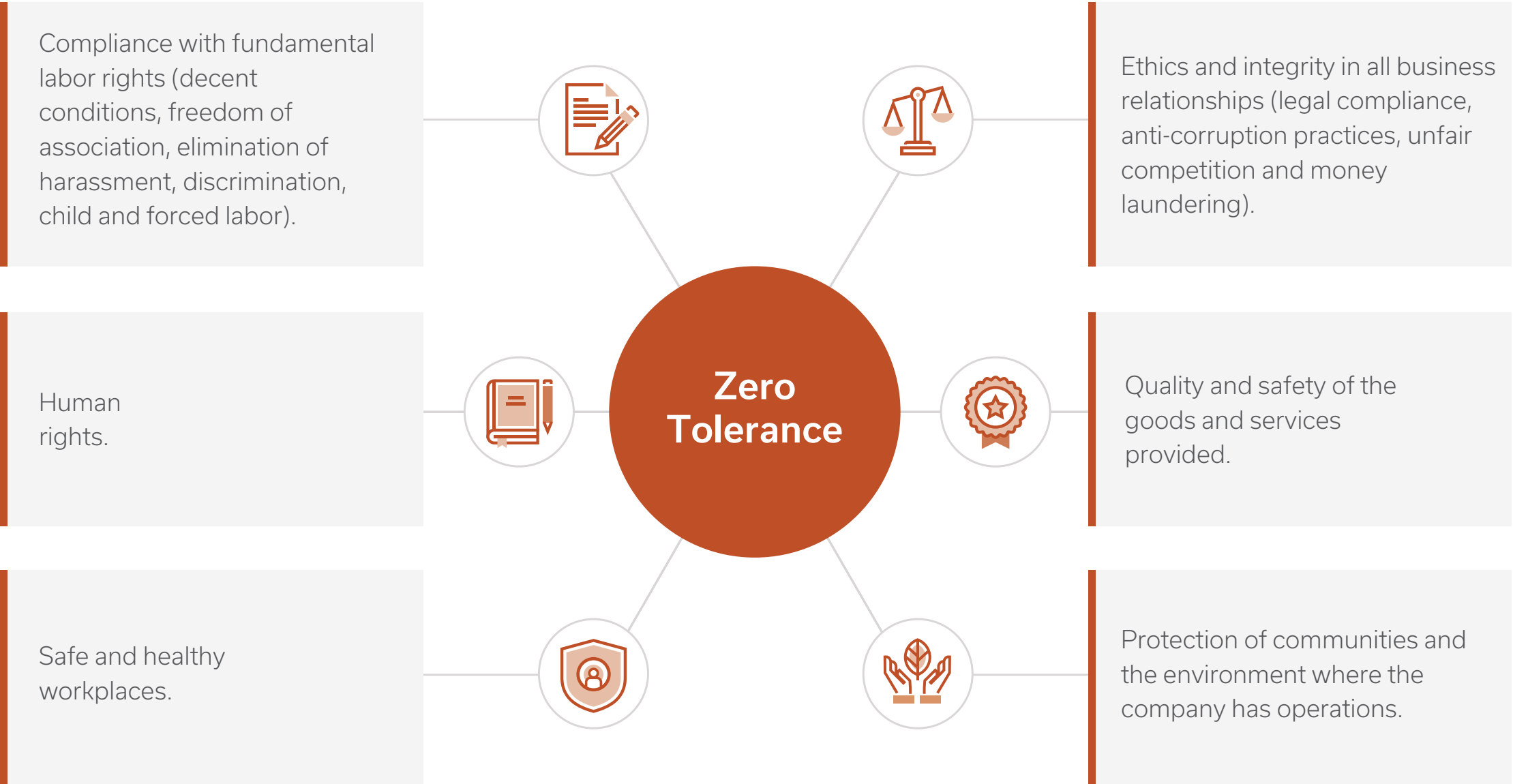
⁵Only considers data from Mexico and Texas for the corresponding calculation.



Infrastructure Division collaborator, Mexico

Assessment mechanisms

Through the commitment of our suppliers, we have developed a Zero Tolerance culture, which avoids establishing commercial relationships with suppliers that do not adhere to our criteria of:



Reporting mechanisms are available to our suppliers to submit observations, grievances, complaints or reports of any situation related to our operations or commercial relations.

If we become aware of any conduct prohibited by the Grupo México [Code of Conduct, Code of Conduct for Business Partners](#) (corporate) or the [Code of Conduct for Suppliers, Contractors and Relevant Business or Commercial Partners](#) (AMC), an investigation is initiated by a working group appointed by the Integrity Committee in each division.

Additionally, Grupo México has processes in place to assess the commercial performance of suppliers and various sustainability aspects.

Supplier performance assessment

Performance assessments are conducted annually for our major strategic and direct suppliers (those that would put the operation at risk), representing the greatest spending for operational purchases and those which each line of business considers appropriate to comply with the certification and/or assessment guidelines required by other institutions.

The Procurement department prepares and approves the list of suppliers to be assessed.

The assessment process considers factors that include:		
	Financial capacity	<p>The following scoring scale is used to review the assessments and present the results for each supplier, based on certain criteria:</p> <p>100 >70 = approved / reliable 70 >0 = not approved</p> <p>An improvement plan will be prepared together with any supplier that receives a score of less than 70 to take immediate action to remedy the deficiencies identified. The improvement plan would include the deficiencies, the corrective actions required, the commitment date and controls to prevent recurrence.</p>
	Technical assessment	
	Commercial terms	
	Fulfillment of deliveries	
	Agreement / Contract fulfillment	
	Level of service	
	Tax compliance	
	Compliance with certifications required	
	Compliance with Safety, Environment and Labor regulations	

The Procurement teams follow up on improvement plans. Replacements or alternatives will be considered for any supplier that fails to correct their deficiencies within the time agreed.

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Sustainability assessment for Relevant Business Partners

We acknowledge that the process for managing our relationships with commercial partners and for fostering sustainable practices requires monitoring and ongoing improvement. In this regard, we implemented the **Dow Jones Risk & Compliance** in the Mining Division as a first step in 2023.

Dow Jones Risk & Compliance

This tool supports our due diligence process for verifying the integrity of our supply chains and business partners

Assessing risks associated with corporate governance, money laundering, payment compliance, and other risks

Follow-up to monitor the commitments in terms of the Principles of the Global Compact and the United Nations Sustainable Development Goals (SDG) in our value chain

Additionally, as part of our commitment to ongoing improvement in our processes, we are adopting international practices in the **Mining Division** to strengthen the sustainability assessment of suppliers and contractors aligned with:

- Council on Economic Priorities voluntary certification of workplace conditions (SA8000)
- Social Responsibility Guide (ISO 26000)
- International Organization for Standardization workplace health and safety management system (ISO 45001) and environmental management system (ISO 14001)
- Mexican Standard on Social Responsibility (NMX-SAST-26000-IMNC-2011)

The initial implementation of this assessment asks our business partners to complete a self-assessment form covering topics of ethics, regulatory compliance, reporting mechanisms to address human rights violations, and mechanisms to ensure and promote human rights, and health and safety, among others. The assessment motivates our partners to adopt commitments to do business ethically, to ensure and foster their sustainable growth.



Collaborator in material warehouse, Mexico

Our business partners are asked to print and sign the completed form to certify the accuracy of the information provided.

➤ This assessment will be added to the requirements for conducting business with our partners.

The Procurement department will analyze the results of the assessment and low results will trigger a more detailed review of the parameters that fall outside expectations.

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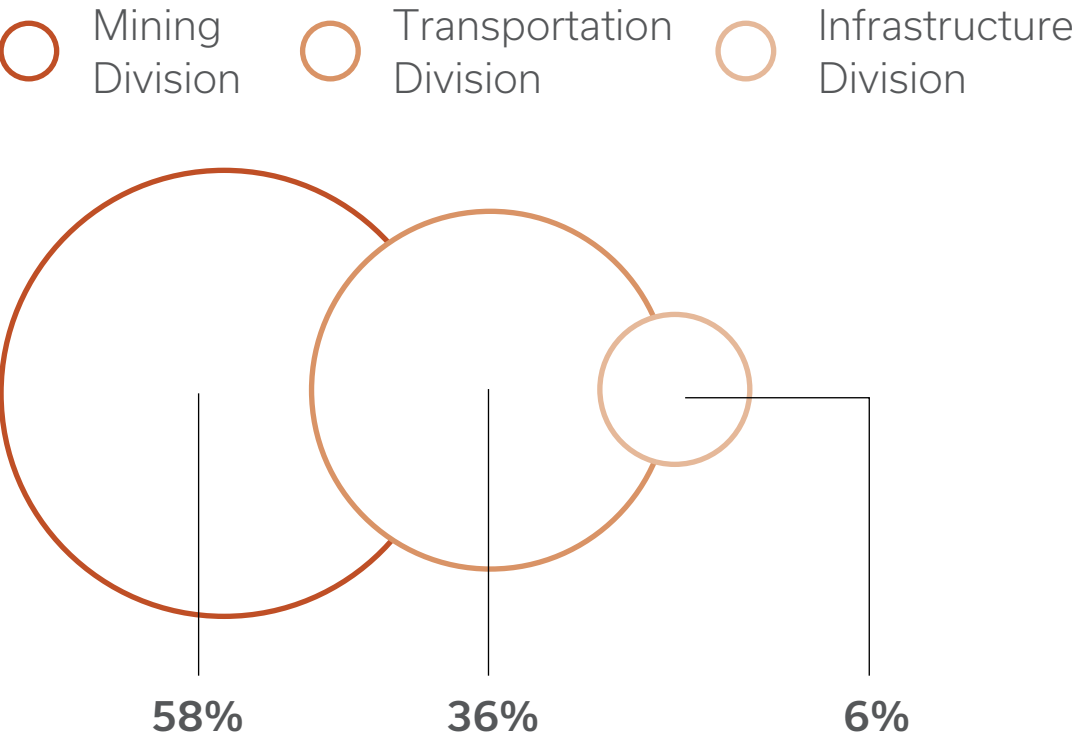
2.2.4

Metrics and Targets

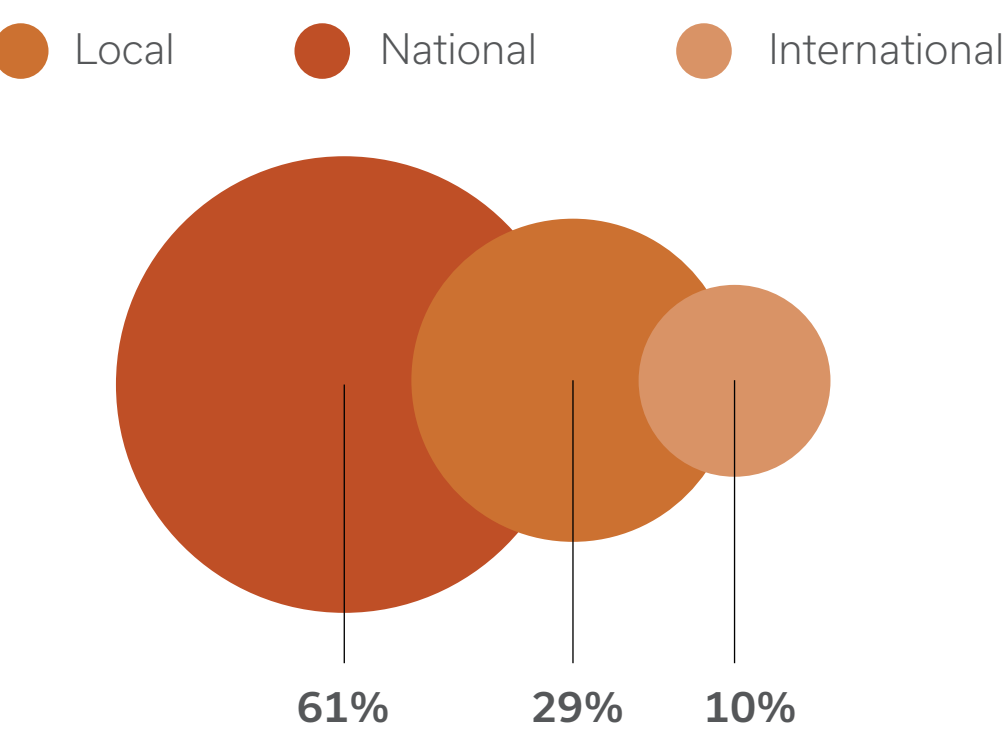
GRI 204-1

> We spent US\$4,544 billion on purchases of goods and services in 2022, representing a 21% year-over-year increase.

Distribution of spending on suppliers



Proportion of spending on local, national and international suppliers

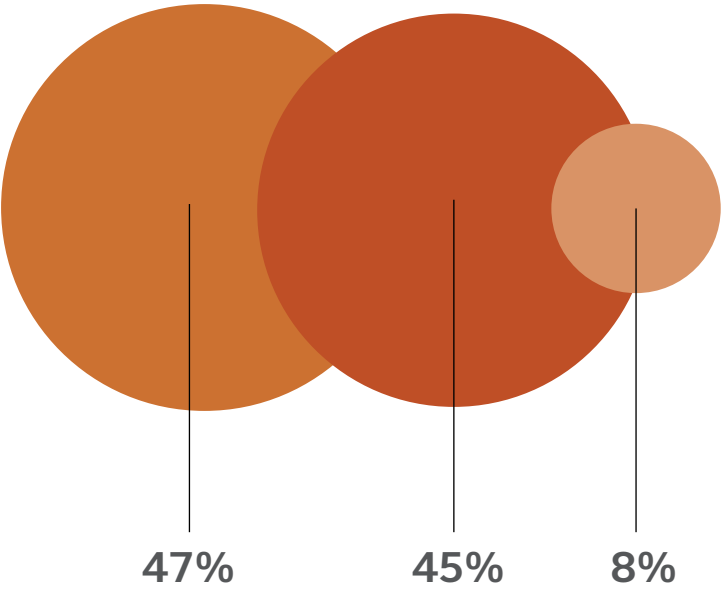


Proportion of spending on local, national and international suppliers

Local National International

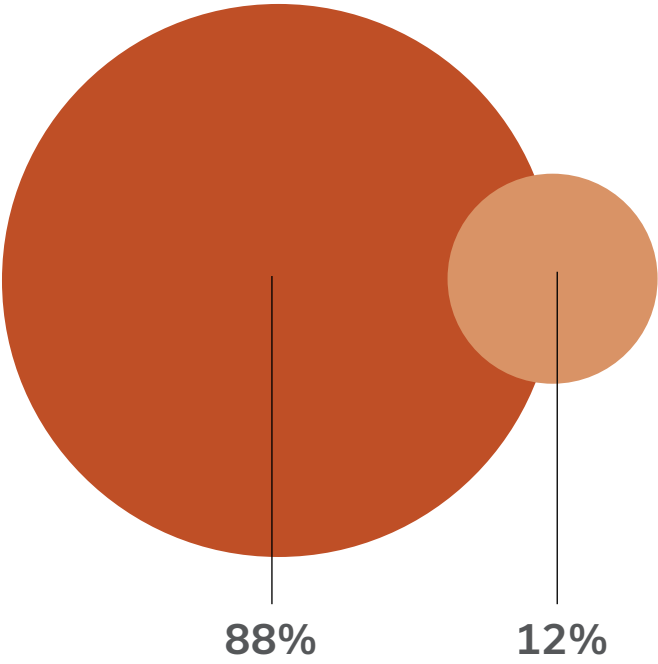
Mining Division

US\$ 2,628



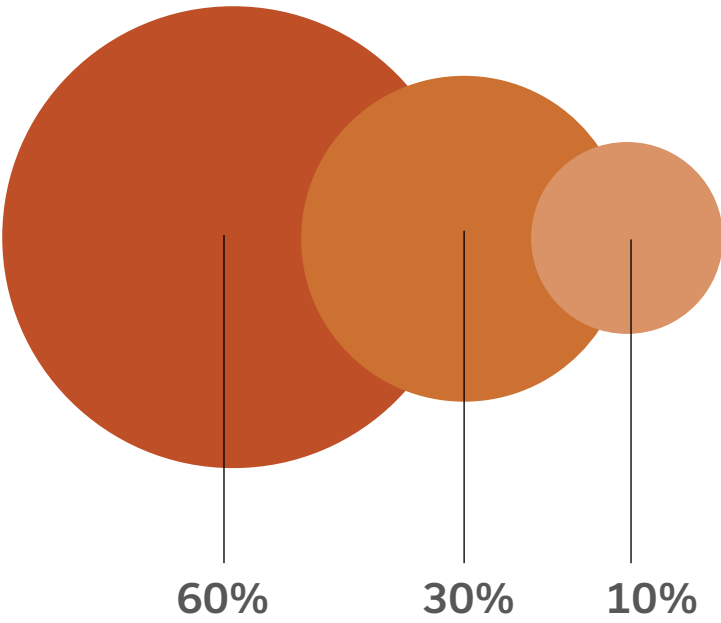
Transportation Division

US\$ 1,663



Infrastructure Division

US\$ 253



The calculation only considers information from national and international suppliers for the Transportation Division.

Spending for each division by type of supplier

US\$ million










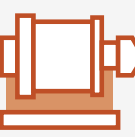





Region	Total spending	Total suppliers	Local suppliers		National suppliers		International suppliers	
			Total spending	Total #	Total spending	Total #	Total spending	Total #
Total MIN DIV	2,628	3,418	1,237	861	1,171	1,778	220	779
SCC	2,192	2,486	1,059	441	918	1,339	215	706
MM (Mexico)	1,226	1,412	557	343	523	594	146	475
SPCC (Peru)	965	1,074	502	98	395	745	69	231
ASARCO (USA)	437	932	178	420	254	439	5	73
Total TRA DIV	1,663	3,170	-	-	1,463	2,870	200	300
Mexico	1,641	2,392	-	-	1,441	2,092	200	300
USA	22	778	-	-	22	778	-	-
Total INF DIV	253	1,641	75	786	153	765	25	90
Total Grupo México	4,544	8,229	1,312	1,647	2,788	5,413	445	1,169

Considerations for the 2022 spending on suppliers:

- 90% of spending on local and national suppliers across the three divisions.
- In the United States, most of the goods and services required for our mine operations are available at the local or national level. Therefore, the spending on international suppliers is minimal or null, as in the case of the **Transportation Division** operations in the United States.
- At the time of closing this report, FEC and RAVEN operations in the United States Transportation segment do not have information available for the 2022 fiscal year, hence the difference compared to the 2021 report.
- The **Transportation Division** is in the process of separating out their local and national suppliers to provide this detail in subsequent reports.

Principal purchases

While the sectors and industries in which the company is involved cover a wide range of goods and services, the 5 categories for our principal acquisitions for each division are:

Mining		Transportation		Infrastructure	
	Energy		Energy		Energy
	Vehicle and equipment parts		Freight and signaling equipment		Cement
	Chemicals		General services for railway operations		Chemicals
	Mill bars and balls		Vehicle and equipment parts		Vehicle and equipment parts
	Explosives and accessories		Locomotive and railcar repairs		Construction materials

2.2 Supply Chain Management

Economical Contributions

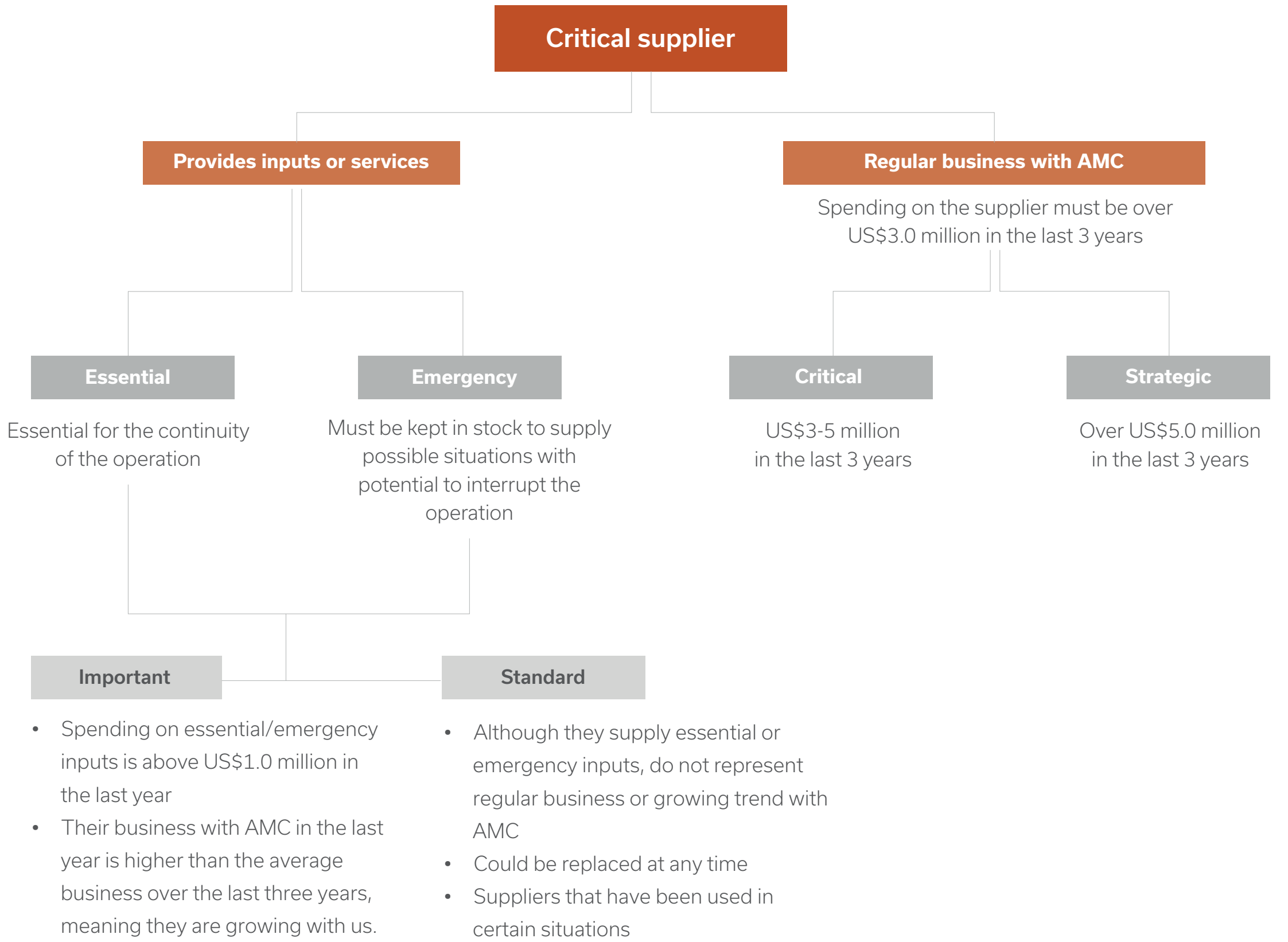
Supply Chain Management

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Critical suppliers

We have set parameters for each Gurpo México division to identify critical suppliers in our supply chains, which we classify according to the following characteristics:



Transportation Division

The Transportation Division identifies and classifies suppliers according to the following:

- Importance for the continuity of our operations
- Key agents in the good performance of the company
- Degree of technical, technological and/or scientific specifications of the good or service
- Complexity to replace or find another supplier offering the same goods or services

Suppliers are classified as critical when:

1. They are strategically important to the operation
2. The good and/or service they offer is unique or difficult to find
3. The company's material performance indicators depend on the supply of the good or service

01

Specific supplier

1. Required by the customer
2. High reliability in the delivery of the product or service

02

Critical supplier

1. Essential for the operation
2. Very difficult to replace
3. Determining factor in the company's performance

03

Regular supplier

1. Standard catalog of goods and services
2. Broad range of suppliers that can provide the good or service
3. Goods and services that are not determining factors for the operation nor do they have unique characteristics

04

Influential supplier

1. Difficult to replace, but possible
2. The good or service has very important technical restrictions or details

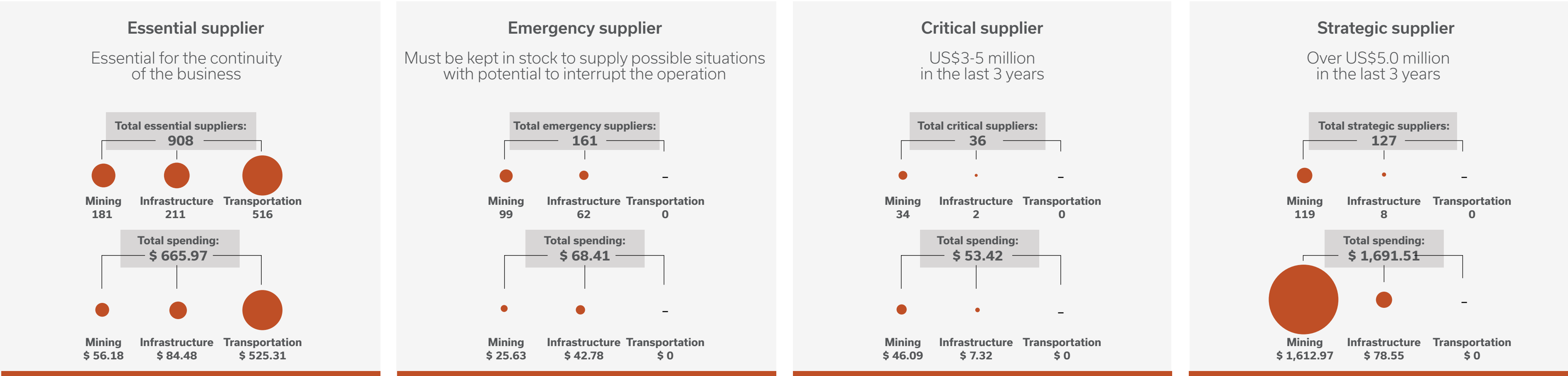
Spending on critical suppliers in each Division

US\$ million

Division	Country	Total suppliers	Total spending on suppliers	Total critical suppliers identified (4 categories)	% Total suppliers	Total spending on critical suppliers (4 categories)	% Total spending
Mining Division	Mexico	1,412	\$ 1,226.24	168	12%	\$ 773.10	63%
	Peru	1,074	\$ 965.33	145	14%	\$ 768.48	80%
	USA	932	\$ 436.61	120	13%	\$ 199.28	46%
Total Division		3,418	\$ 2,628.18	433	13%	\$ 1,740.86	66%
Infrastructure Division	Mexico	1,641	\$ 253.43	283	17%	\$ 213.13	84%
Total Division		1,641	\$ 253.43	283	17%	\$ 213.13	84%
Transportation Division	Mexico	2,392	\$ 1,641.15	491	21%	\$ 524.68	32%
	USA	778	\$ 21.71	25	3%	\$ 0.64	3%
Total Division		3,170	\$ 1,662.86	516	16%	\$ 525.31	32%
Total Grupo México		8,229	\$ 4,544.46	1,232	15%	\$ 2,479.30	55%

> In terms of total spending on suppliers, we identified 1,232 critical suppliers across the 3 divisions, representing 55% of our spending⁶.

We identified the following results in the 4 categories for the critical supplier classification:



2.2 Supply Chain Management

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Training local suppliers

Forjando Futuro – Suppliers

In 2018, we set as a goal to implement an institutional program to develop local small and medium suppliers for the Mining Division at our operations in Mexico and Peru.

As a result, we created the Forjando Futuro (Forging Futures) - Suppliers program, which promotes local supply and provides training for mining jobs in the communities where we operate.

The principal achievements since 2019 include:



Certification of local companies, Sonora, Mexico

For 2030, we have set as a target training and certifying 800 micro, small and medium businesses to increase the local purchasing and hiring, in addition to training 6,400 local residents to boost local hiring and gender equality.

⁷ Joint initiative led by the CAF, Latin American Development Bank, and the Arequipa Chamber of Commerce and Industry (in Spanish, CCIA).

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2.3 Investments in Sustainable Development



2.3 Investments in Sustainable Development

2.3 Investments in Sustainable Development

Grupo México makes positive contributions to society in different ways, beyond paying taxes and our economic value distributed. Our investments in sustainable development have a significant impact on worker health and safety management, caring for the environment, and the development of the communities near our operations.

Also, our Grupo México Foundation supports causes that contribute to improving quality of life, fostering human capital and supporting overall development.

Our principal investments associated with occupational health and safety management, environmental performance and social development are described following.



Strengthening occupational health and safety

- Industrial safety
- Training and personal protective equipment
- Health promotion and protection
- Detection and treatments of diseases



Ongoing improvement in our environmental performance

- Reduce water consumption with increased water treatment and reuse
- Waste management
- Prevention and mitigation of spills
- GHG emissions reduction
- Biodiversity conservation
- Reforestation



Foster the economic, social and human development of our neighbor communities

- Community programs
- Company-sponsored schools
- Services in Grupo México neighborhoods
- Investments in infrastructure for communities



Donations and philanthropic programs

- Support, donations and disaster relief
- Dr. Vagón and Escuchar Sin Fronteras health programs
- Environmental programs
- Development of institutions and associations



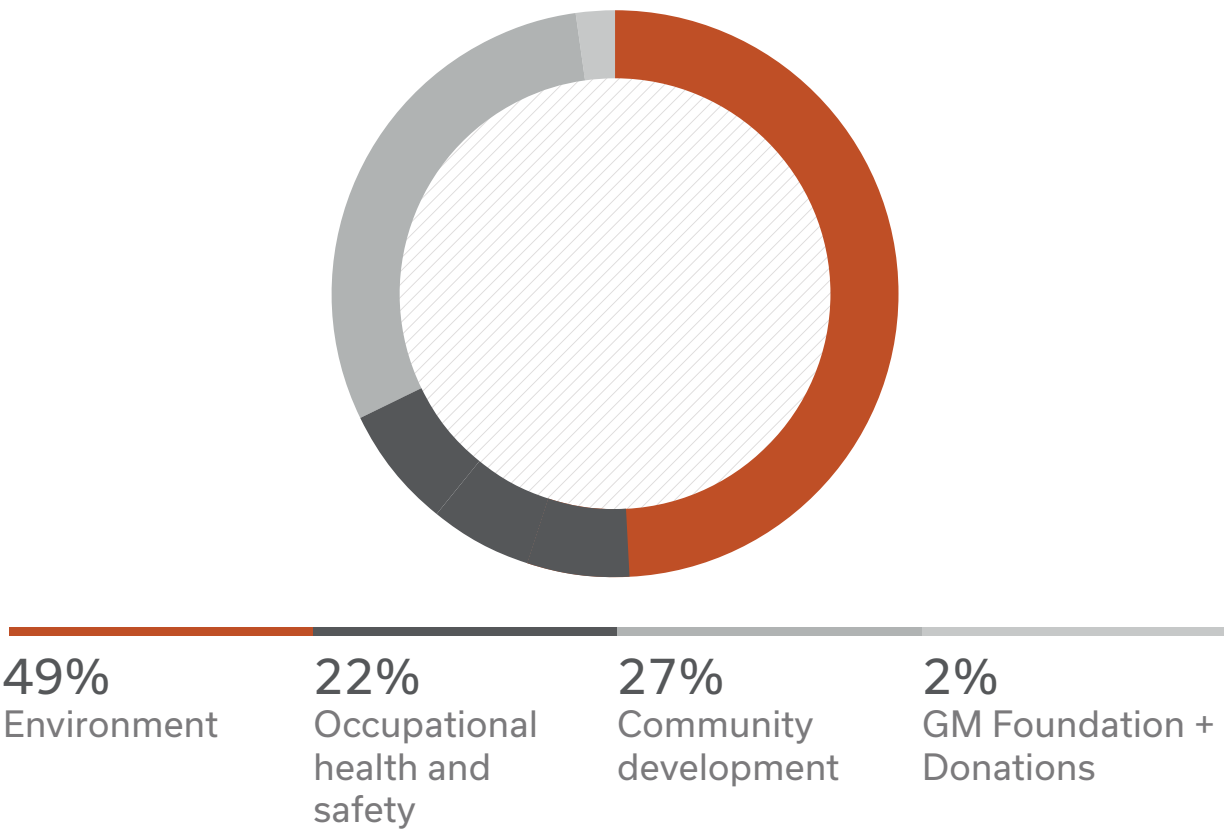
Transportation Division, Mexico

2.3 Investments in Sustainable Development

The following table details our investments and spending in sustainable development over the last three years and the chart shows the breakdown for 2022:

Grupo México
Investments and spending in sustainable development 2022

US\$ millions	2022	2021	2020
Type of expenses and investments	544	460	463
Occupational health and safety	120	87	81
Environment	268	294	295
Community development	144	68	39
GM Foundation and donations	12	11	48



We have made important investments in workplace health and safety over the last three years to strengthen our training processes, and also to provide personal protective equipment and our safety management systems to receive ISO 45001 certification for all our mine operations. Approximately 50% of our investments are made in engineering works aimed at providing safe workplaces, such as road maintenance, ventilation and activities.

Nearly half our sustainable development investments are allocated to environmental aspects, particularly to reinforce the impoundment of mine waste at our operations. Our Mining Division made significant investments in mine waste facility maintenance in Mexico in 2022, including backup tanks for tailings dams and rainwater deviation works to reduce the risks associated with extraordinary weather events.

In community development, we have increased our investments and spending over the last three years thanks to the gradual restart of our activities and returning to in-person interactions with the communities. With this, we have been able to continue our existing projects and develop new projects, leading Grupo México to nearly double our investments allocated to community development, compared with 2021.

Of note is that the investments of our Grupo México Foundation and donations were higher in 2020 because of the global pandemic, as Grupo Mexico became a strategy ally in facing the health emergency.

2.3 Investments in Sustainable Development

The following table summarizes our sustainable development investments and spending in 2022, by division:

US\$ million

Investments and spending in sustainable development 2022					
Division	Workplace health and safety	Environment	Community development	FGM FGM + donations	Total
Total DMIN DIV	109	233.9	70.7	1.8	415.4
SCC	103.9	213.8	70.4	1.8	389.9
Mexico (MM)	85.2	176	12.8	1.4	275.4
Peru (SPCC)	18.7	37.8	57.6	0.4	114.5
ASARCO (USA)	5.1	20.1	0.3	-	25.5
Total TRA DIV	6.1	19.6	72.5	0.2	98.4
Total INF DIV	5	14.7	0.4	-	20.1
GM Foundation (FGM)	-	-	-	9.5	9.5
Total Grupo México	120.1	268.2	143.6	11.5	543.4

Of note is that the investments of the Transportation Division in sustainability principally focus on community and social development. In 2022, this meant investing in urban mobility and infrastructure projects, including the construction of bypasses and upgrading stations and level crossings. These projects will reduce the risk of traffic accidents, strengthen our commercial and corporate commitment to maintaining the integrity of the freight transported, and increase the operational value of the railway system in Mexico.

Most the investments and spending by our Infrastructure Division are made in environmental prevention.

For more information, consult the section on the investments and operating costs in [Annexes](#).



Charcas Unit, Mining Division, Mexico

> We invested US\$544 million in 2022, in workplace health and safety, environmental and community development projects and initiatives, and also in social and environmental donations in our three divisions and the Grupo México Foundation.

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Priorities



2.4.2
Setting
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2.4.3
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2.3 Sustainable Development Goals Contributions (SDGs)

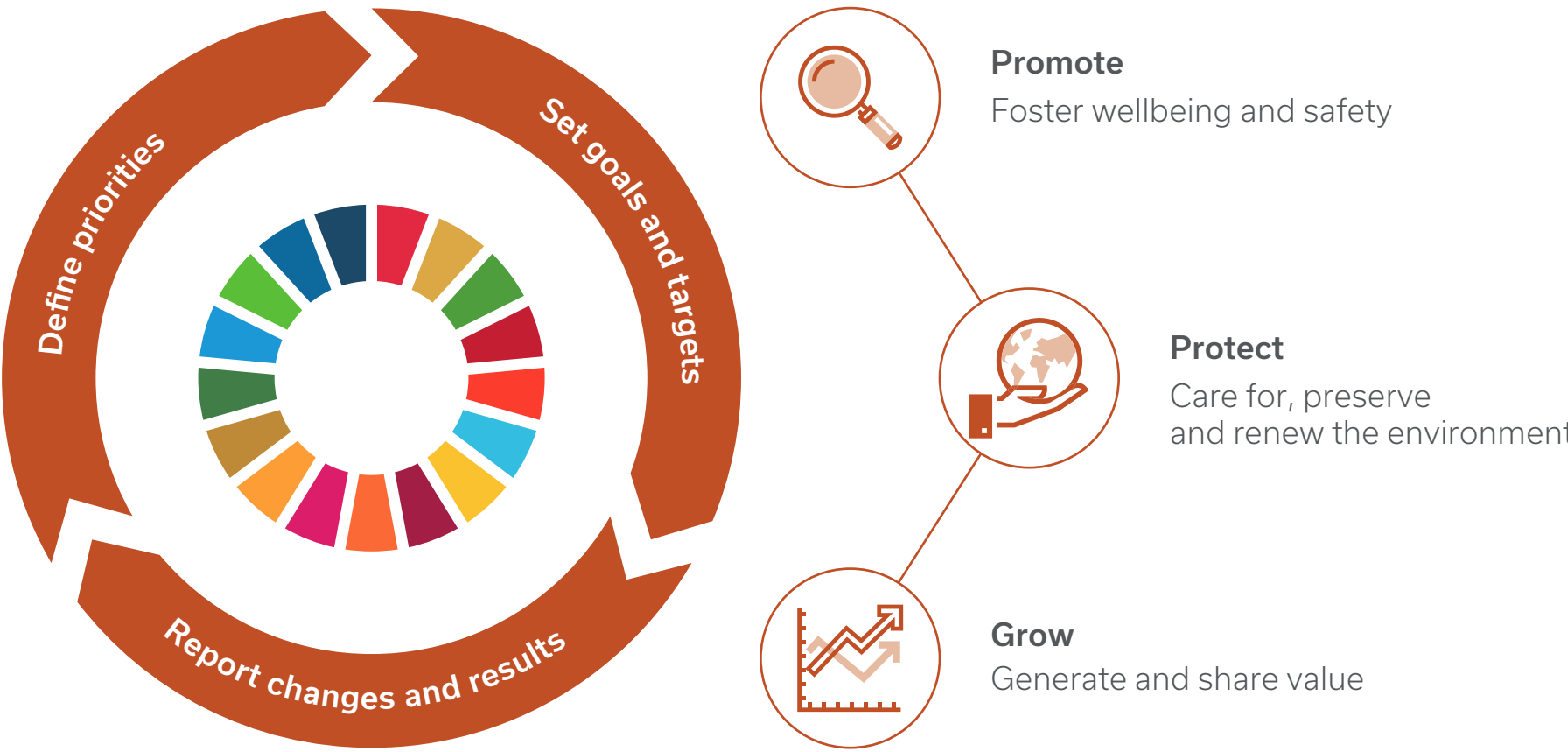
2.4 Sustainable Development Goals Contributions (SDGs)



Hospital in Toquepala, Mining Division, Peru

At Grupo México, our success is not measured solely by financial results, but also by our commitment to sustainability and our contributions to the United Nations Sustainable Development Goals (SDG). Since our last Sustainable Development Report, we have started to communicate our contributions to the SDG, following the recommendations [of the Practical Guide: Integrating the SDG into Corporate Reporting](#) prepared by the Global Compact and the Global Reporting Initiative.

We have used the [Mapping Mining to the Sustainable Development Goals: An Atlas](#), prepared by the United Nations, the World Economic Forum and the Columbia University Center for Sustainable Investment, among other institutions, to offer a general overview of our progress and the changes we have made in sustainable development. To organize our results, we used our Grupo México Development with Purpose framework, which divides our sustainability management into three key areas: Grow, Promote and Protect (for more information, consult the section on [Our Approach](#)).



Methodology for preparing the Report Practical Guide: Integrating the SDG into Corporate Reporting Global Compact and Global Reporting Initiative	Classification of results Mapping Mining to the Sustainable Development Goals: An Atlas Columbia University Center for Sustainable Investment
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2.3 Sustainable Development Goals Contributions (SDGs)


2.4.1
Setting Priorities

We prepare materiality analyses (consult [Sustainable Development Corporate Goals](#)) to identify and prioritize the topics with the greatest economic, environmental and social impact on our operations.


These materiality analyses are also informed by the shared value diagnostics that we prepare every two years in the communities near our operations. These diagnostics help us to identify the concerns and areas of interest of the local residents, and are a valuable tool for our community strategy. The diagnostics factor in linkage to the Sustainable Development Goals, in terms of targets and indicators, considering the risks associated with our operations and the benefits of major investments, from the perspective of community relations. For more information, consult the shared value diagnostics SDG linkage guide in [Annexes](#).

We have identified ten principal material topics for the three divisions of Grupo México, which helps us to prioritize our contributions to the SDG based on the positive impact that we generate in the community while reducing the risks and negative impacts of our activities.


These material topics are:




Climate Change




Water




Waste Management




Workplace Health and Safety




Biodiversity




Business Ethics




Our People



Local Communities



Responsible Production



Economic Performance

Our principal focus at Grupo México is to generate a positive impact on society. In support of this, we promote respect for human rights throughout the company, our value chain, and in our engagement with our neighbor communities and indigenous peoples. We make every effort to be good neighbors in the places where we operate and we strive to ensure the sustainable coexistence of our operations with the communities.

Grupo México also contributes to mitigating climate change with our offering of sustainable products and services in our three divisions, which include renewable energy, copper and efficient transportation. Additionally, we promote biodiversity conservation with projects like the Mexican gray Wolf conservation project in Mexico, and the Ite wetlands project on the southern coast of Peru.

We strive to minimize the potential negative impacts of our operations on the health and safety of our employees, the environment (including water), biodiversity, and mine waste management.

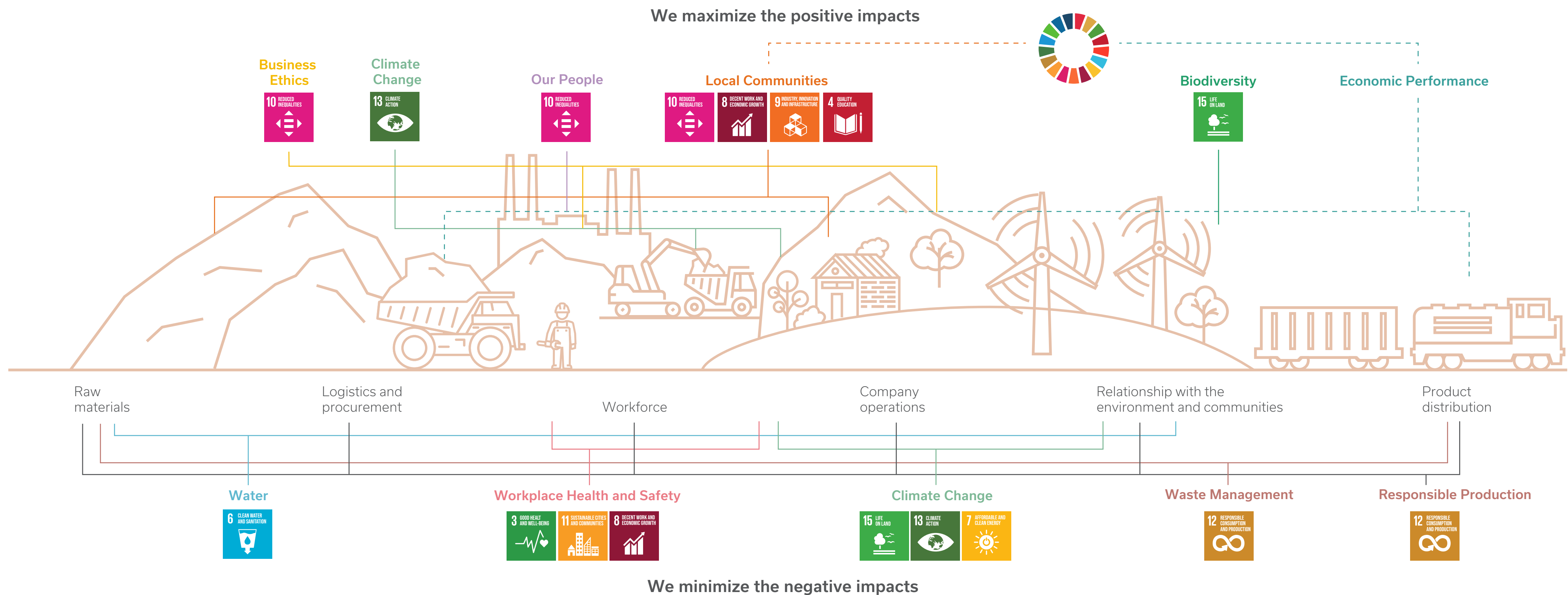
2.3 Sustainable Development Goals Contributions (SDGs)

Economical Contributions

Supply Chain Management

Investments in Sustainable Development

Contributions to the Sustainable Development Goals (SDG's)



2.4.2 Setting Targets

To organize and systematize our contributions to the SDG, we set 27 Sustainable Development 2022 Corporate Goals in 2018 to strengthen our organizational performance, aligned with the expectations of our stakeholders and in compliance with different regulatory frameworks and international conventions.

For details and the status of these goals and targets, consult the section on [Our Approach](#).

2.4.3 Progress and Results

We share our commitments and results for recent years in terms of the targets set, classified into the three pillars of our sustainable development strategy:

- **Promote** - Foster wellbeing and safety
- **Protect** - Care for, preserve and renew the environment
- **Grow** - Generate and share value

We will be sharing a detailed report with the Global Compact this summer, reporting the contributions of our Mining Division (AMC) to the SDG.

2.3 Sustainable Development Goals Contributions (SDGs)

Economical Contributions

Supply Chain Management

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Contributions to the Sustainable Development Goals (SDG's)



Promote - Foster wellbeing and safety

Organizational changes

- We have published the following policies, which guide our actions:
 - Workplace Health and Safety
 - Community Relations
 - Respect for the Rights of Indigenous Peoples and Communities
 - Human Rights
 - Diversity, Inclusion and Non-Discrimination
- We have implemented an Action Protocol with Indigenous Communities to guide our engagement with these communities.
- We created a diversity and inclusion working group at the Grupo México level to support sharing learnings between the three divisions and to define joint strategies.

Management of risks and negative impacts from our activities

- We reduced the lost time injury frequency rate for employees and contractors by 25% in the Mining Division and 15% in the Transportation Division.
- 63% of our Mining Division operations are ISO 45001 certified
- 75% of our Mining Division employees in Mexico are registered in preventive and detection programs for non-occupational health risk factors
- We have implemented a Behavior-Based Safety System at 12 (69%) of our Mining Division operations
- We have implemented a traffic management plan at all relevant operations in Peru, Mexico and the United States, which maintains ongoing improvement to detect areas of opportunity
- Our Transportation Division installed automatic gates at 62 crossings to prevent railroad accidents in urban and rural areas

Benefits for society and the environment

- We have implemented changes in our recruitment processes across the three divisions to promote the inclusion of women and respect for human rights.
- We invested in adapting facilities to address the needs of our women employees, primarily in Peru.
- We provided training on human rights and indigenous peoples to all Community Development personnel, which involved the Office of the United Nations High Commissioner on Human Rights in Mexico and the Peruvian Ministry of Culture.
- Our Community Care Service receives and handles grievances from external stakeholders near our operations; this service is available at all our sites and projects of our Mining and Infrastructure divisions in Mexico and Peru, and soon will be implemented in the United States and Spain.
- The academic performance of our company-sponsored schools is above the national averages in Mexico and Peru, particularly noting achievements in the areas of communications and mathematics.

2.3 Sustainable Development Goals Contributions (SDGs)

Economical Contributions

Supply Chain Management

Investments in Sustainable Development

Contributions to the Sustainable Development Goals (SDG's)



Protect - Care for, preserve and renew the environment

Organizational changes

- We have published policies:
 - Environmental
 - Tailings Systems
- We have published protocols on:
 - Biodiversity Management
 - Sustainable Water Management
 - Closure of Operations
- We have strengthened our organizational structures for biodiversity, water and climate change management at the corporate level.

Management of risks and negative impacts from our activities

- 88% of our Mining Division operations are ISO 14001 certified.
- We maintain current our systematic logging of water input and output volumes, and we also systematically monitor the groundwater levels of the water tables and the quality of our discharges.
- We have implemented biodiversity management plans, prepared according to the ICMM Guide to Good Practices at all our operations in Mexico, and will soon implement these plans at our operations with biodiversity relevance in Peru and the United States.
- We updated our analysis of risks and opportunities associated with climate change, the conclusions of which are reported in the section [Climate Change](#), aligned with the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD), which we also used to update our analysis of physical and transition risks.
- Our use of renewable electricity increased from 18.6% in 2019 to 22.6% in 2021, due to our IMMSA operations consuming renewable electricity from our El Retiro Wind Farm.
- We will increase our use of renewable electricity to 25% with the start of operations of our 168 MW Fenicias Wind Farm.
- We maintain current the safety reviews for all our active mine waste facilities.
- We have standardized the operation, maintenance and monitoring manuals for 77% of our mine waste facilities.

Benefits for society and the environment

- Our company nurseries have produced more than 20.8 million plants, reforesting more than 23,350 acres (9,450 hectares) of company land (primarily in Sonora and Coahuila) and in more than 20 states in Mexico, through the Grupo México Foundation program Mexicanos Sembrando.
- We received Wildlife Habitat Council (WHC) certification for the conservation efforts of our Buenavista del Cobre Wildlife Conservation Management Center (in Spanish, the UMA) in the gene recovery, behavioral rehabilitation and reintroduction of the Mexican Gray Wolf (*canis lupus baileyi*).

2.3 Sustainable Development Goals Contributions (SDGs)

Economical Contributions

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Grow - Generate and share value

Organizational changes

- We have started to implement sustainability assessments with suppliers and business partners.
- We have developed strategies to incorporate local suppliers into our supply chains.

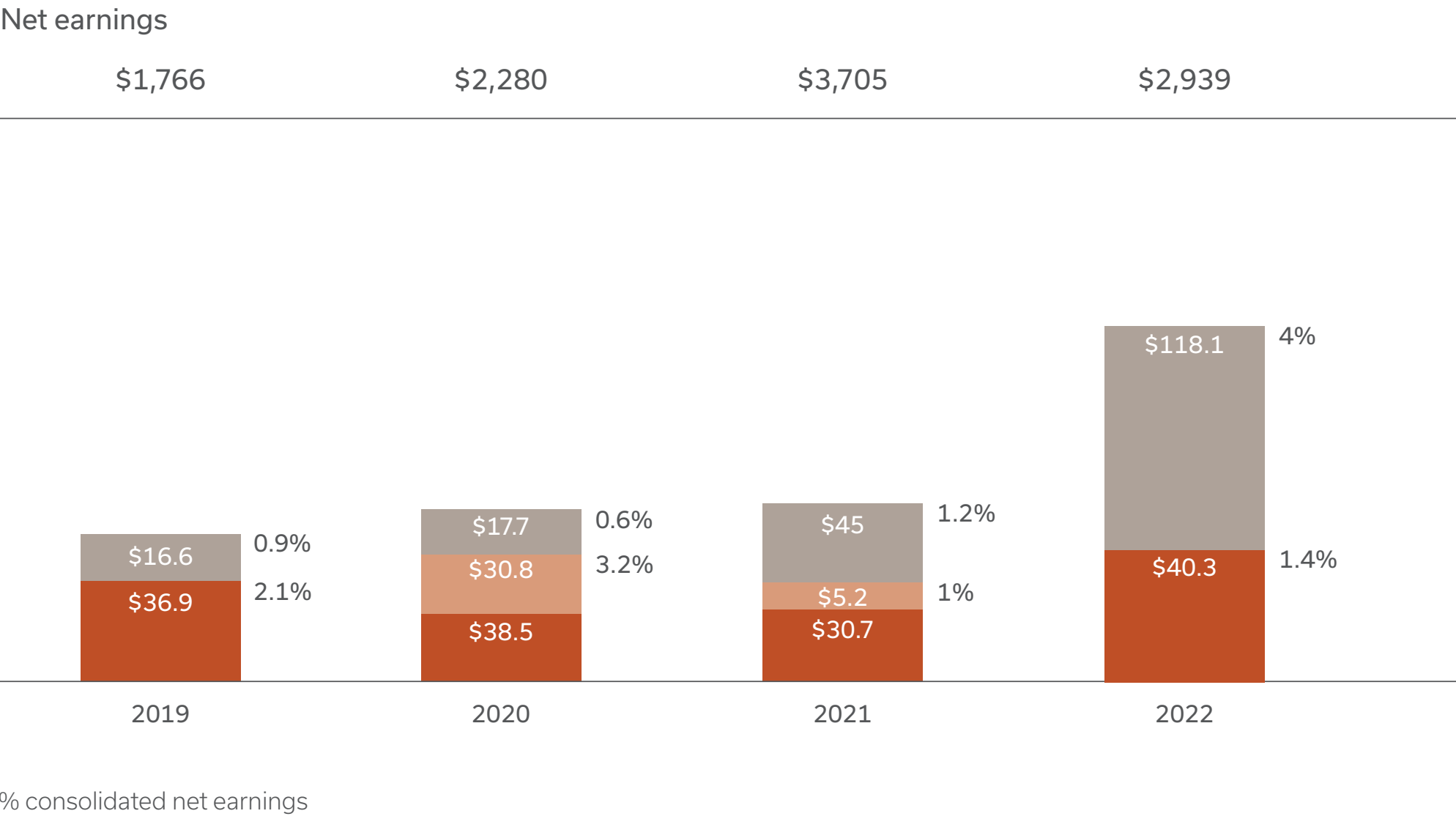
Benefits for society and the environment

- Our Forjando Futuro (Forging Futures) program supports the development of local small and medium suppliers at our Mining Division operations in Mexico and Peru.
- Over the last 4 years, we have invested nearly 3.5% (US\$379 million) of net earnings in projects and philanthropy that contribute directly to different SDG, prioritizing the development of the communities near our operations.

Report of contributions in the last 4 years

To report our contributions and progress on the target to “Invest at least 2.5% of net earnings in projects that contribute to the United Nations Sustainable Development Goals (SDG)”, since 2019, we have identified investments and spending that represent direct benefits for the communities, classifying these into the following categories:

Direct and Indirect Contributions to the Sustainable Development Goals (2019-2022)



SDG Contributions

Philanthropy

- Considers the budgets for:
- Community development programs
 - Schools
 - Development of local suppliers
 - Supports and donations
 - Grupo México Foundation programs

COVID-19

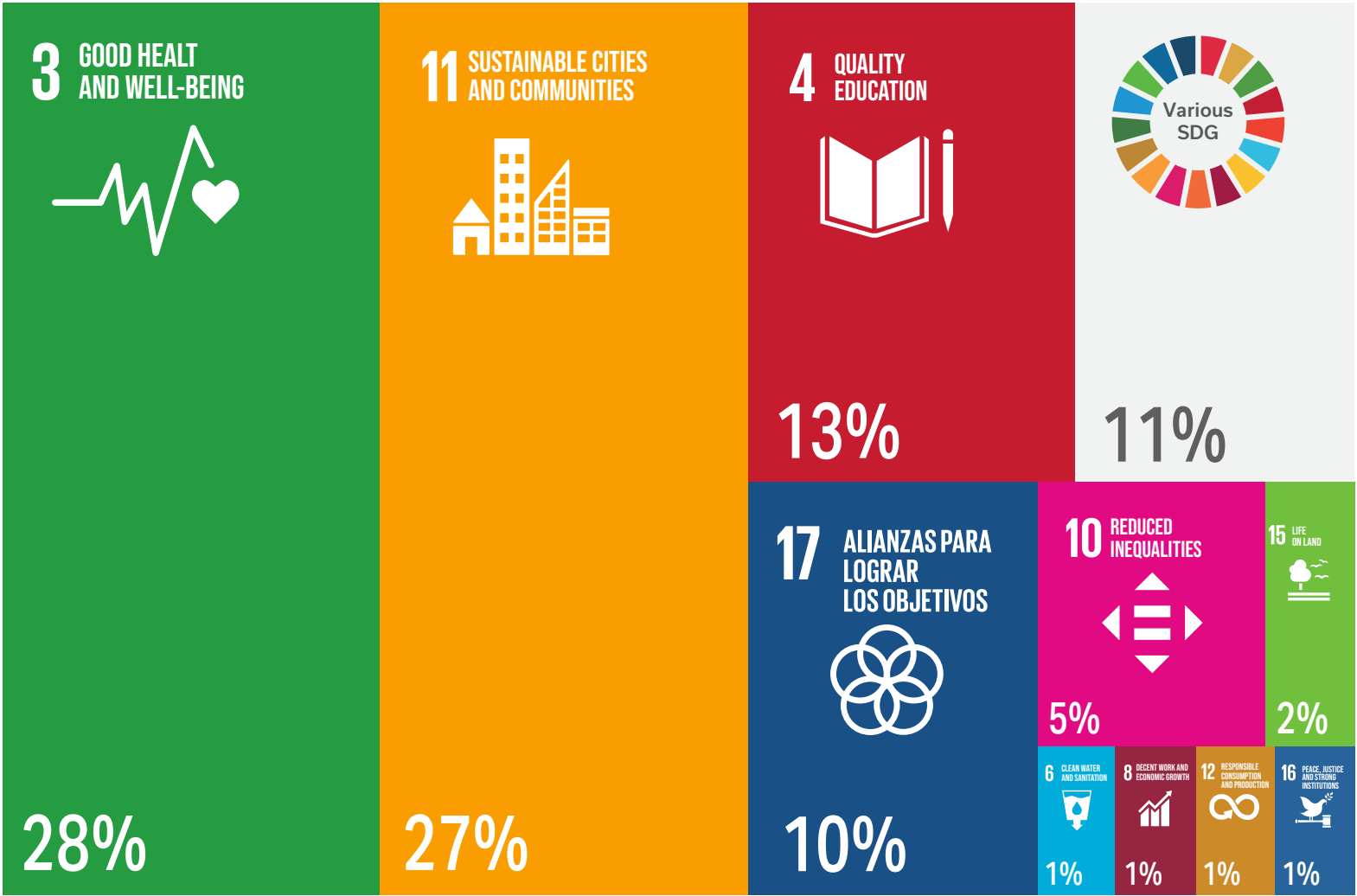
Investments

- Infrastructure in communities and SCC neighborhoods and schools
- Equipment and works in communities
- Railroad crossings

2.3 Sustainable Development Goals Contributions (SDGs)

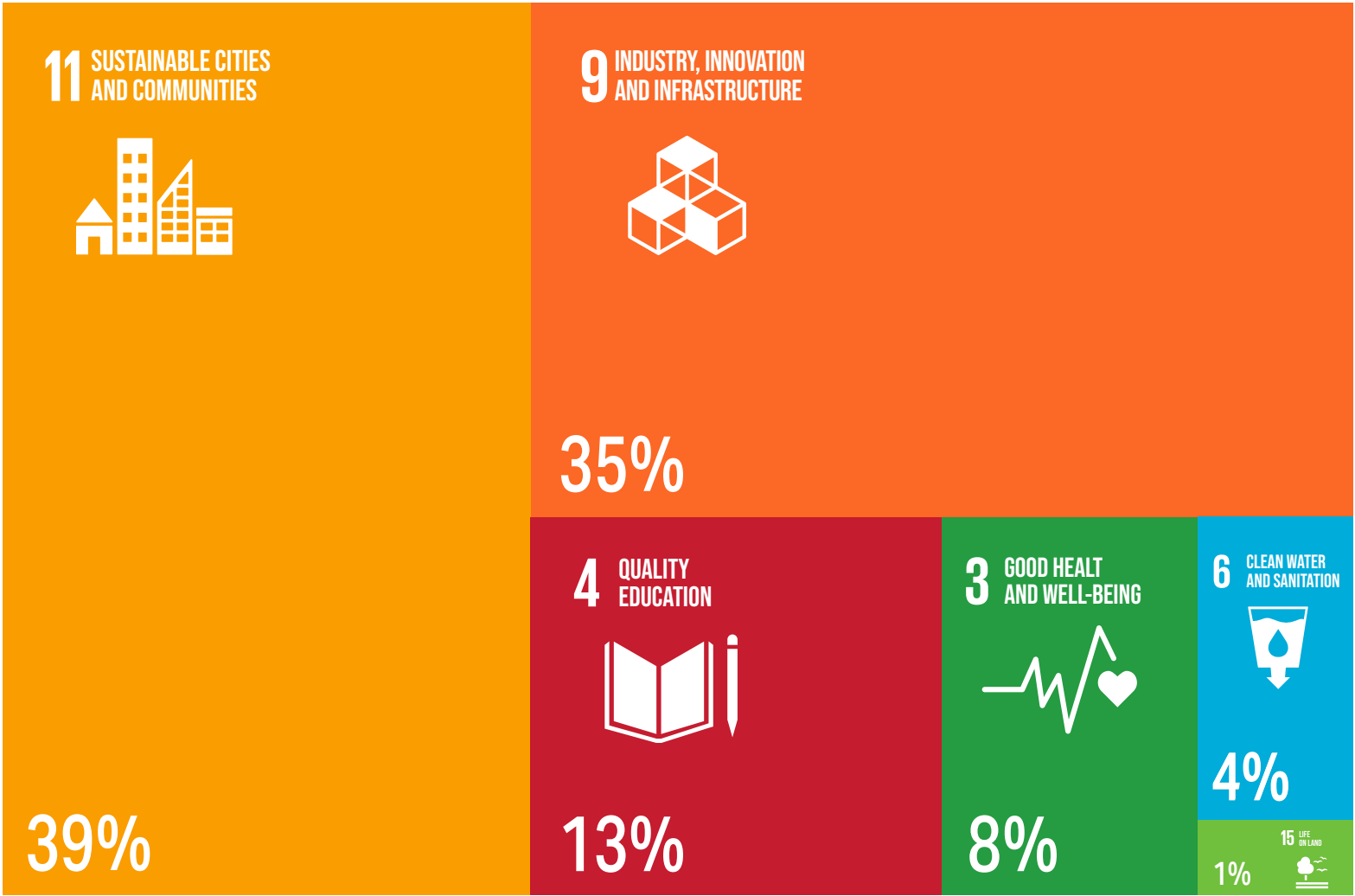
The percentages of distribution for each SDG in the last 4 years, by category, are show following:

Philanthropy



US\$182.5 million

Investments



US\$197.4 million

Since 2019, we have allocated approximately **US\$379.9 million** to fund social and philanthropic projects that support the SDGs in the communities near our operations. This represents, on average, 3.5% of our net earnings.

2.3 Sustainable Development Goals Contributions (SDGs)

To further understand the relationship between our investments and the SDG, we have identified the benefits generated by our different programs and projects, detailed following for each category:

Philanthropy		US\$ millions	
Benefits identified	Investments	182.5	
Promote health and sports, including supports and donations to face the COVID-19 pandemic	Dr. Vagón, The Health Train (Ferromex)	11.5	51.4
	Dr. Vagón (Escuchar Sin Fronteras) (Hearing Without Borders)	1.2	
	COVID	36.1	
	Social programs (health)	1.7	
	Social programs (sports)	0.6	
	Supports and donations (health)	0.3	
	Supports and donations (sports)	0.2	
	Supports and donations (safety)	0.0	
Access to housing and basic services, including the development of sustainable infrastructure in urban areas	Operating costs for SCC neighborhoods	35.6	48.4
	Supports and donations (infrastructure)	12.8	
Access to quality basic education and technical and professional skill development, with youth and adults	Operating costs for our Grupo México-sponsored schools	22.2	23.9
	Social programs (educational)	1.4	
	Supports and donations (education)	0.4	
Multiple benefits, noting social inclusion and fostering community engagement	Community development programs, community relations and productive projects	19.8	19.8
Support and creation of multiple alliances to strengthen social development	Supports and donations for institutions and organizations	16.8	18.6
	FGM institutional programs	1.3	
	Supports and donations (services)	0.5	
Strengthen social inclusion in the communities	Community programs (culture and inclusion)	1.4	10.6
	Operation of social programs in the communities	9.0	
	Supports and donations (culture)	0.2	
Combining efforts for the conservation and sustainable management of forests and terrestrial ecosystems	Community programs (environment)	4.7	4.7
Access to employment and opportunities, including the productive activities and entrepreneurship	Development of local suppliers	1.0	2.3
	Community programs (economic development)	1.2	
Promote volunteerism, inclusion, human rights and citizen participation	Community programs (volunteer and social participation)	1.3	1.7
	Supports and donations (volunteer and social participation)	0.4	
Access to clean water through the participation of the local communities in improving water management and sanitation	Supports and donations (water)	0.3	0.7
	Supports and donations (water infrastructure)	0.3	
Strengthen the sustainable management and efficient use of natural resources	Supports and donations (environmental protection)	0.5	0.5

2.3 Sustainable Development Goals Contributions (SDGs)

Investments

Benefits identified		Investments		US\$ millions	
				197.4	
Development of sustainable infrastructure in urban areas, including cultural and natural heritage protections	Urban and cultural infrastructure		76.1	77.6	
	Infrastructure in SCC neighborhoods		1.5		
Development of regional infrastructure in support of the economic development and wellbeing of communities	Infrastructure, equipment and works in communities		24.6	68.4	
	Regional infrastructure		43.8		
Construction and upgrades for schools to provide safe learning environments	Infrastructure for SCC schools		0.9	25.0	
	Educational infrastructure		24.0		
Infrastructure to reduce risks and accidents involving the railroad, and road safety in general	Railroad crossing signaling program		14.5	16.6	
	Safety infrastructure		1.5		
	Health infrastructure		0.5		
Support for the withdrawal, treatment and distribution of clean water in the local communities	Water infrastructure		8.9	8.9	
Infrastructure for the preservation and sustainable management of terrestrial ecosystems	Environmental infrastructure		1.0	1.0	

Considerations for the calculation

- Identifying the concepts and investments for the calculation of our contributions is strengthened with an ongoing improvement process reflected in each report. As a result, in 2021, we started to specify in more detail the contributions of our programs and investments in infrastructure at the organizational level.
- It is important to note that for the 2.5% of earnings target, we identified additional SDG to those specified as priorities for the organization, due to our Community Development and Grupo México Foundation programs and initiatives.
- We provided different supports and donations in response to the COVID-19 pandemic in 2020 and 2021.

Next steps

Continuing our commitments, we have diversified and set new corporate targets and initiatives, with new horizons for their achievement, aligned with the Sustainable Development Goals and related to the principal material topics at the Grupo México level and for each division.

For more information, consult the section on [Corporate Goals](#) in [Our Approach](#).

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3 Our Approach

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as the axis of our
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3.6
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3.1

Sustainability as the axis of our transformation

GRI 2-25, 3-1, 3-2

Acting in a responsible and transparent manner in social, economic and environmental aspects is essential to ensure sustainable development. At Grupo México, we’re committed to the United Nations Sustainable Development Goals (SDGs), the Paris Agreement, and the principles of the Global Compact. Through these and other actions, we affirm that caring for the environment, the fight against climate change and respect for human rights are at the center of our sustainability strategy.

Our mission, which defines our base purpose and reason for being, is to meet the needs of the markets in which we participate through large scale projects, without compromising the wellbeing of future generations. We’re committed to remaining on the cutting edge of technology and to maintaining an ongoing commitment to our people, the environment and society. Honesty and respect are the basis for our social responsibility as we generate maximum value for our shareholders. All this feeds our vision of being a global leader in efficiency and profitability, while caring for human development to guarantee the sustainability of our operations.

We are guided by our [Code of Ethics](#) and sustainability policies that include the principles of global and sector initiatives.

Our codes and policies guide our actions in environmental, social and governance (ESG) aspects, and apply to all employees, suppliers and contractors, in the three divisions of Grupo México:



Mexican wolf, Sonora, Mexico

- [Sustainable Development Policy](#)
- [Occupational Health and Safety Policy](#)
- [Environmental Policy](#)
- [Climate Change Policy](#)
- [Community Outreach Policy](#)
- [General Human Rights Policy](#)
- [Policy of Respect for the Rights of Indigenous Peoples and Communities](#)
- [General Policy on Diversity, Inclusion Non-Discrimination and Zero Tolerance for Workplace or Sexual Harassment](#)
- Anticorruption Policy
- Money Laundering Prevention Policy
- Personal Data Protection Policy
- [Code of Conduct for Business Partners](#)

3.1 Sustainability as the axis of our transformation

Additionally, the Mining Division has:

- [General Policy for Tailings Systems](#)
- Protocol for Biodiversity Management
- Protocol for Sustainable Water Management
- Protocol for the Closure of Operations
- Code of Conduct for Suppliers, Contractors and Relevant Commercial or Business Partners

Sustainability as the axis of our transformation

Material Topics for the Three Divisions

Sustainability Risk Management

Corporate Sustainable Development Goals

Stakeholder Engagement

ESG Assessments and Recognitions

Our Sustainable Development policy commits us to:



Guarantee a safe operation, prioritizing risk management



Provide a safe and healthy workplace environment



Promote a culture of ethics, diversity and inclusion



Build a culture of collaboration and respect in the communities near our operations



Foster ongoing improvement in our environmental performance



Operate with transparency; prevent and sanction corrupt actions



La Caridad mine, Sonora, Mexico

3.1 Sustainability as the axis of our transformation

Our sustainability management is driven by development with purpose, which is built on three pillars: Grow, Promote and Protect.

<div>GROW</div> <div>Create and share value</div>	<div>We invest to generate opportunities and prosperity, making us an engine for positive change for the economies in which we operate.</div> <div><ul style="list-style-type: none">• We ensure the continuity of the organization, adapting to the needs of our surroundings and the demands of responsible growth following ESG (Environmental, Social and Governance) criteria.• We strive to engage communities in growth by promoting employment and local supply.• We develop different initiatives that support the United Nations Sustainable Development Goals (SDGs) (for more information consult the section on Contributions to the SDGs).</div>
<div>PROMOTE</div> <div>Foster wellbeing and safety</div>	<div>We strive to be good neighbors, improving the quality of life of our people and that of the communities where we operate, supporting a more sustainable society.</div> <div><ul style="list-style-type: none">• We create safe working environments for our employees, and we operate to the highest standards of occupational health and safety.• We put the dignity of the individual at the center of everything we do, and build work environments where respect, diversity, inclusivity and non-discrimination are the norm.• We work to contribute to the common good of our neighbor communities, promoting active listening, collaboration and dialogue.• We respect and promote the human rights of our employees and the communities in which we operate.• We are allies of communities and local governments in emergency situations.• We promote and support a more sustainable society, together with our business partners.</div>
<div>PROTECT</div> <div>Care for, preserve and renew the environment</div>	<div>We believe that leaving a positive environmental footprint is the foundation of sustainable development.</div> <div><ul style="list-style-type: none">• We provide products and services that accelerate the transition to inclusive, low-carbon economies.• We operate responsibly and with a preventive approach.• We have adopted national and international environmental goals.• We have ongoing improvement processes to minimize our risks and ensure efficiency and the responsible use of raw materials, energy and water.• We contribute to the protection and conservation of the biodiversity in the environments where we operate.</div>



Collaborators of San Martín Unit, Zacatecas, Mexico

3.1 Sustainability as the axis of our transformation

Sustainability as the axis of our transformation

Material Topics for the Three Divisions

Sustainability Risk Management

Corporate Sustainable Development Goals

Stakeholder Engagement

ESG Assessments and Recognitions



Collaborators of Zinc Electrowinning Refinery, San Luis Potosí, Mexico

Our sustainability management is built on the following principles:



Transparency



We support the Extractive Industries Transparency Initiative (EITI). For more information consult the [Economic Contributions](#) section in Generating Shared Value .

This report analyzes our 2018-2022 ESG goals to contextualize our progress and to support and measure the ongoing improvement of our sustainability performance, constituting an exercise in transparency and accountability. We also use this report to present our new goals or targets in environmental, social and workplace health and safety aspects, affirming our commitment to continue improving every day (for more information consult the [Corporate Sustainable Development Goals](#) section).



Prevention



We focus on preventing unwanted events and, when such events do occur, we take action to curtail their impact. In this regard, we have developed a robust management system for sustainability-related risks and implemented a critical risk log mechanism (for more information consult the [Sustainability Risk Management](#) section in this chapter). This mechanism supports us to prevent and address risks more efficiently and systematically, ensuring that obstacles and controls are measurable and auditable, and that there is a clear assignment of tasks for action, supervision and verification.

In workplace health and safety, we have undertaken various initiatives to ensure more detailed controls. The principal actions in this area include audits and cross audits, traffic management plans, installation of anti-collision systems and behavior-based safety systems (for more information consult the [Occupational Health & Safety](#) section).

3.1 Sustainability as the axis of our transformation



La Caridad Unit, Sonora, Mexico

 <div>Adopting best practices</div>	<p>Guided by highly respected organizations, we are continually striving to adopt best practices in sustainability, like developing our environmental management (ISO 14001) and workplace health and safety (ISO 45001) systems. We are also guided by responsible practices in the mining and metals industry, promoted by the International Council on Mining and Metals (ICMM). Additionally, we align with risk management guides (for more information consult the Sustainability Risk Management section in this chapter), best practices in biodiversity (for more information, consult the Biodiversity section), and we have begun to formally adopt good practices in water management (for more information, consult the Water and Effluents section). We are also working to align with the Global Industry Standard on Tailings Management (for more information consult the Waste section).</p> <p>Americas Mining Corporation (AMC), our principal subsidiary, joined the United Nations Global Compact. With this commitment, the Mining Division affirms our interest in aligning policies, strategies and operations to the Ten Universal Principles of the Global Compact, covering human rights, labor rights, the environment, and anti-corruption.</p> <p>Adopting these best practices produces benefits such as increased occupational health and safety, improved environmental performance, greater efficiency, and increased productivity, while also reducing our costs and giving us a competitive advantage in the industry, among other benefits.</p>
 <div>Independent review</div>	<p>An independent third party verifies our sustainability reports under GRI reporting standards (for more information consult the Independent Assurance Report), adding additional transparency, assurance and reliability to our management and performance. This exercise also helps us to identify areas for improvement in environmental, social and governance aspects.</p> <p>We are also in the process of obtaining ISO 14001 (environmental management systems) and ISO 45001 (occupational health and safety) certifications for all our mine operations. Additionally, we have received The Copper Mark responsible production certification for two of our mine operations (for more information consult the Certifications in this chapter).</p>

3.2

Material Topics for the Three Divisions of Grupo México

GRI 2-25, 3-1, 3-2

Identifying, analyzing and prioritizing the material topics of the three divisions is a fundamental exercise that guides our sustainable development strategy. We align with the definition of the Global Reporting Initiative (GRI), which focuses on those topics that reflect the most significant economic, environmental and social impacts¹ on the company’s operations, being those that would influence the assessment and decisions of our stakeholders.

We also consider the Sustainability Accounting Standards Board (SASB) concept of materiality, which defines material sustainability issues as environmental, social, economic and institutional risks with potential economic effects on an organization.

The materiality analysis process is reviewed every two years and the most recent review was conducted in 2021. Our goal is to reflect in the materiality matrices for our three divisions the most recent changes in the global context and in the markets where we operate.



Identify

- Market and trend analyses to define material topics in the sectors and regions where our three divisions operate.
- Analysis of concerns raised by internal and external stakeholders, including key sustainable development frameworks and trends in our industries.



Prioritize

- Align and weight material topics with assessments and reporting frameworks.
- Set base values for the material topics.



Adjust and validate

- Group material topics.
- Validation by senior management.



Fenicias wind farm, Nuevo León, Mexico

¹ The definition of ‘impact’ we apply is that developed by GRI as “the effect an organization has on the economy, the environment or society, which in turn can indicate its contribution (positive or negative) to sustainable development.”

3.2 Material Topics for the Three Divisions



La Caridad waste deposit, Sonora, Mexico

Sustainability as the axis of our transformation

Material Topics for the Three Divisions

Sustainability Risk Management

Corporate Sustainable Development Goals

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ESG Assessments and Recognitions

The current materiality analysis gives greater consideration to the opinions of our internal and external stakeholders, and includes a detailed analysis of markets and trends in the sectors where we operate, represented by:

- S&P Global materiality maps, the Corporate Sustainability Assessment (CSA) and the Global Reporting Initiative (GRI) disclosure standards.
- Assessments by rating agencies and other initiatives, such as Sustainalytics, MSCI² , ISS (Institutional Shareholder Services), and RMI (Responsible Mining Index).
- International frameworks that present and analyze relevant ESG topics, such as those of the SASB (Sustainability Accounting Standards Board) and The Copper Mark, among others.
- Principles and positions of the ICMM (International Council on Mining and Metals), the UN Global Compact, and others.
- Frameworks or initiatives on specific material topics, such as the CDP (Climate Change, Water Security and Forestry), the CHRB (Corporate Human Rights Benchmark), the TCFD (Task Force on Climate-Related Financial Disclosures), and the EITI (Extractive Industries Transparency Initiative), among others.

The Mining and Infrastructure divisions conducted a survey with company personnel, suppliers and contractors, customers, and members of the communities near our operations, while the Transportation Division conducted an in-house study to identify key issues for the operation. Additionally, we developed an external analysis of media and digital news, which monitored the most relevant issues for our stakeholders. After cross-checking the data, each material topic was assigned a weight according to its relevance in both analyses and its position in the materiality matrix.

The results of the materiality analysis guide our environmental, social and governance (ESG) risk management systems and support building strategies to address and close gaps in priority areas. This analysis enables us to continue setting corporate goals and targets aimed at mitigating risks, fostering the ongoing improvement of our performance. The [Corporate Sustainable Development Goals](#) section reports our progress on the principal economic, environmental and social material topics.

² MSCI Inc., formerly Morgan Stanley Capital International and MSCI Barra.

3.2 Material Topics for the Three Divisions

Sustainability as the axis of our transformation

Material Topics for the Three Divisions

Sustainability Risk Management

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Materiality matrices for the three divisions of Grupo México

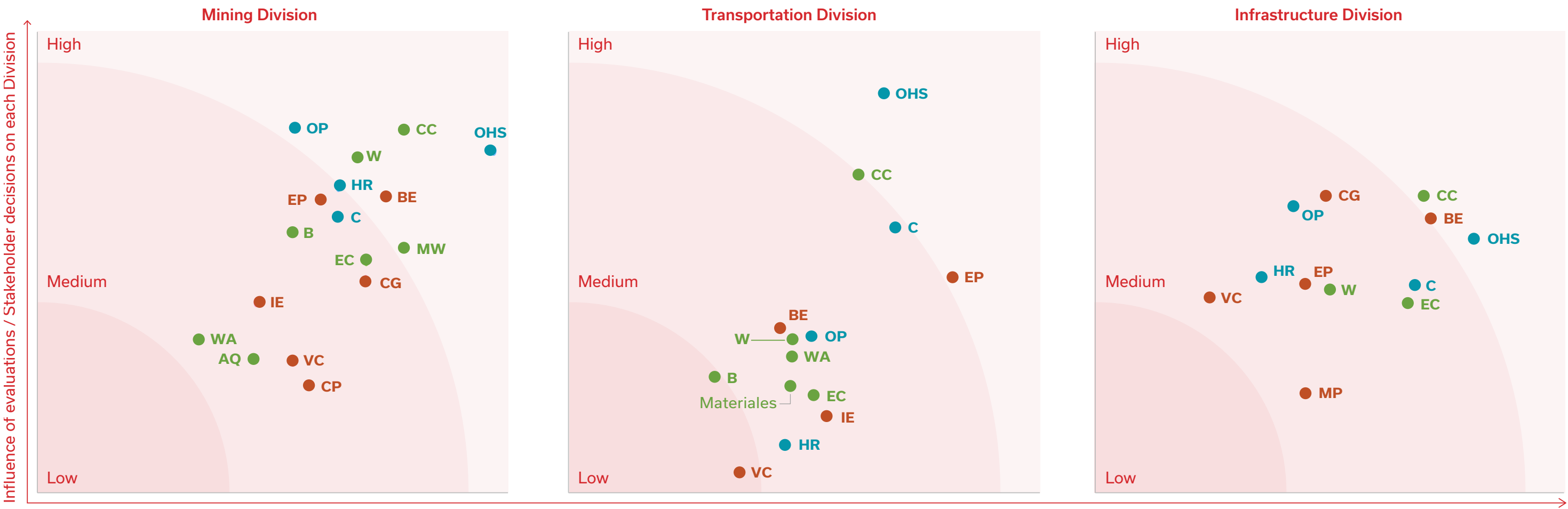
The materiality matrices for our three divisions: Mining³, Transportation and Infrastructure, include common material topics and others that are specific to each sector in which we operate. The 2021 - 2022 matrices show the priority material topics for each Grupo México division and for our stakeholders.

The most relevant topics in the materiality matrices for the three divisions are divided into the areas of environmental, social and governance as follows:

Environmental	Social	Governance & Economic Impact
W Water ⁴	C Local Communities ⁵	VC Responsible Value Chain ⁶
B Biodiversity	HR Human Rights	MP Market Presence ⁷
AQ Air Quality	OP Our People ⁸	EP Economic Performance
CC Climate Change ⁹	OHS Occupational Health and Safety	BE Business Ethics ¹⁰
EC Environmental Compliance		CG Corporate Governance
WA Waste		IE Indirect Economic Impacts ¹¹
MW Mining Waste		CP Closure Plans ¹²



Toquepala, Mining Division, Peru



³ The materiality matrix for the Mining Division includes our subsidiary SCC.
⁴ Includes subtopics: (i) Water management, and (ii) effluents.
⁵ Includes subtopics: (i) Local Communities; (ii) Rights of Indigenous Peoples, and (iii) Physical Safety.
⁶ Includes subtopic: (i) Management of the Supply Chain. For the Mining Division, also includes the subtopic: (ii) Responsible Production, referring to the products we sell.
⁷ Refers to the development and presence of local collaborators and suppliers.
⁸ Includes subtopics: (i) Diversity, Inclusivity and Non-Discrimination, (ii) Development of Human Capital, (iii) Labor Practices, and (iv) Attracting and Retaining Talent.
⁹ Includes subtopics: (i) GHG Emissions, and (ii) Energy.
¹⁰ Includes subtopics: (i) Unfair Competition, (ii) Anti-Corruption, and (iii) Political Influence.
¹¹ Refers to creating benefits in the regions where the company operates (for example, job opportunities, infrastructure development, etc.). In the case of the Mining Division, also includes the subtopic: (i) Market Presence.
¹² Material topic applicable only to the Mining Division.

3.2 Material Topics for the Three Divisions

Priority material topics for Grupo México

The following topics were identified as cross-cutting material topics in our three divisions:

- Occupational Health and Safety
- Climate Change
- Local Communities
- Our People
- Economic Performance

We have adopted a corporate management approach to mitigate the risks associated with these topics, unifying the vision, commitments and goals of the company through corporate policies applicable across all Grupo México divisions and subsidiaries, resulting in specific procedures for our different activities.

The execution of the sustainable development strategy is based on the results of the materiality matrices, and ensures the availability of information, resources and controls to manage the environmental, social and governance (ESG) risks for the organization and our stakeholders. The following section outlines the preventive approach the company implements to eliminate or mitigate risks.

Each chapter in this report presents the material topic from the overall perspective of Grupo México, outlining the particulars for each division. The material topics for each division are discussed in proportion to their level of materiality (high, medium and low).

Sustainability as the axis of our transformation

Material Topics for the Three Divisions

Sustainability Risk Management

Corporate Sustainable Development Goals

Stakeholder Engagement

ESG Assessments and Recognitions

Case study
Community materiality

The Mining Division (SCC) operations in Mexico and Peru, and the Infrastructure Division, conduct participative social diagnostics to mitigate the negative and maximize the positive impacts. These diagnostics help us to identify the concerns and areas of interest of our neighbor communities, and are updated every two years as part of our Community Development Model.

From the results of these diagnostics, we have identified the following related material topics:

Environment:

- Information on environmental management and perceptions of its impact.
- Water access and management.
- Development of energy projects for domestic use.

Social / Economic:

- Communication channels, attention to grievances and concerns.
- Health risks and impacts.
- Improving the quality of basic education.
- Public safety; risk and disaster prevention.
- Generating opportunities (work / supply).
- Infrastructure development in the communities.
- Gender equality.
- Relevant job skills training (farming, tourism, etc.).



Mining Division collaborator, Mexico

We will continue to update our diagnostics, aligning our corporate strategies and goals, to continue generating value for the company and for our neighbor communities.

For more information consult the Due Diligence with the Communities section in [Human Rights](#).

3.3

Sustainability Risk Management

GRI 3-3

Our risk management is based on a preventive, structured and sequential approach to managing the uncertainty associated with potential threats. We strive to prevent the occurrence and consequences of unwanted events through processes and actions to identify, assess, prevent, mitigate, and effectively monitor risks.

Because of our diversification in various industries, including mining, infrastructure and rail transportation, and with operations in Mexico, the United States and Peru, Grupo México is exposed to a wide range of physical risks that could affect people, the communities and the environment.

In environmental, social and governance (ESG) aspects, effective, and particularly timely, risk management is essential to guaranteeing the long-term sustainability of Grupo México and to reducing the negative impacts that our operations may have on the environment, society and the economy.

Our risk management of each material topic is addressed in the corresponding sections of this report, including internal and external risks, with special attention to respecting human rights.¹

3.3.1

Highlights

At Grupo México, we promote a culture and management with a focus on risk prevention. As part of this vision, we are committed to planning, designing, building and operating our operations responsibly, reducing to a minimum the risks to which our employees, the communities and the environment may be exposed. In 2022, Grupo México:

¹ For more information, consult the list of Grupo México's principal risks in our report to the [Mexican Stock Exchange](#) or the list of specific risks for the Mining Division in our [10-K](#) report.



Implemented a Critical Risk Log (in Spanish, RCC) in the Mining Division, informed by the International Council on Mining and Metals (ICMM) Good Practice Guide on Health and Safety Critical Control Management. This tool for managing the critical controls associated with our priority risks is considered the best practice for the sector and strengthens our sustainability risk management by focusing efforts and allocating resources intelligently to the controls that, due to their critical nature, must remain functional at all times because of their purpose and function.

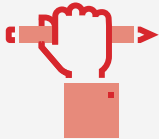


Formalized an internal management procedure for the Critical Risk Log, outlining the mechanisms, tools and persons involved in identifying, assessing and classifying the physical risks the company faces, and also to identify, assess, execute and verify the implementation of the highest priority critical controls for the Mining Division.



Established a Sustainability Risk Committee in our Mining Division, so that we now have this committee in place at all our divisions.

3.3 Sustainability Risk Management



Provided training on our critical controls management system, which is part of our Critical Risks Log. The experience of the mining industry shows that unwanted events generally occur when known controls for known risks are not implemented effectively. Therefore, 40 company employees received training in the method proposed by the ICMM Critical Control Management Implementation Guide to focus on those controls identified as critical.



Continued to align our company practices to manage climate-related risks. We report our risks and opportunities at the Grupo México level, following the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD). For more information, consult the section on [Climate Change](#).

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3.3.2 Governance

GRI 2-24

Our [General Sustainable Development Policy](#) commits us to guarantee a safe operation with an approach of risk prevention and management, and also to provide a safe workplace for our employees and contractors.

The Mining Division published its AMC Corporate Risk Management and Control Policy in 2021 to generate value and protect the organization by:



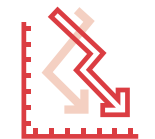
Gaining a competitive advantage



Preserving and improving our reputation



Facilitating an informed and timely decision-making process



Minimizing the impact and uncertainty around the strategic goals of the organization

Each of our divisions has a Risk Committee, reporting directly to the Internal Audit Committee, which is completely independent from the business and is made up of three independent board members (for more information, consult the section on [Corporate Governance](#)). These committees analyze and assess our risk management, evaluate and prioritize risks, and support our Executive leadership to define and update the policies and procedures that govern our Comprehensive Risk Management System. These committees report directly to the Board of Directors, which monitors and manages the company's risks, including those associated with productivity, human resources, supply chain, compliance, continuity of the business, information technologies, and ESG.

We follow a three lines of defense model for effective risk management and the control required to comprehensively mitigate the company's risks, while enriching the way we communicate our risk management and monitoring. This model provides the basis for effective corporate governance through the accountability of the different governance bodies, the actions of our Executive Leadership, and the assurance provided by Internal Audit.

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3.3 Sustainability Risk Management

➤ Our lines of defense work effectively with coordination, communication and collaboration to ensure these activities are aligned, without overlap, duplication or gaps, and without conflict or incompatibility.

²Based on the definition of the International Risk Governance Council (IRGC), emerging risks are "new risks or familiar risks that become apparent in new or unfamiliar conditions".



The **first line of defense** includes the heads of all the company areas and departments involved in the day-to-day operation of the business. Management personnel at our operations manages the operational risks and the Executive Leadership monitors their performance.



The second **line of defense** are the areas that support the first line, including the areas of Internal Control, Sustainability and Legal. The Integrated Internal Control Framework seeks to achieve our risk management goals and helps to fulfill the expectations of the different supervisory bodies.

The Sustainable Development departments of each division set the ESG risk strategy, following a preventive approach, and evaluate and manage these strategies together with the operational areas. Our ESG risk management includes identifying the associated hazards and risks, classifying these by probability of occurrence and the severity of potential damages (their materiality), defining and applying preventive and mitigation controls, and designing sustainability-based strategies to contribute to the continuity of the business. The Sustainable Development departments apply this approach to all their activities, including to: (i) develop policies that promote sustainable development; (ii) supervise and advise the operational and management areas on related issues; (iii) promote sustainable investments that generate economic growth balanced with impacts on the environment and the communities; (iv) protect the health and safety of our employees and contractors, the environment and our neighbor communities; (v) verify compliance with our regulatory obligations, and (vi) continually adopt national and international best practices.



The **third line of defense** is our Internal Audit department, which confirms adherence to policies and procedures, identifies weaknesses and recommend improvements. Internal Audit proactively and continually evaluates the controls associated with the risks identified and conducts audits with an ESG focus to validate the information and disclosure requirements, confirming the existence of all related documentation.

Meanwhile, the Board of Directors receives regular reports and provides oversight, seeking to mitigate and, where necessary, remediate the principal environmental, social and governance risks, including operational, labor-related, financial, accounting, legal and compliance risks, among others, and also emerging risks².

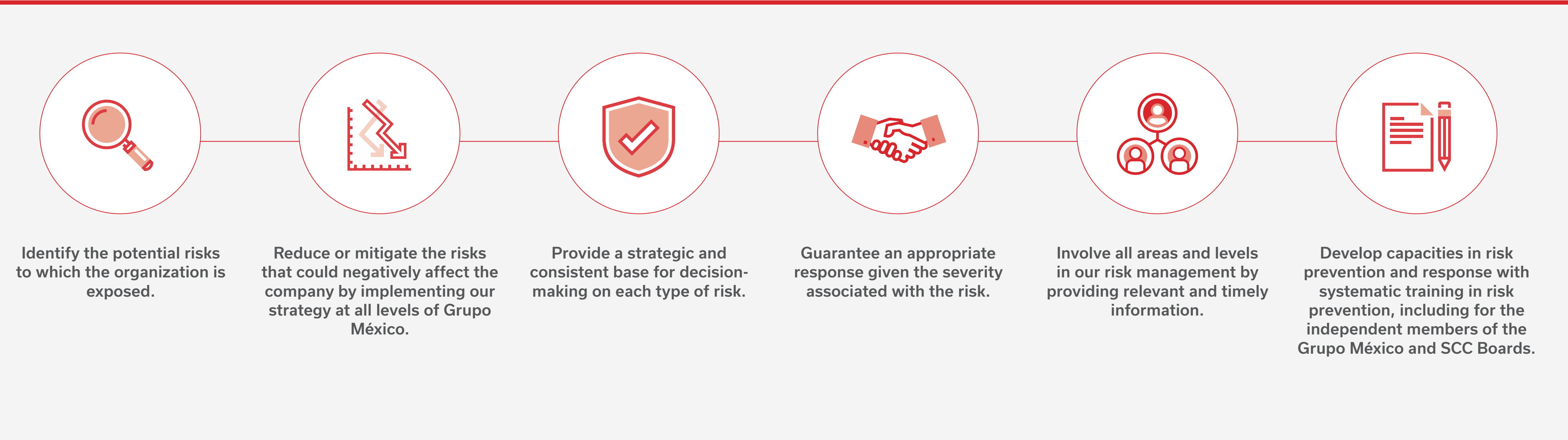
The Executive Vice-President of Grupo México is the highest ranking person with direct responsibilities associated with our sustainability risk management, including monitoring and audits.

3.3 Sustainability Risk Management

3.3.3
Strategy and Management
GRI 2-24

Effective risk management of environmental, social and governance aspects is fundamental to our business strategy and affirms our commitment to our employees, neighbor communities and the environment, while generating and preserving value in the company.

Applying best practices in identifying threats and assessing physical environmental and safety risks, we have implemented a systematized risk management process for significant unwanted events to ensure the corresponding critical controls have been implemented effectively. Our strategy is built on 6 pillars:





3.3 Sustainability Risk Management

To support the successful execution of our strategy at our mining operations in Mexico, Peru and Spain, our employee performance reviews include adherence to the Internal Control and Compliance framework set by the company, including our [Code of Ethics](#), and the policies and procedures that include aspects of risk management.

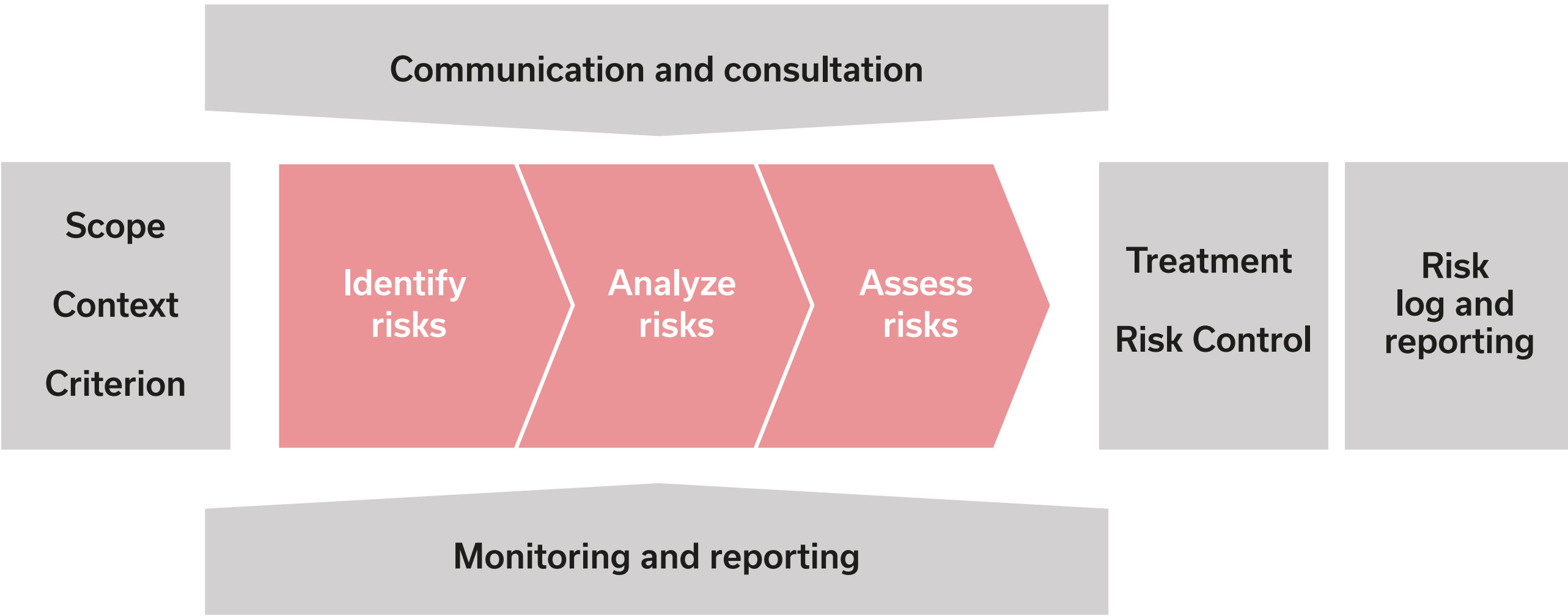
We also use different tools to support our employees to proactively identify and report potential risks throughout the organization. For example, we systematically promote the use of safe shift cards, our Hazard Identification, Risk Assessment and Control Measures tool (in Spanish, IPERC), and the near miss system for risks to worker safety. Additionally, we have a [reporting system](#) in place for other risks, such as those associated with legal compliance and rights.

The environmental management and workplace health and safety systems at our Mining and Infrastructure divisions provide important support for the ongoing improvement of our performance and to reduce the gaps in our risk management. In fact, the physical risks are identified, assessed and managed initially through our environmental management and workplace health and safety systems, most of which are ISO 14001 and 45001 certified.

	ISO 14001 - Environmental management systems
	ISO 45001 - Workplace health and safety management systems

ISO 31000 RISK MANAGEMENT FRAMEWORK

In terms of ESG, we complement the COSO³ framework with the ISO 31000 international standard on risk management. Our sustainability risk management aims to optimize the organization's capacity to identify, analyze and assess the environmental, social and governance risks and the opportunities. It also helps us to select and implement controls, and maintain these controls operational, avoiding the occurrence of the risks, and preventing or mitigating their consequences.



²The Committee of Sponsoring Organizations of the Treadway Commission (COSO) provides an internal control framework to identify and assess the risks that could affect the achievement of our business goals. Risks are prioritized by severity according to the defined risk appetite.

3.3 Sustainability Risk Management

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➤ Grupo México adopts best practices in sustainability risk management and promotes a culture of prevention.

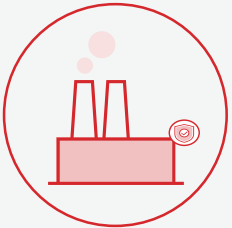
Our risk management seeks to:



Prevent avoidable material risks



Reduce material risks wherever possible



Contain the effects within our operations



Not increase the risks during emergency response

Our Critical Risk Log identifies critical risks based on criteria of probability and consequences, placing them on a heat map to prioritize those that could potentially have a major impact on our operations. The Log focuses on 16 groups of risks in health and safety and 4 environmental. We recently developed a company procedure and digital tool (S Platform) to manage the detailed monitoring of the controls more effectively, establish the roles and responsibilities, times, reminders and notifications, scaling up the chain of command, define corrective actions and their follow-up. Our S Platform measures, verifies and audits controls, identifying those that are not being implemented correctly or the thresholds that are being surpassed.



Collaborator of Buenavista del Cobre, Sonora, Mexico

3.3 Sustainability Risk Management

Sustainability as the axis of our transformation













Material Topics for the Three Divisions

Sustainability Risk Management

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Stakeholder Engagement


ESG Assessments and Recognitions


Critical risk log				
Group of environmental risks				
AA1	Release of chemical substances			
AA2	Release of acid drainage			
AA3	Contamination from fugitive dusts			
AA4	Handling mine waste			


In terms of human rights, our due diligence process forms part of our risk assessment processes to identify, prevent, mitigate and as necessary, remediate potentially adverse impacts on the human rights of both our collaborators and our neighbor communities.

Grupo México has a series of tools to apply a preventive approach that guarantees respect for the human rights of our employees (workplace climate surveys and the [Reporting Line](#)), the communities near our operations (Participative Diagnostics, Social Management Plans and the Community Care Service), our suppliers and contractors (due diligence processes during contracting and ongoing monitoring), and ensures adherence to the Voluntary Principles on Security and Human Rights (applying the policies and processes of the Security Department). For more information, consult the section on [Human Rights](#).

Critical risk log				
Group of workplace health and safety risks				
SST1	Improper operation of vehicles			
SST2	Pyrometallurgical explosions			
SST3	Rockfall			
SST4	Fall from height			
SST5	Electrocution			
SST6	Injuries from moving parts/machinery			
SST7	Explosion of pressurized containers			
SST8	Injuries from pulls and winches			
SST9	Increase of toxic gases and/or temperature			
SST10	Flooding inside the mine			
SST11	Sudden spread of fire			
SST12	Sliding slopes			
SST13	Explosives			
SST14	Collapse inside the mine			
SST15	Mass contagion			
SST16	Occupational disease			

 Underground mine

 Open pit mine

 Plant

3.3 Sustainability Risk Management

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3.3.4 Metrics and Targets

Our 2025 targets are:



Consolidate the Critical Risk Log. We are expanding this project to the Infrastructure and Transportation divisions. We will also provide additional training to identify, assess, handle and respond to the material risks identified and to link our risk management with the scenarios prepared for the emergency response plans.



Enhance our sensitivity analyses and stress tests on climate change and the quality and quantity of water (for more information, consult the section on [Climate Change](#)).



Develop and systematically maintain a training program on risk management for the independent members of the Grupo México and SCC Boards.



Develop an analysis of emerging risks that includes the potential impacts and mitigation actions.



Consolidate a risk culture within the company.



Zinc Electrowinning Refinery, San Luis Potosí, S.L.P.

3.4

Corporate Sustainable Development Goals

TCFD MYO-C

A core focal point of our sustainable development strategy is setting and communicating the principal metrics and goals that we use to assess our progress and promote ongoing improvement in our ESG performance, aligned with best practices, standards, and relevant initiatives in sustainable development for the industries in which we operate.

We are guided by the [materiality analysis](#) that we prepare for each division, in order to address the most relevant topics for our business and our stakeholders, while seeking to drive a significant improvement that is specific, measurable, attainable and relevant, within a defined time period.

Our sustainable development goals are closely aligned with the United Nations Sustainable Development Goals (SDG), which help us to increase our positive contribution to the society and the planet. The status of the goals and targets set in 2018 to be reached by 2022 is the following (except where we have set a new goal on having achieved the goal initially proposed).



Buenvista del Cobre, Sonora, Mexico

3.4 Corporate Sustainable Development Goals



Collaborator of Santa Bárbara Unit, Chihuahua, Mexico

2018 - 2022 Progress Report

Legend for the progress report:

✓

The goal has been met.

✗

The goal has not been met.

➔

The goal will require more time to be met.

Occupational Health and Safety			
2018 - 2022 Goal	<div>3 SALUD Y BIENESTAR</div> <div>8 TRABAJO DECENTE Y EMPLEO ECONÓMICO</div> <div>11 CIUDADES Y COMUNIDADES SOSTENIBLES</div>	Status in 2022	Performance
Zero fatalities.		✗	The Infrastructure Division met this goal. The Mining and Transportation divisions did not meet this goal. For more information, consult the section on fatalities occurred this year in Workplace Health and Safety.
Reduce the lost time injury frequency rate ¹ by 25% in the Mining Division .		✓	The goal was met. The lost time injury frequency rate decreased 25% for employees and 29% for contractors, compared with 2018. For more information, consult the section on our accident rates in Workplace Health and Safety .
Reduce the lost time injury frequency rate by 15% in the Transportation Division .		✓	The target was met. The lost time injury frequency rate decreased 21%, compared with 2018. For more information, consult the section on our accident rates in Workplace Health and Safety .
Implement a Behavior-Based Safety System in 75% of our Mining Division operations.		➔	We resumed this initiative in 2022, analyzing our operations in Mexico. The behavior-based safety system has been implemented and is in operation at 12 sites; reporting 40% progress at 1 other Mining Division site (69% of the total progress).
Obtain ISO 45001 certification ² for all Mining Division operations.		➔	63% of the total progress; the remainder of our operations are expected to receive their certification in 2023.
Register 100% of Mining Division personnel at our operations in Mexico exposed to (non-occupational) health risks in preventive health programs.		➔	We resumed our preventive health programs in 2022, with efforts focused on detecting risk factors. We report 75% progress on this goal for employees at our operations in Mexico.
Implement a comprehensive traffic management plan at all our open pit mines.		✓	The traffic management plans at our open pit operations in Peru, Mexico and the United States (Mission) were audited 2022, detecting areas of opportunity for ongoing improvement. Our Buenavista del Cobre operation is building new parking areas for mine trucks.
Install equipment at 40 level crossings to prevent accidents in urban and rural areas.		✓	By 2022, we have equipped 62 crossings with automated gates, under the project started in 2018, to upgrade the most dangerous crossings on our rail lines.

¹ Number of lost time injuries per 1,000,000 man hours.
² For more information, consult the section below on [Certifications](#).

3.4 Corporate Sustainable Development Goals



Community Attention Service, Mining Division, Mexico

Human Rights			
2018 - 2022 Goal	<div><div>8</div><div>TRABAJO DECENTE Y ECONOMÍA</div></div> <div><div>10</div><div>REDUCCIÓN DE LAS DESIGUALDADES</div></div>	Status in 2022	Performance
Develop initiatives to promote respect for human rights ³ in our company and with our major suppliers.	✓	A Taskforce on Diversity and Inclusion at the Grupo México level was created to share learnings and define a joint strategy for this topic area. Changes have been made to the recruitment processes of our three divisions to promote the inclusion of women and we continued to provide training and awareness on this topic. We have started adapting our facilities in Peru to meet the needs of women.	
Institutionalize the process for identifying and engaging with the indigenous communities near the Mining and Infrastructure division operations.	✓	We have a policy and a protocol in place on Grupo México engagement with indigenous communities in Mexico, Peru and the United States; also, we provided training on Human Rights and Indigenous Populations for all Community Development personnel, which involved the Office of the United Nations High Commissioner on Human Rights in Mexico and the Peruvian Ministry of Culture.	
Implement a mechanism for external stakeholders near our Mining and Infrastructure division sites to submit their grievances.	→	Our Community Care Service has been implemented at 100% of the operational sites and mine projects of our Mining and Infrastructure divisions in Mexico and Peru. The Service has been implemented at 1 ASARCO site, and we have started planning for its implementation at the Los Frailes project in Spain.	

Community Development			
2018 - 2022 Goal	<div><div>4</div><div>EDUCACIÓN DE CALIDAD</div></div> <div><div>9</div><div>INDUSTRIA, INNOVACIÓN E INFRAESTRUCTURA</div></div> <div></div>	Status in 2022	Performance
Invest at least 2.5% of net earnings in projects that contribute to the Sustainable Development Goals (SDG ⁴).	✓	Over the last 4 years, we have invested, on average, 3.5% (US\$378 million) of net earnings in projects and philanthropy that contribute directly to the SDG, prioritizing the development of the communities near our operations.	
All company-sponsored schools obtain academic results above their respective national averages.	✓	All our schools in Mexico and Peru reported academic performance above the national averages. 70% of students scored satisfactory or better in the areas of communication and mathematics.	
Implement an institutional program to develop small and medium local suppliers at our Mining Division operations in Mexico and Peru.	→	This program has been started in the Mining Division in Mexico and Peru, with the participation of 72 local businesses; preparations are underway to serve small and medium businesses in the communities where we operate, through a single point of contact. We also continued our trade skills training program in which 671 people from our neighbor communities participated, 36% of whom were women.	

³ For more information, consult the section on [Human Rights](#).
⁴ For more information, consult the section on [Contributions to the 2030 Sustainable Development Goals](#).

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Cuajone dam, Mining Division, Peru

⁵ We define baseline as the calculation of water inputs and outputs at each operation throughout the year.
⁶ Refers to the groundwater level of the water tables.

Environmental Management			
2018 - 2022 Goal	Status in 2022		Performance
Obtain ISO 14001 certification for 100% of our Mining Division operations	→	We report 88% progress; the remainder of our operations are expected to receive their certification in 2023 .	

Water			
2018 - 2022 Goal	Status in 2022		Performance
Update the water baseline ⁵ analysis for all Mining Division operations.	2022	✓	We systematically log the water input and output volumes at all operations; therefore, this goal continues to be met.
Systematically monitor operations and impacts on the watersheds and water tables in high water stress zones that supply the operations of the Mining Division ⁶ .	2022	✓	According to the Aqueduct Water Risk Atlas tool, 14 of our Mining Division operations are located in high water stress zones in Mexico, Peru and the United States. We systematically monitor the groundwater levels of the water tables and the quality of our discharges at these and all other operations; therefore, this goal continues to be met.
Submit the CDP water report and improve our score.	2022	✓	We submitted the CDP Water Security questionnaire for the first time this year and received a “B” rating, the third best score on an 8-level scale.

Biodiversity			
2018 - 2022 Goal	Status in 2022		Performance
Biodiversity management plans implemented at all our mining operations.	2022	→	We have implemented biodiversity management plans, prepared according to the ICMM Guide to Good Practices , at all our operations in Mexico and we have started the plans for our operations with biodiversity relevance in Peru and the United States. We have completed the biodiversity diagnostics for these plans.
Guarantee the production of 5 million trees per year and join efforts with reforestation organizations.	2022	✓	Our company nurseries produced over 5.8 million plants in 2022, and we reforested 4,084.5 acres (1,653 hectares) with 1,637,417 plants, exceeding, for the second year in a row, the area affected by our operations (553.5 acres (224 hectares)).
Certification for at least one positive net impact biodiversity conservation project.	2022	✓	We received the Wildlife Habitat Council certification for our conservation efforts at our Buenavista del Cobre Wildlife Conservation Management Center (in Spanish, the UMA) in the gene recovery, behavioral rehabilitation and reintroduction of the Mexican Gray Wolf (<i>canis lupus baileyi</i>).

3.4 Corporate Sustainable Development Goals



El Retiro wind farm, Oaxaca, Mexico

Climate Change				
2018 - 2022 Goal	<div><div>7 ENERGY AFFORDABLE AND CLEAN ENERGY</div><div>13 ACTION ON CLIMATE</div></div>		Status in 2022	Performance
Update our analysis of risks and opportunities related to climate change.	2022	✓	The principal conclusions of this analysis are reported in the section Climate Change , aligned with the recommendations of the Task Force on Climate-Related Financial Disclosures (TCFD), which we used to update the analysis of physical and transition risks.	
Increase the use of renewable electricity in the organization to 25% .	2022	→	The use of renewable electricity increased from 18.6% in 2019 to 22.6% in 2021. This increase was due to our IMMSA operations consuming renewable electricity from our <i>El Retiro</i> Wind Farm. However, the percentage decreased to 19.8% in 2022 due to our Zinc Refinery ceasing to consume electricity from this supply source. The start of operation of the 168 MW Fenicias Wind Farm in 2023 will support us to meet this goal.	
Reduce the Mining Division greenhouse gas emissions intensity by 5% .	2022	✗	The emissions intensity was 3.7 tCO2e/tCu in 2022, the same as reported for 2019; therefore, we have not achieved the target reduction of 5%.	

Mine Waste (tailings)				
2018 - 2022 Goal	<div>12 RESPONSIBLE CONSUMPTION AND RESPONSIBLE PRODUCTION</div>		Status in 2022	Performance
Implement a policy and standards for safe management of mine waste facilities.	2022	✓	We have implemented a system to monitor compliance with the Policy at all active Mining Division tailings dam; therefore, the goal has been met.	
Update the safety assessments for all active mine waste facilities.	2022	✓	All facilities have a current safety review.	
Standardize the operation, maintenance and monitoring manuals for all mine waste facilities.	2022	→	In progress. Only two mine waste facilities remain pending (of a total 9).	

3.4 Corporate Sustainable Development Goals

New short and medium term goals

We present our new goals in the short, medium, and long term with a general focus at Grupo México level and for each of our divisions concerning our main material issues. Within each material topic sections of this report, additional goals with a more specific focus for each topic may be found, as the case may be.

Cross-division goals				
#	Goal	Metric	Base year	Target year
1	Occupational Health and Safety			
1.1	Zero major or fatal accidents.	# major or fatal accidents incurred by employees and/or contractors	2020	Annual
2	Diversity and Inclusion			
2.1	Increase the number of women in the total workforce 1-2% each year from 2022 to 2025.	7.5% of our total workforce are women	2022	2025
3	Climate Change			
3.1	Reduce GHG operational emissions (Scope 1 and 2) by 15% at the Grupo México level.	tCO2e	2018	2027
3.2	Reduce GHG operational emissions (Scope 1 and 2) by 35% at the Grupo México level.	tCO2e	2018	2035
3.3	Zero net Scope 1 and 2 GHG emissions at the Grupo México level.	tCO2e	2018	2050
3.4	Increase the use of renewable electricity from renewable sources by at least 25% .	%	2022	2027
3.5	Increase the use of Grupo México renewable electricity from renewable sources to 50%.	%	2022	2035
3.6	Implement a climate risk adaptation plan at all our vulnerable facilities.	Planes implementados / total de unidades vulnerables	2023	2025
4	Community Development			
4.1	Of the total investment amount that Grupo México allocates each year to projects that contribute to the Sustainable Development Goals (2.5% net earnings), allocate 60% to water, health, education, cultural heritage, and resilience to climate change initiatives in our neighbor communities.	% investment	2021	2030

3.4 Corporate Sustainable Development Goals

Sustainability as the axis of our transformation

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Mining Division				
#	Goal	Metric	Base year	Target year
1	Occupational Health and Safety			
1.1	Zero major or fatal accidents.	# of major or fatal accidents incurred by employees and/or contractors	2020	Annual
1.2	Evaluate the job-related skills and competencies for all AMC personnel, giving priority to personnel whose work is considered at high risk for potential incidents.	Personnel evaluated and approved / Personnel exposed to high risk for potential incidents	2023	2025
1.3	Maintain all our Mining Division certifications .	Improvement actions implemented and completed / improvement actions identified	2023	2030
1.4	Reduce work-related injuries by 70% at all Mining Division operations.	# of work-related injuries	2023	2030
1.5	Reduce work-related illness by 70% at our AMC operations.	# of collaborators with work related illness,	2023	2030
1.6	Register 100% of employees in health prevention programs at our Mining Division operations in Mexico.	Personnel at risk / total workforce vs Personnel registered in preventive programs / personnel at risk	2022	Anual
1.7	Update 100% of our Emergency Response Plans at AMCthe Mining Division level.	Plans reviewed / updated	2023	2024
1.8	Integrate 100% of the 100% of contractor companies withof high risk activities into our AMC safety programs and management systems of the Mining Division.	Companies integrated / total eligible companies	2023	2026
1.9	100% AMC of the Mining Division safety and hygiene personnel certified in Comprehensive Safety and Risk Prevention.	All safety personnel / all certified personnel	2023	2030
2	Diversity and Inclusion			
2.1	Increase the number of women in the total workforce by 2% each year from 2022 to 2025.	% women in the workforce	2022	2025

3.4 Corporate Sustainable Development Goals

Sustainability as the axis of our transformation

Material Topics for the Three Divisions

Sustainability Risk Management

Corporate Sustainable Development Goals

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Mining Division				
#	Goal	Metric	Base year	Target year
3	Community Development			
3.1	Increase the local/indigenous workforce by 10%.	% of local personnel hired	2021	2030
3.2	Increase the local suppliers by 20% for the Mining and Infrastructure divisions.	% of local suppliers	2021	2030
3.3	Implement at least 6 mechanisms for active participation, engagement and communication with the local and indigenous communities, with a focus on Human Rights, at 100% of our Mining Division sites.	# mechanisms implemented per site (CCS, participative diagnostics, channels of communication, community committees, perception studies)	2022	2030
3.4	Reduce educational, health and infrastructure gaps, as well as increase the social capital of the communities where we operate.	% of reduction in gaps	2022	2030
3.5	Position our 11 company-schools in the top quintile nationally for mathematics and Spanish.	# position of our schools	2023	2030
4	Climate Change			
4.1	Reduce GHG operational emissions (Scope 1 and 2) by 10%, at the AMC level ⁷ .	tCO ₂ e	2018	2027
4.2	Reduce GHG operational emissions (Scope 1 and 2) by 40%, at the AMC level.	tCO ₂ e	2018	2035
4.3	Zero net Scope 1 and 2 GHG emissions, at the AMC level.	tCO ₂ e	2018	2050
4.4	Increase AMC renewable electricity usage from renewable sources by at least 25%.	%	2022	2027
4.5	Increase AMC renewable electricity usage from renewable sources to 50%.	%	2022	2035
4.6	Reduce greenhouse gas emissions intensity by 20%. (AMC)	%	2022	2027
4.7	Reduce greenhouse gas emissions intensity by 50%. (AMC)	%	2022	2035
4.8	Implement a climate risk adaptation plan at all our vulnerable sites. (AMC)	Plan implemented per vulnerable sites	2023	2025

⁷The Scope 1 and 2 GHG operational emissions reduction targets at the Grupo México level are included in the section on Climate Change.

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Mining Division				
#	Goal	Metric	Base year	Target year
5	Biodiversity			
5.1	Restore an area greater than that affected by our Mining Division operations each year.	Area restored / Area affected	2021	Annual
5.2	Report the biodiversity status of the areas around our Minera México operations located in high biodiversity value zones, through ecological integrity assessments.	# operations with ecological integrity assessment / # of operations located in areas with high value for biodiversity	2022	Annual
5.3	Biodiversity management plans at all our Mining Division operations.	# operations with biodiversity management plans / total operations at biodiversity-relevant areas	2021	2023
5.4	Offset the net biodiversity loss; achieve positive net impact for the Mining Division.	# operations with improved ecological integrity / # of operations located in areas with high biodiversity value.	2022	2030
6	Water and Effluents	Personal en riesgo/ total de plantilla vs		
6.1	Detailed water balances for each site, updated annually.	Number of balances / number of sites	2022	2030
6.2	Contribute to recharging water tables at the river basins and watersheds where our operations are located.	Millions m³	2022	2028
6.3	Active participation in the governance of the river basins and watersheds where we operate.	River basin committees where we participate	2022	2025
6.4	Detailed monitoring of the conditions of priority watersheds where we operate.	Watersheds monitored / total watersheds	2022	2024
6.5	Reduce freshwater consumption per production unit by 5%, compared with 2022.	m³ / ton crushed ore	2022	2030
6.6	Increase reuse of process water to 83%.	(Water recirculated / water consumed) x 100	2022	2030
6.7	Increase use of waste, treated or desalinated water at our operations to 10% of our total freshwater consumption.	(Wastewater / water consumed) x 100	2022	2030

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Sustainability as the axis of our transformation

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Mining Division				
#	Goal	Metric	Base year	Target year
7	Mine Waste (tailings)			
7.1	Full compliance with the General Tailings Systems Policy.	# tailings systems in full compliance with the policy / # total tailings systems	2022	2025
7.2	Updated closure plans at all our active tailings dams.	# active tailings dams with updated closure plans / # active tailings dams	2022	2025
7.3	Closure of all inactive tailings dams, heaps and piles, in accordance with best practices.	# inactive mine waste facilities closed / # inactive mine waste facilities	2022	2030
7.4	Global Industry Standard on Tailings Management implemented at all our tailings facilities.	# operations aligned with this standard / # total operations	2022	2030
8	Supply Chain			
8.1	Have an independent certification of our purchasing process.	Whether or not we have a certificate	2023	2024
8.2	Have a due diligence process for critical suppliers, including ESG criteria.	% of critical suppliers that have a due diligence process	2023	2024
8.3	Include carbon footprint criteria in the decision criteria for main supplies and equipment.	Whether or not carbon footprint criteria are included	2023	2024

Infrastructure Division				
#	Goal	Metric	Base year	Target year
1	Occupational Health and Safety			
1.1	Zero fatalities of employees and contractors	# fatalities/internal staff and contractors	2019	2025
1.2	Reduce our lost time injury frequency rate by 40%	# of accidents/ HH worked	2019	2025
1.3	Increase preventive health programs and monitoring for vulnerable personnel by 30%.	# of total annual programs	2022	2025
1.4	Monitor the health of vulnerable personnel in health issues	Personnel in risk/total staff	2022	2025
1.5	ISO 45001 for our 5 active lines of business.	International certification by business line	2020	2025
1.6	Align 100% of the organization with the <i>Centinela de la Seguridad</i> program, focused on changing behaviors.	% Business units	2022	2025

3.4 Corporate Sustainable Development Goals

Sustainability as the axis of our transformation

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Infrastructure Division				
#	Goal	Metric	Base year	Target year
2	Human Capital, Diversity and Inclusion			
2.1	Increase the number of women in the total workforce by 0.8% each year from 2022 to 2025.	% women in our workforce	2022	2030
2.2	Great Place To Work certification for our five lines of business.	# lines of business / international certification	2022	2025
2.3	Increase training hours by 20%.	# training hours	2022	2025
3	Community Development			
3.1	Implement at least six mechanisms for community participation, care and communication in each of the sites where we operate. (Community Care Service, participatory consultation diagnoses, transparent communication of various operational stages, collaborative citizen committees, perception studies and multisectoral regional development plans).	# implemented mechanisms / total target mechanisms	2022	2030
3.2	Reduce educational, health and infrastructure gaps, as well as increase the social capital of the communities where we operate.	% gap reduction	2023	2030
4	Supply Chain			
4.1	Certify the purchasing process through ISO 20 400.	International certification	2022	2030
4.2	Evaluate ESG indicators for 40% of our critical suppliers	# critical suppliers	2022	2025

3.4 Corporate Sustainable Development Goals

Sustainability as the axis of our transformation

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Infrastructure Division				
#	Goal	Metric	Base year	Target year
5	Business Ethics			
5.1	Disseminate the Code of Ethics to 100% of the organization.	# employees	2022	2025
5.2	Certify the compliance system with ISO 37 301.	Infrastructure Division level	2022	2025
5.3	Human rights training for 90% of personnel.	# employees	2022	2025
5.4	Anti-corruption training for 90% of personnel.	# employees	2022	2025
5.5	Close complaints and reports in less than 35 days.	# days investigation	2022	2025
6	Biodiversity			
6.1	Increase to 30% the individuals reforested voluntarily and maintain 80% of the survival rate.	# individuals reforested	2022	2025
7	Water and Effluents			
7.1	Reuse 20% of discharge water in other productive processes.	m³ discharge water	2022	2025
7.2	Map our operations in high water stress zones and the mitigation of the associated impacts	# operations at water stress river basins or watersheds	2022	2025
8	Spills and Waste			
8.1	Reuse 80% of hazardous waste in other productive chains.	# tons reincorporated/ # total tons	2022	2025
8.2	Reuse 50% of waste requiring special handling	# tons reincorporated/ # total tons	2020	2025
8.3	Zero spills affecting ecosystems, in accordance with Mexican legislation.	# spills 1m³ or more	2020	2025
8.4	Update our critical prevention processes and environmental spill response protocols.	# operations / # critical operations	2020	2025

Transportation Division				
#	Goal	Metric	Base year	Target year
1	Occupational Health and Safety			
1.1	Reduce our lost time injury frequency rate by 20%.	Lost time injury frequency rate	2021	2025
1.2	Reduce our reportable workplace incidents by 20%.	Number of reportable workplace incidents	2021	2025
1.3	Reduce incidents at level crossings by 15%.	Number of incidents at level crossings	2021	2025
2	Diversity and Inclusion			
2.1	Increase the number of women in the total workforce by 0.7% each year from 2022 to 2025.	Total number of women in the organization	2021	2025
3	Climate Change			
3.1	More than 60% electricity consumption from renewable sources for our operations in Mexico.	% renewable electricity consumption / total electricity consumption in Mexico	2021	2025
3.2	Reduce Scope 1 emissions by 15%.	tCO ₂ e	2021	2025
3.3	Reduce fuel consumption by 10%.	Gj	2021	2025

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GRI 2-28, 2-29, 2-30

Grupo México has operations in Mexico, Peru and the United States, and given the nature of our businesses and industries, communication must be transparent and efficient with our shareholders, investors, employees, unions, communities, customers, suppliers, commercial partners, sector and industry chambers, governments, and the media, paving the way for accountability and co-responsibility.

Our business strategy is based on social, environmental and economic sustainability, taking into account the needs, circumstances and concerns of our stakeholders.

All company divisions map our stakeholders according to our industries to gain an accurate understanding of the stakeholders with which we interact and foster positive relationships delivering benefits for both our stakeholders and the company. The materiality studies we prepare periodically support us in setting our priorities in sustainability management and to assess the risks that could have a material impact on our company. All our materiality studies have involved direct and indirect engagement with Grupo México’s external stakeholders, and are based on conversations focusing on management, enabling us to contextualize the risk analysis and complement our materiality analyses with feedback from experts in different topics and sectors.

We communicate with and listen to our stakeholders through different communication channels, such as our Annual Report, Sustainable Development Report, Shareholders’ Meeting (quarterly investor calls), Community Committees, forums, interviews, social media, community development centers, Community Care Service (CCS), press releases and newsletters. We are always receptive to receiving and discussing concerns and issues related to the company, and our communication channels are always open.

Our Community Care Service (CCS) is the communication channel by which we receive and address grievances and concerns from our neighbor communities. For more information consult the [Local Communities](#) section to learn more about this valuable communication tool with our communities.

Regarding our relations with political organizations and causes:

- Grupo México does not contribute to political parties or to political organizations in any of the countries where we operate.
- Our contributions to industrial and commercial chambers are limited to membership fees. .
- Our communications and engagement focus solely on promoting our business objectives, social development, caring for the environment, and the interests of the industrial sectors in which we participate.
- We support the OECD (Organization for Economic Cooperation and Development) recommendations of principles of transparency and integrity, for the governments in the countries where we operate to promote and guarantee accountability, transparency, and fair and competitive access to the market.
- We integrate the general principles of the OECD directives for multinational companies into our relationships with stakeholders. In particular, under general principle number 15, Grupo México refrains from undue participation in local political activities.

3.5 Stakeholder Engagement

We use different communications channels and tools to engage with our stakeholders. As part of our commitment to transparency, we publicly share information about our activities and operations via our Annual Report, the Sustainable Development Report, press releases and newsletters. We also share relevant messages and information for our stakeholders and the general public via our social media. We actively promote and participate in opportunities for dialogue, like the Shareholders Meeting and investors calls, and also specialized forums and media. Community Committees have been set up in all the communities where our Mining Division operates, and our Community Care Service or CCS is available to receive grievances, concerns and suggestions from members of the communities where we operate (for more information, consult the section on [Local Communities](#)). Company employees are encouraged to use the Reporting Line to report incidents (for more information, consult the section on [Business Ethics & Integrity](#)). Grupo México listens and welcomes discussion about concerns or issues related to the company, and our channels of communication are always open.

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We operate according to our Mission, Vision and Values statements, which consolidate and reaffirm how we engage with stakeholders, from the perspective of creating value in the short, medium and long term. We endeavor to ensure our actions are based on integrity and respect, contributing to the development of every member of our team and also the development of the communities where we work. The satisfaction of our clients, protecting the interests of our shareholders and strengthening our suppliers and contractors are also of vital importance. While we strictly adhere to all laws and regulations, we strive to go further with company guidelines that turn risks into opportunities for improvement, based on prevention.

All Grupo México divisions define stakeholders as organizations, institutions and individuals that have an interest in the economic, environmental and social performance of the company. We also include any entity or individual that may be impacted by our activities. Grupo México has an Investor Relations department, which classifies our stakeholders through selection mechanisms. Additionally, our Institutional Relations and Media department has a team of specialists to identify the priority stakeholders and the best way to communicate with them. In parallel, the Community Development departments of the Mining and Infrastructure divisions prepare specific protocols for engaging with stakeholders in the communities where we operate, including the Community Care Service (CCS). Communication with in-house stakeholders, such as employees and trade unions, is determined by the Human Resources departments in each division.



Dialogues with communities, Mining Division, Mexico

3.5 Stakeholder Engagement



Ferromex, Transport Division, Mexico

Following are the stakeholders with whom the company has active and constant communication:

STAKEHOLDERS	COMMUNICATION CHANNELS OR MECHANISMS								
	Customers	Company Personnel	Unions	Investors	Suppliers	Contractors	Communities	Opinion Leaders Civil Society Media	Financial Institutions Government Agencies Academic Institutions Rating Agencies
Website	●	●	●	●	●	●	●	●	●
E-Ferromex, E-Ferrosur	●								
Intranet		●							
Sustainable Development Report	●	●	●	●	●	●	●	●	●
Annual financial report				●				●	●
Quarterly financial reports				●				●	●
News bulletins							●	●	●
In-house magazines and newsletters		●	●						
Publication of relevant events				●					●
Press releases								●	
Shareholders meetings				●					
In-person meetings			●						●
CBA reviews			●						
Diagnostic studies							●		
Interviews							●		
Surveys	●						●		
Workplace climate survey		●							
Telephone consultations	●			●	●	●		●	●
Ethics Reporting Line	●	●		●	●	●			
Guided tours							●	●	●
Site visits							●		
Community committees							●		
Awareness days							●		
Community development centers							●		
Community care service							●		




- Ongoing
- Yearly
- Once or twice a year
- Quarterly
- Bimonthly
- As needed

3.6

ESG

Assessments and Recognitions

GRI 2-28, 2-29, 2-30

	Each year, we participate in the Corporate Sustainability Assessment (CSA), a tool developed by S&P Global to measure company performance in corporate sustainability. The assessment focuses on various key aspects, like environmental, social and corporate governance management, transparency and reporting, and also impact on society and the environment. We participate as Grupo México, GMéxico Transportes, and Southern Copper Corporation.
	Focusing our business model on responsible management and transparency in social, economic and environmental aspects has led to our progressive improvement in this performance assessment . Grupo México has been included in the Dow Jones Sustainability Index MILA Pacific Alliance ¹³ since 2017 and Southern Copper Corporation since 2019. These are the only two companies in the Mining and Metals sector in the region to be included in the index in 2022. Our improved performance is due to the progress we have made in areas like cybersecurity, water management, closure of operations, and occupational health and safety, among others.
	Both Grupo México and Southern Copper Corporation received scores of 69 points on the Corporate Sustainability Assessment (CSA) in 2022, a 13% improvement over our 2021 scores. Our CSA performance this year was 35 points above the average score for the Mining and Metals industry, which gained us a place in the Sustainability Yearbook 2023 ¹⁴ for the second year in a row. The Yearbook lists the top 15% of companies in the Mining and Metals industry. Also, our subsidiary Grupo México Transportes (GMXT) improved its score by 8% over 2021. We will continue working on our performance management to ensure our ongoing improvement to maintain and increase these types of recognitions.

Both Grupo México and our subsidiary Grupo México Transportes were listed in the **S&P/BMV Total Mexico ESG** sustainability index for the first time in 2022, and the principal subsidiary of our Mining Division, Southern Copper Corporation, was listed for the first time in the **S&P/BMV General Peru ESG** index.

Grupo México has also been included in two FTSE Russell sustainability indexes since 2019: FTSE4Good **Emerging Latin America**¹⁵ and **FTSE4Good BIVA**¹⁶.

Being included in these sustainability indexes is recognition of our management and our focus on aligning our operations with ethical, responsible and sustainable business practices in environmental, social and governance aspects. It also reflects our institutional commitment to transparent operations and to reporting quality information for our stakeholders to objectively assess our commitment and performance in sustainability.

¹³ MILA - Latin American Integrated Market: includes companies from Pacific Alliance member countries with the best performance in the CSA assessment.

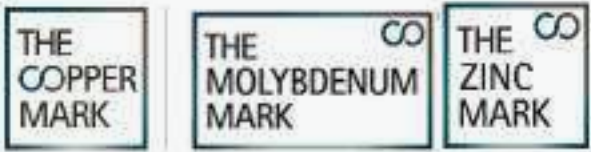
¹⁴ The S&P Global Sustainability Yearbook 2023 lists the top 15% of companies in their industry scoring within 30 points of the company with the best performance in their industry.

¹⁵ Lists publicly traded companies in the Latin American market with the best performance, according to the FTSE4Good Russell ESG assessment criteria.

¹⁶ Recognizes the companies with the best ESG performance in the Mexican market.


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3.6 ESG Assessments and Recognitions



We received **The Copper Mark** responsible production certification in 2022 for our La Caridad open pit mine and our Sonora Processing Plant (smelter and refinery). Both operations participated in an independent assurance assessment to demonstrate our responsible copper production and our alignment with the United Nations Sustainable Development Goals, focusing on 5 key areas: **business and human rights, community, labor conditions, the environment, and governance**. Additionally, our La Caridad mine received **The Molybdenum Mark** responsible production certification and our Processing Plant also received **The Zinc Mark** responsible production certification. Our goal is for the copper produced at all our Mining Division operations to meet The Copper Mark criteria.

The Copper Mark, The Molybdenum Mark and **The Zinc Mark** are independent certifications of responsible production practices for these metals, assessing areas like business, human rights, community, labor conditions, the environment, and governance at the production site level (e.g. mine or plant). These certifications provide assurance of our institutional commitment at each operation regarding customers, investors, communities and other stakeholders, confirming that our production meets the highest international standards of sustainability.



Grupo México has been submitting the **CDP questionnaire on climate change** each year since 2016. Although the questionnaire is submitted for Grupo México, it includes all our divisions and subsidiaries, as climate change is a topic that we address from a comprehensive perspective, considering positive and complementary synergies between our divisions. We received the same score on the 2022 climate change assessment that we received in 2021, which is of particular note as the assessment is constantly evolving to ensure it remains relevant and useful for investors and companies. Additionally, Grupo México received a “B” rating on our first Water Security questionnaire, aimed primarily at the Mining and Metals sector. These results demonstrate our ordered management of the risks associated with climate change and water security, according to the CDP.

CDP environmental assessment results¹⁷. Thanks to our efforts, **Grupo México received the third best rating** on the **climate change** and **water security** assessment scale, placing us above the average for both the sector and the region in both categories.

CDP questionnaire rating scale

Leadership		Management		Awareness		Disclosure	
A	A-	B	B-	C	C-	D	D-






Grupo Mexico Rating

¹⁷The CDP is a nonprofit that operates a global disclosure system for investors, companies, cities, states and regions to manage environmental impacts, being a global benchmark for environmental reporting standards.

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3.6 ESG Assessments and Recognitions

Grupo México - Scoring on Climate Change and Water Security questionnaires

	<p>Grupo México has been participating in the Corporate Human Rights Benchmark since 2019, and our rating has significantly improved by providing detailed explanations of our due diligence process for human rights and descriptions of our programs to protect the human rights of our employees, communities and stakeholders. Our performance is currently 28% better than the average for the Extractive Companies category.</p>
	<p>Both Grupo México and our subsidiary Southern Copper Corporation have actively participated in the Sustainalytics annual Mining and Metals assessment for the ESG Risk Ratings Report since 2020. In 2022, we improved our Grupo México rating by 30%, compared with 2020, while Southern Copper Corporation improved 37% in this same comparison.</p>
	<p>In occupational safety, our La Caridad Processing Plant (in Spanish, METCO) precious metals plant received the Casco de Plata award from the Mexican Mining Chamber, awarded each year to the operations with the best performance in Workplace Health and Safety. We also received the ELSSA Program Award for our Metalúrgica del Cobre, La Caridad, Santa Barbara, Charcas, San Martin and Zinc Refinery operations. The Mexican government awards this recognition to companies that promote safe and healthy workplace environments. Additionally, the Mexican Mining Chamber (in Spanish, CAMIMEX) and the National Council on Job Skill Standardization and Certification (in Spanish, CONOCER) awarded first place to our Charcas and Santa Barbara rescue teams in the categories “Underground mine rescue” and “First aid”, respectively, at the XVI National Competition for Mine Rescue, First Aid and Hazardous Materials Teams.</p> <p>MAPFRE-Peru awarded our Toquepala mine the 2021 Excellence in safety prize, in recognition of the Comprehensive Workplace Health and Safety Management System at our mines, which has reduced accident rates and boosted our efforts in caring for the life and health of our personnel.</p>
	<p>In biodiversity, we received Wildlife Habitat Council (WCH) certification for the conservation efforts of our Buenavista del Cobre Wildlife Conservation Management Center (in Spanish, the UMA) in the gene recovery, behavioral rehabilitation and reintroduction of the Mexican Gray Wolf (<i>canis lupus baileyi</i>), as part of the Mexico-USA Binational Conservation Program for the Mexican Gray Wolf. For more information, consult on the Biodiversity section.</p>
	<p>In the labor aspect, our Processing Plant in Sonora, our smelter and refinery for ore mined in the region, received “Great Place to Work” certification for the first time in 2021, and our Infrastructure Division engineering and energy units received this same recognition for the second year in a row. Additionally, the Processing Plant was among the Top 10 Best Places for Women to Work in 2022. With this recognition, we take our place as the employer of choice for the best professionals in the country, strengthening our organizational culture of safety, trust and certainty for all personnel.</p>
	<p>In the social aspect, the Business Coordinating Council (in Spanish, CCE) and the Mexican Association of Organizational Communicators (in Spanish, AMCO) recognized the social impact of our Mobile Documentary Filmmaking Workshop, which we offer in the communities where we operate. This program offers youth and adults the opportunity to produce audiovisual materials on social topics and with characters from their own communities, reflecting the identity between mining and the community. Over the last three years, 547 students have produced 173 films, some of which have received awards like the 2020 UNAM José Rovirosa prize for the Best Mexican Student Documentary Film and nominations for festivals like Shorts México and Cinema Planeta, and some have been presented at the <i>Cineteca Nacional de México</i>.</p>

3.6 ESG Assessments and Recognitions

Certifications

Certifying our environmental management and workplace health and safety systems reinforces our culture of prevention in adherence of international best practices. We are continuing to work on receiving ISO 45001 and 14001 certifications.

Mining Division ISO 14001 and 45001 certifications



ISO 14001	
	Certified
MIN DIV	69%
ASARCO	-
USA	-
SCC	85%
Mexico	90%
Peru	67%



ISO 45001	
	Certified
MIN DIV	63%
ASARCO	-
USA	-
SCC	77%
Mexico	90%
Peru	34%

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Mining Division Collaborators, Mexico

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Compliance



4.1.7
Cybersecurity



4.1 Corporate Governance

Introduction

Grupo México, S.A.B. de C.V. (Grupo México) is a leading Mexican company in mining, transportation and infrastructure. Our corporate governance structure ensures our decision-making supports the sustainability of the company while caring for the interests of our investors, employees, customers, suppliers, neighbor communities and other stakeholders.

Our corporate governance ensures we adhere to our vision, mission and values statements, and oversees the decision-making of the company and our three divisions:

Americas Mining Corporation (AMC):
Mining Division

Grupo México Transportes (GMXT):
Transportation Division

México Proyectos y Desarrollos (MDP):
Infrastructure Division

We are a family company, with a governance structure that is designed to ensure transparent and responsible decision-making that supports the expansion of the company (particularly in recent years) and the relevance of all our lines of business. Our mine operations represent nearly 80% of company sales and EBITDA, while our railroad operations represent 19% of sales (17% EBITDA) and our infrastructure operations nearly 5% of sales (4% EBITDA). Because of this, our Mining Division tends to take the lead on the environmental, social and governance aspects for the sustainable and responsible success of the company. Of note is that our subsidiary Southern Copper Corporation accounts for 70% of sales and 75% of our EBITDA.

Grupo México Sales and EBITDA 2022



79%	19%	5%
Mining Sales	Transportation Sales	Infrastructure Sales
79%	17%	4%
Mining EBITDA	Transportation EBITDA	Infrastructure EBITDA

4.1 Corporate Governance

4.1.1

Governance Structure

GRI 2-9, 2-12, 2-13, 2-15, 2-20

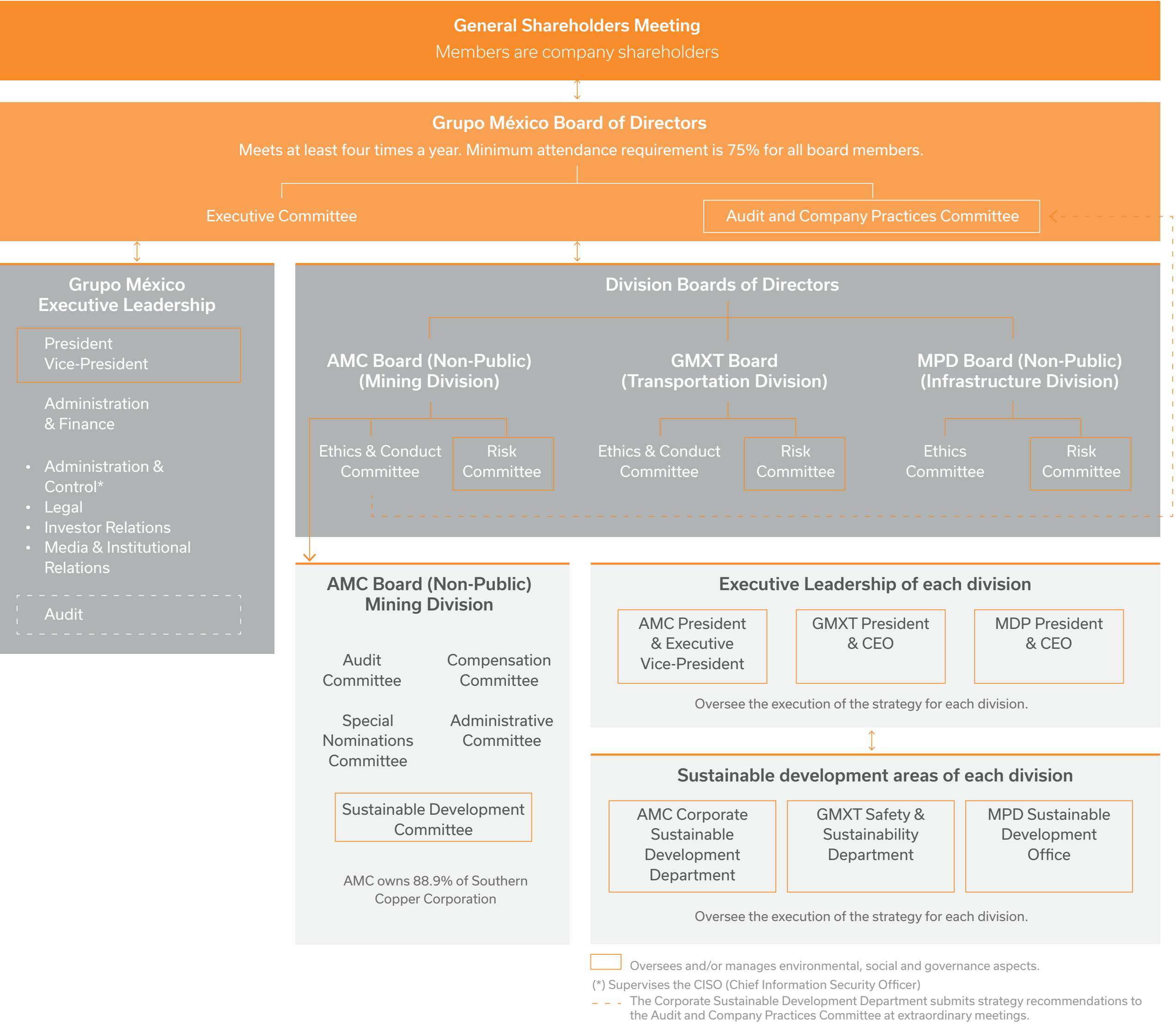
➤ Our corporate governance structure incorporates international good practices and supports an environment of trust, transparency and accountability.

The General Shareholders Meeting is the supreme governing body of Grupo México. This body reviews and approves the management reports submitted to it by the Grupo México Board of Directors. Meanwhile, the Grupo México Board of Directors is our highest administrative body and is responsible for setting and overseeing the global strategies for our business and our subsidiaries, and for reviewing our compliance.

Each of our three divisions has its own Board of Directors¹, which report directly to the Grupo México Board of Directors. Each division also has an Ethics and Conduct Committee and a Risk Committee, which support their respective boards in managing matters related to their corresponding topic areas. These committees report to their own boards and to the Grupo México Audit and Company Practices Committee.

¹The Boards of Directors of the Mining and Infrastructure divisions are not public.

Grupo México governing bodies and their relationship to sustainable development



4.1 Corporate Governance

Both Southern Copper Corporation (SCC), the principal subsidiary of Grupo México and our Mining Division, and Grupo México Transportes have their own Boards of Directors that report to their own Shareholders Meetings.

The Executive Leadership of Grupo México is a senior management team that reports directly to the company President and Vice-President. The Executive Leadership of each division regularly reports results and relevant issues to their respective Boards of Directors.

In terms of sustainable development, each division has specialized departments or offices in this area, which regularly report our environmental, social and governance (ESG) performance to their respective governing bodies, including the President, Vice-President or senior management, accordingly. Our ESG performance is consolidated and reported to the Grupo México Audit and Company Practices Committee at extraordinary meetings. Southern Copper Corporation (SCC), our principal subsidiary which represents nearly three quarters of our business and trades on the New York and Lima Stock Exchanges, formed a Sustainable Development Committee in 2022 at its board level, chaired by an independent board member. For more information, sconsult the section below on [Sustainable Development Management](#).

Governing body	Structure	Principal roles and responsibilities
General Shareholders Meeting	<ul style="list-style-type: none">Members are all Grupo México shareholders.Per our Bylaws, all Grupo México shares confer the same rights and obligations, without privileged series or classes, therefore all shareholders hold equal voting rights, according to their shareholdings.As the Shareholders Meeting is the supreme governing body of the company and there being no restrictions on their share rights, all shareholders are equally entitled to vote, in accordance with the Bylaws and applicable laws, including on matters related to the internal policies of Grupo México.The total number of Grupo México shares is publicly available information contained in our Bylaws and our Company Annual Reports.Shareholders Meetings are called as required and established by our Bylaws and applicable laws; these calls are published on the Mexican Stock Exchange platform, where we also post a summary of the minutes approved by the Shareholders Meeting.	<ul style="list-style-type: none">Reviews and approves the management actions of the Company's administration.Reviews and approves the management reports presented by the Board of Directors.Appoints and ratifies the members of the Board and confirms their independence, in accordance with Article 26 of the Mexican Securities Market Law.Protects the rights and interests of the shareholders.
Board of Directors	<ul style="list-style-type: none">14 members (5 company executives and 9 independents).Two support committees: Executive Committee and Audit and Company Practices Committee.Meets at least four times a year. Board members are required to attend at least 75% of the meetings.Detailed information for each board member is provided in the annex Corporate Governance.	<ul style="list-style-type: none">Sets, oversees and reviews the execution of the business strategies for Grupo México and our divisions.Oversees the execution of the decisions made by the Grupo México Shareholders Meeting.Sets policies and guidelines on sharing information and/or communications with shareholders and the market.Manages the accounting information, internal auditing, operations with related parties, and conflicts of interest.Monitors our risk management in each jurisdiction where we have operations.Sets and oversees the execution of our risk management strategy and assessment, defines lines of reporting, defines metrics, disclosure of information and ESG reporting.
Executive Committee	<ul style="list-style-type: none">Made up of three board members: Germán Larrea Mota Velasco (Chairman), Claudio X. González Laporte (Independent) and Antonio Madero Bracho (Independent)Chaired by the Chairman of the Board	<ul style="list-style-type: none">Oversees and presents the Quarterly Report to the Board of Directors.

4.1 Corporate Governance

Governing body	Structure	Principal roles and responsibilities
Audit & Company Practices Committee	<ul style="list-style-type: none">Members are all independent board members: Rolando Vega Sáenz (Chairman), Emilio Carrillo Gamboa and Fernando Ruíz SahagúnLink to bylaws: https://www.gmexico.com/GMDocs/InformacionCNBV/Esp/INF_ES_CNVB_Y_BMV_2022_4.pdfExpertise:<ul style="list-style-type: none">Company practicesAuditingCompliance	<ul style="list-style-type: none">Monitors the management, operation and execution of Grupo México's business.Monitors the internal audit system and due diligence in the implementation of and compliance with our Code of Ethics.Oversees our Cybersecurity strategy, together with the CISO².Sets the compensation policies for the Grupo México executive leadership.
Grupo México Executive Leadership	<ul style="list-style-type: none">Selected on criteria of experience, expertise and professional reputation.Must perform their duties free of conflicts of interest and without influence of personal, proprietary or economic interests.	<ul style="list-style-type: none">Submit business strategies to the Board of Directors for approval.Propose guidance for the internal control system and internal audits to the Audit and Company Practices Committee.Ensures the integrity of the accounting, recording, filing and information systems.
Boards of Directors of our three divisions	<ul style="list-style-type: none">Each Grupo México division has its own Board of Directors.Our Transportation Division trades independently on the Mexican Stock Exchange as the company México Transportes SAB de CV, and its detailed information is available in the section Annual Reports on its website	<ul style="list-style-type: none">Sets, oversees and reviews the execution of the business strategies for each division.Reports the performance and execution of these strategies to the Grupo México Board of Directors
Ethics & Conduct Committee	<ul style="list-style-type: none">At the Grupo México level, the members of this committee are: (i) Vice-President of Administration and Control, (ii) Lead Counsel, (iii) Vice-President of Human Resources, and (iv) Chief Auditor.At each division, the members of this committee are: Head of the Administration and Control department, Lead Counsel, Director of Human Resources, Head of the Audit Department, and Compliance Officers.	<ul style="list-style-type: none">Approves the Code of Ethics.Coordinates the Ethics Committees of each division.Reviews and addresses reports received via the Grupo México Comprehensive Reporting System (Reporting Line).
Risk Committee	<ul style="list-style-type: none">Each division has a Risk Committee.	<ul style="list-style-type: none">Analyzes and reviews the Company's risk management.Assesses and prioritizes risks.
Southern Copper Corporation Board of Directors	<ul style="list-style-type: none">Detailed information is provided in the annex Corporate Governance and in the sections Members of the Board and Corporate Governance on the SCC website.	<ul style="list-style-type: none">Maximizes value for SCC shareholders while ensuring compliance with all laws and regulations in the jurisdictions where we operate, in adherence of ethical standards.Supports the Executive Leadership to define and update the policies and procedures for our Comprehensive Risk Management System.

²The three members of this committee have experience in cybersecurity.

³ Chief Information Security Officer.

⁴Based on: the results of the Internal Solvency Model; key Risk Indicators; dynamics of the level of exposure in priority risks relative to the established limits; effectiveness and efficiency of control mechanisms; compliance with risk management policies.

4.1 Corporate Governance

Governing body	Structure	Principal roles and responsibilities
Southern Copper Corporation Sustainable Development Committee	<ul style="list-style-type: none">Chaired by an independent member of the SCC Board of Directors.Three independent members of the SCC Board of Directors.	<ul style="list-style-type: none">Oversees the management of risks and opportunities associated with environmental, social and governance aspects.Ensures the company mission and vision hold sustainable development at the core of our business model, considering our material risks.Reviews, suggests and approves occasional adjustments to the sustainable development policies and monitors compliance with these policies.Confirms the sustainable development strategy and monitors progress on our defined targets.Approves and monitors the corporate goals and targets.Monitors the ESG indicators for the division.Approves the investments required to achieve our targets.Ensures the performance and effectiveness of our sustainable development management, and the implementation and fulfillment of our sustainable development targets and policies.
Executive Leadership of each division	<ul style="list-style-type: none">Details of the Executive Leadership of each division are provided in the annex Corporate Governance.	<ul style="list-style-type: none">Submit the different business strategies to the Board of Directors for approval.Propose guidance for the internal control and internal auditing systems to the Audit and Company Practices Committee.Ensure the integrity of the accounting, recording, filing and information systems.
Sustainable Development departments of each division	<ul style="list-style-type: none">Each division has its own sustainable development area, with different levels of maturity depending on the needs of the line of business and the size of the division.For more information consult the section below on the Sustainable Development Management of each division.	<ul style="list-style-type: none">Design policies and business strategies that promote sustainable development within the company, our communities, the environment and our value chain.Identify risks and opportunities on environmental, social and governance aspects, and mitigate the associated risks.Propose sustainability targets, and support and monitor meeting these targets.Evaluate and improve our performance in sustainability.Communicate our sustainability targets, goals, achievements and gaps to our stakeholders.Promote the incorporation of innovative practices in sustainable development.

4.1 Corporate Governance

4.1.2

Board of Directors

GRI 2-10 | TCFD GOB-A

The Grupo México Board of Directors is our highest administrative body, and has two support committees: the Executive Committee and the Audit and Company Practices Committee.

Appointment

The Annual General Shareholders Meeting appoints the members of the Board of Directors each year according to criteria of professional background and experience, expertise, and personal and professional reputation, and we promote diversity in gender, age, nationality, ethnic origin, profession and specialization.

Board members are appointed individually and approved by a simple majority vote of company shares. An alternate may be named for each sitting board member, noting that alternates for independent board members must also be independents. Board members are appointed for one year and may be re-elected or removed at any time. Appointments to the company committees are also individual.

We encourage the inclusion of diverse profiles throughout the appointment process for the members of the Board of Directors, proposing, attracting and retaining board members that have different backgrounds, and different life and professional experiences, bringing value added to the Board of Directors.

➤ Voting on the matters before the Ordinary General Shareholders Meeting was individual in 2022, improving our Corporate Governance practices.

Independence

GRI 2-10

Board members must meet the requirements laid out in clause 25 of the Grupo México Bylaws and the Mexican Securities Market Law, Article 26⁵ to be considered independent.

Any independent board member who ceases to be independent must inform the Board of Directors. As required by regulations, board members must inform the other board members and refrain from participating in any vote where they hold a conflict of interest.

⁵ **Excerpt from Article 26 of the Mexican Securities Market Law**
[...] the following persons shall not, under any circumstance, be appointed or serve as independent board members:

- I. Key management or employees of the company or enterprises that are members of the same business group or consortium, or the commissioners of said enterprises. This restriction shall apply to any person holding such position during the twelve months prior to the appointment date.
 - II. Persons who hold significant influence or authority in the company or enterprises that are members of the same business group or consortium.
 - III. Shareholders that are part of the group that holds control of the company.
 - IV. Customers, service providers, suppliers, debtors, creditors, partners, board members or employees of a major customer company, service provider, supplier, debtor or creditor. A customer, service provider or supplier is considered major when company sales represent more than ten percent of the total sales of the customer, service provider or supplier, during the twelve months prior to the appointment. Additionally, a debtor or creditor is considered major when the debt amount is greater than fifteen percent of the company's assets or those of their counterparty.
 - V. Family members by blood or by marriage to the fourth degree, and the spouses and partners of the persons referenced in sections I through IV of this article.
- Any independent board member who ceases to be independent during their tenure must inform the board of directors of this situation by or before the next meeting of the board.

62%

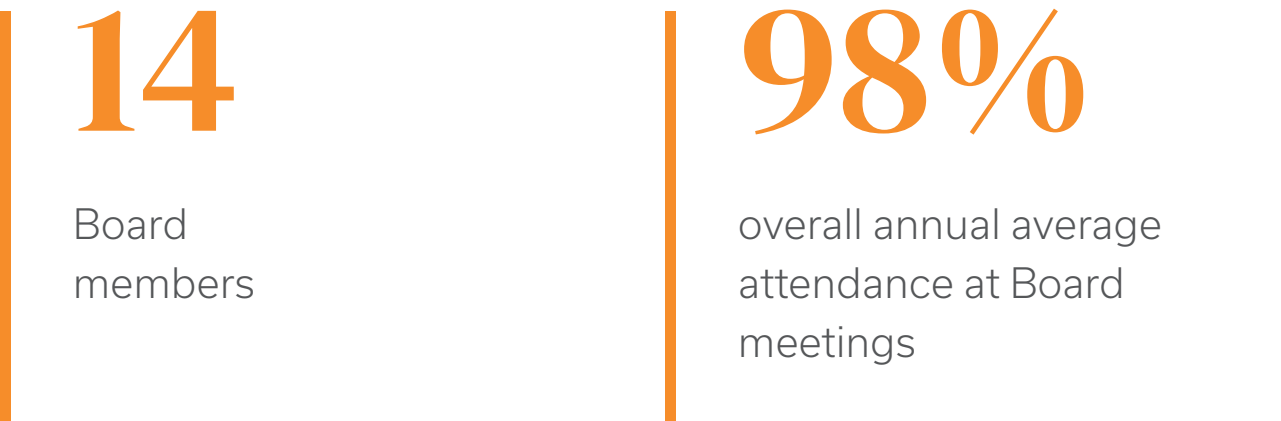
Board members
are independents
(25% required by law)

4.1 Corporate Governance

Structure

GRI 2-9, 2-11, 2-12, 2--17

Our [Grupo México Board of Directors](#) has 14 members, appointed by the General Shareholders Meeting. Decisions are made by the majority vote of the members present, including the decisions of the Executive President regarding the management of the business.



The company bylaws and applicable legislation confer minority rights on Company shareholders in the appointment of board members, and alternates, to protect their corporate and economic rights, in an environment of transparency and accountability.

Germán Larrea Mota Velasco, founder and largest shareholder, is the Chairman of the Board of Directors and CEO or Executive President of Grupo México. The experience, professionalism and expertise he has amassed as the head of the company for over 41 years support his excellent leadership of the company’s business and strategies.



Toquepala Unit collaborator, Tacna, Peru

The members of the Board of Directors are prominent business people with extensive experience in their industries, which benefits the management of our Grupo México business. Bringing together experience from different sectors, and also complementary skills and expertise, provides a broad perspective for our lines of business, and a variety of viewpoints on the current trends in our markets and the main areas of interest of our stakeholders. We have policies and procedures in place that are specifically designed to prevent and impede conflicts of interest among members of the Board and senior management.

4.1 Corporate Governance

Board of Directors skills and expertise															
Skill or expertise	Details	GERMÁN LARREA MOTA VELASCO	XAVIER GARCÍA DE QUEVEDO	ALFREDO CASAR PÉREZ	LUIS CASTELAZO MORALES	OSCAR GONZÁLEZ ROCHA	ANTONIO DEL VALLE RUIZ	ANTONIO MADERO BRACHO	CARLOS PRIETO SIERRA	CARLOS ROJAS MOTA VELASCO	CLAUDIO X. GONZÁLEZ LAPORTE	EMILIO CARRILLO GAMBOA	FERNANDO RUIZ SAHAGÚN	ROLANDO VEGA SÁENZ	FERNANDO LÓPEZ GUERRA LARREA
Strategy	Ability to think strategically, to identify and critically analyze opportunities and threats to develop effective strategies.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Finances	Experience and expertise in accounting and finances to: - Analyze financial statements - Evaluate the financial viability and performance of the organization - Contribute to the financial planning process - Monitor budgets and use resources efficiently	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Risk and compliance	Ability to identify, assess, prioritize and monitor key and relevant risks in the industry, and political, social, economic, technological, legal, regulatory, financial and compliance factors.	✓	✓	✓			✓	✓			✓	✓	✓		✓
Information technologies	Knowledge and experience in IT governance, cybersecurity systems/information security and privacy.	✓	✓	✓			✓	✓				✓			✓
Executive management	Experience managing executive teams to appoint and evaluate Leadership and their management teams.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Boards of Directors	Experience and participation on the boards of directors of other publicly traded companies.	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Industry expertise	• Public policy	✓	✓	✓			✓				✓	✓	✓		
	• Mining	✓	✓	✓			✓					✓	✓		✓
	• Materials sector	✓	✓	✓			✓				✓	✓	✓		✓
	• Transportation	✓	✓	✓			✓				✓	✓	✓		✓
	• Infrastructure	✓	✓	✓			✓				✓	✓	✓		✓
Environment	• Climate change	✓	✓	✓			✓				✓	✓	✓		✓
	• Water management	✓	✓	✓			✓				✓	✓	✓		
	• Ming waste	✓	✓	✓			✓				✓	✓	✓		✓
	• Biodiversity management	✓	✓	✓			✓				✓	✓	✓		✓

Board of Directors skills and expertise																
Skill or expertise	Details															
Social	• Occupational health and safety	✓	✓	✓			✓						✓	✓		✓
	• Diversity	✓	✓	✓									✓	✓		✓
	• Community development	✓	✓	✓			✓						✓	✓		
	• Human capital	✓	✓	✓			✓				✓		✓	✓		
	• Human rights	✓	✓	✓							✓		✓	✓		
Governance	• Business ethics	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	
	• Corporate governance	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓	

> The experiences and responsibilities of the directors are linked to the topics of the highest strategic relevance, such as issues related to climate change and its direct and indirect impacts.

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4.1 Corporate Governance

Performance review
GRI 2-18

In accordance with our [Corporate Policies and Guidelines](#), the members of the Board of Directors under a performance review each year . Committee leadership and members are also reviewed once a year, through a self-assessment process.

> With a 98% attendance record, the members of our Board of Directors are committed to the company.

4.1.3
Executive Leadership

The Grupo México [leadership team](#) has broad experience and expertise, and is responsible for the management, operation and execution of our business. Their responsibilities include preparing and submitting the business strategies for the company to the Board of Directors, and executing the decisions of the Shareholders Meeting and the Board of Directors.

Germán Larrea Mota Velasco Executive President	Lillie Hernández Minor Lead Counsel
Xavier García de Quevedo Executive Vice-President	Juan Carlos Jaques Garcés Chief Auditor
Mª de Lourdes Aranda Bezaury Vice-President of Communications and Institutional Relations	Miguel Valdés Neaves Vice-President of Administration and Control
Marlene Finny de la Torre Vice-President of Administration and Finance	

⁶The minimum attendance requirement is one of the parameters reviewed.

> In terms of Sustainable Development, the Executive Leadership designs business strategies that promote sustainable environments for our communities, the environment and to ensure the continuity of the business.

The Company information, communication and reporting area has an inventory of the principal sources of the types of data required to prepare indicators and reports, and support risk management and monitoring by our Executive Leadership. Additionally, the three Divisions are continually **mapping stakeholders**⁷ by industry, communicating the results to our Executive Leadership.

The Board of Directors conducts an annual review of the Executive Leadership, covering performance-based benefits and leadership of employees and senior management, exemplifying good, responsible and honest conduct.

⁷The report includes a matrix with our identified stakeholders, the current communication channels or mechanisms, and the frequency of these communications.

4.1 Corporate Governance

4.1.4 Strategy

Policies and procedures
GRI 2-19

Grupo México is committed to ethics and transparency throughout our governance structure, and we have policies and procedures in place to prevent corruption and conflicts of interest. Our [Code of Ethics](#)⁸ affirms our values and outlines our Mission and Vision, and also our principles and conducts to work in harmony with our employees, shareholders, inhouse and external suppliers and providers, customers, the authorities, and communities, while respecting the human rights of all. The Code covers a wide range of topic areas, from health and safety, harassment, sexual harassment and conflicts of interest to confidentiality of information, intellectual property, fair competition and bribes. Everyone who collaborates with the company, directly or indirectly, is held to our Code of Ethics, including the Board of Directors, Executive Leadership, employees, representatives and any person acting on behalf of Grupo México and our subsidiaries in Mexico and abroad.

➤ The Grupo México Code of Ethics is the backbone of our strategy, guaranteeing the business ethics and integrity of the company.

[Our Grupo México Comprehensive Reporting System](#) promotes a safe, ethical and transparent environment, offering a safe and confidential channel for reporting any irregularity or violation of our company values, principles and ethics (for more information, consult the section on [Business Ethics and Integrity](#)).

⁸Applicable in all countries where the company has operations.

Our [Corporate Governance Manual](#) outlines the organizational governance framework (strategies, policies, decision-making structures and accountability) for the company and our three divisions.

We also have a series of policies in place that support governance, detailed following:

Policy	Purpose
Policies on independence and conflicts of interest	Define circumstances where members of the Board of Directors cannot be considered independent.
Executive Leadership supervisory policies	Determine the procedures and mechanisms for the supervision and performance review of Grupo México Executive Leadership, with information on the growth and results of their management teams.
Corporate Policy on Transactions with Related Parties	Prevent any transaction between Related Parties, unless the user area can justify and document that the customer, supplier and/or contractor is the sole provider, manufacturer or supplier with experience in the company, has delivered good results and the transaction is in the company's interest.
Compensation and salary policies	Recruit and retain employees for each Grupo México division with attractive compensation packages, training programs and growth.
Anti-money laundering, internal control, personal data, anti-corruption and suspicious activities policies	Meet compliance with applicable legislation; provide prevention and accountability mechanisms for Company officers, and also counter-terrorism financing measures or to prevent other activities considered suspicious.
Conflicts of Interest Policy	Define the conditions for the personal interests of an employee to not influence their judgment or decision-making for Grupo México. We fully respect the private lives of our employees, though we expect them to avoid situations that could lead to a conflict between their personal interests and those of Grupo México.
Anti-fraud Policy	Promote a culture that combats fraud and maintains the highest level of professional and ethical standards in how we do business.
Protection of assets policy	Promote the physical protection of our facilities and infrastructure, and implement protection and prevention programs.

4.1 Corporate Governance

4.1.5 Management

Sustainable Development Management for each Division
GRI 2-14, 2-16 | TCFD GOB-A, GOB-B

We’re committed to a comprehensive and cross-cutting management of our sustainable development across the different divisions, areas and levels of the organization to ensure the risks and opportunities associated with our material topics⁹ are considered in our strategic decision-making processes.

Mining Division

All areas of the company are involved in the management and monitoring of our sustainable development aspects.

The Grupo México Board of Directors Audit and Company Practices Committee oversees the reports prepared by the Corporate Sustainable Development Department on our management of risks and opportunities. Meanwhile, the Mining Division (AMC) Board of Directors ensures the ESG aspects of our line of business are managed properly, through quarterly reviews of the principal performance indicators reported by the Corporate Sustainable Development Department.

Additionally, we formalized a Sustainable Development Committee under the Southern Copper Corporation (the principal subsidiary of the Mining Division) Board of Directors in 2022. An independent board member chairs this committee, which meets quarterly to review our environmental, social and governance aspects.

⁹Includes occupational health and safety, water management, waste, climate change, human rights, business ethics, and local communities, among others.



4.1 Corporate Governance

Sustainable Development Committee - Souther Copper Corporation

Principal roles and responsibilities

Support the Board in:

- Risk management, program implementation, and economic, environmental and social performance
- Validating ESG targets, accountability, budgets, deliverables, etc.
- Compliance with regulations and policies to develop standards and procedures to achieve the sustainable development strategic goals of the organization

ESG material topics:

- Occupational health and safety
- Environmental issues (biodiversity, water, waste, climate change, closure plans)
- Community development
- Human rights Sociopolitical matters
- Corporate Governance
- Responsible procurement

The SCC Sustainable Development Committee met twice in 2022 and reviewed the following aspects:

- Alignment with the UN Global Compact, The Copper Mark
- Progress and challenges in ESG performance
- Goals and targets
- ESG performance indicators
- Climate change (Emissions reduction map and short, medium and long term reduction targets, [Climate Change Policy](#), and emissions reduction projects)
- Water management
- Risk management - tailings dams

In addition to reporting the ESG performance and other strategic recommendations for the Mining Division to the governing bodies, our Corporate Sustainable Development Department is responsible for implementing the general strategy of the division in sustainable development, and also for managing specific material topics, such as Environmental Affairs, Occupational Health and Safety, and Community Development, principally in relation to our mining activities. The Department created a Climate Change Office in 2022 to monitor the implementation of our climate strategy while contributing to aligning the vision and climate change targets for our three divisions.

Additionally, the Department works in close collaboration with the other divisions and areas of the company that have already taken the lead on ESG reporting at the Grupo México level.

Roles and Responsibilities of the Corporate Sustainable Development Department



Align the vision and sustainable development targets with the strategic priorities of Grupo México.



Lead efforts in the prevention and mitigation of social and environmental risks.



ESG reporting and communications.



Participate in ESG assessment processes with rating agencies and investors.



Prepare, compile and validate the Grupo México Annual Sustainable Development Report.

Corporate Governance

Business Ethics and Integrity



Design and execute strategies focusing on gaps.



Define policies, metrics and targets to improve our ESG performance.



Supervise the implementation of management systems, programs and initiatives for operational and institutional improvement.



Participate in initiatives and forums on sustainable development.



Manage relations with inhouse and external stakeholders in relation to sustainable development.

Our Corporate Sustainable Development Department holds follow-up meetings with regional managers and heads of all our operations to monitor performance, risk management, fulfillment of goals and ongoing improvement for our environmental and social material topics.

At the operational level, all our mines have specialists in environmental and social aspects to ensure our sustainability metrics and risk management are monitored and reported properly, supporting the ongoing review of the effectiveness of the measures and management systems to make any strategic adjustments that might be necessary.

+260

Experts in social and environmental aspects

4.1 Corporate Governance

Transportation Division

The CEO and Administration Department of Grupo México Transportes supervise the sustainable development strategy and performance of our Transportation Division. Each GMXT department is responsible for managing, planning and preparing specific projects corresponding to their area.

CEO and Administration Department	<ul style="list-style-type: none">Defines the GMXT sustainability strategy.Prioritizes ESG risk management.Defines lines of action for the different departments of Grupo México Transportes.
Corporate Projects Department	<ul style="list-style-type: none">With Legal, verifies compliance with environmental and occupational health and safety regulations at both new projects and existing operations.Coordinates the management and publication of ESG information for the Transportation Division to communicate to stakeholders.
Operations	<ul style="list-style-type: none">Develops and implements initiatives in occupational health and safety, environmental management and protection, fuel savings and energy.



Control centers, Transportation Division, Mexico

Infrastructure Division

In the Infrastructure Division, the Executive President and their team support the Board of Directors in strategic decision-making for the operations of our companies and for the following:

- Allocating the necessary resources to achieve the defined goals.
- Promoting the efficient use of resources and available assets.
- Monitoring the social and environmental performance of our Infrastructure Division companies.
- Assessing the risks that could affect our Infrastructure Division companies.
- Ensuring compliance with company regulations and applicable legislation.

The sustainable development management of the Infrastructure Division is built on four pillars:

Policies	<ul style="list-style-type: none">Review, modification and approval of policies that promote sustainable development, together with inhouse and external stakeholders.
Sustainable investments	<ul style="list-style-type: none">Design and financial planning through risk analyses to promote the inclusion of communities, being mindful of the environment.
Environmental protection	<ul style="list-style-type: none">Verification of regulatory compliance by all our operations.Incorporation of industry best practices.
Risk management	<ul style="list-style-type: none">Identification of general and specific risks for each line of business, based on sustainability guidelines.

4.1 Corporate Governance



Female collaborators from Zinc Electrowinning Refinery, San Luis Potosí, Mexico

Working groups across our three divisions

On Board instruction, during extraordinary meetings with the Audit and Company Practices Committee, we set up two ESG working groups across our three divisions, the Climate Change Working Group and the Diversity and Inclusion Working Group.

Climate Change Working Group



The Mining Division Corporate Sustainable Development Department is responsible for the implementation of our Grupo México climate strategy and coordinates this topic area across the three divisions. This Department reports regularly to the Grupo México Audit and Company Practices Committee and to the Executive Vice-President, and also to the SCC Sustainable Development Committee.

TheClimateChangeWorkingGroupwascreatedin2022 to coordinate the strategy and management of risks and opportunities associated with sustainability across the three divisions, and to align our climate change vision and targets presented to the Committees. Additionally, the Infrastructure and Transportation divisions each have sustainability areas, which monitor our climate change management in close coordination with the Climate Change Office.

Diversity and Inclusion Working Group (DEI)



This working group was created to implement a uniform DEI strategy across the three divisions, taking into account the differences in the business models of each division. The principal objectives of this working group are: monitor our DEI indicators, identify the principal challenges regarding inclusion in each division, set goals and targets, policies, strategies and budgets to promote DEI in our three divisions, and provide a forum for sharing lessons learned between the divisions, facilitating their application at the Grupo México level.

Diversity and inclusion in the workplace is a cross-cutting topic that touches all areas of the company. The directors of Human Resources in each division are responsible for the management of this topic area. Each Human Resources department has a team that promotes diversity and inclusion through initiatives and specific procedures. Additionally, the Community Development Department promotes diversity and inclusion in the communities near the operations of our Mining and Infrastructure divisions.

4.1 Corporate Governance

4.1.6 Compliance

We have an Internal Control System and Corporate Policies and Guidelines to improve our corporate governance management in adherence of the guidance of the Board of Directors and international industry best practices.

Our Internal Control system strictly measures and evaluates budgetary, economic, financial, equity, regulatory and management aspects. We also have an ongoing improvement process to improve the efficiency of our operational, financial and administrative processes, and to strengthen the transparency of our information for stakeholders.

Our **Corporate Governance Good Practices Compliance Report** assesses and strengthens the institutionalization, corporate governance and transparency of our operations. The recommendations in the report are aimed at fulfilling these objectives, and improving our corporate governance and practices, contributing to strengthening the work of the Board of Directors and its support bodies.

4.1.7 Cybersecurity

Structure

The Grupo México Audit and Company Practices Committee manages our cybersecurity strategy. Progress on the cybersecurity plan for the three divisions is reviewed quarterly, while the implementation of the strategy and organizational priorities are reviewed twice a year. At the executive level, the Chief Information Security Officer (CISO) monitors the implementation of the strategy and supervises the cybersecurity action plans.

We recently developed a Corporate Information Security Policy, which aligns the expectations associated with this topic area with our institutional approach. Additionally, each Grupo México division has its own information security policy, and these policies are publicly available and communicated internally.

Culture of information security

Our three divisions provide training on information security, including online workshops, periodical articles and inhouse campaigns. The workshops also deliver information on the principal risks that employees may encounter, and the actions to take if they experience a suspicious event.

Information security management systems

We have information security policies, processes, controls and systems in place in our three divisions, the design and architecture of which is based on the National Institute for Standards and Technology (NIST) benchmark and ISO 27000 guidance on information security management systems. We also contract the full time (365 days a year) monitoring (SOC) and incident response services of a specialized third party firm.

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4.2 Business Ethics and Integrity

GRI 3-1, 3-2

Ethics and integrity are core to the operations of Grupo México, and we have tools and an internal control system in place to minimize the possibility of unlawful conducts occurring within the company or our value chain.

Aware of the importance of a comprehensive management system to ensure transparency in our financial and non-financial operations in all the countries where we operate, at Grupo México, we have implemented various accountability, process tracing and risk assessment measures. The COSO framework provides us with guidance on enterprise risk management, internal control, and fraud deterrence. We undergo an independent audit annually on compliance with Sarbanes-Oxley requirements and our internal control framework.

Our highlights from 2022 in the area of business ethics for Grupo México and our subsidiaries include:

2022 Actions



New risk matrices for Grupo México. In collaboration with the Internal Control department, our Compliance department has prepared new risk matrices for anti-money laundering and counter-terrorism financing, anti-corruption, personal data, and fair competition. These new matrices are built from information gathered and support defining appropriate controls to minimize, and where possible eliminate, the risks associated with our different lines of business.



Mining Division collaborators, Mexico



Catalog of Sanctions for the Mining Division. The members of the Ethics and Discipline Committee are authorized to impose sanctions and have a tool to support this process in the event of non-compliance with the [Company Code of Ethics and Conduct](#). This tool is a Catalog of Sanctions, prepared by a specialized independent firm at the request of our Compliance Department, that clearly outlines the sanctions that will be imposed in each case of non-compliance with our Company Code of Ethics and Conduct. The Catalog of Sanctions provides guidance for decision-making according to the particulars of each case.

¹Committee of Sponsoring Organizations of the Treadway Commission; defines the principal international standards for internal control frameworks.

4.2. Business Ethics and Integrity

4.2.1
Commitments and policies
GRI 2- 24

At Grupo México, we acknowledge that a sustainable world can only be achieved through a multipronged approach, which includes adherence to policies and benchmarks on transparency for financial and non-financial operations, and also the assessment of latent risks in the conducting of our business.

Business ethics and integrity are a priority for our operations, and we have corporate policies in place that affirm this commitment, and also ambitious and responsible goals and targets in sustainability. Of note in this regard are our efforts in protecting human and labor rights, protecting the environment, risk assessment, reducing CO2 emissions, and preventing corruption.

Our policies are prepared by multidisciplinary teams made up of the areas involved in the subject matter in question, supported by our legal, internal control and compliance departments. All Grupo México worksites, operations and corporate offices are required to abide by our policies. The corresponding guidelines, objectives and commitments are communicated throughout the company via audiovisual media.

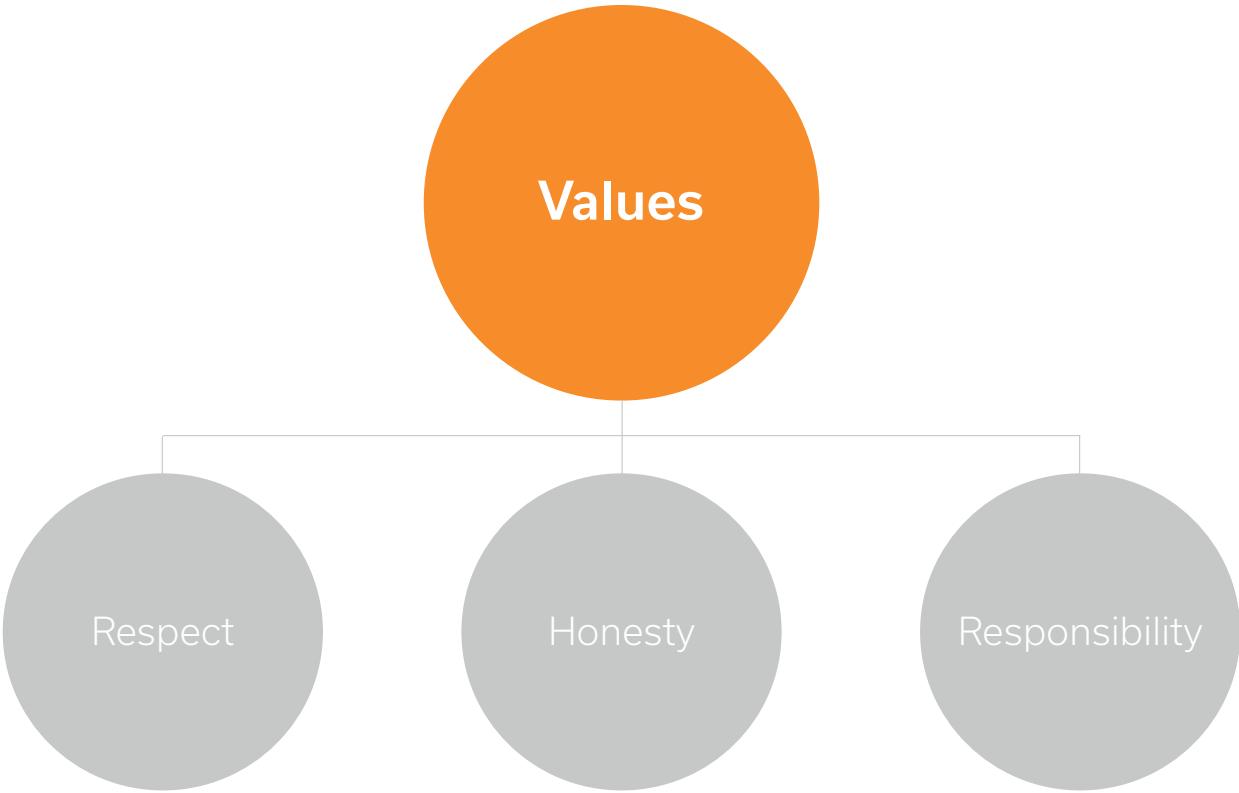
Grupo México, and all our subsidiaries, are held to the following publicly available policies:

Policies	
General Sustainable Development Policy	General Tailings Systems Policy
Workplace Health and Safety Policy	General Diversity, Inclusion and Non-Discrimination Policy
Environmental Policy	Anti-Corruption Policy
General Policy on Respect for the Rights of Indigenous Peoples and Communities	Policy on the Prevention of Money Laundering and Terrorist Financing
General Human Rights Policy	Personal Data Protection Policy
Community Development Policy	Code of Ethics
General Climate Change Policy	

4.2.2
Code of Ethics

Values, principles and ethics
GRI 2-23

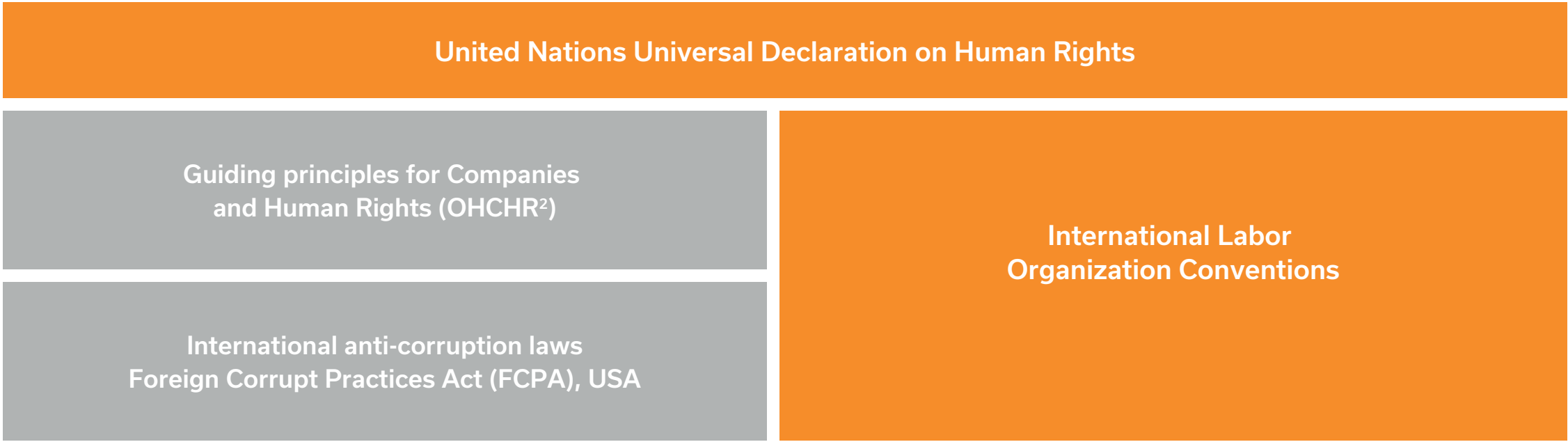
Our Code of Ethics describes all conducts permitted and not permitted during the course of business both within and outside the company, and all areas of the company are subject to these directives. Additionally, all new hires receive information and orientation on our Code of Ethics.



The Code of Ethics is the basis for ensuring ethical conduct and integrity throughout our company. The Code of Ethics is applicable to, and its acceptance and adoption is a requirement for, both employees and suppliers in all countries where we operate.

4.2. Business Ethics and Integrity

The [Code of Ethics](#) is the basis for ensuring ethical conduct and integrity throughout our company. The Code of Ethics is applicable to, and its acceptance and adoption is a requirement for, both employees and suppliers in all countries where we operate. All persons who collaborate directly or indirectly with the company are held to and required to abide by the Code of Ethics, including the Board of Directors, Executive Leadership, employees, representatives, and any person acting on behalf of Grupo México or our subsidiaries, in Mexico or abroad. We share our Code of Ethics with our value chain and our stakeholders to communicate our principles and how we conduct our relationships.



4.2.3 Processes to remediate negative impacts
GRI 2-25

We follow an annual calendar of internal audits to determine compliance with our policies and processes by all departments, including Finance, Environment, Operations, and Compliance. The internal audit team identifies areas for improvement and any potential impacts on our operations. These audits support us to address and remediate any breach or irregularity identified.

Grupo México adopted COSO as our benchmark for internal control and compliance audits more than twenty years ago. COSO is internationally recognized as providing one of the highest standards in three key areas: Enterprise Risk Management (ERM), internal control, and fraud deterrence.

We conducted more than 300 internal audits in 2022, and also carried out remediation plans for financial and non-financial aspects.

4.2.4 Reporting Line
Comprehensive Reporting System
GRI 2-25

Grupo México is committed to transparency and honesty. We offer a [Reporting Line](#) to employees, suppliers, contractors, communities and all inhouse and external stakeholders, available 24 hours a day, 365 days a year in all countries where we operate.

The Reporting Line is managed by a third party and guarantees anonymity; therefore, no Grupo México person has direct access to any information, and the records cannot be altered or deleted, and there is no access tracking.



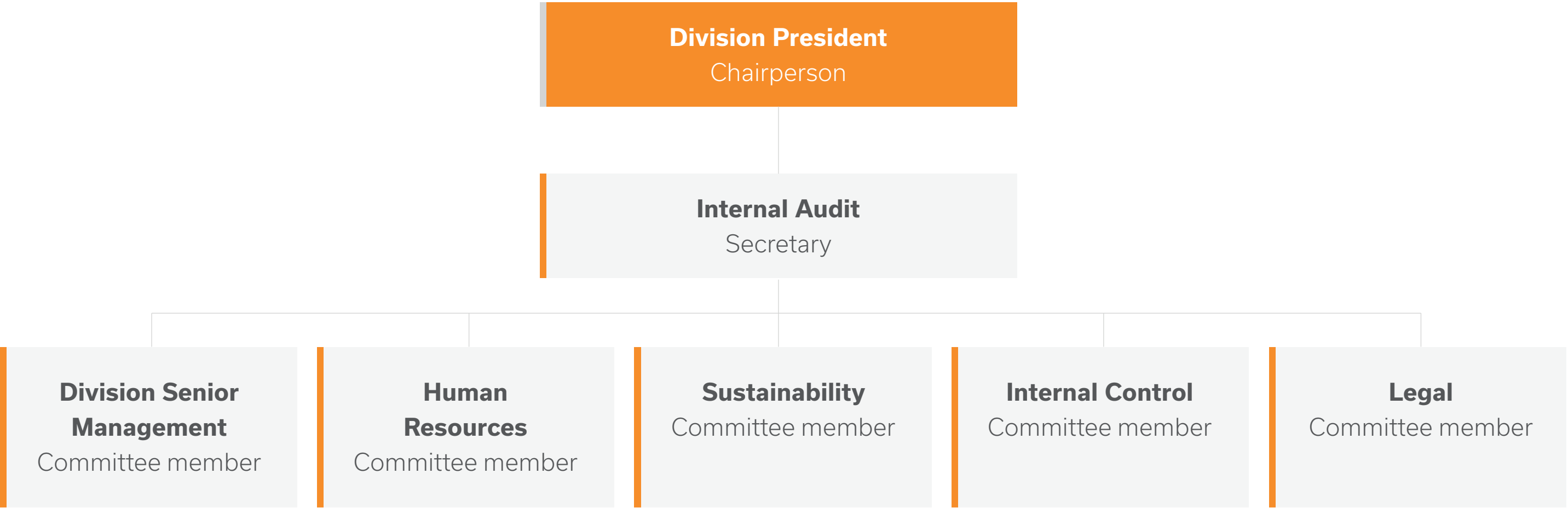
² Office of the High Commissioner on Human Rights

4.2. Business Ethics and Integrity

Division	Operation	Website	Email	Phone
Mining	Minera México (México)	https://www.lineadedenuncia.com/mineramexico	mineramexico@lineadedenuncia.com	800 062 2105
	Southern Peru Copper Corporation (Peru)	https://www.lineadedenuncia.com/scc	scc@lineadedenuncia.com	0800 78258
	ASARCO (USA)	https://www.ethic-line.com/asarco	asarco@ethic-line.com	844 402 0221
	Minera Los Frailes (Spain)	https://www.lineadedenuncia.com/MINERALOSFRAILES	mineralosfrailes@lineadedenuncia.com	900 423 887
Infrastructure	México Proyectos y Desarrollos	https://www.lineadedenuncia.com/infraestructura	Infraestructura@lineadedenuncia.com	800 062 2105
Transportation	Grupo México Transportes	https://www.lineadedenuncia.com/gmt	gmt@lineadedenuncia.com	800 062 2105
Corporate	Services	https://www.lineadedenuncia.com/grupomexico	gms@lineadedenuncia.com	800 062 2105

Members of the Ethics and Discipline Committee

Each Grupo México division has an Ethics and Discipline Committee that meets quarterly and reviews all reports received, prioritizing any involving corruption or discrimination. This multidisciplinary committee ensures impartiality and full attention to each case. The committee reviews and addresses these reports and determines the response action and follow-up. The committee is formed from the following areas:



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4.2. Business Ethics and Integrity

Reports received (2022)								
	Mining Division					Transportation Division	Infrastructure Division	Grupo México
	Total division	SCC	Minera Mexico	SPCC (Peru)	ASARCO (USA)			
Human Resources-related ³	104	100	73	27	4	80	67	251
Business ethics-related ⁴	83	83	48	35	0	42	4	129
Others	27	26	19	7	1	-	2	29
Total	214	209	140	69	5	122	73	409

At the Grupo México level, we received 409 reports in 2022, a 39% increase over 2021. The most significant increase in reports was seen in the Mining Division, specifically our Minera México subsidiary, which reported a 130% increase, due mainly to greater promotion of the anonymous reporting line among employees.

Meanwhile, reports in the Transportation Division decreased 27%. Of note is that most of the reports for this division involved urban coexistence, and more specifically noise complaints from the train passing through or near communities. Our response to these complaints was to explain to each user that the noise level and duration are regulated by the federal government and Grupo México Transportes is required to comply with Mexican law, while also listening to our stakeholders.

In the Infrastructure Division, reports increased from 27 in 2021 to 74 this year. The primary complaint users reported involved abuse of authority. Of the 45 reports received involving this topic, 12 were found to have

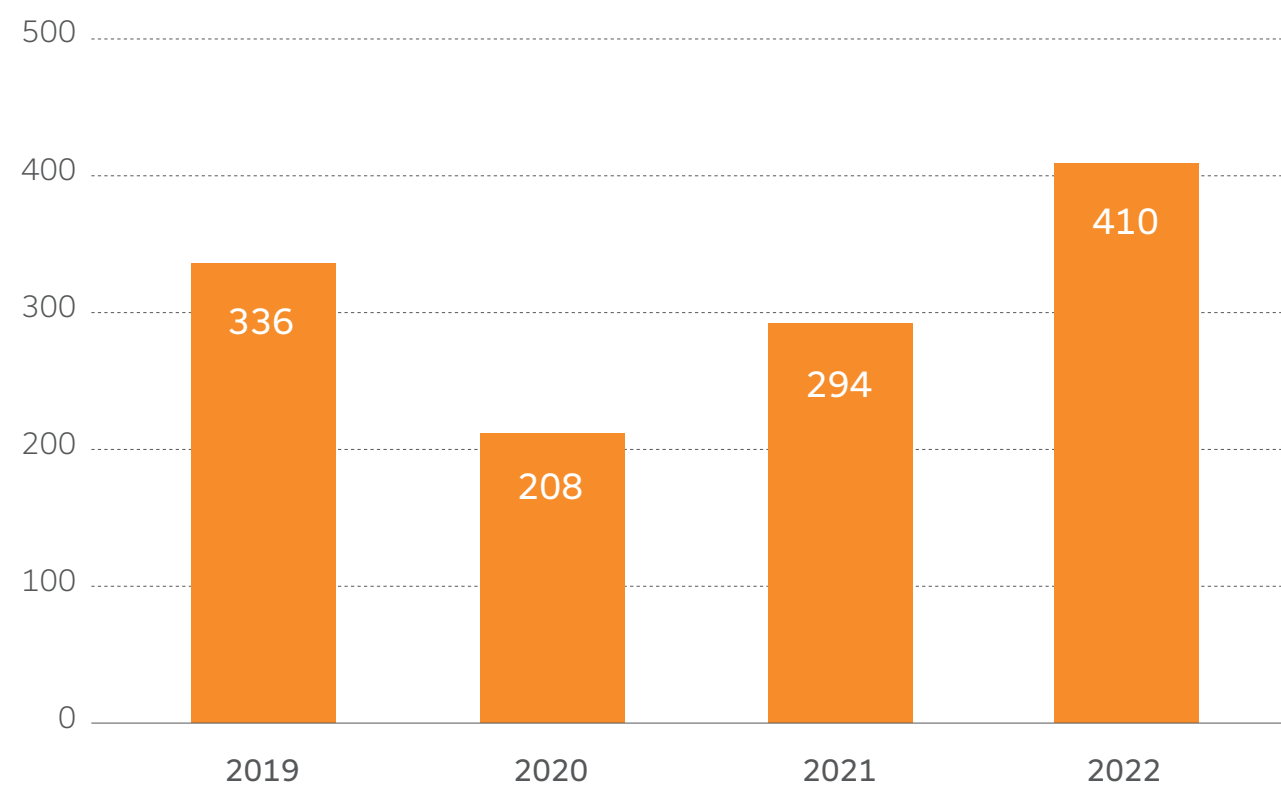
merit and the remaining 32 were dismissed on lack of evidence. We reviewed in detail all the reports and determined corrective measures that included training, written reprimands, and in some cases, dismissal. Our goal is to address the complaints reported and prevent future incidents.

Despite the significant increase in reports received at the Infrastructure Division in 2022, the Internal Audit team addressed and resolved 97% of the reports received this year.

³ Abuse of authority, sexual harassment, improper or unsafe working conditions, improper employee conduct, unfair dismissal, discrimination, workday, urban coexistence issues, consumption of alcohol or illegal substances, and non-sexual harassment.
⁴ Conflicts of interest, falsification of information, technical reports or research, theft of company property, customer service issue, improper use of assets or resources, corruption, and money laundering.

4.2. Business Ethics and Integrity

Total Reports Received Grupo México 2019 - 2022



The 5 topic areas reported with the greatest frequency are shown below, with the measures taken by Grupo México following.

The most frequently reported issue in 2022 was abuse of authority.



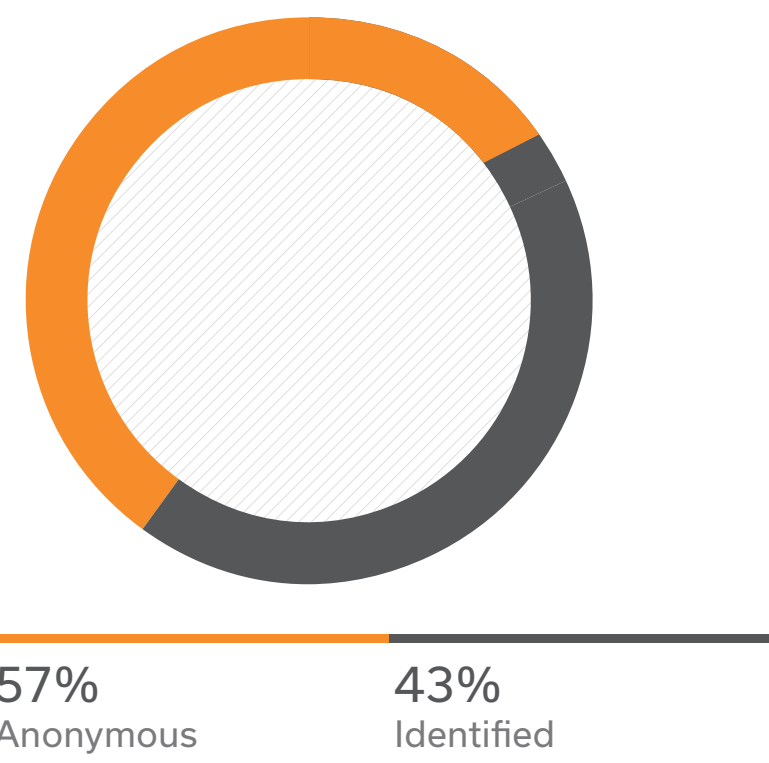
Principal reports by type (2022)

- 114 abuse of authority
- 52 urban coexistence
- 25 theft of property
- 6 sexual harassment
- 4 discrimination

The second most frequently reported issue was noise complaints against the railroad and the impact on urban coexistence. Our response to these reports was to communicate and share with the interested parties the importance of sounding the whistle and compliance with federal laws and international standards.

The 6 reports of sexual harassment we received are under investigation and will be resolved in adherence of our company policies. Minera México received four reports involving discrimination in 2022. These cases are currently being investigated, considering our corporate culture holds as a priority protecting human rights.

Protecting the identity of the persons reporting
Tipología del denunciante



Our [Code of Ethics](#) protects the identity of persons who use the Reporting Line. Employees and commercial partners can call the Reporting Line without fear of repercussions.

Of the 410 reports received, 57% were submitted anonymously, while a name and contact information were provided for the other 43%.



Buenavista del Cobre collaborator, Sonora, Mexico

4.2. Business Ethics and Integrity

4.2.5

Anti-corruption

GRI 205-1


Our Anti-Corruption Policy defines conducts that are not permitted or tolerated within the organization, and also includes control mechanisms and declaring conflicts of interest.

The Reporting Line is the formal channel of communication for reporting any complaint associated with corruption⁵, in any of its variants. The [Reporting Line](#) is available to company personnel, outside stakeholders, the government, communities and the general public.

4.2.6


Channels to promote professional ethics

GRI 205-2



Training

- Based on the international standards laid out in the FCPA (Foreign Corrupt Practices Act), including the seven guidelines the FCPA provides to prevent acts of corruption.
- Union employees receive [Code of Ethics](#) training every two years, and annually for non-union employees.
- We are members of the TRACE (Anti-Bribery Compliance Solutions) international training platform, where company employees complete high-impact, quality e-learning trainings with flexible scheduling.



Communication

- Media campaigns with posters, memos, intranet, and screens at company offices and cafeterias.
- Principal themes:
 - Workplace harassment
 - Corruption and conflicts of interest
 - Respect for human rights
 - Money laundering
 - Detecting and reporting violations

⁵ Per the FCPA, corruption includes acts of bribery, extortion or solicitation, trading in influences, and unauthorized facilitation payments to government employees.

⁶ As defined by the FCPA, acts of bribery, extortion or solicitation, trading in influences, and unauthorized facilitation payments, where government operations are involved.

⁷ Bribe: The promise, offering or giving a private official privado, directly or indirectly, anything of value for their own or another’s benefit, to obtain or retain business or any other benefit or undue advantage.

Corporate GovernanceBusiness Ethics and Integrity

	Anti-corruption / Code of Ethics				Code of Ethics
	Mining Division			Infrastructure Division	Transportation Division
	Minera Mexico	SPCC	ASARCO		
Personnel trained, by topic*					
Executive Leadership	100%	40%	86%	53%	100%
Upper Management	98%	90%	90%	27%	100%
Middle Management	100%	97%	78%	45%	100%
Administrative / Operational personnel	100%	95%	79%	41%	100%
Unionized	97%	99%	*	*	N/A

* Governmental institutions and business partners are not included in the Personnel trained.

Confirmed incidents of corruption and actions taken

GRI 205-3

We received no reports of government-related corruption⁶ in 2022, however there were five reports involving claims of bribery⁷ between individuals in our Transportation Division. We investigated the matters and found that four of these cases were without merit and therefore no penalties or sanctions were levied. The fifth case remains under investigation.

Our reported cases of corruption in the last five years are shown following:

	2018	2019	2020	2021	2022
MINING	9	-	-	-	-
AMC	-	-	-	-	-
ASARCO	-	-	-	-	-
SPCC	-	-	-	-	-
TRANSPORTATION	-	-	-	-	-
INFRASTRUCTURE	-	-	-	-	-
Total	9	0	0	0	0

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4.2. Business Ethics and Integrity

Grupo México has zero tolerance on corruption, fraud, conflicts of interest, or any action or activity that could be construed as contrary to the values and standards of the company, or national or international law.

Production in countries that have the 20 lowest rankings in Transparency International's Corrupt Perception Index
SASB EM-MM-510a.2

In the context of our anti-corruption initiatives and actions in our three divisions and subsidiaries, including Southern Copper Corporation, as ranked by the Transparency International Corrupt Perception Index, we have no operations or financial or non-financial transactions in any of the 20 countries with the highest perception of corruption.

Contributions to political parties or representatives
GRI 415-1

In compliance with and as required by our [Code of Ethics](#), our three divisions and subsidiaries, including Southern Copper Corporation, do not make donations of any kind to political parties or organizations, pay lobbying expenses, or participate in setting public policy or in legislative or regulatory processes.

Legal actions related to unfair competition, monopolistic practices and against free competition
GRI 206-1

None of our three divisions or subsidiaries, including Southern Copper Corporation, was subject to legal action involving unfair competition, monopolistic practices or against free competition. As a preventive action, Grupo México has a team of legal experts who advise on critical business decisions to avoid any non-compliance at the national or international level.

Non-compliance with social and economic laws and regulations
GRI 419-1

We have received no monetary or non-monetary fine or sanction for non-compliance with social or economic laws.

Non-compliance with environmental laws and regulations
GRI 307-1

The Mining Division strengthened its Environmental Legal Compliance Taskforce in 2022. This team was created to design, implement and monitor an institutional system to identify the risks associated with legal non-compliance that could impact the environment and/or affect our operations in Mexico. The Taskforce meets quarterly and has an Environmental Legal Compliance Policy, Environmental Legal Steering Committee Charter, and a Compliance Model and Manual.

The Mining Division received three fines in 2022, totaling US\$195,841, which our Legal Department is reviewing and may challenge.

The Transportation and Infrastructure divisions did not receive any significant monetary or non-monetary fine or sanction in 2022 for non-compliance with environmental laws or regulations.

Number of environmental fines⁸ in US\$ for the last 4 years:

	2019		2020		2021		2022	
	Fines	US\$	Fines	US\$	Fines	US\$	Fines	US\$
MINING	2	38,182	2	52,489	10	781,780	3	195,841
TRANSPORTATION	1	50,690	-	-	-	-	-	-
INFRASTRUCTURE	-	-	-	-	-	-	-	-
Total	3	88,872	2	52,489	10	781,780	3	195,841

⁸ To provide more accurate information on the number of fines and the amounts per year, we have adjusted our disclosure methodology. The number of fines and the amounts reflect the number of fines received and their amounts in the corresponding year. The total amount, where applicable and available, does not include the amounts challenged. Therefore, the data may be restated in the next report as there may be changes to some fines and amounts, as a result of the challenges, occurring outside of the reporting period for this report.

4.2. Business Ethics and Integrity

Success Story

Grupo México is among the top companies listed in the Business Integrity 500 index (IC500) as rated by the **Association of Mexicans Against Corruption and Impunity** and **Mexican Transparency**, to assess the existence and public availability of policies on integrity and anti-corruption of the 500 largest companies in Mexico.

Now in its sixth year, this assessment considers publicly available information based on the following five aspects:

- 1. Statement of principles
- 2. Relationships with third parties
- 3. Training and scope
- 4. System for reporting complaints
- 5. Availability of information

The assessment determined that Grupo México and our divisions have high standards to position us as solid companies, actively combating corruption. Our subsidiary Americas Mining Corporation received 98 points (out of 100), placing AMC among the 17 companies receiving the second highest score, while our Infrastructure Division ranked 49th, with 96 points, and Grupo México and our Transportation Division 114th, with 92 points.

These recognitions affirm our anti-corruption strategy, which strengthens our culture of integrity and compliance, to anticipate and face reputational risks, maintain our competitive advantages, mitigate other associated risks, and comply with international standards and guidelines.

INTEGRIDAD
CORPORATIVA
500

2022
Sexto Informe



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5.1.5
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5.1.6
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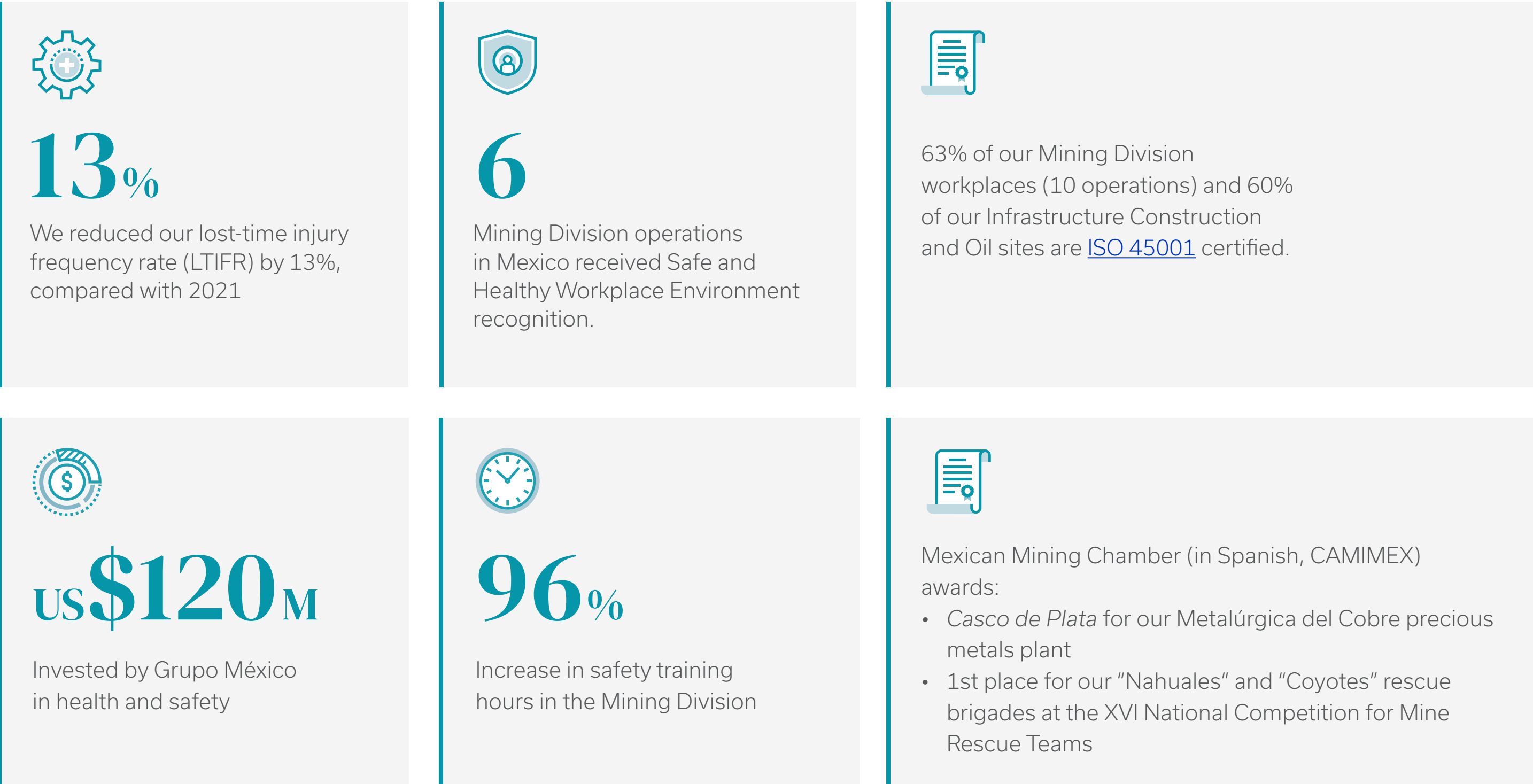
5.1 Workplace Health and Safety

GRI 3-3

Personal health, safety and wellbeing is our priority both in and outside our operations. We provide a safe and healthy work environment for our employees, contractors and suppliers by promoting a culture of prevention, identifying threats, minimizing risks, developing skills, and the ongoing improvement of our health and safety management systems.

5.1.1 Highlights

In 2022



5.1.2ManagementGRI 403-1, 403-2, 403-4

Our [Workplace Health and Safety Policy](#) provides the guidelines for promoting a culture of prevention and the ongoing improvement of the comprehensive health and safety management systems at our operations.

Our prevention management is built on three principal pillars:

- Risk identification and control
- Health and safety culture and leadership
- Performance review

Risks: identification and controlsGRI 403-2

We manage the risks associated with all our operational activities to detect, prevent, mitigate and remediate unwanted events that could affect our personnel and our interactions with communities. Our risk identification and control cycle for our operational processes involves:

1. Multidisciplinary teams who proactively identify threats and assess risks.
2. Workplace Safety Analysis: We analyze the risks associated with the current conditions at our operations and prepare control actions.
3. Permission for high-risk work: Systematic process to authorize any type of operational work, identifying the hazards to determine operational controls to minimize the risks.
4. Inhouse and independent audits.

Our 2023 goal is to use these tools to foster a culture of prevention with our contractors and suppliers. We will also incorporate this category into the scope of our critical risk management, focusing on our contractor companies that perform high-risk work and our new projects each year.

Some of the actions planned are:

- Identify contractor companies that perform high-risk work
- Safety programs to supervise activities
- Evaluation of the objectives (in conjunction with Contracting)
- Integrate contractor companies into the indicator statistics, particularly in the Transportation Division

As part of our commitment to the ongoing improvement of our management, our Mining Division implemented a Critical Risk Log in 2022, based on the International Council on Mining and Metals (ICMM) Health and Safety Critical Control Management Good Practice Guide. This tool will aid us to manage our critical risks more efficiently, and also our logging and monitoring controls.

Our improved processes have identified 16 principal Health and Safety risks, which will be monitored via the Critical Risk Log:

**Incorrect operation of vehicles**

**Increased toxic gases and/or temperature**

**Pyrometallurgical explosions**

**Flooding inside the mine**

**Falling rock**

**Flash fires**

**Fall from height**

**Landslides**

**Electrocution**

**Explosives**

**Injury from moving parts/machinery**

**Collapse inside the mine**

**Explosion of pressure vessels**

**Infectious disease outbreak**

**Injuries from lines and winches**

**Occupational disease**

For more information, consult the section [Sustainability Risk Management](#).

5.1 Workplace Health and Safety

Culture: leadership in health and safety

Fostering leadership and the active participation of our personnel is an ongoing effort by offering different training programs. We promote safe work environments through the personal and professional development of our operational and administrative personnel.

Our training programs are built from the needs assessments conducted at each operation and cover topics that include:

- Safety orientation
- Equipment and machinery training
- Safe work practices
- Safety standards
- Hazard identification and risk assessment
- Workplace health and safety awareness and culture
- High-risk work (at height, confined spaces, handling chemical substances, and the storage, transportation, use and handling of explosives, etc.)
- Emergency response (rescue procedures, salvage, civil protection)

For more information, consult on [Metrics](#) in this section.

We have [Medical Services](#) at all our operations, which run prevention programs geared towards all our employees and their families to foster healthy lifestyles.

Ongoing evaluation of our performance

We have implemented various mechanisms for the ongoing improvement of our performance in safety, including communication channels to support our employees in reporting unsafe conditions or risks at their workplace, observation programs, and audits.

The evaluation mechanisms for our Health and Safety strategies in the three company divisions are divided into the following 3 categories:

- a) Informational mechanisms: tools and channels to receive reports and to disseminate messages.
- b) Observation and monitoring mechanisms: practices and bodies created to regularly evaluate workplace environments and conditions.
- c) Review mechanisms: practices that focus on the fulfillment and performance of our health and safety strategy.

For more information, consult on the section [Evaluation Mechanisms](#) below.

5.1.3 Governance
GRI 403-8

Corporate Level

Our three divisions report their workplace health and safety management to the Grupo México governing bodies at each division, as described in [Corporate Governance - Sustainable Development Management](#).



Buenavista del Cobre collaborator, Sonora, Mexico

5.1 Workplace Health and Safety



Mining Division collaborator, Mexico

Mining Division

Health and Safety management in the Mining Division falls under the scope of our Corporate Sustainable Development Department, which has a Workplace Health and Safety department structured as follows:

Corporate Sustainable Development Department			
AMC Health & Safety Department			
Occupational Health	Safety	Health & Safety Information Management	
Ensures compliance with health regulations at our work sites and sets the strategies to care for the health of our employees.	Sets, organizes, coordinates, controls and supervises industrial safety and hygiene activities at our Americas Mining Corporation (AMC) properties.	Manages our information systems and gathers statistical information to prepare industrial health, safety and hygiene reports, and workplace health and safety management system reports for AMC.	
Health Monitoring	Contractor Safety and Emergency Response	Training and Design	Management Systemsde Gestión
Coordinates and audits compliance with health regulations and government health standards for our processes, products, procedures, facilities, services and related activities.	Audits and manages the implementation and operation of contractor health and safety programs at our operations, verifying their activities are performed according to health and safety standards. Audits the conditions, requirements and protocols in the event of emergency, and also preventive measures to control the occurrence of emergency situations at our operations.	Coordinates the health and safety planning, training and assessment of skills and competencies with the different departments at each operation, to strengthen the know-how and skills of our employees.	Plans, sets and implements strategies for our operations to achieve the goals set by the Workplace Health and Safety Management System.

5.1 Workplace Health and Safety

Workplace Health and Safety

Our People

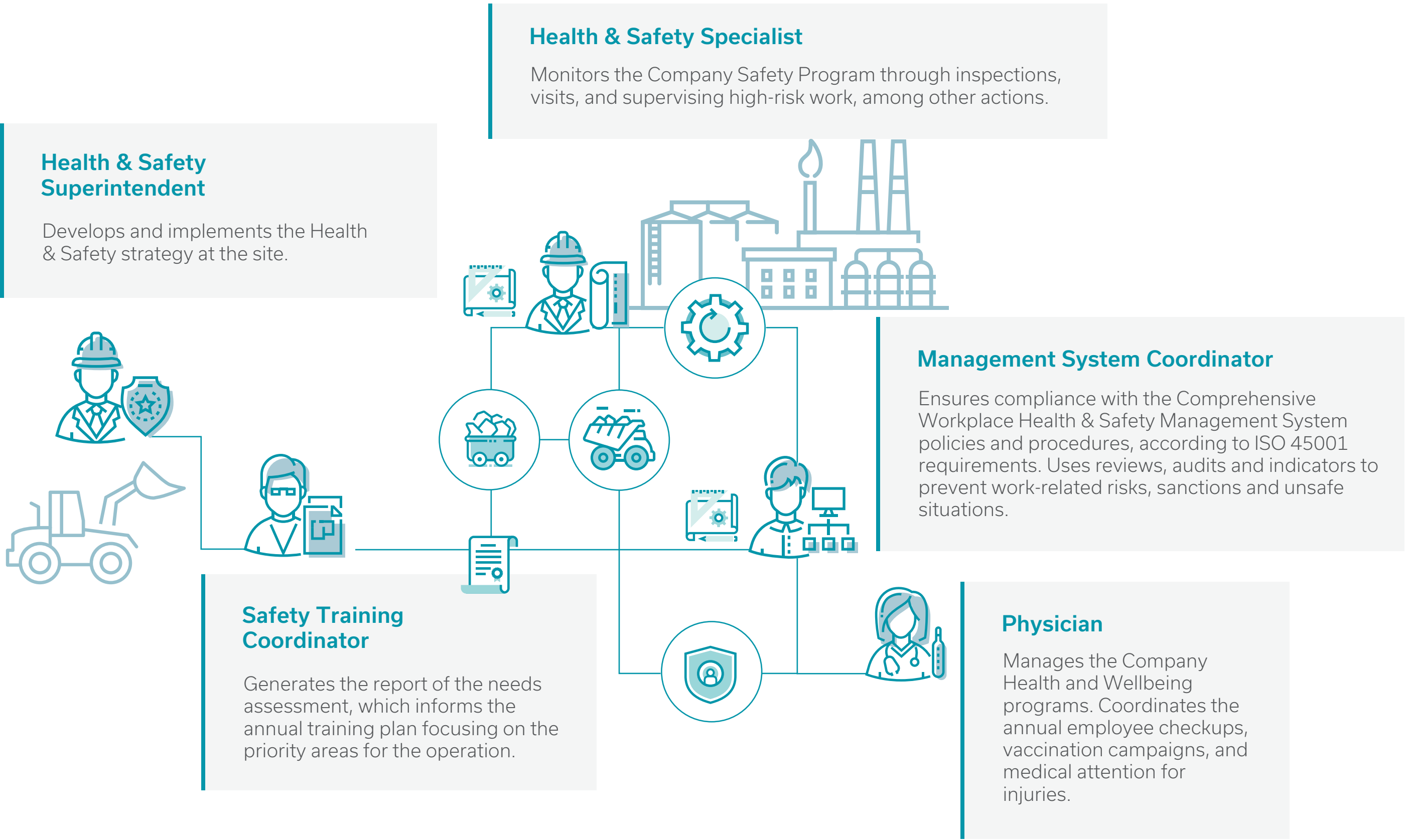
Diversity & Inclusion

Human Rights

Local Communities

Indigenous Peoples

The team at each site has the following roles and responsibilities:



Mining Division collaborators, Mexico

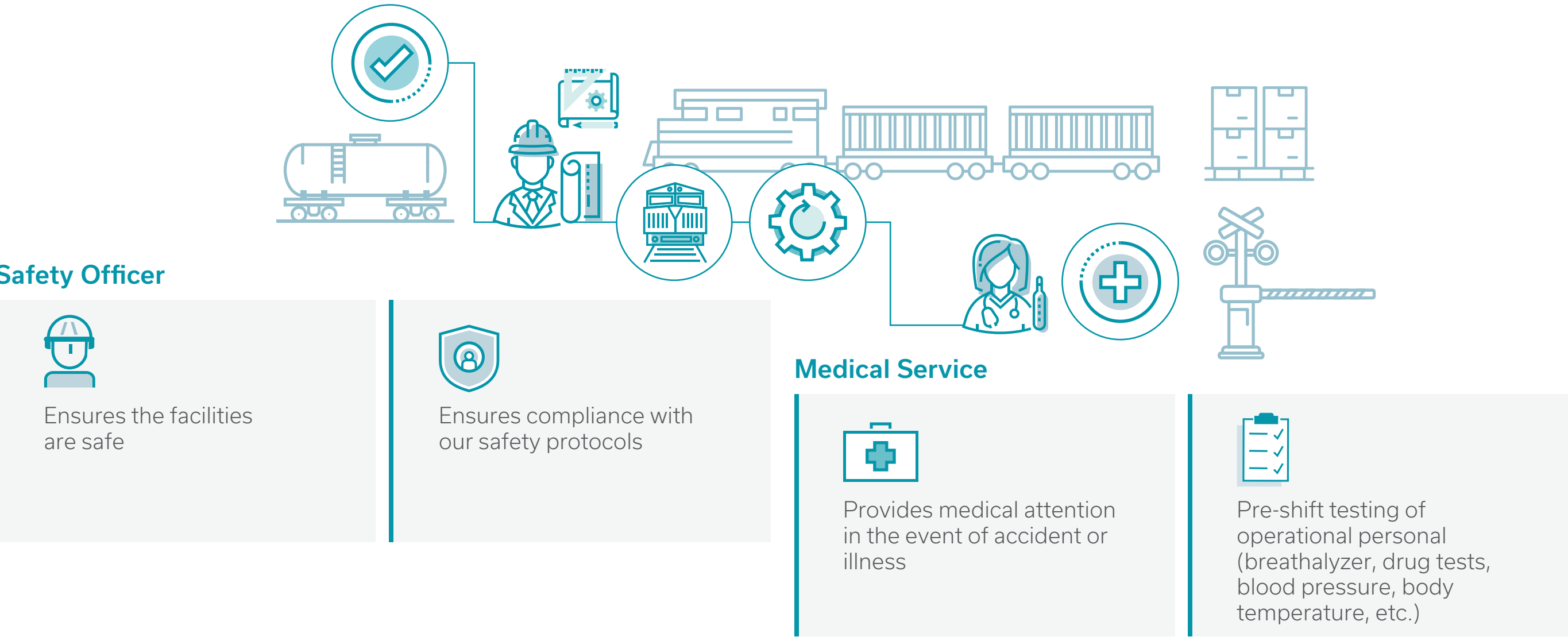
5.1 Workplace Health and Safety

Transportation Division

The Transportation Division has a Health and Safety Corporate Department.



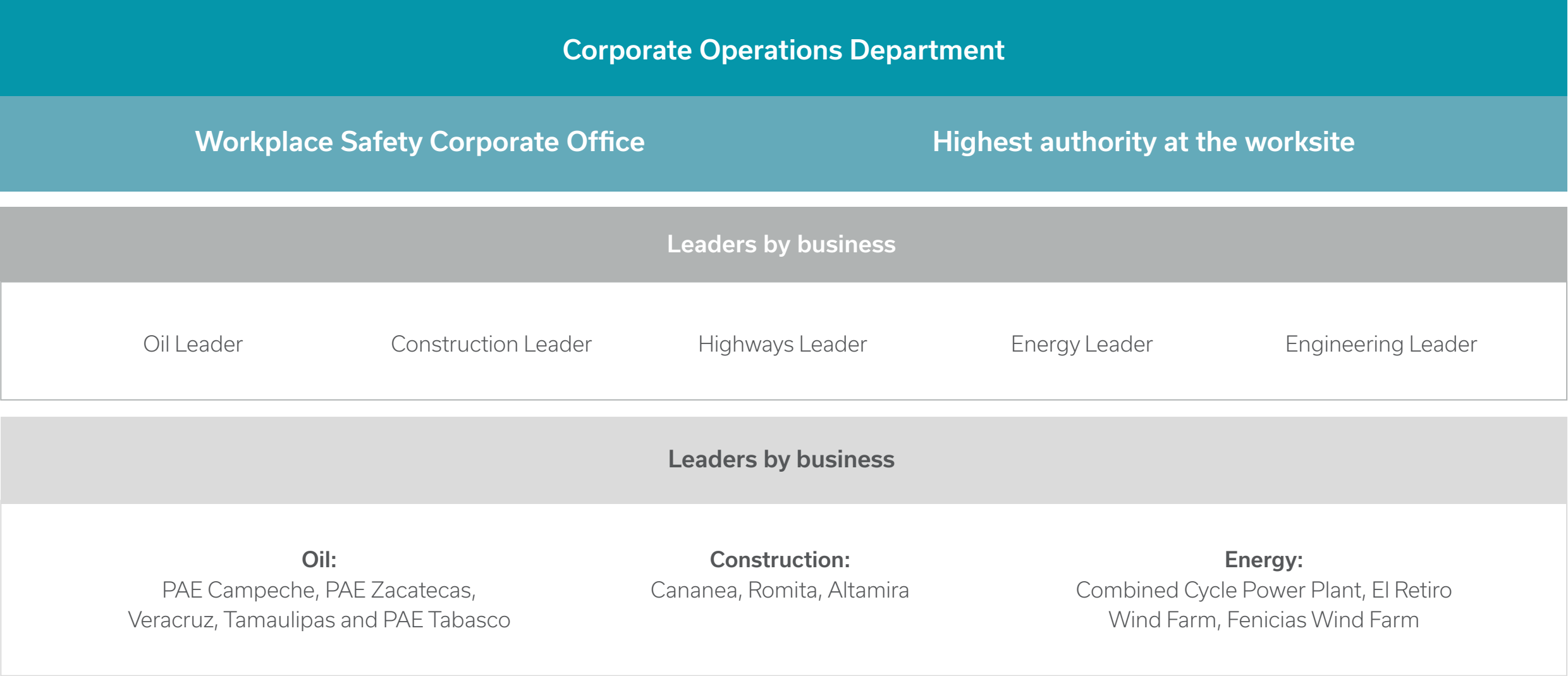
The Transportation Division has a Health and Safety Corporate Department.



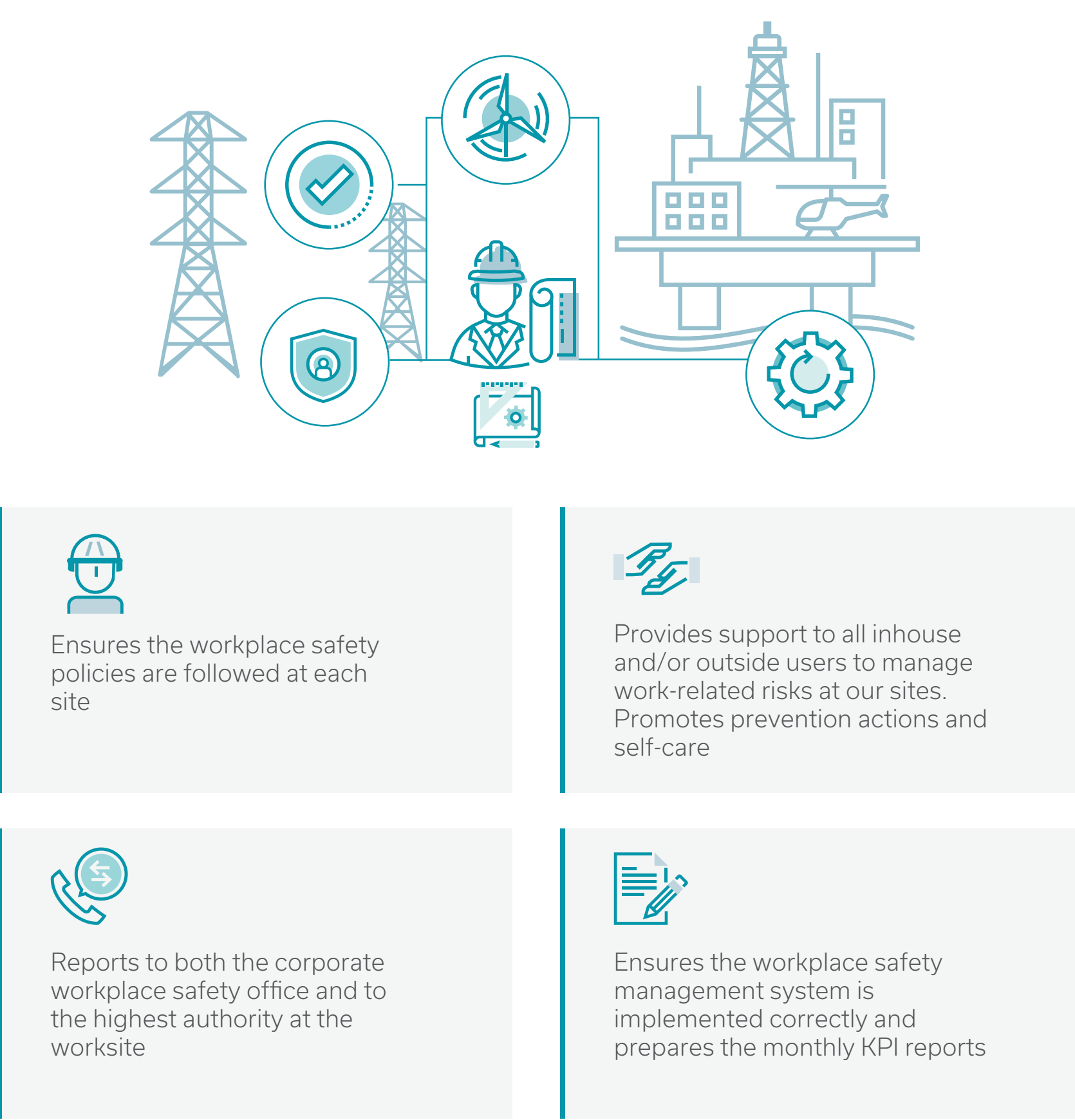
5.1 Workplace Health and Safety

Infrastructure Division

The Operations Department of the Infrastructure Division holds the overall responsibility for workplace safety, supported by the Workplace Safety Office:



The Operations Department of the Infrastructure Division holds the overall responsibility for workplace safety, supported by the Workplace Safety Office:



5.1 Workplace Health and Safety

Workplace Health and Safety

Our People

Diversity & Inclusion

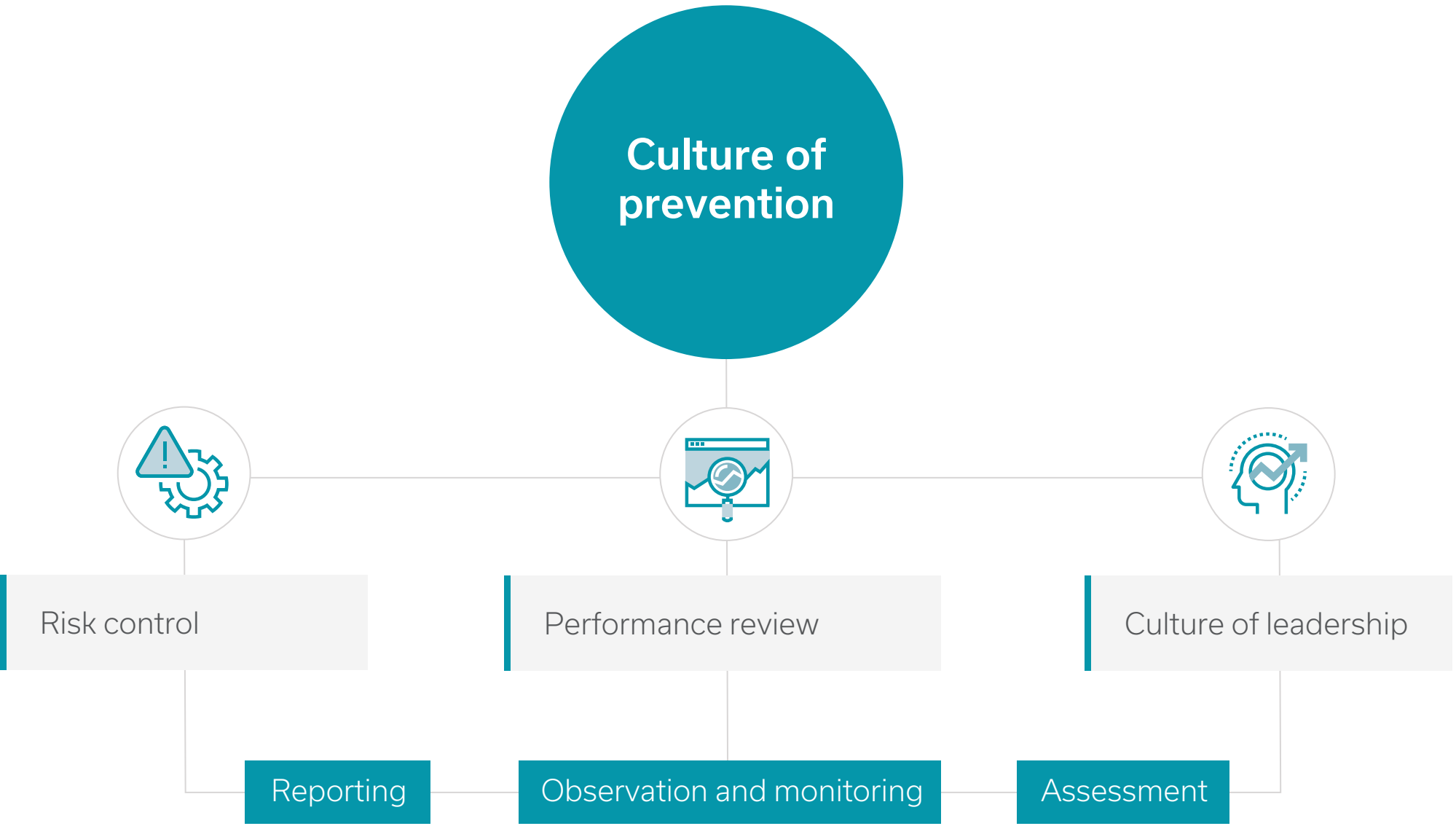
Human Rights

Local Communities

Indigenous Peoples

5.1.4
Strategy

We promote safe and healthy workplace environments to protect our people, contractors and suppliers, through the 3 pillars of our culture of prevention:



Our strategy uses different tools, initiatives, corporate health and safety programs, and also includes evaluation mechanisms, which include bodies, practices and channels to maintain an ongoing evaluation process.



Santa Bárbara Unit collaborators, Chihuahua, Mexico

Safety programs and tools

Our principal corporate safety programs include Emergency Response Plans and Safety Teams across our three divisions, adapted to the particular characteristics of each type of operation:

Emergency Response Plans

Monitoring our Emergency Response Plans helps us to order the actions of each person when responding to each type of event that may present at our operations in the different divisions.

These Emergency Response Plans strengthen the response skills of our personnel and their ability to react, reducing their vulnerability by having competent work teams and the equipment necessary to respond to incidents.

We evaluate these plans through our Comprehensive Workplace Health and Safety Management System, which identifies and develops:

- Actions for implementation, correction, monitoring and updating.
- Technical training needs of our employees.
- Equipment and instruments to detect and respond to emergencies.
- Maintenance of evacuation routes and signage.

5.1 Workplace Health and Safety

Workplace Health and Safety

Our People

Diversity & Inclusion

Human Rights

Local Communities

Indigenous Peoples



Brigadiers, Mining Division, Mexico

Safety Teams

We have emergency response teams at all our operations, made up of operational and health and safety personnel who have been trained to respond to emergency situations quickly.

Our Mining Division has specialized rescue brigades at our mines. At the XVI National Competition of Underground Mine Rescue, First Aid and Hazardous Materials Teams organized by the Mexican Mining Chamber (in Spanish, CAMIMEX) and the National Council on Job Skill Standardization and Certification (in Spanish, CONOCER), we received:

- 1st place for our Santa Barbara team (“Coyotes” First Aid rescue team)
- 1st place for our Charcas team (“Nahuales” underground mine rescue)

The Infrastructure Division has trained teams to respond to the various types of situations that may present in our different lines of business, such as fuel leaks, man overboard rescue, incidents involving helicopters, ship collisions, raising or lowering wind turbines, among others.

In the Transportation Division, trained teams control situations and give instructions in the event of an emergency at our operations, with the support of our medical service.

Health programs and tools

GRI 403-3

Our medical services are constantly monitoring the physical and mental health and wellbeing of our personnel, and that of our neighbor communities for certain operations.

Medical services

Mining Division

Our principal health programs include:

- **Health campaigns and prevention talks:** our medical departments, together with our safety departments, conduct health campaigns each year, focusing on the prevention and detection of health issues.
- **Mental health training workshops:** led by specialists in occupational psychology, these workshops focus mainly on stress management, resilience, acceptance of mental health conditions, and eliminating the stigmas associated with mental illness.
- **Wellbeing program:** implemented at our Mining Division operations in Mexico, focusing on the detection and prevention of non-occupational health risks and chronic-degenerative diseases. As of 2022, 77% of our employees are participating in this health control and monitoring program.

We conducted 48 health campaigns in 2022 focusing on the early detection of diseases like breast cancer and prostate cancer. We also held 3,755 health talks, which received 10,491 participants, and 1,530 talks on occupational health, focusing on the prevention of occupational risks and diseases.

5.1 Workplace Health and Safety

Workplace Health and Safety

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Hospitals in Peru

Our operations in Peru provide medical services to care for the comprehensive health of an estimated 14,000 inhabitants, including our employees and their families, and when needed, residents of the communities near our operations.

These services are provided free of charge through three specialty hospitals, two in the Moquegua region and one in Tacna, and are regulated by the Peruvian National Health Service.

Our hospitals are staffed by a team of certified healthcare professionals, experienced in attending ailments affecting the health of residents at our camps.

We provided 481,306 medical services to 17,500 people in 2022, representing an investment of over US\$26 million.

The three hospitals have emergency services, medical-surgical wards, operating rooms for major and minor surgeries, doctor and dentist offices, clinical labs, physical therapy, and pharmacies. Our services are equipped with the latest technology to provide the best in biomedical advances to our users.

Transportation Division

The Transportation Division has a medical service at each operation, available 24/7 for medical attention and assessments.

Our medical services serve as a filter to ensure all operational personnel are physically fit to perform their activities, without any health concern or condition that could compromise their safety or that of others. The Transportation Division has a Zero Tolerance policy for employees having alcohol or illegal substances in their systems when they come to work.

Infrastructure Division

In addition to our ongoing health campaigns, the Medical Service at our operations is available for consultation by phone, where a team of physicians attends to employee health-related concerns, channeling them to local public and private healthcare facilities, when necessary.



Health Services, Mining Division, Mexico

5.1 Workplace Health and Safety

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Evaluation mechanisms

GRI 403-2, GRI 403-4


The mechanisms for our ongoing improvement in health and safety support building a culture of prevention at all our operations and worksites. These mechanisms are divided into the following categories:

 **Informational mechanisms**


Tools and channels created to receive reports and to disseminate messages to raise awareness for prevention among employees:




Complaint and suggestion box*:
direct and safe line of communication to report irregularities by email.




Reporting Line*:
direct and safe line of communication to report irregularities by phone.




Reportes WhatsApp WhatsApp reports (Mining and Transportation):
digital media to communicate unsafe events and conditions detected at our operations. Unit supervisors and superintendents participate in the chats to respond and address the reports received.




Complaint and suggestion box (Mining and Transportation)*:
direct and safe line of communication to report irregularities by email.




5-Minute talks*:
to raise awareness and highlight the importance of safety. Held at the beginning of each workday or before starting any activity.



SISSEI (Mining) personal contact reports (Mining):
feedback reports with employees on activities and procedures, focusing on continuity or correcting processes.



Near miss reports (Mining and Infrastructure)*:
reports of incidents that do not result in, but have the potential to cause, injuries or health concerns. These reports inform the ongoing improvement of prevention processes.



Health and Safety week*:
annual event to raise awareness among employees and their families on safety, health and hygiene through informational talks, conferences and activities.




Informational mechanisms: five minute talks

*These mechanisms are in place at all three Grupo México divisions.


5.1 Workplace Health and Safety

Observation and monitoring mechanisms


Bodies and practices created to regularly assess workplace environments and conditions:




Safe shift cards (Mining):
tool used to prevent injuries by evaluating different aspects prior to starting work, including preparedness, working conditions, equipment and safe work procedures.



Visits by Workplace Health & Safety personnel*:
conducted to verify the level of compliance with each element of the Workplace Health and Safety Management System and to follow up on action plans.



Inspections by supervisors and superintendents*:
conducted to ensure worksite conditions are safe and healthy.



Safety and Hygiene Committee / Special Safety Committee*:
the Mining and Transportation divisions have these types of bodies, made up of company and employee representatives:

01Provides recommendations for prevention and ensure compliance with government workplace health and safety regulations.

02Monthly schedule of inspection visits and meetings, from which a report is produced and submitted to Management and to the unions, noting the areas for improvement in employee health and safety.

03Participates in incident investigations and follows up on the implementation of preventive measures, continually strengthening the safety programs at each operation.



Mining Division collaborator, Mexico

*These mechanisms are in place at all three Grupo México divisions.

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Assessment mechanisms

Practices that focus on evaluating the fulfillment and performance of our health and safety strategy, tailored to each division:



IPERC Tool (Mining):

tool to identify work-related hazards and risks in a timely manner, and to determine actions (controls) to prevent injuries or occupational diseases, and raise awareness among personnel.



Crossed audits (Mining):

reviews conducted by a team of auditors from another operation to foster the exchange of good practices and generate recommendations to minimize employee exposure to risk factors.



Corporate inspections (Mining):

Safety Department personnel conduct regular visits to our operations to follow up on the different institutional programs and Health and Safety initiatives.



Safe performance audits (Transportation):

regular reviews conducted by Health and Safety personnel.



Effective audits (Transportation):

strategy to foster and consolidate a culture of accident prevention, using a cascading evaluation process for each area of the organization.



Safety Indicators (Infrastructure):

digital tool that measures more than 20 different indicators, which allows visualizing the contribution of the actions carried out to reduce accidents and strengthen occupational safety. The Corporate monitors this tool for a review of the applicable Mexican regulations, as well as the associated indicators.



Transportation Division collaborators, Mexico

5.1 Workplace Health and Safety

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5.1.5 Metrics and Targets
403-9, 403-10

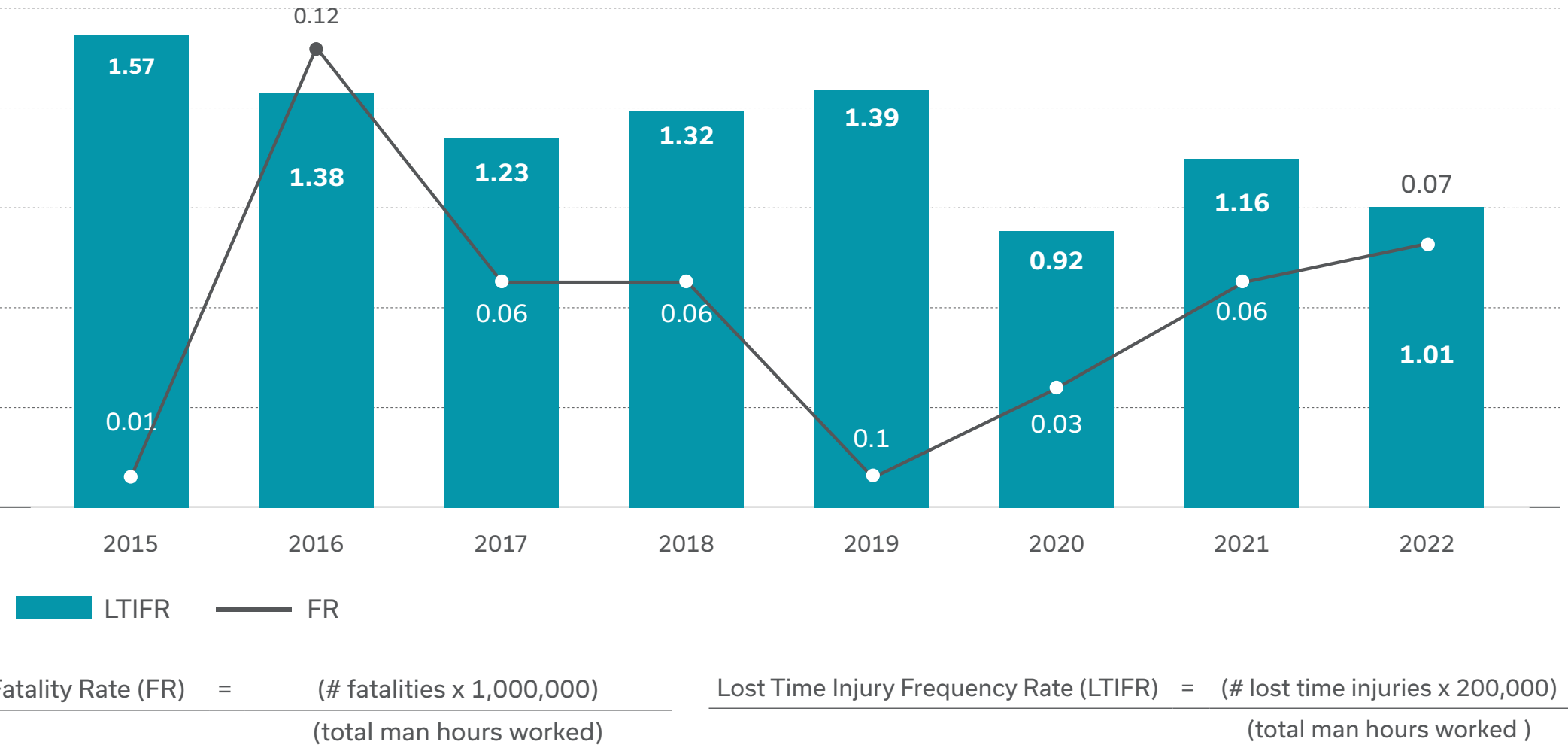
We evaluate the performance of our strategy and our different Health and Safety mechanisms through the following indicators:

- Lost time injury frequency rate (LTIFR)
- Fatality rate (FR)
- Training
- Certifications
- Occupational diseases
- Railroad coexistence

Which are described below.

The following table represents the historic lost time injury frequency (LTIFR) and fatality (FR) rates for Grupo México personnel.

Grupo México Safety Performance (2015-2022)



For more information, consult the section on the historic information of our safety performance for company employees and contractors in [Annexes](#).



Medical service, San Luis Potosi, Mexico

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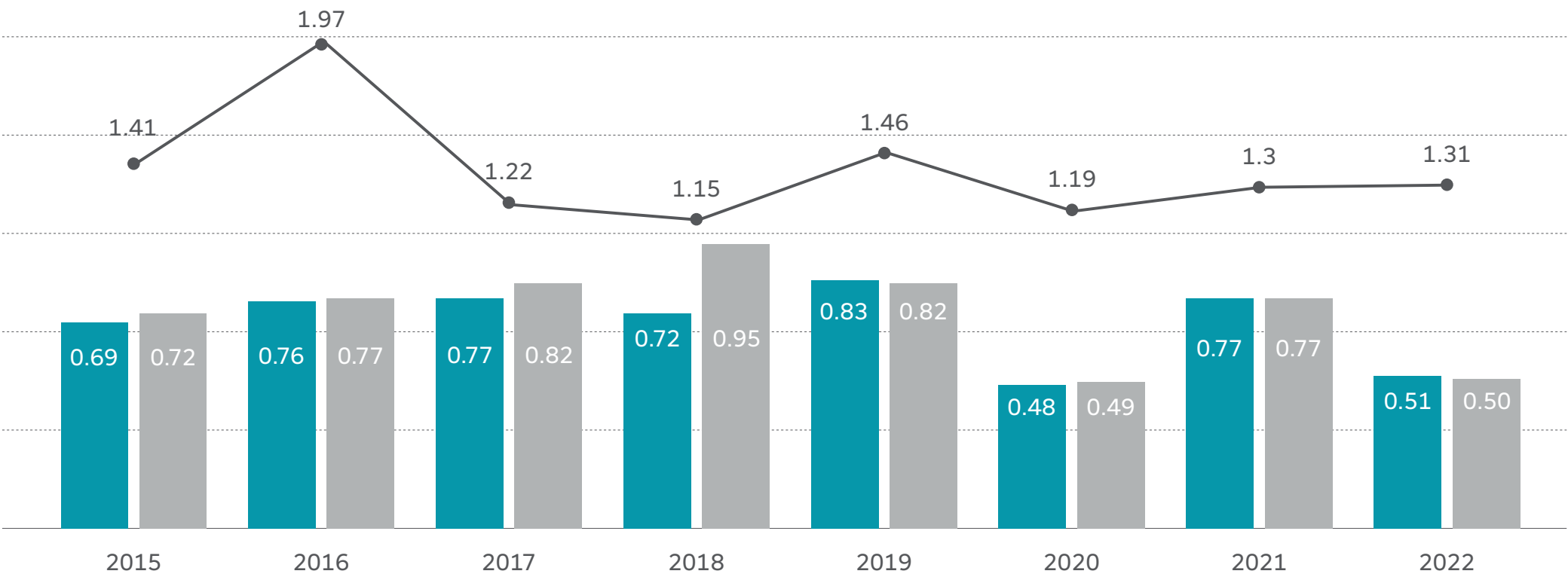
Local Communities

Indigenous Peoples

Lost Time Injury Frequency Rate (LTIFR)

GRI 403-9

Mining Division and Southern Copper Corporation (2015-2022)



AMC SCC MSHA Total Metales Mines

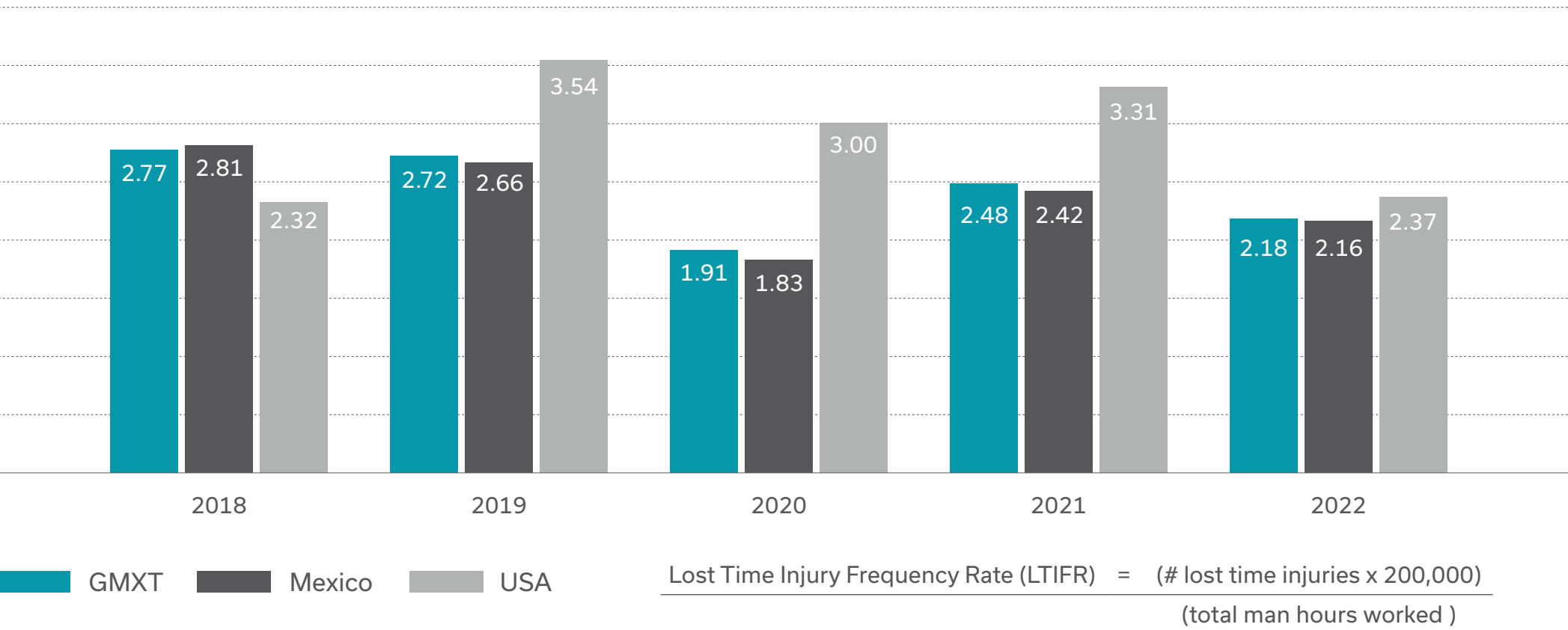
Lost Time Injury Frequency Rate (LTIFR) =
$$\frac{(\# \text{ lost time injuries} \times 200,000)}{(\text{total man hours worked})}$$

The above table provides a comparison of the lost time injury frequency rate (LTIFR) for company personnel occurring per 200,000 man hours worked between the Mining Division, Southern Copper Corporation, and the results reported by the Mine Safety and Health Administration (MSHA).

The principal types of injuries caused by workplace accidents were fractures, contusions and cuts, and the fingers are the part of the body most frequently injured.

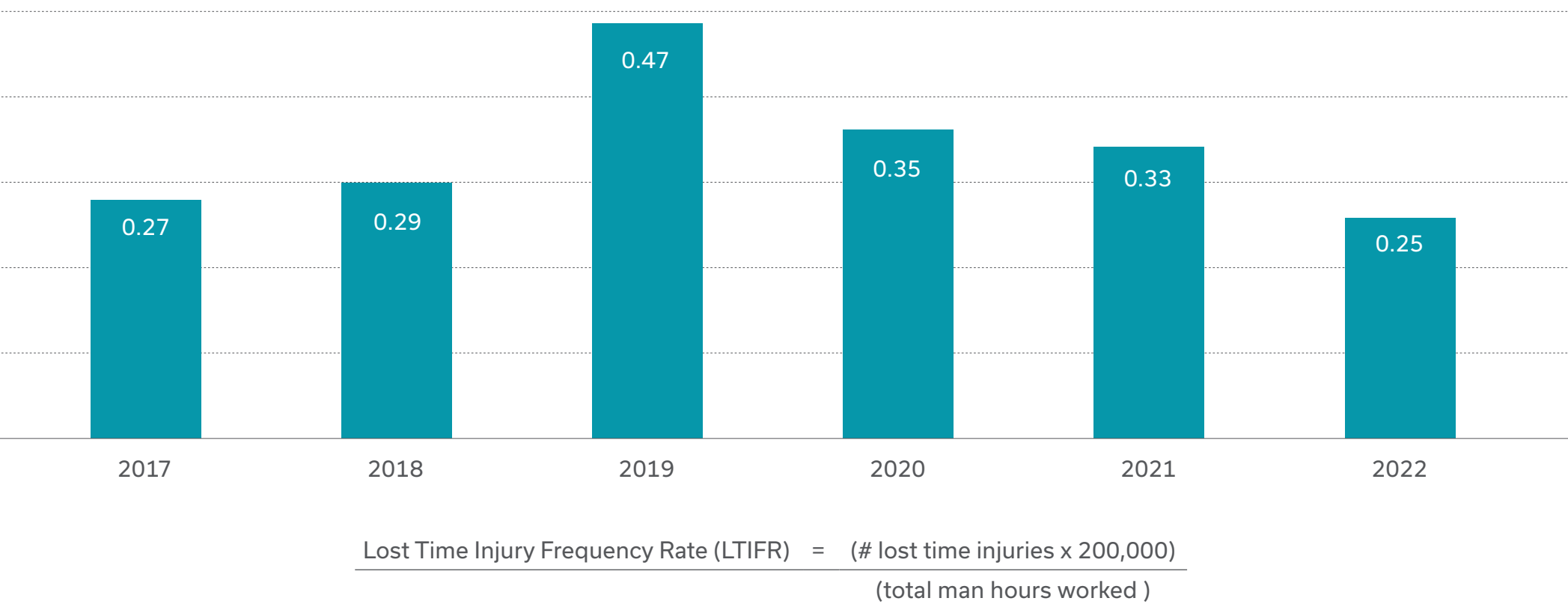
Transportation Division (2018-2022)

We reduced workplace accidents by 12% in 2022, compared with the previous year.



Infrastructure Division (2017 – 2022)

Although our Infrastructure Division operates in multiple sectors, and some of these are high-risk, as in the case of the oil and construction industries, we have reduced our lost time injury frequency rate by 47% over the last 4 years.



Lost Time Injury Frequency Rate (LTIFR) =
$$\frac{(\# \text{ lost time injuries} \times 200,000)}{(\text{total man hours worked})}$$

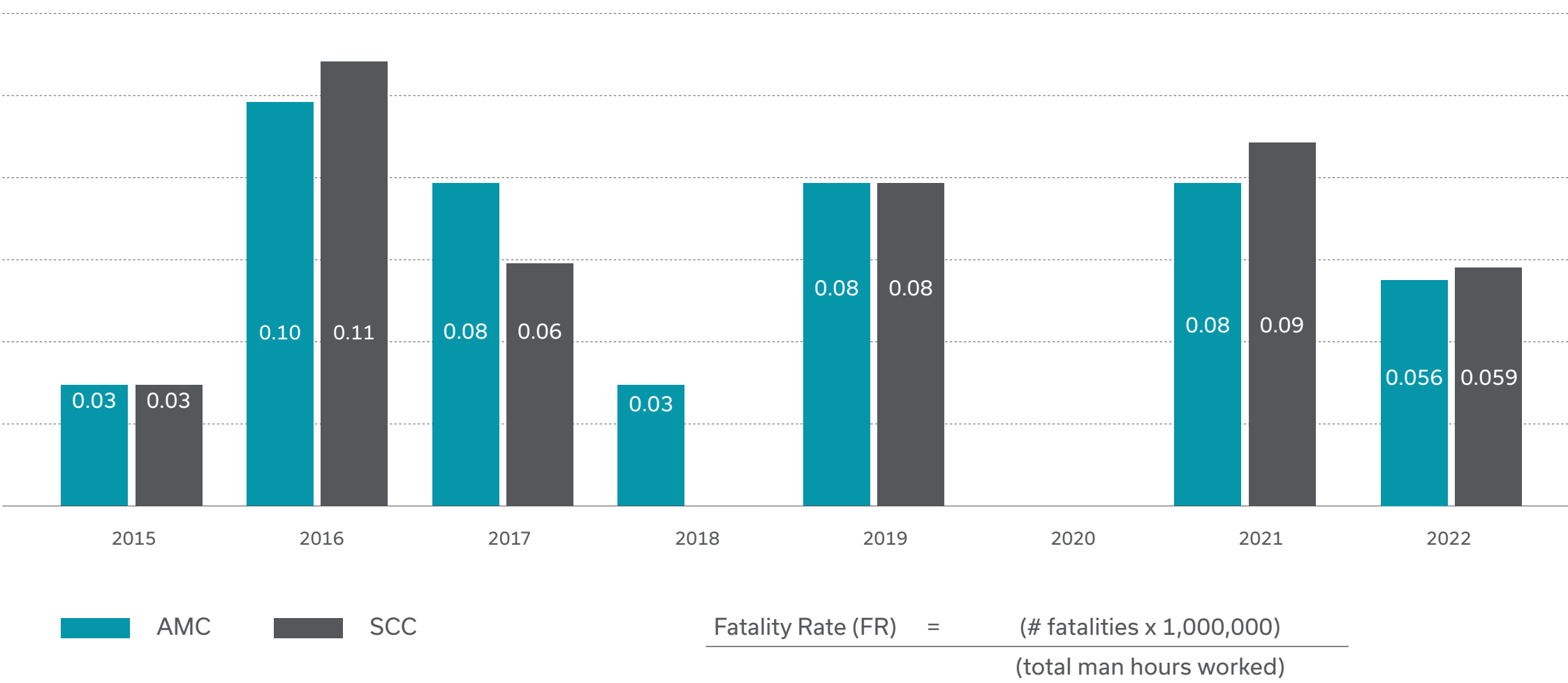
5.1 Workplace Health and Safety

Fatality Rate (FR)
GRI 403-9

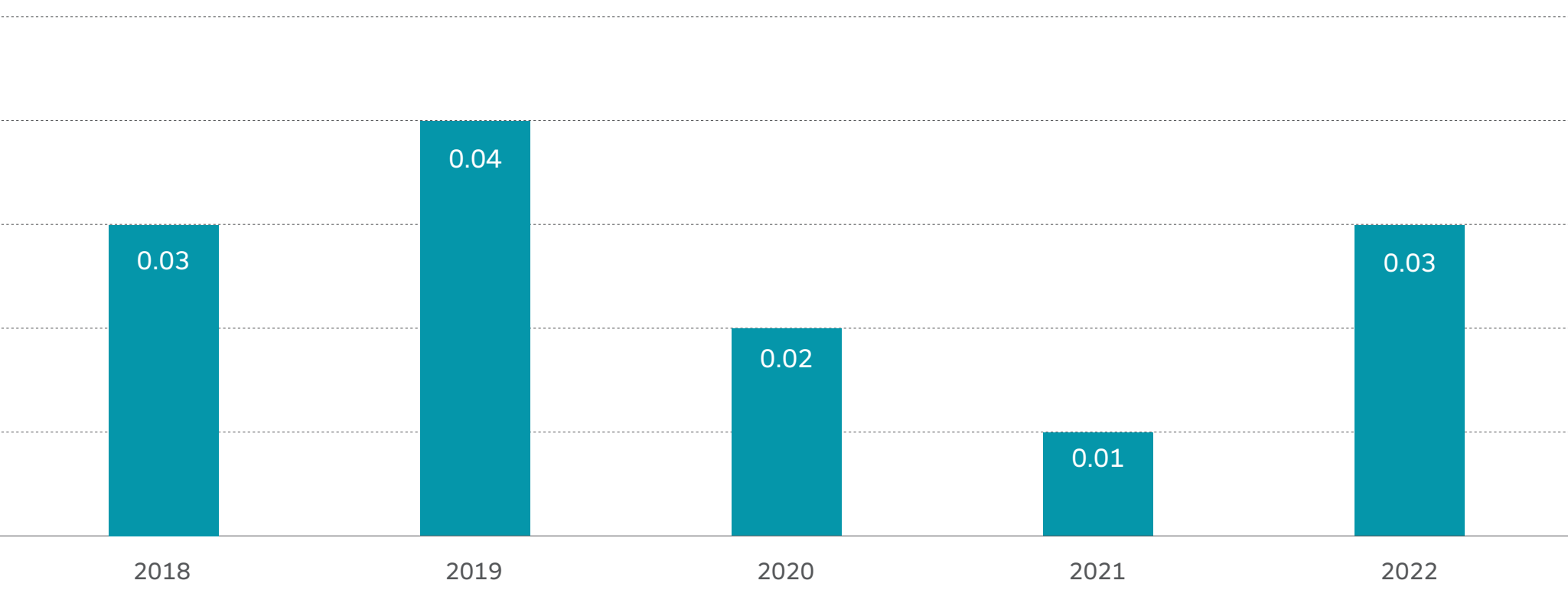
Mining Division and Southern Copper Corporation (2015-2022)

There were four accidents in 2022 that resulted in fatalities, two company employees at our La Caridad and Santa Barbara operations and two contractor personnel at our Buenavista del Cobre and Santa Barbara operations, involving vehicle operation and contact with toxic gases, respectively.

Following these events, we strengthened our control measures to upgrade our standards, prepare reports, increase media campaigns and instructional materials for personnel, and reinforced the implementation of corrective procedures and certifications for equipment operators by the supplier, accordingly.



Transportation Division (2018-2021)



There were three fatalities reported in 2022 at our operations in Coahuila, Chihuahua and Sinaloa.

These events were caused by unsafe actions and failures to follow regulations, safety protocols and instructions from the Operations Control Center. In response, strengthened our control and monitoring through a process of communication and dialogue, and also improved our ongoing monitoring of strict safety measures for all personnel.

Infrastructure Division

The Infrastructure Division reported no fatalities at our operations in 2022.

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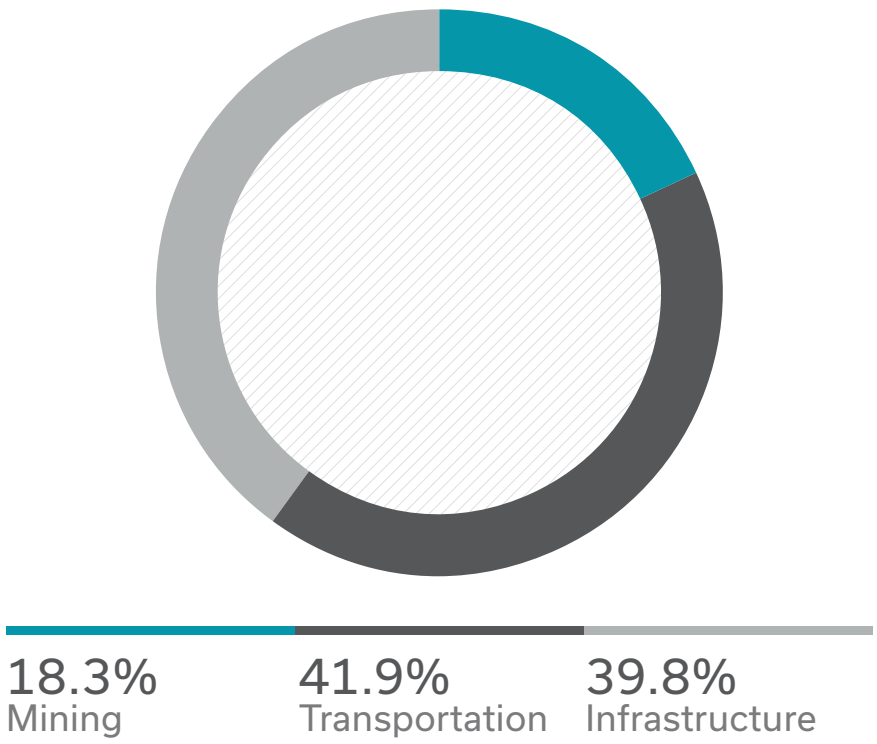
Indigenous Peoples

Training

GRI 403-5

We delivered a total 1,146,047 training hours on workplace safety in 2022.

Safety training hours



In the Mining Division, we delivered 209,884 training hours on basic and preventive safety for a total 29,025 participants, both new and old hires (company and contractors), of which 38,746 hours were dedicated to training our contractor personnel.

The Transportation Division reported 479,812 training hours, with an average 44.9 training hours per company employee.

In the Infrastructure Division, we delivered more than 456,351 training hours on workplace safety at our sites.

Certifications

GRI 403-1

Our management systems are certified by accredited bodies and are frequently reviewed with inhouse audits, and strengthened through ongoing improvement processes.

Our principal certifications include:

ISO 45001

Our Mining Division made progress in 2022 in certifying the safety systems at our operations:

- 10 of our 16 operations (63%) are ISO 45001 certified, three of which received their certification in 2022, and we expect to certify the remaining six operations in 2023.
- Operations certified:
 - La Caridad
 - Metallurgical Complex
 - Lime Plant
 - Guaymas Terminal
 - Buenavista del Cobre
 - Zinc Plant
 - Charcas
 - Santa Barbara
 - Ilo
 - San Martin
- Pending certification:
 - Toquepala
 - Silver Bell
 - Ray
 - Mission
 - Central Workshop
 - Cuajone



Mining Division collaborators, Mexico

In the Infrastructure Division, 60% of our worksites are certified, principally in our Construction and Oil subsidiaries:

- Lines of business certified:
 - Oil
 - Construction
 - Engineering
- Pending certification:
 - Highways
 - Energy

Occupational Diseases

GRI 403-10

Mining Division

The principal indicators in Health for the Mining Division are:

- Fatalities resulting from occupational diseases or illnesses
- Recorded occupational diseases or illnesses
- Occupational disease rate

The 2022 results for each indicator were:

Indicator		AMC	SCC	Mexico	Peru	USA
I. Fatalities resulting from occupational diseases or illnesses	a) Employees	0	0	0	0	0
	b) Contractors	0	0	0	0	0
II. Recorded occupational diseases or illnesses	a) Employees	18	18	17	1	0
	b) Contractors	0	0	0	0	0
III. Occupational disease rate*	a) Employees	0.09	0.1	0.14	0.02	0.0

*Contractors are not included here as the majority are temporary.

The principal occupational diseases identified in the Mining Division are:

- **Hypoacusis:** :Sensory disorder that produces hearing loss or deafness and hinders speech development, language and communication; may present unilaterally, affecting only one ear, or bilaterally, affecting both ears.
- **Pneumoconiosis:** Chronic lung disease caused by exposure to metal or mineral dust.

Identifying occupational diseases helps us to measure the performance of our prevention programs and industrial health and hygiene controls. Meaning, the performance of all the measures in place to mitigate and control occupational health risks are reflected in decreases or increases in the occupational diseases identified.

Transportation Division

The Transportation Division reported no recorded occupational diseases at any of our operations.

Infrastructure Division

According to the records of the government health services, there were no recorded occupational diseases at any of our Infrastructure Division subsidiaries.

Urban-railroad coexistence

Maintaining a relationship of respect and healthy coexistence with the cities, towns and communities along our rail lines is a priority for our Transportation Division. In this regard, all crossings are signaled as required by law and according to the corresponding type of crossing. Additionally, crossings that would represent a risk to the operations or to the nearby communities are identified and closed.

The Transportation Division has been working on a level crossing upgrade program since 2017, under which we have equipped 62 crossings with automated gates, action that has reduced the accident rate at these crossings by 80%.

Additionally, we have upgraded 54 crossings with passive signaling, for a total of 116 crossings upgraded since the start of this program.



Infrastructure Division collaborators, Mexico

5.1.6

Next Steps

GRI 403-6

As part of our ongoing improvement process, Grupo México involves and encourages our employees to develop their potential, while also strengthening our operations. Continual monitoring, review and attention to the impact of our activities is key to fulfilling our corporate sustainability strategy and goals.

To achieve these goals, we encourage and foster coordination with the different government safety agencies, to both prevent and address unwanted events, and also with health agencies, such as civil protection authorities, social security, and federal, state and municipal authorities, among others.

We will continue to strengthen our prevention management, supported by the following actions:

- **Risks:**
 - Implement additional critical risk controls to achieve zero serious and fatal accidents.
- **Culture:**
 - Increase the frequency of practice drills and preventive redundancies.
 - Develop mandatory courses and workshops to develop talent specialized in safety.
- **Evaluation:**
 - Strengthen our management processes and improve the ISO 45001 performance of our personnel.
 - Audit the safety protocols of our contractor companies, principally those whose work exposes them to critical risks.

For more information on meeting our 2022 Corporate Sustainable Development Goals and our 2030 targets, consult the section on [Corporate Goals](#).

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5.2.4
Human Capital
Development



5.2.5
Talent Recruitment
and Retention



5.2
Our
People

GRI 2-7, 2-8, 3-1, 3-2, 3-3

Our people are the backbone of Grupo México and the foundation for fostering an environment of wellbeing for all company employees, based on the values of honesty, respect and responsibility.

We have corporate policies in place to manage and develop our labor practices in adherence of regulations in the regions where we operate. We add to these, our policies on human resource management aligned with international best practices. We also listen to and address the concerns of our employees through organization-wide tools and mechanisms, like the Reporting Line and workplace climate surveys, which are based on performance indicators designed and applied by our Human Resources departments, and documented policies and procedures. These annual and monthly indicators measure results and reflect the strategic planning of the Human Resources Department. Additionally, Internal Control conducts reviews and there are also inhouse and independent audits.

- > All employees, contractors and suppliers that work with or on behalf of Grupo México are required to comply with our company policies and procedures.



Mining Division collaborator, Mexico

Policies for Our People	
Code of Ethics	General Policy on Our People
General Human Rights Policy	Policy on Diversity, Inclusivity, Non-Discrimination and Zero Tolerance for Workplace or Sexual Harassment
General Policy on the Respect and Wellbeing of our Collaborators	Workplace Health and Safety Policy

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5.2 Our People

5.2.1
Highlights

Grupo México

- 11.9% decrease in the turnover rate, compared with 2021.
- 61.1% of vacant positions were filled inhouse (+107% over 2021).
- Inhouse promotions increased 107%, compared with 2021.
- 7.5% of employees are women (+ 11.2% over 2021).
- 30.6% of our 2,217 women employees are in STEM positions (+10.6% over 2021).
- 14.1% of women employees in all Management positions (+6.8% over 2021).
- 14% of women employees hold Junior Management - Middle Management positions (+6.2% over 2021).



Transportation Division

- 97% employees are full time, under permanent contract.
- New hires increased 18.2% over 2021.
- 94.4% vacant positions filled inhouse.
- 48.7 hours of training per employee this year (+37% over 2021).
- 6.8% increase in women employees, compared with 2021.
- 31.4% of women employees hold STEM positions (+14.2% over 2021)



Mining Division

- 43.7% employees are hired from and/or residents of local communities near our operations.
- 82.6% of upper management positions are held by local residents.
- Inhouse promotions increased 11.3%, compared with 2021.
- 12.2% decrease in the turnover rate, compared with 2021.
- 26.3 training hours per employee this year (+ 55.5% over 2021).
- 15.3% increase in women employees, compared with 2021.
- 32.4% of women employees hold STEM positions (+18.3% over 2021)
- 11.8% of women employees in all Management positions (+15.8% over 2021).
- 11.6% of women employees hold Junior Management - Middle Management positions (+14.9% over 2021).
- 97.7% vacant positions at SCC filled inhouse (+13.9% over 2021).
- 71.4% increase in women in Management positions at SCC, compared with 2021.



Infrastructure Division

- 100% upper management positions held by local residents.
- 25.7% decrease in turnover rate, compared with 2021.
- Inhouse promotions increased 411%, compared with 2021.
- 6.8% increase in women employees, compared with 2021.
- 18.9% of women employees in all Management positions (+6% over 2021).
- 20.4% of women employees hold Junior Management - Middle Management positions (+9% over 2021).

¹ Here, the term “all Management positions” includes junior, middle and top management.

5.2.2Labor Practices²
GRI 3-1, 3-2

At Grupo México, we honor all our obligations and responsibilities as laid out in our collective bargaining agreements, acting in adherence of law and [our values, labor culture](#) and [Code of Ethics](#).

➤ 96.7% of our employees are under permanent contract.

Workforce
GRI 2-7

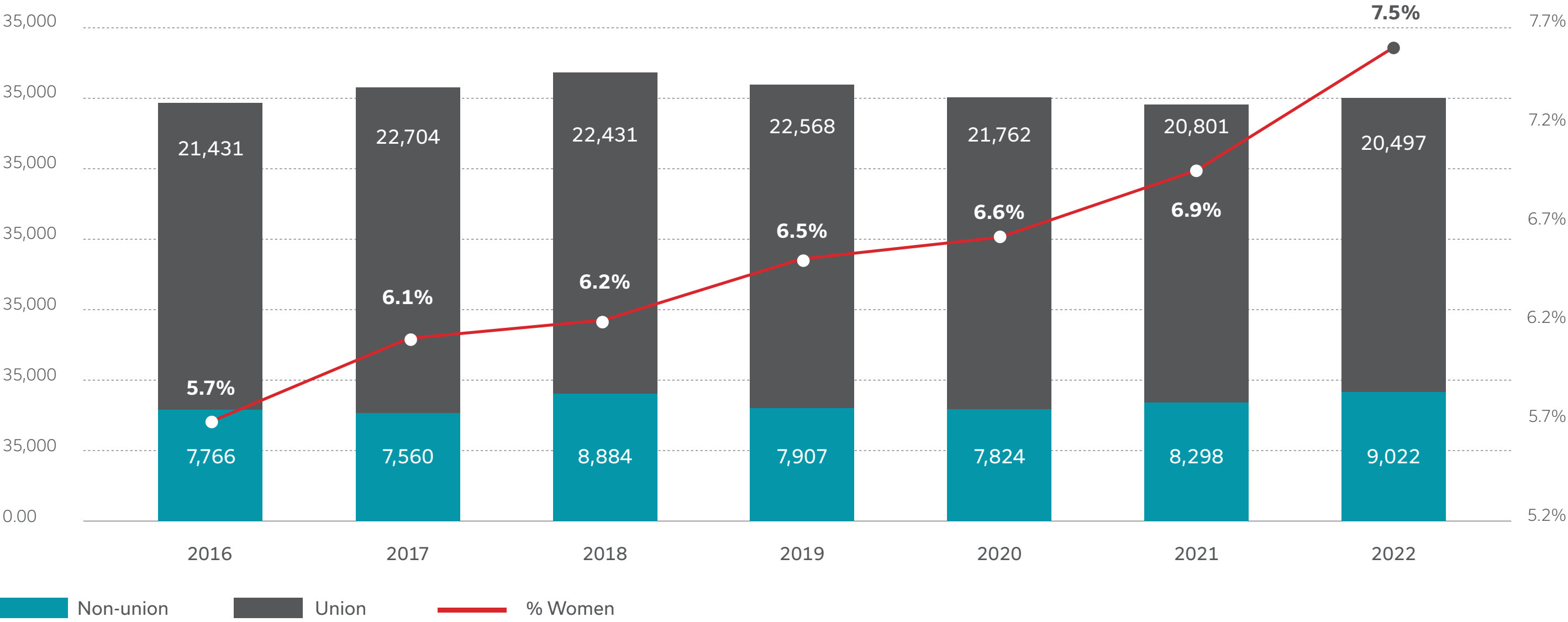
Workforce ³										
	Mining Division					Transportation Division			Infrastructure Division	Grupo México
	Total Division	SCC	Minera México (Mexico)	SPCC (Peru)	ASARCO (USA)	Total División	Mexico	USA	Total Division	Total
Employees	16,316	15,016	10,050	4,947	1,319	10,677	9,820	857	2,526	29,519
Women	1,239	1,094	763	331	145	538	455	83	440	2,217
Men	15,077	13,922	9,287	4,616	1,174	10,139	9,365	774	2,086	27,302
Permanent contracts	15,683	14,374	9,989	4,375	1,319	10,348	9,492	856	2,526	28,557
W Full-time	1,183	1,038	748	290	145	504	421	83	440	2,127
M Full-time	14,500	13,336	9,241	4,085	1,174	9,844	9,071	773	2,086	26,430
Temporary contracts	633	642	61	572	-	329	328	1	-	962
Women	56	56	15	41	-	34	34	-	-	90
Men	577	586	46	531	-	295	294	1	-	872
Contractors ⁴	12,239	12,239	6,470	5,769	-	-	-	-	572	12,811
Men	11,088	11,088	5,812	5,276	-	-	-	-	572	11,660
Women	1,151	1,151	658	493	-	-	-	-	-	1,151

²The data reported in this chapter cover 100% of the workforce for our three divisions.
³It includes the breakdown of our workforce by type of employment contract, sex and region.
⁴Reporting the total number of contractors for the Mining and Infrastructure divisions. The Transportation Division is not included, however we are working to include these figures in future reports.

5.2 Our People

> 45.3% of Grupo México employees are from local communities.

Grupo México Workforce



Local workforce ⁵						
	Mining Division				Infrastructure Division	Grupo México
	Total Division	SCC	Minera México (Mexico)	SPCC (Peru)	Total Division	Total
Employees from local communities	6,555	6,510	5,661	894	1,382	7,937
% employees from local communities	43.7%	43.4%	56.3%	18.1%	54.7%	45.3%
Upper management from local communities	38	13	36	2	79	117
% Upper management employees from local communities	82.6%	61.9%	100%	20%	100%	93.6%

⁵ Employees from local communities are people who were born in or are residents of communities near our operations.

5.2 Our People



Collective bargaining agreements

GRI 2-30

Our [General Human Rights Policy](#) commits us to respecting basic labor principles and rights, in adherence of conventions 87 and 98 of the [International Labor Organization \(ILO\)](#) on freedom of association and collective bargaining.

Grupo México ensures all employees are familiar with the terms of our collective bargaining agreements and have been informed of their right to accept or reject these terms with their individual, free and secret vote. All employees, suppliers and contractors across our divisions have access to a reporting line where they can report any violation of these rights.

We have received no penalty in any of the three countries where we operate (Mexico, Peru and the United States) for breach of applicable regulations or for violating the rights of freedom of association or collective bargaining of our employees.

Each Grupo México division sets the terms and conditions for employment for their non-union personnel, respecting all regulations in each country where we operate.



36

collective bargaining agreements:
Mining Division⁸: 14
Transportation Division: 6
Infrastructure Division: 16

> 69.4% of Grupo México employees are covered by collective bargaining agreements.

⁶ Transportation Division not included as this information is not available, however we are working to include these figures in future reports.
⁷ ASARCO (USA) not included as the Human Resources department does not currently track this information.

⁸ Does not include the collective bargaining agreements of our ASARCO subsidiary (United States), as the Basic Labor Agreement between the company and its unions expired October 15, 2019. Employees are currently working under the terms and conditions of the last, best and final offer ("LBFO") implemented by the company on December 2, 2019. In 2018-19, ASARCO and the United Steel Workers Union participated in more than 40 in-person bargaining sessions for a successor collective bargaining agreement. Given the impasse, the Union initiated an economic strike on October 2019 which lasted until July 2020. On January, 2020, the Union filed unfair labor practice charges with the National Labor Relations Board (NLRB) and a trial is ongoing. Only once the trial has been completed will a ruling be issued by the administrative law judge determining if there was any merit to the allegations or not. ASARCO vehemently denies the accusations contained in the complaint and believes that it has acted lawfully relating to contract negotiations, the strike, day-to-day operations and personnel decisions.

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Collective bargaining agreements										
	Mining Division					Transportation Division			Infrastructure Division	Grupo México
	Total MIN DIV	SCC	Minera México (Mexico)	SPCC (Peru)	ASARCO (USA)	Total TRA DIV	Mexico	USA	Total INF DIV	Total
Total Employees covered by a collective bargaining agreement	11,460	11,024	7,242	3,782	436	8,028	7,569	459	1,009	20,497
Nationals	11,454	11,018	7,236	3,782	436	8,028	7,569	459	1,009	20,491
Women	280	224	101	123	56	18	13	5	77	375
Men	11,174	10,794	7,135	3,659	380	8,010	7,556	454	932	20,116
Foreigners	6	6	6	-	-	-	-	-	-	6
Women	1	1	1	-	-	-	-	-	-	1
Men	5	5	5	-	-	-	-	-	-	5
Total Non-union employees	4,856	3,992	2,808	1,165	883	2,649	2,251	398	1,517	9,022
Nationals	4,838	3,974	2,801	1,154	883	2,641	2,251	390	1,512	8,991
Women	953	864	658	206	89	520	442	78	363	1,836
Men	3,885	3,110	2,143	948	794	2,121	1,809	312	1,149	7,155
Foreigners	18	18	7	11	-	8	-	8	5	31
Women	5	5	3	2	-	-	-	-	-	5
Men	13	13	4	9	-	8	-	8	5	26
% Union	70.2%	73.4%	72.1%	76.5%	33.1%	75.2%	77.1%	53.6%	39.9%	69.4%

5.2 Our People

Workplace Health and Safety

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Indigenous Peoples



Collaborator in workshops, Southern Peru

Number of strikes and lockouts exceeding one week duration, by country

G4 – MM4

In 2022 there were no additional strikes or lockouts recognized as such by the authorities that affected the operations of any of the Mining Divisions’ subsidies.

Minimum notification periods for operational changes

GRI 402-1

Our **Mining Division** maintains a permanent and open dialogue with our employees through our Human Resources departments. We communicate any operational change with the advance notice required by law. In Mexico, employees are generally notified of operational changes the same week as the change takes effect.

The notices and arrangements for consulting and review of collective bargaining agreements are detailed in the agreements themselves, while the [Mexican Labor Law](#) sets the times for requesting reviews of collective bargaining agreements. In the United States, notification times are set by the [National Labor Relations Act](#) and vary by place and topic. We are

also governed by the [Worker Adjustment and Retraining Notification Act \(WARN\)](#), which requires 60-day notice for mass layoffs and shutdowns. In Peru, legal changes to work hours must be communicated to employees and unions eight days in advance.

Under international best practices and in adherence of the regulations in the countries where we operate, **Transportation Division** employees receive advance notice of any significant or material change in the company.

The **Infrastructure Division** maintains ongoing dialogue with all our employees and union representatives. Changes that would have an impact on operations are communicated during our work meetings with the advance notice required by the labor laws. Because of their business model being based on temporary projects, our Construction and Engineering subsidiaries inform employees of the start and end dates for projects when they are hired, so they can make the best professional decisions for themselves. Where possible, these employees may be transferred to other sectors or areas within the same company to continue working and looking after their families.

* Since 2007, the Taxco mining unit has maintained its operations suspended (strike) derived from the conflict with the National Union of Mining, Metal and Allied Workers of the Mexican Republic (SNTMMSRM, by its Spanish acronym).

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5.2.3

Diversity, Inclusion and Non-Discrimination

GRI 405-1

We strive to ensure the creation of a working environment that fosters diversity, inclusion, and gender equality, complying with equal opportunities, regardless of race, faith, age, gender, nationality, or sexual orientation. We seek to foster an environment of respect that can reach our employees, their families, the communities close to our operations and the rest of our stakeholders. In order to comply with and monitor inclusion and non-discrimination, one of the four pillars of our approach, we have established policies and procedures as well as our Strategic Plan for Diversity and Inclusion. This year we published for the first time in this report a section dedicated to this topic where you can consult a detailed explanation of the policies that guide our commitments and the actions we have implemented. (For more information, consult the section on [Diversity and Inclusion](#))



Transportation Division collaborator, Mexico

5.2.4

Human Capital Development


GRI 3-3

Grupo México is committed to caring for and developing the personal and professional growth of our employees, aligned with the strategic goals of the company and our Institutional Competencies Model.

Our training and development plans are designed to support our employees to acquire and upgrade their technical skills and competencies. The activities of our three divisions require highly specialized technical skills, therefore developing these skills and competencies is a priority.


Additionally, employees have the opportunity to explore and grow in areas of interest to them, developing their skill sets according to their professional profiles and aspirations. Some examples of this are our training programs and career plans, and our processes and campaigns to measure, review, offer feedback and improve performance.

Education Programs




- Formal education programs (elementary, middle school, high school, bachelor’s degree and graduate studies)
- Postgraduate programs (certifications, diploma programs and master’s degrees)
- Incentive policies and financial support for professionalization.
- Considerations in our collective bargaining agreements to support the studies of our employees and their families.

Training Programs



- Development of technical safety skills (operation and maintenance): technical know-how, raising awareness and focus on safe behaviors.
- Management skills and institutional competencies.
- Human Rights and [Code of Ethics](#).

Development Plans



- Ongoing preparation to take on new tasks and responsibilities, as needed, consolidating their professional careers within the company.
- Individual development plans.

> We offer educational programs in the communities where we operate and invite students to complete their professional practices in the different areas of the company (for more information, consult the section on [Local Communities](#)).

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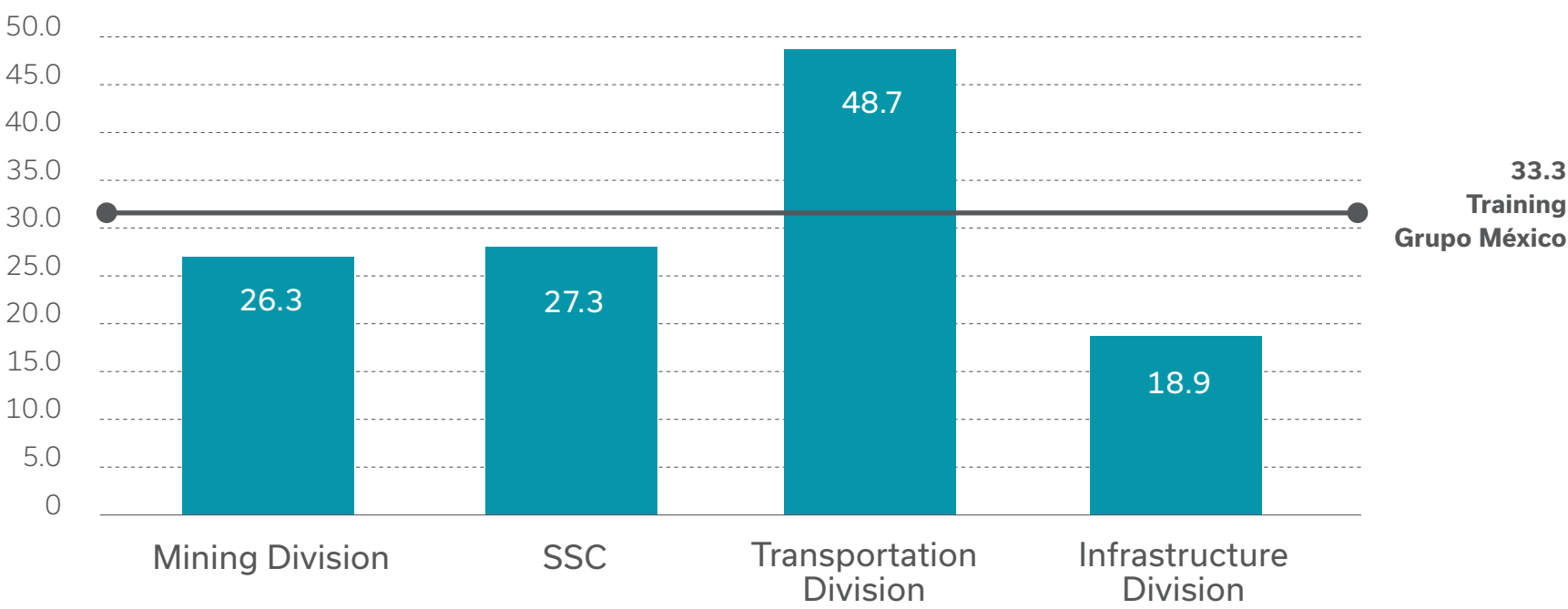
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5.2 Our People

Professional training
GRI 404-1

Grupo México¹¹ provided an average 33.3 hours of training per employee in 2022.

Grupo México Training 2022

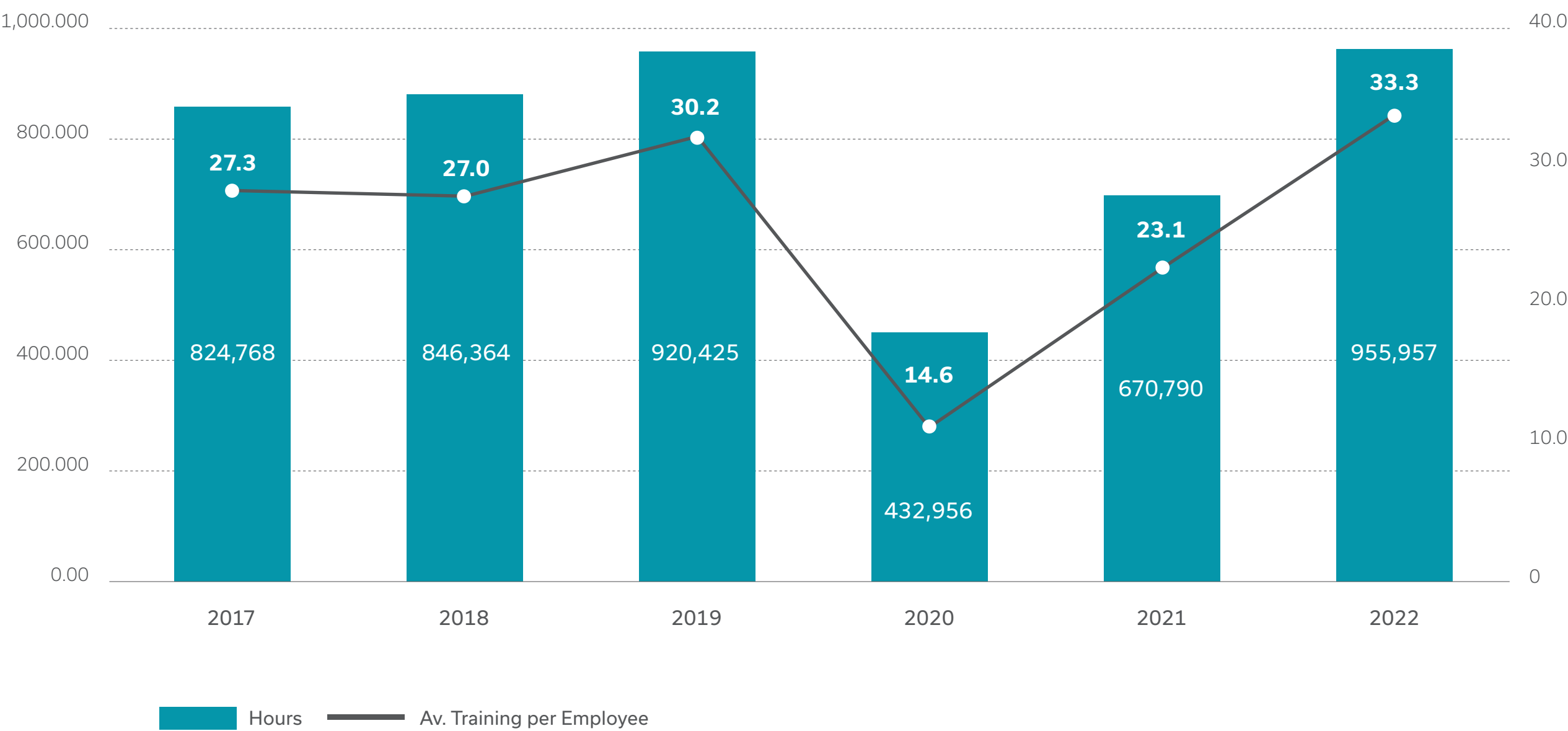


 **9.55**
Thousand training hours.

 **+42.5%**
increased the hours of training in Grupo México compared to 2021.

¹¹The training hours of the FEC and RAVEN subsidiaries of the Transport Division were not accounted for, therefore, the training average calculation was based on the workforce of the subsidiaries where the training hours were recorded. However, we are working to ensure that in future reports, the data will be fully disclosed.

Employee Training Hours
Grupo México



At the Grupo México level¹², the total cost of training was around US\$ 2,7 million, while the average cost of training per employee was US\$ 157,49. For the Mining Division¹³ and our subsidiary SCC, the cost of training per employee was US\$ 164,77 and US\$ 164,56, respectively, while for the Infrastructure Division, it was US\$114.24.

¹²The Transportation Division is not included as this information is not available, however we are working to include these figures in future reports.
¹³ASARCO is not included in the total cost of training or the average cost per employee as these programs do not always carry a cost.

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5.2 Our People

Performance Appraisal

GRI 404-3

Our performance appraisal are based on individual goals and competencies aligned with the strategic goals of the organization.

Most company personnel participate in an annual performance appraisal based on objectives defined by the company and the metrics and indicators of our Performance Improvement process to identify the potential of each employee. Additionally, union employees participate in a different type of review each month, which generally results in performance-based monthly bonuses.



90.2%

non-union employees participated in a performance appraisal in Grupo México

- Mining Division employees in Mexico in operational and maintenance positions (both union and non-union) are entitled to receive a bonus when production targets are met.

89.5%

non-union personnel have participated in an annual performance appraisal in the Mining Division and 96.4% for SCC

92.6%

non-union personnel have participated in an annual performance appraisal in the Transportation Division

87.4%

non-union personnel have participated in an annual performance appraisal in the Infrastructure Division

Training programs

GRI 404-2

More than 38 programs were provided in 2022 with the participation of 15,462 employees to upgrade the skills and competencies of company personnel.

Number of training programs and participants ¹⁴					
	Mining Division	SCC	Transportation Division	Infrastructure Division	Grupo México
Programs to upgrade competencies	12	8	7	2	21
Participants	8,906	8,192	2,041	632	11,579
Programs to upgrade skills	12	9	0	5	17
Participants	2,477	2,373	0	1,476	3,953
Total programs	24	17	7	7	38
Total participants	11,383	10,565	2,041	2,108	15,532

- Our training programs include inhouse courses and financial support for outside training or education.

¹⁴ For more information, consult the section on the description and scope of the programs mentioned in [Annexes](#).

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5.2 Our People

Of note are the following programs the Mining Division offers focusing on leadership skills:



Coaching Leadership
(905 participants)

Program to develop skills in self-leadership, emotional intelligence, and intra and interpersonal relationships to become an agent of change in the company.



Management Skills Diploma Course
(150 participants)

This program is aimed at Upper and Middle Management personnel to develop leadership and business management skills, and influencing people, to achieve different goals.



Professionals in Development
(70 participants)

This program focuses on project development in different areas and is aimed at recent university graduates to develop leadership skills and management techniques to prepare them for middle management positions.

Career transition and retirement programs

The **Mining Division** has a retirement plan for our employees, which offers benefits in addition to the pensions required by law. At ASARCO, for example, we offer 401K retirement benefits, an employer-sponsored retirement plan that supports employees to save a portion of their salary (before taxes) for their retirement.



Mining Division collaborator, Mexico

	Definition	Impact
Outplacement	Mining Division program that assesses the strengths, weaknesses, skills and interests of the person as they continue their professional career. The company contracts the support of expert consultants on career transition.	10 employees in 2022 were benefited.
Executive Coaching	Mining Division program aimed at executives in development.	10 employees in 2022 were benefited.
Plan your retirement	Infrastructure Division program that raises awareness among employees on the importance of planning and defining personal retirement plans, emphasizing the urgency of transforming our most valuable asset to be equipped to manage the most complex stage of life, retirement.	36 employees in 2022 were benefited.

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5.2.5

Talent Recruitment and Retention

GRI 103-1

In Grupo México we strive to provide a good workplace environment, which, coupled with fair compensation, ensures high employee retention, satisfaction and commitment to the organization.

Our recruitment efforts are linked to our education and job skills training programs. Our hiring practices are fair and transparent, informing prospective candidates of the tasks and skills required for each position, and also how results are measured with our performance review processes.

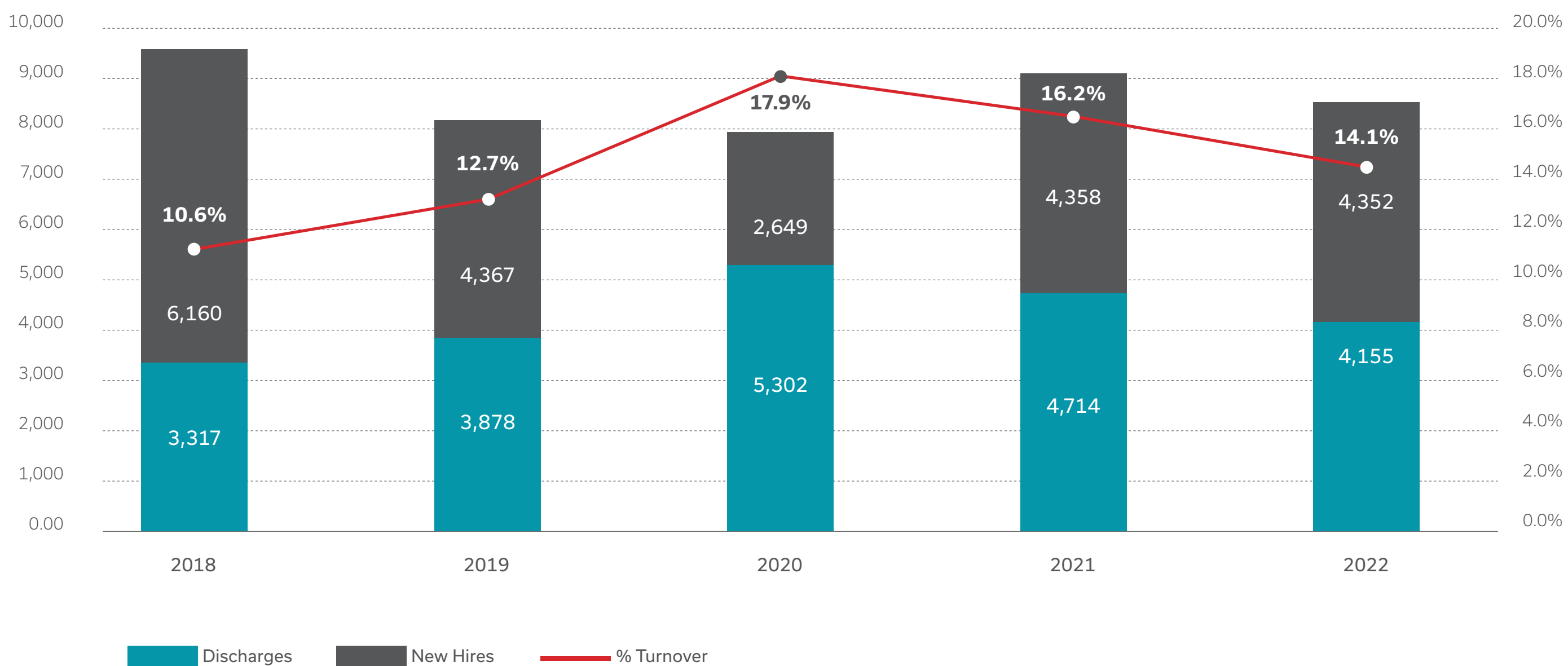
We monitor employee performance through annual reviews, which inform our employee training, development, succession and career plans.

- > We encourage recruiting local talent, which positively impacts the economies of our neighbor communities.

New hires and turnover

GRI 401-1

Grupo México reports an 11.9% decrease in the turnover rate, compared with 2021.



5.2 Our People



Collaborators Combined Cycle Plant, Sonora, Mexico

New Hires*					
	Mining Division	SCC	Transportation Division	Infrastructure Division	Grupo México
Women in each division	17.8%	19.1%	10.8%	14.2%	14.7%
Men in each division	82.2%	80.9%	89.2%	85.8%	85.3%
% Grupo México	41.4%	N/A	28.1%	30.5%	100%

*The subsidiary SPCC of the Mining Division integrates both new hires and internal promotions.

Within the new hires of the Infrastructure Division we include internal hires, since when a temporary project ends, as a good practice we look for vacancies in other projects that are similar to the profiles of the personnel whose project has just finished .

Total Turnover Rate					
	Mining Division	SCC	Transportation Division	Infrastructure Division	Grupo México
Women in each division	14.4%	12.3%	22.5%	32.5%	20%
Men in each division	10%	8.2%	11%	52.3%	13.6%
% total by division	10.3%	8.5%	11.6%	48.9%	14.1%

New Hires	Inhouse Promotions
There were 4,352 new hires* at the Grupo México level. The Transportation Division reported an 18.2% increase in new hires, compared with 2021.	61.1% of vacant positions in Grupo México were filled inhouse, and 97.7% at SCC.

Total Turnover Rate
The turnover rates decreased 12.2% and 25.7% in the Mining and Infrastructure divisions , respectively, compared with 2021.

The high turnover rate for the Infrastructure Division reflects the nature of these operations. The projects of the Engineering and Construction subsidiary are short-term or temporary and, therefore, personnel are signed to annual contracts that stipulate the start and end date of the project to which they are assigned. Additionally, there were 1,234 discharges in 2022, due primarily to the Construction subsidiary completing 9 projects.

5.2 Our People

Employee benefits

GRI 401-2

We offer an attractive benefits package over and above that required by law, to contribute to the job stability of our employees.

Employee benefits				
	Mining Division	SCC	Transportation Division	Infrastructure Division
Salary-related	Full-time	Full-time	Full-time	Full-time
Life insurance	X	X	X	X
Medical insurance	X	X	X	X
Family protection insurance	X	X	X	
Disability coverage	X	X		
Pension plan	X	X	X	X
Savings fund	X	X	X	X
Grocery vouchers	X	X	X	X
Productivity bonus	X	X	X	
Interest-free personal loans, up to one month's salary	X	X	X	X
Stock options	X	X	X	X
Employee cafeteria	X	X	X	X
Employee transportation	X	X	X	X



Collaborators Fenicias wind farm, Mexico

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5.2 Our People

Parental leave

GRI 401-3

Grupo México encourages families spending time together and we adhere to the government guidelines that support parents to achieve a work-family balance.

Parental leave
<ul style="list-style-type: none">In the Mining Division, 28 women and 483 men took parental leave, with a 99.4% return to work rate for both men and women.In the Transportation Division, 16 women and 233 men took parental leave, with a 98% return to work rate.In the Infrastructure Division, 9 women (2% of 440) and 24 men took parental leave, with a 100% return to work rate for both men and women.

Lactation Rooms
<ul style="list-style-type: none">The Mining and Infrastructure divisions support nursing mothers by providing designated lactation rooms at our offices and operations. Our long term goal is to generalize these spaces in all company workplaces.

Trend of Employee Engagement

The **Mining Division** conducts an Employee Survey (ECO) every two years to measure employee commitment to the organization. This instrument measures two base factors: **loyalty**, defined as the extent to which an employee identifies with the organization and our business objectives, and **satisfaction**, defined as the level of contentment with their working conditions and whether these conditions are optimal for the employee’s work.

The survey is conducted every 2 years, therefore the results reported in the [Annexes](#) are from 2021. The Infrastructure and Transportation divisions will be conducting the ECO survey with their personnel in 2023.

Ratio of starting base salary by gender compared to local minimum wage

GRI 2-6, 202-1

We are committed to offering salaries above the minimum wage in the countries where we operate, ensuring a decent standard of living for our employees and their families. The total annual salary and compensation package for company employees at all three divisions comprises their base salary, productivity bonuses, cash benefits and profit sharing, where applicable.

Ratio of base salary to local minimum wage, by gender										
	Mining Division					Transportation Division			Infrastructure Division	Grupo México
	Total Division	SCC	Minera México (Mexico)	SPCC (Peru)	ASARCO (USA)	Total Division	Mexico	USA	Total Division	Total
Women	4 : 1	9 : 1	5 : 1	23 : 1	2 : 1	2 : 1	4 : 1	2 : 1	3 : 1	6 : 1
Men	4 : 1	9 : 1	5 : 1	23 : 1	2 : 1	2 : 1	5 : 1	2 : 1	4 : 1	6 : 1

> Our Infrastructure Division Engineering Services and Power Plant, and our Mining Division Processing Plant are internationally recognized as “Great Places to Work”.

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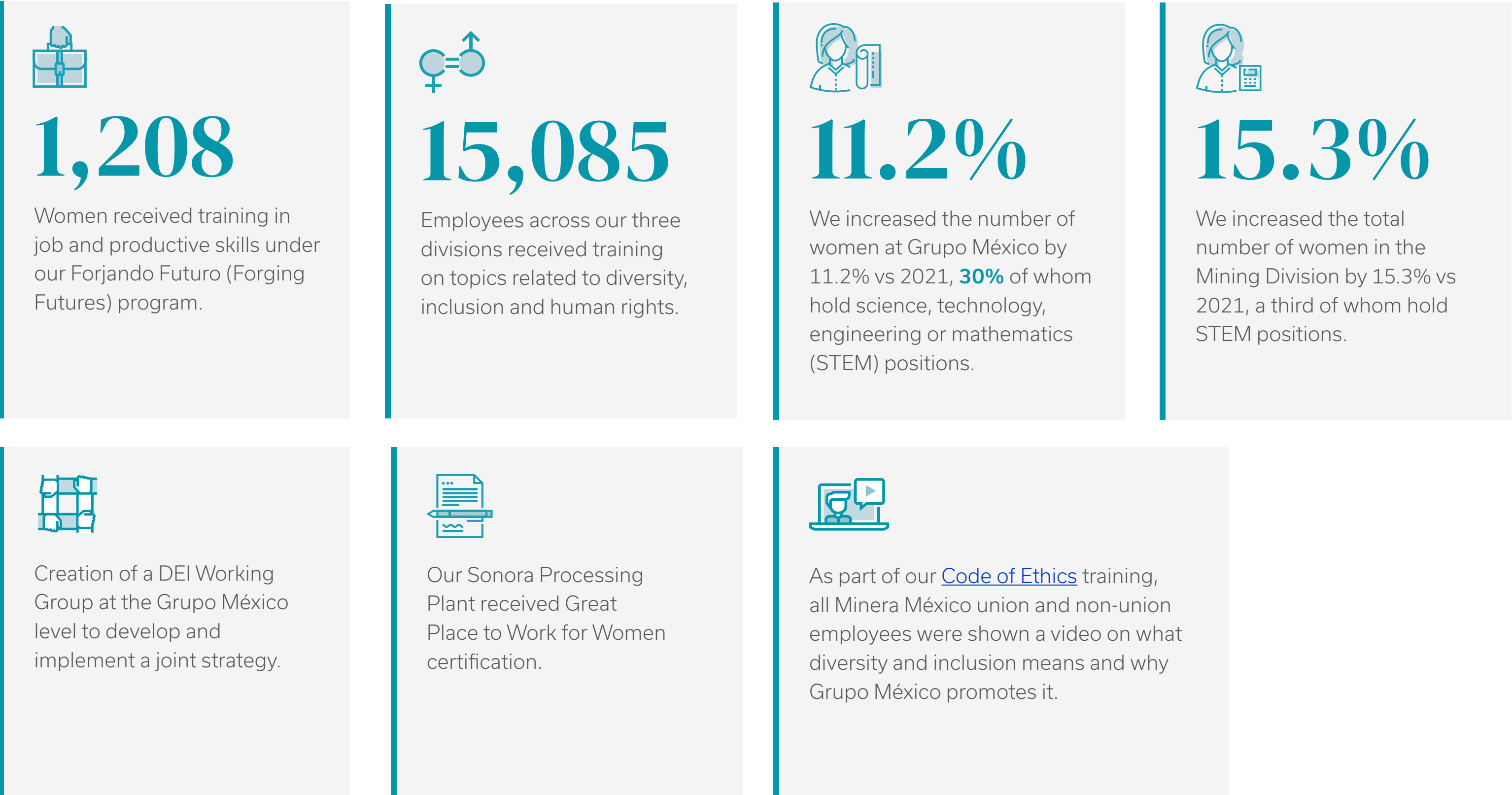
Diversity & Inclusion

At Grupo México, we strive to incorporate into our organization the richness and plurality of each country and community that embraces us. Valuing diversity and encouraging openness to different ways of thinking, and creating inclusive environments are essential to ensuring our workplaces

support the optimal development of our employees and stakeholders. In this regard, we're working to build diverse and inclusive teams, fostering respect among all our employees, extending this culture to the communities where we operate.

5.3.1

Highlights



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5.3.2 Governance

Diversity and inclusion in the workplace is a cross-cutting topic that touches all areas of our company. We created a Diversity and Inclusion (DEI) Working Group at the Grupo México level in 2022, coordinated by the Corporate Sustainable Development Department.

The principal goals of this working group are:

- Generate DEI statistics.
- Identify the principal challenges of inclusion for each division, considering our different business models.
- Define targets, policies, strategies and budgets to promote DEI across our three divisions.
- Monitor the indicators for this topic area.
- Provide a forum for sharing lessons learned between the divisions, facilitating their application

The Human Resources management team in each division are responsible for the management of this topic area. Each Human Resources department has a team that promotes diversity and inclusion through initiatives and specific procedures.

Additionally, the Community Development Department promotes diversity and inclusion in the communities near the operations of our Mining and Infrastructure divisions.

The Human Resources teams regularly monitor:

- The number of women that join and that are promoted in the company, by area. (monthly)
- That employees are familiar with our diversity, inclusion and non-discrimination policy and complete the courses assign to them on topics related to DEI and nonviolence in the workplace. (annual)
- That our recruitment materials continue to use inclusive language. (ongoing)
- That cases of harassment are addressed immediately by the Ethics and Discipline Committee.

Regarding promoting diversity and inclusion in the communities near our operations, the Community Development Department has an Impact Measuring department, which regularly reviews progress on the different goals and aspects of our community development model (for more information, consult the section on Local Communities).



Female collaborators at Charcas Unit, San Luis Potosí, Mexico

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5.3.3
Strategy and Management

To fulfill the commitments laid out in the [General Human Rights Policy](#), we have:

- [Policy on Diversity, Inclusion, Non-Discrimination, and Zero Tolerance for Workplace or Sexual Harassment](#) for Grupo México and the Mining Division, which describes the reporting mechanisms available in Mexico, Peru and the United States, and the protections for the person reporting.
- Diversity and Inclusion Strategic Plan (in the process of being implemented).

Commitments included in the policy:

- 

Respect human rights, guaranteeing diversity and inclusion, wellbeing, no discrimination, and equality for all persons.
- 

Prevent potential barriers during hiring, promotion and salary processes, always with objectivity.
- 

Ensure equal opportunities, and alsoa as well as equal treatment, condition and position between men and women.
- 

Guarantee workplaces where respect and tolerance are the norm.
- 

Take corrective action against attitudes or acts of discrimination, harassment or any other type of disrespectful, excessive or violent behavior.
- 

Guarantee no repercussions or consequences for people who report a violation of the obligations outlined in the Policy.
- 

Fair and exhaustive investigation of all reports under this Policy.

Diagnostics and strategic plan

The Mining Division prepared a diagnostic for Mexico in 2020 and for Peru in 2021 to identify DEI-related risks and opportunities. These diagnostics were based on:

Country	Sites	Surveys	Interviews	Focus groups
Mexico	5	784	64	6
Peru	3	597	45	7

These diagnostics identified the principal barriers to entry and growth for women, people with disabilities, and members of the LGBT+ community. We also identified that the gender perspective had been considered in high level objectives, but when the diagnostic was conducted, this did not translate into selection, recruitment and professional development policies with a DEI approach. The diagnostic showed there are important areas of opportunity for women and to incorporate people with disabilities in the infrastructure of various company operations. It also concluded that maternity is the main barrier to the inclusion of women in the work environment and that our inclusion strategies need to prioritize employees who are mothers.

The information gathered from these diagnostics informed the design of the 2020-2023 DEI Strategic Plan to promote increased inclusion and safe workplaces. The Mining and Infrastructure divisions will participate in a DEI diagnostic in 2023 to better identify the barriers to entry in their business

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models. Meanwhile, both divisions have been applying the key elements of this Strategic Plan since 2020.

The principal strategic lines are:

- 1. Awareness campaigns, training and communication on diversity, inclusion and non-discrimination.
- 2. Incorporate a gender equality and diversity approach into our human resources policies and procedures.
- 3. Physical modifications at our operations for the inclusion of women.
- 4. Promote diversity and equal opportunities in our neighbor communities.
- 5. Define specific processes on awareness, prevention and handling potential incidents of sexual and/or workplace harassment.

The principal actions taken in promoting diversity and inclusion in 2022 were:

1. Awareness campaigns, training and communication

Training:

We updated the diversity and inclusion training curriculum in the Mining Division and held an in-person sensitivity training and awareness campaign at Minera México for 100% of our union and non-union employees where we explained the [Code of Ethics](#) (including the use of the Reporting Line) and our commitments under the [Human Rights Policy](#), and we discussed in detail the topic of diversity and inclusion, prevention and handling incidents of workplace or sexual harassment. For the first time,

all employees had access to a video on what diversity and inclusion is and why Grupo México promotes it.

Testimonial from a participant in the course at METCO:

"Perhaps we cannot totally change the way people here think about diversity, but with each talk and each course, we see the gap narrowing quickly."

Additionally, 100% of the Mining Division management team (40 people) participated in a training on diversity and inclusion, focused on company leadership.

We provided training on topics related to diversity and inclusion to 15,085 employees across our three divisions, as part of our Code of Ethics and human rights training (for more information, consult the section on [Employee training](#)).

In addition to this training, 952 Minera México employees completed specific 1-hour online courses in 2022 to understand and prevent workplace harassment as laid out in Mexican standard NOM035, to promote safe and respectful workplaces. In Peru, as a complement to the Code of Ethics training, 326 employees received training on diversity, inclusion, non-discrimination and sexual harassment in the workplace, and inclusion of people with disabilities.



Communication:

In parallel, we run an ongoing media campaign to promote the value of diversity and inclusion, and also the tools available for reporting incidents of discrimination or harassment. These messages are conveyed via videos at our sites, on the company intranet and with print materials. We have also created a 10-minute capsule as an introduction to diversity and inclusion, which 3,912 employees in our Mining Division have taken.

We designed an inhouse and public campaign for International Women's Day to acknowledge the contribution women make to the workplace and to raise awareness on the importance of empowering women everywhere and protecting their rights.

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We used a purple Grupo México logo on our social media, designed a video about women at our processing plant in Sonora, Mexico and a video on Neida Patricia Madrid Villa, the first woman shovel operator in the mining industry in Mexico. This video was widely successful and received the most engagement from users during the month of March. <https://www.facebook.com/CasaGrandeGMexico/videos/686626039040327>



These training and media campaigns seek to raise awareness among all our employees and, gradually, drive a cultural shift to safe, diverse and inclusive workplaces.

2. Incorporation of the DEI approach in our human resources policies and procedures

In 2022, we continued to work on the changes started in 2021 in our three divisions to include the diversity and inclusion approach in our recruitment processes. The principal changes we have made are:

- Post vacancies using inclusive language and omit age requirements.
- Incorporate into the relevant policies that selection, training, development, succession, promotion and performance review are competency-based to eliminate bias in decision-making (based on gender, age or any other personal characteristic).
- Promote and encourage the inclusion of women in the final candidate lists.

In parallel to these changes in the policies, our Human Resources teams received specialized training on how to include the DEI perspective in our recruitment processes (for example, interviewing a diverse group of candidates). Thanks to this, today we are much better prepared to make proactive efforts to increase the number of women in the industries where we operate.

3. Physical modifications at workplaces for the inclusion of women

A first step to attract women is to have a physical infrastructure that meets the needs of women. We continued our projects to improve and install lactation rooms at corporate offices and mapping our sites to identify unmet needs (for example, insufficient number of restroom facilities or changing rooms for women). Our Mining Division operations in Peru completed a project of mapping their facilities to identify the needs of women and these needs are being addressed with changes to our facilities.

Adjusting facilities in our three divisions is a gradual and ongoing process that will support us to bring more women into all areas of our operations.

4. Promoting diversity and equal opportunities in our neighbor communities

The community development model of our Mining and Infrastructure divisions is guided by inclusion, where all our programs and projects conduct an exhaustive advance process to listen to the ideas and needs of the different groups that make up a community, considering their diversity in terms of age, gender, language, sexual preference and specific needs. We promote the value of diversity and inclusion through three key areas:

- Our community programs
- Support for disabled and special needs students at our schools
- Training for women

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Mining Division collaborator, Mexico

Community programs:

Of our Mining Division community programs, we highlight our Mobile Documentary Filmmaking Workshop, which is open to all members of our neighbor communities and offers technical training for participants to film and edit their own documentaries. This program is currently operating in six communities in Mexico and will soon expand to others.

The documentaries produced in 2022 look at topics of discrimination and promoting respect and inclusion in the community.

The first, *Las Dos Puertas* (The Two Doors) tells the story of Alex, someone who identifies as transgender and works at one of our cafeterias in Nacoziari, Sonora. Alex talks about the obstacles they have had to face and how they have fought for the acceptance of their family and their community. (https://drive.google.com/file/d/1cPOlof3IGsm-698oq4W9RLcKFBbg5c_8/view)

"I want everyone to see me as a normal person, and to be on the outside what I am on the inside."



The second, *Nada Podrá Pararme* (Nothing's Going to Stop Me), tells the story of Berenice's life, a woman who was born with a disability, and how it has been lifelong struggle to get ahead, facing prejudices, using their feet to manage technology, graduating from college, and getting a job. (<https://drive.google.com/file/d/1eMxJZAXnuahgVn-8aJG0Abcov5mt-dEg/view>)

Both documentaries convey to the public the value of diversity and inclusion in a way that is very personal, evoking empathy and pushing us to reflect on our way of thinking, particularly in the social context of communities away from the big urban centers.

"After graduating from college, I started to look for work and every time I would see it in their faces, "you want to work?""



Disabled or special needs students at our schools

We have adapted all our programs to ensure that anyone with any type of disability or special need can actively participate in all Grupo México actions in the communities. We carry a particular concern for guaranteeing that students at our schools with any type of physical and/or intellectual disability, who are on the neurodiversity spectrum, or who have special needs, have specialized support available to them to support their learning and participation in school life.

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All students are assessed when they join our schools. The assessment for students with special educational needs includes an action plan to offer the student additional support. Our schools have “shadow teachers,” who are present in the classroom and available to offer individual support to students who may need it. In 2022, we identified that 10% of the children and youth at our schools have some type of physical and/or intellectual disability, are on the autism or neurodiversity spectrum, or have a learning difficulty. A team of experts in student psychology advised and accompanied these students and their families to support their academic development.

Additionally, Grupo México promotes the value of diversity and inclusion through regular talks and activities at our schools. In 2022, for example, we held a “Disability Week” at our schools in Esqueda and Nacozari, Sonora, with a series of talks and activities for families, teachers and students to raise awareness on the different types of disabilities. We also provided talks for parents and workshops for teachers on how to support students on the autism disorder spectrum.

Training for women


The Mining Division program *Forjando Futuro* (Forging Futures) contributes to local economic development by strengthening the skills of individuals and local businesses for them to Benefit from the economic value generated by Grupo México, through jobs and contracting suppliers. We trained 1,870 people in Mexico and Peru this year, 1,208 (64.6%) of whom were women.

Components of the *Forjando Futuro* program




Job skills training

35.7% of participants were women in trades like welding, electricity, heavy machinery, instrumentation, and high school certification.



Training for micro, small and medium businesses

38.8% of the businesses trained were represented by women.



Regional industries and productive skills

83.9% of the 1,121 participants in 2022 were women.

Topic areas included: beekeeping, orchards, preserves and canned goods, style, jewelry, and pastry, among others.

5.3.4

Metrics and Targets

GRI 405-1

Women in the workforce

Women represent 7.5% of the total Grupo México workforce

December 2022	Mining Division	SCC	Transportation Division	Infrastructure Division	Grupo México
% Women	7.6%	7.3%	5.0%	17.4%	7.5%
# Women	1,239	1,094	538	440	2,217
Total Workforce	16,316	15,016	10,677	2,526	29,519

However, the participation of women is not uniform across our divisions. In the Infrastructure Division, for example, the participation of women varies greatly according to the line of business, which has implications for the DEI strategy.

Infrastructure Division	% Women	Women	Men	Total
Corporate	45%	74	91	165
Engineering	27%	68	183	251
Construction	8%	66	791	857
Energy	30%	27	63	90
Fuels	14%	1	6	7
Highways	24%	66	205	271
Oil	9%	62	603	665
Total ¹	16%	364	1,942	2,306

¹This table does not include 309 employees (76 women and 233 men) who are classified as “specialized services” as they work at the offices of our customers, under their direction and company policies.

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We are working to progressively bring more women into the company. Currently, 14.1% of women employees hold management positions², and 10 women are members of different governing bodies, committees and working groups (13% of the total members).

57.4%

women in administrative and operational positions

59.8%

women between 26 and 40 years old

18.9%

of the female workforce in the Infraestructure Division is employed in all management positions, while in the Transport Division, Mining Division, and SCC, women occupy **17.3%**, **11.8%**, and **11.8%** of their female workforce, respectively.

Of our total 2,217 women employees at Grupo México, 30.6% hold STEM (science, technology, engineering or mathematics) positions.

Division	Total number of women employees	% holding STEM positions
Mining Division	1,239	32.4%
SCC	1,094	35.4%
Transportation Division	538	31.4%
Infrastructure Division	440	24.5%
Grupo México	2,217	30.6%

²Includes senior management, middle management, superintendents, supervisors, etc.



Infrastructure Division collaborator, Mexico

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5.3 Diversity & Inclusion

The efforts described here to foster diversity and inclusion have resulted in an increased number of women working at Grupo México. In the Mining Division, the total number of women increased 15.3% in 2022, compared with 2021, and at the Grupo México level, this increase was 11.2%.

Division	Increase total # women 2021-2022
Mining Division	15.3%
SCC	15.8%
Transportation Division	6.1%
Infrastructure Division	6.8%
Grupo México	11.2%

This increase in the number of women that work at the three divisions is primarily due to the increase of opportunities. We analyzed turnover trends for women employees to design a strategy to encourage women to stay with the company.

Women employees 2021- 2022			
Division	% Increase in hiring	% Turnover	% Total increase in women employees
Mining Division	45.9%	14.4%	15.3%
Transportation Division	63.0%	22.5%	6.1%
Infrastructure Division ³	27.9%	32.5%	6.8%
Grupo México	43.1%	20.0%	11.2%

³ The high turnover for the Infrastructure Division reflects the nature of the operation as the Engineering and Construction subsidiary contracts by project, therefore our personnel sign an annual contract that stipulates the start and end dates for the project in question.

Salary gap
GRI 405-2

At Grupo México, we promote equal opportunities in salary and professional development for both men and women. An example of this is our salary tables, which make no distinction for gender and remunerate talent under equal conditions.

Ratio of base salary, women to men ⁴					
Category*	Mining Division	SCC	Transportation Division	Infrastructure Division	Grupo México
Directors	0.99	N/A	1.05	N/A	1.01
Deputy Directors and Managers	1.01	0.95	1.07	0.95	1.02
Middle Management	0.98	0.94	1.06	0.75	0.99
Administrative / Operational	0.89	0.91	0.98	0.77	0.91
Unionized	1.00	1.00	1.06	0.74	1.01
Total	0.98	0.94	1.05	0.86	0.99

⁴ This table is built from salary information for men and women in the same category across the three divisions, including only those categories where women hold positions and for which we have a comparative salary to obtain these averages.

* The category of Directors is made up of all Directors of the entire organization. The category of Deputy Directors and Managers is made up of the Deputy Directors, Superintendents and Managers of the entire organization. The category of Middle Management is made up of the Assistant Managers, Heads and Supervisors from the entire organization. The category of Administrative and Operational is made up of all non-union employees who do not belong to the previous categories in the entire organization. The category of unionized is made up of all Unionized personnel.

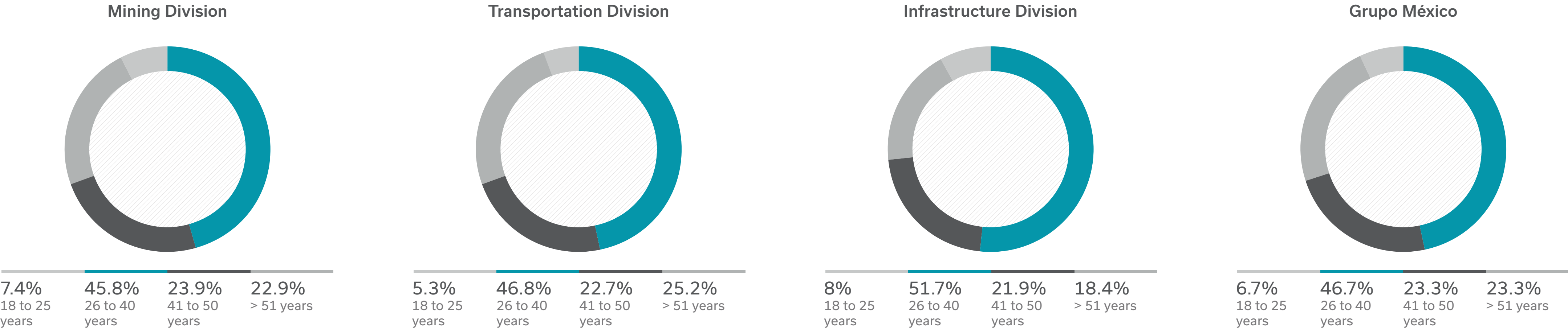
Intergenerational diversity

We value intergenerational diversity and inclusion, which ensures an exchange of learning and experiences between the members of one generation and another, and also better performance of our teams:

Workforce by age group				
Age	Mining Division	Transportation Division	Infrastructure Division	Grupo México
18 to 25 years	7.4%	5.3%	8%	6.7%
26 to 40 years	45.8%	46.8%	51.7%	46.7%
41 to 50 years	23.9%	22.7%	21.9%	23.3%
> 51 years	22.9%	25.2%	18.4%	23.3%

Qualitative performance indicators

Our efforts to promote diverse and inclusive workplaces led to a 92% satisfaction rating on the Great Place to Work for Women survey at our Processing Plant in Sonora and position use in eighth place among the best places for women to work in Mexico.



Targets of women’s participation in the labor force

At Grupo México, we’re committed to increasing the number of women in our total workforce by 1-2% each year, from 2022 to 2025.

Targets of women’s participation in the labor force							
Women in the workforce		# Women	Total workforce	% Women in the total workforce			
Division	2025 Annual increase target	2022 (base year)	2022 (base year)	2022 (base year)	2023	2024	2025
Mining Division	2%	1,239	16,316	7.6%	9.6%	11.6%	13.6%
Infrastructure Division	0.8%	364	2,306	15.8%	16.6%	17.4%	18.2%
Transportation Division	0.7%	538	10,677	5.0%	5.7%	6.4%	7.1%



Geologist, Santa Bárbara Unit, Chihuahua, Mexico

5.3.5
Next Steps

We have been working on building an institutional structure over the last two years that will advance our diversity and inclusion agenda both across all company divisions and with our neighbor communities. The inclusion of women, people with disabilities and members of the LGBT+ community in the workplace implies a cultural shift that we call businesses and organization to formally support. We regularly design and update our Grupo México DEI Strategic Plan with this goal in mind.

In 2023, we will continue our efforts in the strategic lines of action discussed above (awareness, training, hirings, changes to the infrastructure, working in communities) and incorporate into this Plan, the learnings we acquire along the way. Our next steps will focus on:

- Making progress on mapping our facilities to make adjustments and address the needs of women.
- Preparing DEI diagnostics for the Infrastructure and Transportation divisions, based on interviews, surveys and focus groups.
- Approving and communicating the tool for the prevention, handling, action and remediation of situations of workplace or sexual harassment.
- Starting to design a mentoring program to develop diverse talent, the first phase of which will focus on women in the Mining Division.
- Continuing our awareness campaigns with each division and at the Grupo México level.

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Due Diligence Process:
Mining and Infrastructure
Divisions



5.4.2
Due Diligence Process:
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5.4.3
Due Diligence
Process: Suppliers



5.4.4
Due Diligence Process:
Security & Public Safety
Officers



5.4 Human Rights

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

At Grupo México, we respect and promote the human rights of all our employees, our neighbor communities, and our suppliers and contractors, in adherence of all laws and regulations in the countries where we operate.

Our Human Rights management strives to prevent, mitigate, and where necessary, remediate potential impacts. The Grupo México [General Human Rights Policy](#) provides the foundation of our corporate strategy and articulates the commitments outlined in our [Code of Ethics](#). All employees of our three divisions and subsidiaries are subject to these policies, which also extend to our suppliers and service providers.

Our [Policy on Respect for Indigenous Peoples and Communities](#) and [Policy on Diversity, Inclusivity and Non-Discrimination, and Zero Tolerance for Workplace or Sexual Harassment](#), was also prepared for the Mining Division, strengthen our company processes and detail our reporting mechanisms, ensuring compliance with our commitments. Additionally, the Mining Division issued our [Code of Conduct for Suppliers, Contractors and Relevant Business or Commercial Partners](#) in 2022, which includes commitments directly related to human rights.

Goals of our company policies and processes



Guarantee respect for the human rights of our employees.



Guarantee respect for the human rights of the communities near our operations.



Promote respect for human rights throughout our value chain.

The effective management of our environmental, social and governance risks (for more information, consult the [Management of Sustainability Risks](#) section) helps us to identify human rights-related risks and to implement preventive measures to ensure our operations produce no negative impacts on the human rights of our communities, employees or contractors, or in the event of any such impact, to take actions to mitigate or remediate.

As noted in the table following, our risk management includes relating the different types of risk to the different types of human rights, as categorized by international benchmarks. The table notes the company department responsible for managing the potential human rights-related risks, based on the policies and procedures in place for each department (described in the corresponding sections of this report).

5.4 Human Rights

Types of risk identified by Grupo México				
Related to Human Rights		Related to the Principles of the Global Compact ¹³		Company department
Environmental	Right to Clean Water and Sanitation ¹	7º	Precautionary approach to environmental challenges.	Environmental Affairs
	Right to a healthy environment that supports development and wellbeing ²	8º	Initiatives to promote greater environmental responsibility.	
		9º	Development and diffusion of environmentally friendly technologies.	
Labor	Right of freedom of association and collective bargaining ³	3º	Uphold freedom of association and collective bargaining.	Human Resources and the Ethics & Discipline Committee
	Right to not be subjected to forced, compulsory or slave labor ⁴	4º	Elimination of forced or compulsory labor.	
	Right to fair and decent work conditions ⁵	5º	Abolition of child labor.	
	Right to no discrimination in the workplace ⁶	6º	Elimination of workplace discrimination.	
Social	Rights of Indigenous Peoples to self-determination and to free, advance and informed consent ⁷	1º	Support and respect the protection of internationally proclaimed human rights.	Community Development (Mining and Infrastructure divisions) and Railroad Protection and Communications (Transportation Division)
	Right to participate in cultural life ⁸	2º	Not complicit in human rights abuses.	
	Right to land (no forced eviction; privacy and property) ⁹			
Occupational Health & Safety	Right to healthy and safe work conditions ¹⁰	1º	Support and respect the protection of internationally proclaimed human rights.	Occupational Health & Safety
	Right to Health ¹¹	2º	Not complicit in human rights abuses.	
	Right to life ¹²			

International benchmarks

¹ United Nations General Assembly Resolution A/RES/64/292, 2010 and Resolution A/RES/70/169, 2015

² Mexican Constitution, Article 4, paragraph 5

³ Universal Declaration on Human Rights (UDHR), International Covenant on Civil and Political Rights (ICCPR), International Covenant on Economic, Social and Cultural Rights (ICESCR), International Labor Organization fundmanetal conventions (ILOC)

⁴ UDHR, ICCPR, ICESCR, ILOC

⁵ UDHR, ICESCR

⁶ UDHR, ICCPR, ICESCR, ILOC

⁷ UDHR, ICCPR

⁸ UDHR, ICCPR, ICESCR, ILOC

⁹ UDHR, ICCPR, ICESCR

¹⁰ ICESCR

¹¹ ICESCR

¹² UDHR

¹³ Grupo México policies and procedures to comply with principle 10: Work against corruption in all its forms, described in the Business Integrity section

5.4 Human Rights

5.4.1

Due Diligence Process: Mining and Infrastructure Divisions

Under our commitment to the United Nations Guiding Principles on Business and Human Rights, we have implemented assessment processes to identify, prevent, mitigate or remediate negative impacts on the human rights of our employees and our communities.

Workplace Health and Safety

Our People

Diversity & Inclusion

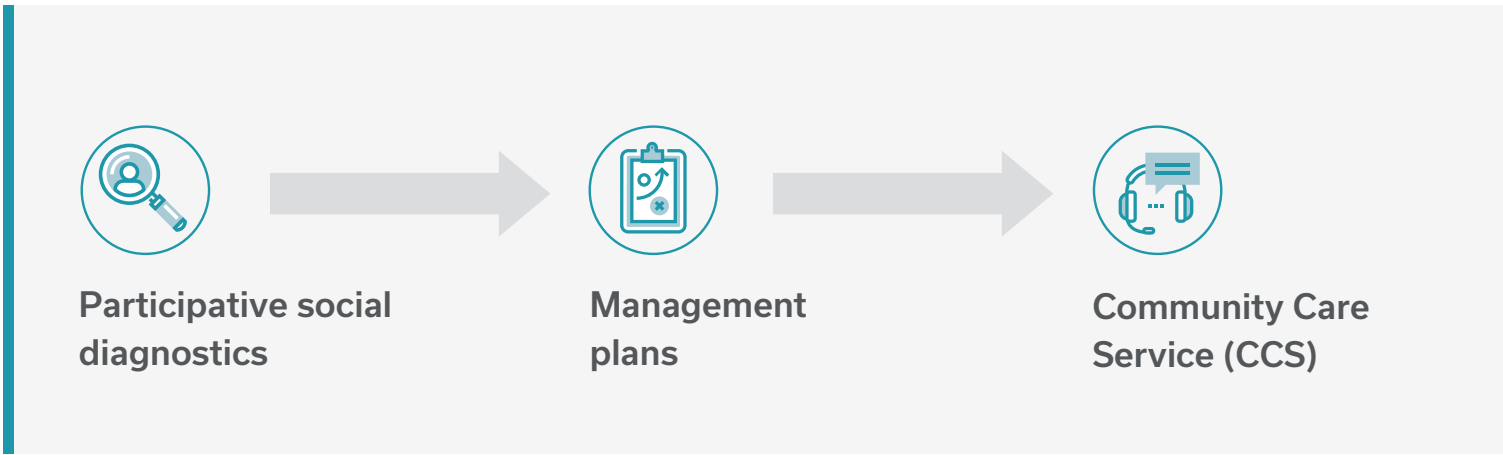
Human Rights

Local Communities

Indigenous Peoples

Due diligence process with the communities
SASB EM-MM-210b.1.

In addition to the risk management described above, Grupo México applies a human rights due diligence process for the communities where we operate throughout the life of each project (exploration, construction, operation and closure), and we have the participative social diagnostics, management plans and our Community Care Service in the Mining and Infrastructure divisions to support this process.



Participative social diagnostics

Transforming mineral resources, generating power and building communication routes affect the natural capital of communities. Grupo México has developed a due diligence process to identify, prevent, mitigate and remediate potential negative impacts at all our operations.

This process involves conducting **participative social diagnostics** at our Mining Division (SCC) operations in Mexico and Peru, and in our Infrastructure Division to mitigate potential negative impacts and optimize the positives. These diagnostics are updated every two years and are based on the **Social Impact Assessment methodology**, promoted by the Mexican Ministry of Energy (in Spanish, SENER) for energy sector projects.

100%

of our Mining Division operations in Mexico have active diagnostics in 2022

100%

of our Infrastructure Division operations have active diagnostics in 2022

100%

of our Mining Division operations in Peru have active diagnostics in 2022

Management plans

The information gathered from the participative diagnostics informs our **Social Management Plans**, where we outline measures to prevent, mitigate or remediate any potential negative impact, and also actions to optimize the positive impacts.

- The participative social diagnostics and the resulting management plans are tools we use to proactively identify potential risks of negative impacts on the human rights of our communities and take appropriate action.

All 20 operations where we have conducted participative diagnostics and there the Community Care Service is available, have human rights-related risk mitigation plans in place. We identified no impacts on human rights in 2022 that would require remediation plans. For a summary of the risks identified and the actions taken, for more information, consult the [Annex](#) section.

5.4 Human Rights

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➤ The CCS plays a key role in the due diligence process.

Community Care Service (CCS)
GRI 102-17

The **Community Care Service (CCS)** is an open and permanent mechanism for the community to quickly communicate their concerns and grievances to the company, particularly in regard to their human rights. This key tool in the due diligence process was designed in consultation with the Office of the United Nations High Commissioner for Human Rights in Mexico, and we receive occasional feedback from this body. In 2022, the CCS contributed to the United Nations publication “*Corporate Human Rights Due Diligence*” as part of the 10-year anniversary project to collect experiences and practical tools in Latin America.

1,342

incident reports,
100% addressed

5 DAYS

Average
resolution time

70

Grievances
(-1.4% decrease,
compared with 2021)

1,272

Requests and concerns
(+47.5% increase over 2021)

Stages of the Incident response process



Dissemination
(local language)

- Print media
- Digital media
- Megaphones
- Company activities



Receive
reports

- Toll-free line
- WhatsApp
- eMail
- Onsite team
- Media monitoring
- Incidents can be reported anonymously.



Logging and
notification

- Level I. Request for products or for a support action.
- Level II. Concern involving issues related to the company.
- Level III. Complaint or grievance involving an issue related to the company.



Management
and resolution

- Action plan defined and carried out by the areas involved.
- Regular updates on the case.
- For transparency, we make efforts to involve key local players, like the Community Committee and independent observers.



Reporting

- Includes statistics on cases by type, priority, status, details and case studies with evidence of the response and testimonials.



The CCS is currently available at 25 Mining and Infrastructure division sites in Mexico, Peru and the United States.

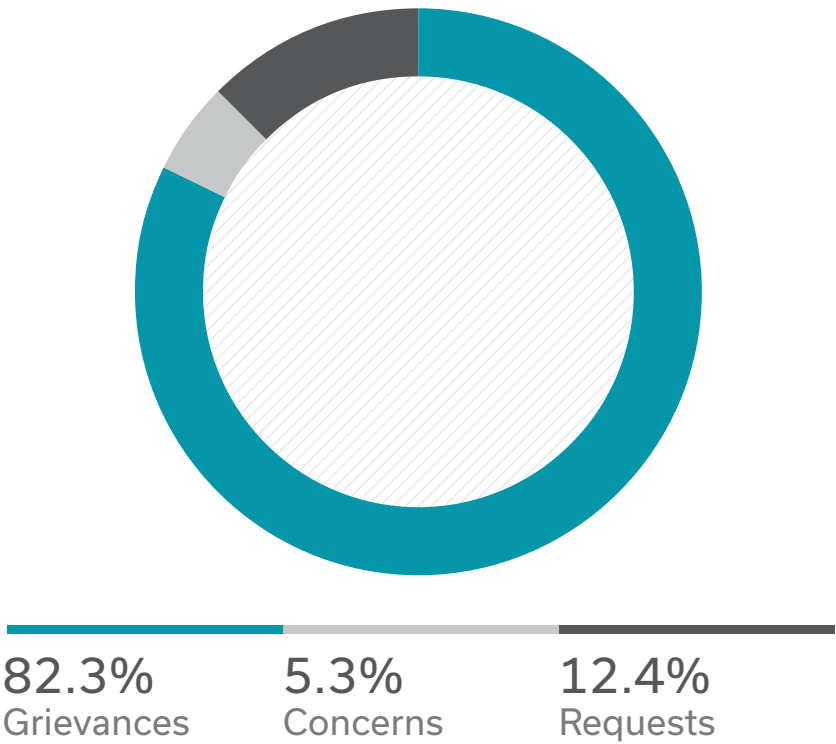


Community Care Service, Mexico

5.4 Human Rights

2022 Incident reports, by country				
	Level I Request	Level II Concern	Level III Grievance	Total
Mexico	75	90	34	199
Peru	92	906	36	1034
USA	0	109	0	109
Total	167	1105	70	1342

Incident reports by level



Types of incidents 2022			
	Requests or Concerns	Grievances	Total
Environment	210	9	219
Health and Safety	4	9	13
Land-related	8	2	10
Business partners (suppliers and contractors)	310	24	334
Community relations	298	12	310
Job-related	438	4	442
Specific assets	1	8	9
Channeled to the Ethics and Discipline Committee	3	2	5
Indigenous Communities	0	0	0
Total	1272	70	1342

Addressing concerns and grievances

Requests and concerns accounted for 94.7% of the reports received this year. These involved job opportunities, services offered, suggestions for community programs and activities, and also access to the information for an environmental study prepared in Peru. The remaining 5.3% of the reports were grievances, which the community development analyzed and channeled to the corresponding areas. We took the actions necessary to remedy the negative impacts on the local community identified.

We started a new project in 2022 with *SAC MIPyMES*, which extends our Community Care Service to offer specialized attention for micro, small and medium companies in the places where we operate and which are looking to join our value chain.

> At Grupo México, we listen to the communities where we operate to help us improve every day.

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5.4 Human Rights

Grievance involving odors in the community

Cananea, Mexico.
In May 2022, we identified two grievances associated with the Buenavista del Cobre mine via a radio program, involving odors and blasting in neighborhoods near our operations. We reached out to the radio station to confirm the grievances and that they were reported to the CCS. We also contacted the person in question and Operations personnel visited their home. We visited their home over five days during the hours the person had reported the odors being the most intense. The resident did not perceive the odors again. In parallel, we boosted our internal monitoring, and the Operations Department found no anomalies.

Grievance involving a delayed contractor payment to a third party

Cuajone, Peru.
In November 2022, we received a grievance from a resident of Torata via our toll-free line, who complained that a Southern Peru contractor had not paid them for a machine rental, which had caused the resident economic hardship.

The case was reported to the Contracting department, who conducted an inhouse investigation and notified the contractor that we were aware of the debt, requesting the contractor make payment to their providers. The contractor contacted the provider and made arrangements for the payment. We were communicating with the Torata resident throughout the process, and they were appreciative of our intervention.

“Thank you for the CCS Micro, Small and Medium Companies system, where we can be heard. I’m grateful that the company really does listen to us here in Moquegua.”

Moquegua resident

The due diligence process involves inter-property audits, conducted by the Impact Measuring office of the Community Development Department, to review and validate the necessary elements for full compliance with the social management plans in our communities. Additionally, both inhouse and independent auditors review the performance of our Community Development Model. We have sought specialized consulting for various mechanisms, like the consultation with the Office of the United Nations High Commissioner on Human Rights in Mexico regarding the Community Care Service (CCS), as mentioned above. We have also received various recognitions from different bodies, including city councils and, specifically, the Inter-American Development Bank (IDB), which recognized our Community Development Model as a good corporate practice in the extractive sector in Latin America.

➤ Our Impact Measuring office conducts inter-property audits to review and validate the necessary elements to ensure full compliance with our Social Management Plans in our communities.

5.4 Human Rights

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Due diligence processes with employees

Our human rights due diligence process for Grupo México employees has two components: workplace climate surveys and the reporting line.

Workplace climate surveys

We use workplace climate surveys to determine the level of satisfaction and to hear the opinions of our employees on various aspects, including topics directly related to human rights. We have updated the Survey for the **Mining Division** to add perspectives on diversity, equity and inclusivity. This tool measures the commitment and satisfaction of our employees to inform our efforts to improve our inclusivity. Additionally, the Mining Division used the “Psychosocial risk factors at work - Identification, analysis and prevention” survey to identify these risks and to promote a favorable organizational environment in the workplace. Both the workplace climate and the psychosocial risk factors surveys are conducted biannually (the next round will be in 2023).

➤ Grupo México conducts surveys that directly address topics related to the human rights of our employees.



Actions to address human rights-related concerns expressed in the surveys:

- Supervisor trainings on collective bargaining agreements and the company codes
- Mentor plan
- [Code of Ethics](#) trainings
- Using the Reporting Line
- Agreements with gyms and schools, etc.

Additionally, our Metalúrgica de Cobre, S.A. de C.V. (METCO) processing plant received “Great Place to Work 2022” certification for our good performance in aspects such as respect and fairness, values that are related to human rights.

Comprehensive Reporting System

The Reporting Line is an essential component of our human rights due diligence process in our three divisions, providing a mechanism for employees and suppliers to immediately communicate to the company any violation of their human rights and to receive a report on how their grievance was addressed. For more information, consult the section on [Comprehensive Reporting System](#) here.

In addition to the tools mentioned, our Workplace Health and Safety departments play a key role in protecting the human rights of our employees, such as the right to life, health, and a safe and healthy workplace.



Collaborators in La Caridad, Sonora, Mexico


US\$85M

invested in occupational health and safety in the three divisions

5.4 Human Rights


5.4.2
Due Diligence
Process:
Transportation
Division

The human rights due diligence process of our Transportation Division addresses the migration issue and how this interacts with the railroad. Additionally, the train crosses or runs near many different communities. Our due diligence process seeks to protect the human rights of our employees, indigenous peoples and communities, the communities, and migrant populations.




Company employees

- Workplace climate surveys
- Comprehensive reporting system




Indigenous peoples and communities

- Direct channels of communication at our stations and at the regional offices of the Department of Tourism through collaboration mechanisms established with the Chihuahua State Commission on Indigenous Peoples (in Spanish, COEPI).



Communities

- Communication via social media
- Direct and ongoing interaction with social actors and local authorities through interpersonal communication tools.
- Dialogue with our neighbor communities and impact assessments, in the case of infrastructure works.
- Initiatives: *Dr. Vagón* the Health Train and *Mexicanos Sembrando*



Migrant populations*

- Coordination with Mexican authorities, including the Ministry of Internal Affairs, the Mexican Immigration Office, and the Railroad Regulatory Agency, to prevent accidents involving migrants and to ensure the Mexican Immigration Office interacts directly with the migrants.

> An example of our engagement with communities is our reduced fare program for the Chihuahua-Los Mochis regional passenger line, where cardholders pay only 20% of the economy train fare.

> Safety at level crossings is a priority to reduce the impact of the railroad on the communities where we operate.

* Mexico is a natural route for migration flows to the United States. Migrants who ride freight trains as a means of transportation put their safety at risk, as the physical and operating conditions of the freight cars are not designed to transport passengers. This is particularly relevant for our operations in central and southern Mexico, as well as near interchange points on the US-Mexico border.

5.4.3

Due Diligence Process: Suppliers

As laid out in the Grupo México [General Human Rights Policy](#), we promote respect for human rights by all who form part of our value chain, including suppliers and contractors, who are required to operate in accordance with these values particularly in the areas of workplace safety, environmental care and social responsibility.

Our [Code of Conduct for Suppliers, Contractors and Relevant Business or Commercial Partners](#) includes sections on ethics and integrity, labor aspects, human rights, risk management, workplace health and safety, community relations, and the environment. All company collaborators are required to comply with this Code of Conduct, including company representatives and anyone acting on behalf of AMC and its subsidiaries.

Principal reference frameworks for the Code of Conduct for Suppliers	
Voluntary Principles on Security and Human Rights	Organization for Economic Cooperation and Development (OECD) Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas
International Labor Organization Convention 169	United Nations International Human Rights Instruments



As part of this regular monitoring of suppliers, we review documents to confirm there are no cases of child or forced labor. We also conduct routine visits where we interview employees of our contractors to confirm compliance with the [Code of Conduct for Suppliers](#) (e.g., the work hours are respected and working conditions are decent). In the event the monthly monitoring finds any irregularity, the supplier is required to correct the situation immediately, or their payments will be frozen, and they may be removed from the Grupo México suppliers list and prevented from participating in future contract bids.

➤ The reporting line is available to the employees of our suppliers, where they can report any violation of their human rights or those of others.

Our Mining Division Procurement department began a sustainability assessment process for relevant commercial partners in 2022, which is based on a questionnaire that includes topics related to human rights, working conditions, environmental protections, and anticorruption. This tool reflects our commitment to fostering respect for human rights throughout our supply chain. For more information, consult the section on [Supply Chain Management](#) in Shared Value.

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5.4.4

Due Diligence Process: Security & Public Safety Officers

Voluntary Principles on Security and Human Rights

SASB EM-MM-210^a.3

Grupo México strictly complies with the legal framework of the countries where we operate and we have policies and processes in place that ensure adherence to the Voluntary Principles on Security and Human Rights, which serve as a guide for companies.

We have tools in place that address the three pillars of the Voluntary Principles on Security and Human Rights:



1. Risk assessment

- Awareness of the local and national political and socioeconomic context, and also the crime rates and potential risks to human rights in the locations where we operate.
- Regular reports with information gathered from the security, legal and environment departments to establish preventive measures and actions.
- Identify risks or threats that would require attention and produce action plans to protect both people and facilities.



2. Interactions between the company and public safety

- Agreements with the Peruvian National Police* to ensure the safety of our employees and to protect the assets of the **Mining Division**. These services are provided fully respecting human rights.
- None of our operations in Mexico or the United States are guarded by police forces.



3. Interactions between the company and private security

- Contract private security companies to protect our operations.
- Security officers at the **Mining and Infrastructure divisions** operate only within the property limits and have no contact with the community, which eliminates the risk of potential human rights violations.
- The **Mining Division** Code of Conduct for Suppliers, Contractors and Relevant Business or Commercial Partners provides for frequent review, by the supplier, of their security procedures and that these are aligned with the Voluntary Principles on Security and Human Rights.
- There were no reports in 2022 (or in previous years) of any human rights violations involving any resident of our neighbor communities by private security officers contracted by the company.



Lime Plant collaborator, Sonora, Mexico

Grupo México applies a due diligence process for contracting private security companies, which ensures compliance with our [Code of Ethics](#) and [Human Rights Policy](#). We verify that these security officers receive regular human rights training, and the contracts contain clauses that promote respect for human rights and establish frameworks for action at our facilities.

We constantly supervise private security providers to identify any irregularities and we make the Reporting Line available to all employees, suppliers and providers. In addition, we have procedures in place to investigate and sanction any human rights violations involving private security officers.

* The Peruvian National Police guarantees appropriate and only strictly necessary use of force, and will not violate rights related to freedom of association and peaceful assembly. There were no reports in 2022 of any violations of these rights by any police officer working under these agreements.

5.4 Human Rights

Corrective actions for cases of discrimination

GRI 406-1

During 2022, the Reporting Line received and addressed four reports of discrimination at Minera México, which were presented at a session of the Ethics and Discipline Committee. After investigating the complaints, one was dismissed as it was determined to not be a case of discrimination. The other three complaints are being assessed to define action plans, and where necessary, remediation plans. For more information, consult the section on [Reporting Line](#) in [Business Ethics and Integrity](#).

Freedom of association and collective bargaining, and prohibition of child and forced labor

GRI 407-1, 408-1, 409-1

We have company policies and procedures in place that eliminate any risk of child or forced labor, or restriction on the freedom of association or collective bargaining at all our operations, in strict compliance with the applicable regulations in each country where we operate. Grupo México is committed to the Children’s Rights and Business Principles, a set of 10 principles developed by UNICEF, the Global Compact and Save The Children to protect children from any negative impact on this vulnerable group caused by business activity.

Operations subject to human rights reviews or impact assessments

GRI 412-1

Mining Division	In 2022, we completed the process of updating the diagnostics at six Minera México operations. With this, 16 Mining Division operations and projects have a current diagnostic.
Infrastructure Division	We updated the social diagnostics at four of our operations in Mexico in 2022: Drilling, El Retiro and Fenicias wind farms, and Highways, finding no potential impacts on human rights.
Transportation Division	All our operations in Mexico underwent human rights assessments in 2022, with special emphasis on the safety of migrants on our rail lines. We identified that our operations in central and southern Mexico are more exposed to risks associated with protecting and respecting human rights, principally in regard to migrants. All our operations in Mexico have mechanisms in place to closely collaborate with the authorities.

100%

of operations in Mexico and Peru have participative social diagnostics

5.4 Human Rights

Employee training on human rights
GRI 412-2

Mining Division

All new hires at Grupo México, both union and non-union, receive and sign their acknowledgement of our policies on [Human Rights](#), and Respect and Wellbeing of our Collaborators, and our [Code of Ethics](#).

Minera México provided in-person sensitivity training in 2022 for all union and non-union employees, covering topics that included our Code of Ethics (and using the Reporting Line), our commitments outlined in the Grupo México Human Rights Policy, and also diversity and inclusivity, prevention of workplace or sexual harassment and how such cases are handled. We produced six videos to reinforce these principles, one of which was dedicated to the topics of diversity and inclusivity, and afterward we lead group activities and a reflection on the advantages of promoting diversity and inclusivity. According to the feedback on the in-person Code of Ethics certification sessions, 99% of participants stated they know about the reporting line and how to use it, they are more aware of diversity and inclusivity, and how applying the Code of Ethics helps to improve the workplace environment.

Due to the remote locations where we operate, as well as the size of our operations, union employees receive this training (online or in-person) every two years and non-union employees every year. In parallel, we constantly reinforce the content of the Code of Ethics and the Human Rights Policy through media campaigns.

Human rights trainings*					
	Country	Course duration	Type of personnel	Employees	%
Mining Division	Mexico	1.5 h	Union	7,039	97.2%
			Non-Union	2,910	100%
	Peru	0.6 h	Union	3,740	98.2%
			Non-Union	1,108	95.1%
	USA	1 h	Union	0	0%
			Non-Union	288	32.6%
	SCC	1.2 h	Union	10,799	97.8%
			Non-Union	4,018	100%
Transportation Division	Mexico	1 h	Union	0	0%
			Non-Union	100	3.8%
Infrastructure Division	Mexico	1 h	Union	27	2.7%
			Non-Union	623	41.1%



San Martín Unit collaborators, Zacatecas, Mexico

17,676.5

Training hours in
the Mining Division
(+ 271.5% over 2021)

15,085

Trained ove the Code of
Ethics (Including Human
Rights) in the Mining
Division

5.4 Human Rights

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We provided [Code of Conduct and Ethics](#) trainings, including human rights-related topics and the Reporting Line, in Peru in 2022, at the start of all Mining / Industrial Health and Safety Program courses, in which all personal at our operations participate. These talks included the audio and/or video on the Southern Peru Copper Corporation Code of Conduct and Ethics. Our personnel in Lima also received training on the Code of Conduct and Ethics with a 10 minute video. All union and non-union new hires that joined the company in 2022 received the talk on our Code of Conduct and Ethics, and the Reporting Line as part of their orientation.

In addition to the trainings mentioned, we provided workplace harassment and discrimination training at Minera México and in Peru for 1,278 employees in 2022. For more information, consult the section on [Diversity and Inclusion](#).

Infrastructure Division

Our Infrastructure Division has developed a Compliance, Ethics and Integrity program, with eLearning and infographics over seven modules, covering topics that include anticorruption, anti-money laundering, our human rights commitments, and how to use the reporting line. The training includes other topics, like fair work practices, child labor, forced labor, non-discrimination, freedom of association, and workplace and sexual harassment.

Transportation Division

All non-union new hires (100 people) in the Transportation Division received an online Code of Ethics course that includes human rights-related topics. All our employees are informed of our human rights policies and procedures.



Transportation Division collaborators, Mexico

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5.5.1
Highlights



5.5.2
Management of the Community
Development Model – Mining
and Infrastructure Divisions



5.5.3
Community Relations
and Coexistence –
Transportation Division



5.5 Local Communities

GRI 3-3 | SASB EM-MM-210b.1.

We are committed to generating wellbeing in the communities where we operate to improve the quality of life of the local residents.

Our Community Development Model in the **Mining Division** and the **Infrastructure Division** supports this commitment. Through linkage mechanisms, participation and transparent communication, we identify the potential effects resulting from the different stages of our productive projects and implement actions to prevent or mitigate any negative effects, while also creating services in benefit of our communities.

The **Transportation Division** applies a model of community relations to maintain and strengthen respectful coexistence with the community.

In Grupo México we respect and promote the Human Rights of all of our collaborators, the nearby communities to our operations, and the one's from our suppliers and contractors in accordance with the framework of the countries where we operate.

5.5.1 Highlights

Principal social performance results in Mexico, Peru and the United States



725

Programs with 6,730 in-person, hybrid and online activities



352,411

Participants



5,463

Volunteers



10,643

Volunteer hours



766

Institutional connections

Social investment in 2022



US\$70.7

Social investment in 2022



US\$8.6M

Community development programs, social relations and productive projects



US\$20M

Operating expenses for schools and employee neighborhoods



US\$42.2M

Infrastructure, public works and equipment for communities and employee neighborhoods:

We conduct three types of audits (internal, independent and crossed) to ensure this information is accurate, supported also by our Comprehensive Impact Measuring System operating procedures and our Evidence Management procedure.

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National and international certifications and recognitions

ISO 9001:2015

The Spanish international certification agency AENOR awarded ISO 9001:2015 quality certification to the Grupo México subsidiary Southern Peru, for our Community Development Management work at our mine projects and operations, recognizing excellence in our community development and relations processes in Peru.

Exceptional Company

In Mexico, we received Exceptional Company recognition from the Business Coordinating Council, the Quality Institute and the Communications Council for our successful practices in the following programs: Community Development Model, Community Care Service, Youth Orchestras and Choirs, Mobile Documentary Filmmaking Workshop, and Mobile Casa Grande.

Publication of the United Nations Office of the High Commissioner for Human Rights

Grupo México is among the companies and organizations that contributed strategies, results and learnings for the report "Corporate Human Rights Due Diligence", issued by the United Nations Office of the High Commissioner for Human Rights, which included the implementation process for our Community Care Service.

Vite Picazo Award

Our largest mine operations in Mexico are located in communities in the state of Sonora, where the Mexican Association of Mining

Engineers, Metallurgists and Geologists hosted the 14th International Mining Congress, during which the Vite Picazo Award was given to Grupo México in recognition of being the company with the greatest social impact in the state of Sonora, Mexico.

Recognition for our Documentary Filmmaking Workshop

The Business Coordinating Council (in Spanish, CCE) and the Mexican Association of Organizational Communicators (in Spanish, AMCO) recognized the social impact of the Mobile Documentary Filmmaking Workshop that Grupo México offers in the communities where we operate. This program offers young people and adults the opportunity to produce audiovisual materials on social topics and with characters from their own communities, reflecting the identity between mining and the community. Since the program started, 547 students have produced 173 films, some of which have been presented at the *Cineteca Nacional de México* and have received nominations for festivals like *Shorts México* and *Cinema Planeta*.

Together with this workshop, we also offer a Mobile Photography Workshop, which has produced more than 2,800 images captured by the lenses of residents of our mining communities. Of these images, 59 have been exhibited at the *Instituto Sonorense de Cultura* in Hermosillo, Sonora, Mexico and at the Centro Cultural Minero of the Mexican Mining Chamber in Mexico City.



Documentary Film Workshop, Sonora, Mexico

5.5.2

Management of the Community Development Model – Mining and Infrastructure divisions

All our Mining and Infrastructure operations in Mexico and Peru apply our social management model, using tools like our social diagnostics.

We create spaces to listen to the community and receive their questions, concerns, requests and grievances, helping us to identify the needs and issues to then bring solutions that foster **responsible coexistence** with our neighbor communities. We also have initiatives in place to generate **economic development** through job skills training and developing local supply, like our *Forjando Futuro* (Forging Futures) program. This and other activities and programs that promote training and learning in culture-related topics, education, health, sports, and the environment, among others, are part of our strategy to **boost human development**.

Community Development Model



We conduct a process to listen to groups in the community before initiating any action. With this **participative communication** and **inclusion** of their points of view and proposals, we ensure their specific needs are addressed.



> 14 procedures that ensure the implementation, measure and ongoing improvement of our community actions

Policies and Codes
Code of Ethics
Code of Conduct for Suppliers, Contractors and Commercial Partners
General Sustainable Development Policy
General Community Development Policy
General Human Rights Policy
General Policy on Diversity, Inclusiveness and Non-Discrimination
General Policy of Respect for the Rights of Indigenous Peoples and Communities

> The recent ISO 9001:2015 certification for our community processes at Southern Peru has resulted in 24 policy documents.

We have indicators in place to institutionalize the social assessment process in our mining communities, continually strengthening our efforts and strategies to define and revise our social management and Community Development plans.



Summer courses, Infrastructure Division, Mexico

Implementation and Results

Responsible coexistence

The basis for our Community Development Model is ensuring a positive and healthy coexistence with the communities near our operations. In support of this, we use open and accessible communications tools to listen and respond appropriately to our communities. We also provide humanitarian aid in emergency situations that would put the wellbeing of the community at risk.

Participative social diagnostics

We conduct participative diagnostics regularly and for the different stages of each business to listen to the community and ensure decisions on operational and social plans are made collaboratively, considering the risks, needs and concerns of the community. The results of the diagnostic are presented and reviewed with representatives from the community to receive their feedback and ensure their representation.

100%

of our communities have a participative [social diagnostic process](#) in place

Community Care Service (CCS)

The Community Care Service (CCS) provides an open line of communication for our communities and addresses grievances, suggestions and concerns for the company.

25

locations where the CCS is available (4 in the Infrastructure Division and 21 in the Mining Division: 14 Mexico, 6 Peru and 1 United States)

5

day response or resolution time by the [Community Care Service](#)

Additionally, we provide disaster relief in response to emergency situations affecting the wellbeing of the community.

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Economic development
GRI 203-1 y 203-2

We strive to create community and institutional connections while also generating economic value. Our two principal focus areas: create opportunities through our *Forjando Futuro* (Forging Futures) program and invest in social infrastructure.

Forjando Futuro Program

The plans for this program are designed in coordination with the Community Development, Procurement and Human Resources departments. This program strengthens both local job skills and the mining supply chain. Additionally, training plans are developed for economic sectors unrelated to our operations to boost job skills in other areas.

Job skills training

- **671 participants**
- Certification program for local suppliers in Mexico designed and implemented in partnership with the Sonora Mining Cluster.
- Certification program for local suppliers in Peru designed in partnership with the Andean Mining Cluster (SAMMI) and the *Universidad Nacional de San Agustín*.
- Dedicated support line for local micro, small and medium suppliers through the Community Care Service (CCS).

Local supply

- Capacity building for local micro, small and medium suppliers.
- Skills certification for local residents.
- 72 local suppliers, **78 participants**

Regional training

- Training for **1,121 people in productive skills** in Mexico.

Social infrastructure

Company funds: voluntary investment in social infrastructure projects using company resources:

- We invested US\$10.6 million in 33 projects

Works for taxes: mechanism applicable in Peru whereby the company executes works projects under an arrangement with the government as part of our tax payments.

- We invested US\$20.1 million under the Works for Taxes program in 2022, equal to 24 times that invested in 2021 and 8 times that invested in the last 3 years.

Contribution through industry-specific taxes:

US\$144.3M

In special mining rights in Mexico.

US\$358.9M

In income tax in Peru, **US\$179.4 million** of which was mining royalties.

5.4 Local Communities

Principal social infrastructure projects				
País	Project	Goal	Investment	Impact
Mexico	Remodel the Casa Grande Community Centers in Charcas, San Luis Potosi and Santa Barbara, Chihuahua	Offer a safe and suitable space, with the characteristics and spaces required for the Casa Grande programs.	US\$3,030,788	Improve the quality of the Community Development Model programs and services provided to the community and double the number of users of these open spaces offered to the more than 11,000 and 14,000 residents of Santa Barbara, Chihuahua and Charcas, San Luis Potosi, respectively.
Mexico	Urban improvement of the former Moctezuma Copper Company tailings deposit in Nacozari, Sonora	Support the municipality in the remediation of an environmental liability left by the defunct Moctezuma Copper Company by improving slope stability, channeling rainwater, tree planting, creating walkways, and the construction of a megalithic sculpture to make this an iconic recreational public space.	US\$2,326,415 (cumulative investment in this project, phases 1 and 2)	Improve the air and water quality, and also general wellbeing to benefit the more than 14,000 inhabitants of Nacozari by containing the tailings and preventing their release into the air and water, while developing a space for physical, recreational and leisure activities, creating identity.
Peru	Cularjahuira Dam	Build a dam, intakes and irrigation channel with a storage capacity of 3.3 million yd³ (2.5 million m³) of water.	US\$ 3,889,597	Water infrastructure with a storage capacity of 3.3 million yd³ (2.5 million m³) of water during the rainy season to irrigate the fields during the rest of the year. This project will provide irrigation for 1,927 acres (780 hectares) of farmland to benefit 585 farmers.
Peru	Candarave Steppes	Recover 2,000 acres (810 hectares) of farmland through the rehabilitation of steppes to benefit farming in the province of Candarave.	US\$ 3,095,742	2,362 acres (956 hectares) of farmland recovered to benefit 2,367 farmers in the High Andean region of Candarave. This project will improve the efficiency of water management for irrigation, preventing the erosion of farmlands and increasing crop production and water availability.

Additionally, we began construction on important investment projects in social infrastructure in 2022:

- **Urban improvements and pedestrian crossings in Esqueda, Sonora, Mexico**, with an anticipated investment of US\$1.5 million to improve the urban landscape and train safety for the nearly 7,000 inhabitants.
- **Wastewater Treatment plant in Ilo, Peru**, with a committed investment of US\$45 million to build a plant with an average industrial water production of 54 gal/s (206 L/s) to benefit more than 131,000 people.
- **High Performance Schools in Tacna and Moquegua in Peru**, with an anticipated investment of US\$48.5 million to build the educational, administrative and residential infrastructure, with equipment and training, to provide a specialized educational service for high achiever students, benefiting 6,000 students through the project horizon.

Tamosura, Pinacate and Tiendas del Minero

Tamosura, Pinacate and our 17 stores for miners focus on raising the quality of life for our communities by providing recreational spaces and supporting the local economy.

- **Tamosura and Pinacate:** Located, respectively, in Cananea and Nacozari, Sonora, Mexico, these shopping centers offer spaces for local merchants and include dedicated areas to promote sports, health, culture, and also green spaces for recreational and leisure activities. An Entrepreneurs Expo was held in 2022, providing trainings and a temporary space for 55 local small businesses at five fairs to exhibit and sell their products.
- **Tiendas del Minero (Stores for Miners):** Supporting our employees, their families and the community at large, this supermarket chain offer goods at competitive prices (9 stores in Mexico and 8 in Peru).

➤ Our social infrastructure projects respond to the needs of the community, as identified through participative diagnostics and studies, considering also the needs of the activity.

These centers are the principal means to implement our model:

Strengthen institutions and create leaders

- Community Committees: Leaders from different areas of the community participate in this social participation mechanism, which evaluates and selects the projects to support with grant funds for seed capital provided by the company.
- Grant funds for seed capital to finance social projects



Empower people

We’re committed to fostering shared responsibility through corporate, youth and community volunteer programs.



Know-how and capacity building for personal growth and development

Our community development centers offer capacity building activities, courses and workshops on topics related to culture, art, health, physical activity, and the environment, among others, for people of all ages.

Some of our emblematic projects are:

- Youth orchestras and choirs
- Documentary filmmaking and photography training program
- Community Care Service
- Wellbeing and sports programs



Human development

Our 32 Community Development Centers in Mexico, Peru and the United States support human development in our communities by providing opportunities and services in remote areas.

Community Development Centers

ASARCO operates the Mineral Discovery Center in the United States. This visitor’s center offers guided tours of a working mine, receiving 4,376 visitors in 2022.



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Youth Choir, La Caridad, Sonora, Mexico



Baseball academy, Sonora, Mexico



Grupo México youth orchestras and choirs

This project was started 4 years ago and, today, involves 1,772 children and youth in 10 communities in Mexico and Peru, where we join forces with renowned Peruvian tenor Juan Diego Florez, through their organization *Sinfonía por el Perú* (Symphony for Peru). The project promotes educational, social and personal development, while providing safe spaces for wellbeing and emotional growth for students and their families.

The principal results are:

- 100% of the students involved start with no musical knowledge and develop the skills to play pieces of medium complexity.
- 100% of the teachers at the schools and all Community Development personnel received training under our child protection and safeguarding policy.
- 80% of the students have improved their academic performance after being involved in the project for one year.
- 9 out of 10 university-age students choose to continue their studies and 4% opt for a degree in music.



Naranjeros-Grupo México Baseball Academy

This program encourages children and youth aged 4 to 17 to play baseball. Participants are residents of Cananea, Nacozari and Esqueda in the state of Sonora, Mexico.

The program is run through strategic partnerships with the Mexican Pacific League, the *Naranjeros* of Hermosillo, the most successful Mexican baseball team with 16 championship wins, and the Sonora State Sports Commission (in Spanish, Codeson), plus the support of the local authorities.

Tournaments will be held at the end of the pilot phase and a regional league will be created. The program will then be extended to other mining communities in Mexico and the United States.

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Casa Grande Móvil, Infrastructure Division, Mexico



Mobile Casa Grande

The Infrastructure Division began its Highways line of business in 2015 with the Salamanca-Leon highway concession and the Silao bypass, extending more than 56 miles (90 km) in the state of Guanajuato, Mexico. Implementing a high-impact and innovative functional strategy for community relations based on a participative diagnostic, the Mobile Casa Grande project has been serving the residents of more than 60 communities in the area of influence of these roadways since 2018.

This social relations model involves a mobile unit that travels to communities, providing a space to connect each community with different public, social and private institutions. Since 2018, the Mobile Casa Grande project has reached over 15,000 people with programs that focus on education, health, sports, the environment, culture and productive skills.

In 2022, the Mobile Casa Grande project began traveling to communities outside the state of Guanajuato, Mexico, taking its services to communities in the municipality of General Bravo, Nuevo Leon, Mexico, near the Fenicias wind farm, operated by Grupo México.

- More than 1,255 projects have been approved since 2009, representing a social investment of US\$7.8 million. In 2022, US\$344,000 was approved for 80 projects.

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SDG Materiality of the Community Development Model

Our Community Development model breaks down into 12 areas of Community Materiality related to the three principal aspects of the Global Reporting Initiative (environment, society and economy) and aligned with the indicators and targets of the 2030 Sustainable Development Goals, as shown following:

Model	Community Development Materiality		Sustainable Development Goals
Responsible Coexistence	Transformation of the Environment	Citizens and Development	<div><div><div>1NO POVERTY</div><div>6CLEAN WATER AND SANITATION</div><div>10REDUCED INEQUALITIES</div><div>11SUSTAINABLE CITIES AND COMMUNITIES</div><div>12RESPONSIBLE CONSUMPTION AND PRODUCTION</div><div>13CLIMATE ACTION</div><div>15LIFE ON LAND</div><div>16PEACE, JUSTICE AND STRONG INSTITUTIONS</div><div>17PARTNERSHIPS FOR THE GOALS</div></div></div>
	We promote caring for the environment in farming and urban communities through actions, campaigns, workshops, training and studies to improve infrastructure.	We foster active engagement and shared responsibility with participative programs that put the community at the center of their own development.	
	308 activities 925 volunteers 72,666 people benefited 67 linkages	620 activities 1,924 volunteers 91,231 people benefited 126 linkages	
Economic Development	Impact and Transformation	Water Management	
	We disseminate information and participate in partnerships, associations and forums to expand the vision and maximize the generation of shared value with stakeholders.	Grupo México is committed to the community's right to water. As part of this commitment, we assist governments with technical advice and investments in works to improve water management.	
Economic Development	Productive Skills	Work and Economic Growth	<div><div><div>2ZERO HUNGER</div><div>8DECENT WORK AND ECONOMIC GROWTH</div></div></div>
	We promote skills development to improve opportunities to earn income, whether through paid work or entrepreneurship, providing services or producing products.	We promote specialized training for people and businesses to join the mining production chain as employees or suppliers, in addition to providing grant funds for entrepreneurial projects.	
	7,173 activities 152 volunteers 15,378 people benefited 257 linkages	99 activities 31 volunteers 8,460 people benefited 177 linkages	

5.4 Local Communities

Model	Community Development Materiality		Sustainable Development Goals
	Social Wellbeing and Quality of Life	Educational Competencies	
Human Development	<div><div>We support the development of artistic and cultural skills with workshops and courses, as well as initiatives that contribute to human and personal development.</div><div>4,284 activities</div><div>1,179 volunteers</div><div>59,747 people benefited</div><div>478 linkages</div></div>	<div><div>We promote the development of extracurricular educational competencies with distance learning, English and computer classes, and also reading rooms.</div><div>719 activities</div><div>247 volunteers</div><div>10,199 people benefited</div><div>57 linkages</div></div>	<div><div><div>1 NO POVERTY</div><div>2 ZERO HUNGER</div><div>3 GOOD HEALT AND WELL-BEING</div></div><div><div>4 QUALITY EDUCATION</div><div>5 GENDER EQUALITY</div><div>7 AFFORDABLE AND CLEAN ENERGY</div></div><div><div>9 INDUSTRY, INNOVATION AND INFRASTRUCTURE</div><div>10 REDUCED INEQUALITIES</div><div>13 CLIMATE ACTION</div></div></div>
	Prevention in Health and Safety	Gender Equality	
	<div><div>Fomentamos el desarrollo de una cultura saludable, a partir de jornadas y talleres que permiten la activación física, la alimentación saludable, además de temas relacionados con primeros auxilios y prevención de enfermedades.</div><div>1,676 activities</div><div>596 volunteers</div><div>30,337 people benefited</div><div>203 linkages</div></div>	<div><div>We promote empowering women as agents of change in society through workshops and courses from different perspectives.</div><div>45 activities</div><div>25 volunteers</div><div>2,649 people benefited</div><div>19 linkages</div></div>	



Sports programs, Mining Division, Mexico

Schools

The Mining Division operates schools at seven of its operations and offices, providing spaces for comprehensive development to company employees and their families, in addition to improving the levels of education in our communities. Located in Mexico and Peru, these schools cover preschool, elementary and middle school levels.

More than 6,000 students have graduated from Grupo México schools since the company adopted these projects, and in 2022, 803 students graduated from our 11 schools in Mexico and Peru, noting that 88% of the students are children of company employees.



5.4 Local Communities

01 *IEF Inicial Santa Rosa de Lima*

- Location: Moquegua/Mariscal Nieto/Torata
- Founded in 1977
- 72 students
- 6 teachers
- Preschool

02 *IEF Daniel Alcides Carrión*

- Location: Moquegua/Mariscal Nieto/Torata
- Founded in 1977
- 277 students
- 34 teachers
- Elementary, Middle School

03 *IEP Juan Vélez Córdoba*

- Location: Moquegua/Mariscal Nieto/Torata
- Founded in 1982
- 143 students
- 28 teachers
- Preschool, Elementary, Middle School

04 *IEP Enrique Meiggs*

- Location: Moquegua/Ilo/Pacocha
- Founded in 1984
- 256 students
- 29 teachers
- Preschool, Elementary, Middle School

05 *IEF Inicial 2677*

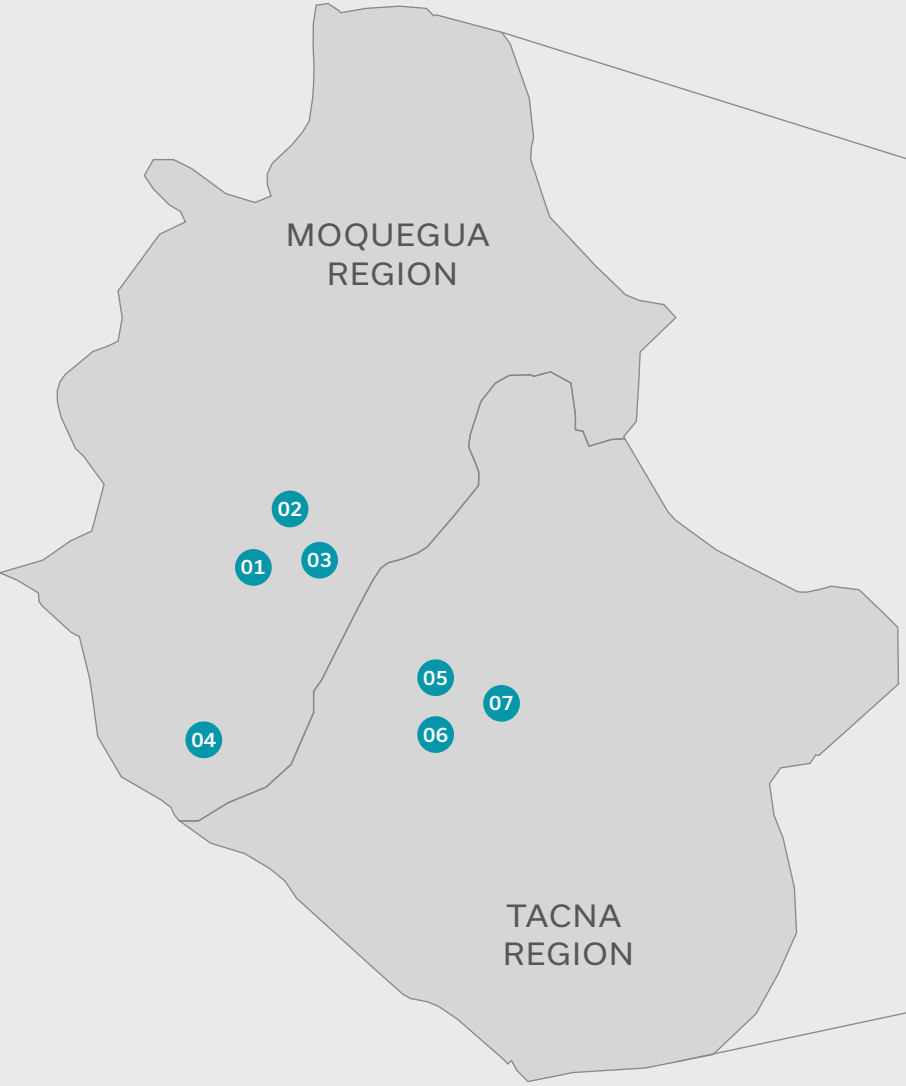
- Location: Tacna/Jorge Basadre/Ilabaya
- Founded in 1986
- 138 students
- 11 teachers
- Preschool

06 *IEF Toquepala*

- Location: Tacna/Jorge Basadre/Ilabaya
- Founded in 1999
- 436 students
- 47 teachers
- Elementary, Middle School

07 *IEP Mariscal Ramón Castilla*

- Location: Tacna/Jorge Basadre/Ilabaya
- Founded in 1984
- 155 students
- 29 teachers
- Preschool, Elementary, Middle School



Our goal: excellence



Our schools provide their services in our mining communities, offering quality, inclusive, innovative, bilingual and equitable education.

Comprehensive education



Through a multidisciplinary team, our schools follow the official curricula set by the education authorities in Mexico and Peru, adding activities that support the development of academic competencies, social skills and English language skills, while being committed to the environment, embodying our values and creating leaders of change.

Services



Our schools offer a variety of services to facilitate and enhance the students’ activities. These include transportation, extracurricular activities, extended hours, personal mentorship, counseling and nutrition consulting.

In 2022, a total of 3,542 students aged 3 to 15 were served by a multidisciplinary team of 306 teachers, 18 psychologists, 22 workshop and extracurricular activity teachers, 14 coordinators and 18 principals.

Bilingual education



Half of our students completing their basic education at company schools in 2022 graduated with an intermediate or advanced level in English. Our schools use different methodologies for teaching English, holding agreements with institutions like Cambridge University Press, Oxford University Press, Pearson Education, Richmond and National Geographic. Our 75 bilingual teachers collaborate with different organizations to achieve positive results.

Academic achievement



Our schools conduct regular assessments using internal mechanisms, official assessment tools and those developed by outside institutions to monitor the progress of our students in their knowledge and skills building.

In Mexico, our 2nd and 9th grade students participated in official assessments; 73% demonstrated knowledge of the learnings expected for these levels in the areas of Spanish and mathematics.

Our 9th grade students also took the high school entrance exams (in Spanish, PREEXANI-I), which test the skills and knowledge of students graduating from middle school; 44% of students scored above the state average, while 29% scored above the national average.

In Peru, our 4th and 8th grade students participated in internal assessments, based on the General Student Assessment, which collects information on the level of learning; 67% of students achieved satisfactory or better results in Spanish and mathematics.

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Health promotion



To encourage habits that will stay with students throughout their lives, our schools have multidisciplinary teams accompany, educate and train students and their families on the importance of healthy eating and physical activity, and the impact on their overall health.

At 2022 close, 75% of students were at their ideal weight. Our 15 physical education teachers educate students on looking after their health and physical development through active breaks, healthy eating campaigns and healthy cooking workshops.

Special Needs Students and Educational Support



The psychology department provides academic support, attention and follow-up with students and their families, particularly for students with physical and/or intellectual difficulties and those who have been diagnosed with autism spectrum disorder.

In 2022, 321 students were cared for by 18 psychologists, with the support of 8 teacher aids and 14 assistants, providing assessment services, teaching adjustments, family workshops, and ongoing training for personnel on topics of inclusiveness and diversity.

Mechanisms for transparency and relationships

Participative communication leading to community commitment

The members of the communities where we operate play a key role in our decision-making for our economic and social development programs. Our model includes spaces for the community to participate proactively and to express their grievances, concerns, interests, positions and proposals.

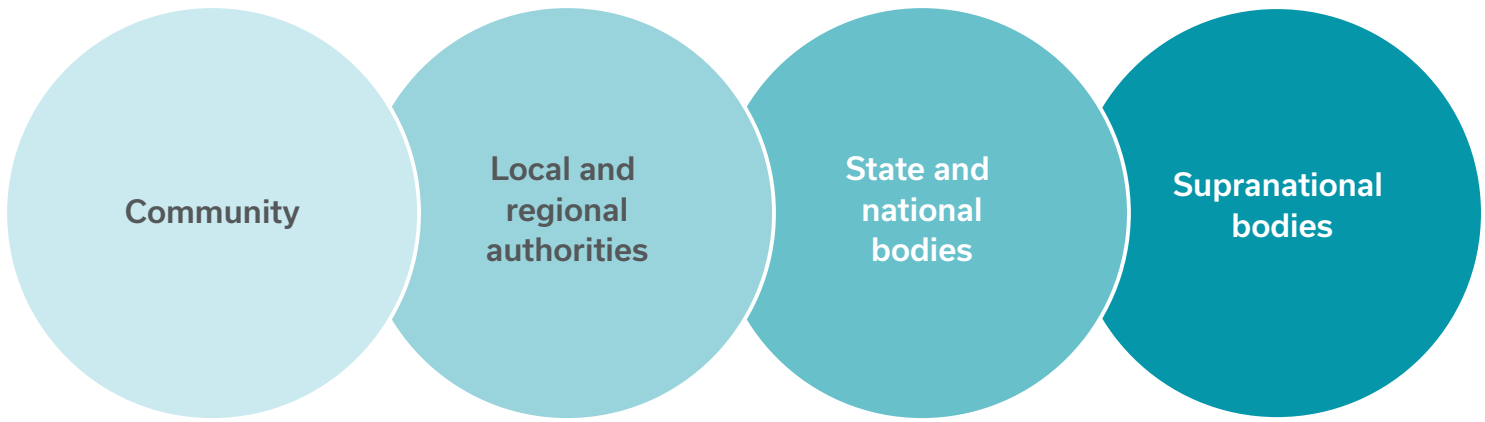
Spaces for participative communication

Community Committees	Community Care Service
Activities at Casa Grande and Casa Nuestra	Emblematic projects
Social media	Educational newsletter
Participative diagnostics	Linkage actions
Community fairs	Business Committees
Lazos magazine	Mobile Documentary Filmmaking Workshop



Paving works, Tacna, Peru

This participative communication involves open and direct dialogue to identify commonalities and to develop or revise our community development programs, achieving results that foster healthy relationships with our communities.



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Active listening to improve relations and wellbeing

From the diagnostics conducted with the community of Cananea, Sonora, Mexico, the company identified a concern among residents to improve the city's drinking water infrastructure. The results of this analysis led to the preparation of a project that was presented to the Community Committee and to the Business Committee, both of which are made up of community representatives, to propose an alternative solution. Following an agreement with the local and federal governments, Grupo México initiated an investment plan in 2022 that will modernize and optimize the service provided by the state government. The project was announced together with Sonora state governor Alfonso Durazo as part of a Grupo México investment program to expand operations in Nacozari, Cananea, Esqueda and Agua Prieta, representing nearly US\$2.0 billion, which includes works for the communities.

➤ Our community development social media platforms are among those with the broadest reach and greatest number of followers in the mining sector in Mexico

Our community development social media platforms make the user feel like they are part of a community that engages beyond the activities conducted in physical spaces. In the last year, we recorded more than 106,000 social media followers in Mexico and Peru, a 23% increase over 2021.

Thanks to social media, everyone that participates in our activities can see their efforts reflected in our posts, while also feeling empowered by their participation and that their proposals are put into practice, strengthening the community-company commitment.

The Business Coordinating Council, the Quality Institute and the Communications Council recognized the value of these initiatives, where the opinion of the community is fundamental in our decision-making, by awarding Grupo México "Exceptional Company" recognition.

Investments

US\$12.8M

Invested in Mexico

US\$57.6M

Invested in Peru

Mexico



30% Community programs

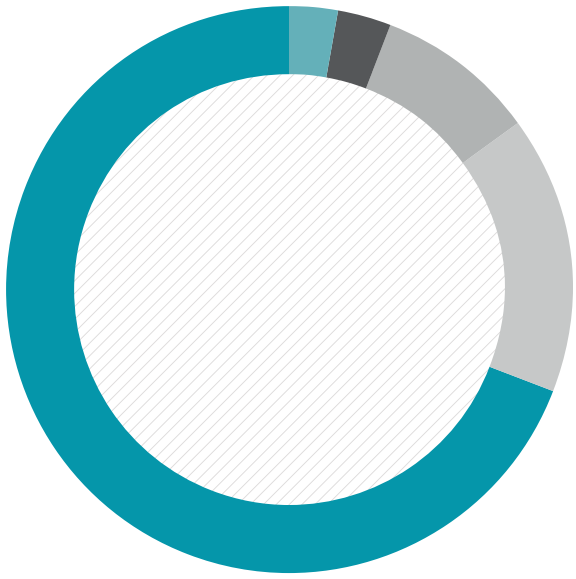
14% Management expenses

14% Operating expenses for Schools

35% Operating expenses for GM neighborhoods

7% Community infrastructure

Peru



3% Community programs

3% Management expenses

9% Operating expenses for Schools

16% Operating expenses for GM neighborhoods

69% Community infrastructure

5.4 Local Communities

Investment in infrastructure and supported services, and significant indirect economic impacts¹

GRI 203-1 y 203-2

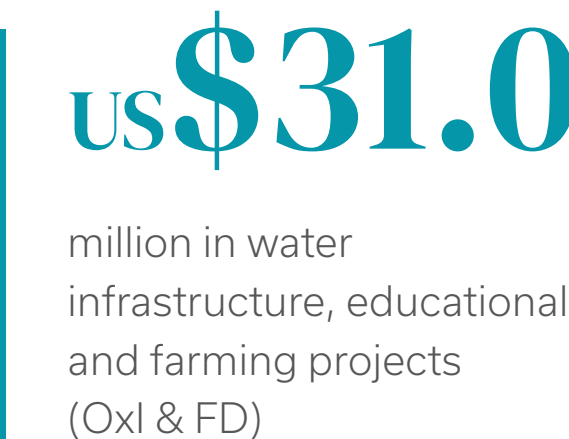
Mexico



Peru



Peru



Peru



Mexico and Peru



85% of the special mining rights paid in Mexico will be used by the Ministry of Education for social impact projects.

We also allocated US\$13.8 million for the neighborhoods where our employees and their families live, and we delivered donations to the community totaling US\$1.7 million.

Operations with local community engagement, impact assessments and development programs

GRI 413-1

We primarily use the participative diagnostic tool to identify social impacts. The company operations in Mexico and Peru have Community Committees, which participate in setting priorities from the results of the diagnostic.

➤ All Mining and Infrastructure division operations in Mexico, Peru and the United States have community engagement programs.

Operations where artisanal and small-scale mining takes place on, or adjacent to, the site

GRI G4 MM8

We have identified artisanal miners near 3 of our 34 operations. There are 15 recognized artisanal miners at the Cananea mine in Sonora, Mexico; 10 recognized miners at the Toquepala mine and 18 in the process of receiving recognition in the province of Jorge Basadre in Peru, and 10 at the Ilo site in Peru processing their recognition.

In recognition of legitimate artisanal and small-scale mining, the documentary short Piedra del Cielo was produced under our 2022 Mobile Documentary Filmmaking project. This documentary short was directed by Cristóbal Copetillo Luque, resident of Cananea, Sonora, Mexico, as an homage to the local Turqueseros.

The film features Don Reyes, a veteran turquoise miner in the northeastern part of Sonora, sharing their experiences as a miner and their connection with the land and turquoise, with its miraculous and fantastical properties. The documentary was selected for the 14th Cinema Planeta Mexican shorts film festival, Earth category, and it has also been shown at the Cineteca Nacional and the Morelia Film Festival.

Link to the documentary:
<https://www.facebook.com/watch/?v=996053161348540>

¹Tax figures are estimates with the final figures being available after the 2022 tax returns are filed.

5.4 Local Communities

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Ite Wetlands, Peru

Operations with significant actual or potential negative impacts on local communities

GRI 413-2 | SASB EM-MM-210b.1.

Our operations in Mexico, Peru and the United States produced no significant impacts in 2022, understanding significant impact as that which the authorities determine as requiring remediation, such as displacement, loss of traditional lands, resettlement or invading the cultural intimacy of the communities near mining operations.

We have management policies and processes in place, as described in this and other chapters of this report, to assess different types of risks and to prevent generating significant impacts on our communities.

Number and description of significant disputes related to land use, customary rights of local communities and indigenous peoples

MM6

The company conducts its operational activities respecting the dynamics of the community in terms of their customs, sharing common goals for the development and wellbeing of the local residents. The company holds as a high priority maintaining close and healthy relationships with the local communities to prevent conflicts involving land use, strengthening our protocols and channels of communication to address any negative perception the community may have in regards to lands and their management.

In this indicator, disputes are understood as conflicts between the company and the affected community involving land use or the customary rights of local communities and indigenous peoples. Disputes are considered significant when they cannot be resolved jointly within a reasonable time,

they recur, are widespread, or they would carry long-term financial, legal or reputational consequences for the community or the company.

Under this definition, there was one significant dispute occurring in 2022, at the Southern Peru operations in Cuajone:

Cuajone, Peru

In February 2022, residents of the community of Tumilaca, Pocata, Coscore y Tala (TPCT), in the Moquegua region, where the Cuajone mine is located, carried out various illegal actions, such as blocking machinery and equipment, claiming that the work was being conducted on land belonging to them. They later demanded compensation and increased their actions to block the railway that transports production and materials, and they occupied the Viña Blanca reservoir obstructing the supply of water to the mine and camp where workers, contractors and their families live.

After a dialogue process facilitated by the President of the Council of Ministers and the Ministry of Energy and Mines, Southern Peru provided its land, concession and easement use permits, which legitimately and legally authorize our operation for 45 years. It should be noted that these rights were awarded to Southern Peru progressively since 1951, on meeting the necessary requirements and in accordance with Peruvian regulations. The company continues its outreach efforts to improve our relationship with the community to a solution that will be beneficial for all.

There were two additional cases, one at the Southern Peru Las Chancas project and another at the Santa Barbara operation in Mexico. Although these cases do not meet the definition of significant, they do involve land use and the company.

5.4 Local Communities

Los Chancas, Peru

The company has been holding informational meetings on the Los Chancas project since January 29, 2019, to inform the Taparihua and Tiaparo communities of the area of interest. Both are farming communities and are known for involving their members in meetings and tasks, among others, to make decisions.

In March 2022, the Tiaparo farmers organized and filed complaints with the Peruvian authorities for invasion by people outside the community, conducting illegal mining activities on communal property. Southern Peru filed its own complaint, as the mining concessions are owned by the company and the illegal presence and activities of these people represents a risk to the operational safety and workers of the company. In parallel, the company continues its efforts with the community to build a culture of legality.

On May 31, 2022, the camp at the Los Chancas project was set on fire. Part of the mining concessions continues to be invaded by illegal miners who are not complying with environmental, tax and mine safety regulations. In our efforts to remove the invaders, 70 illegal miners have been excluded from the Comprehensive Registry of Recognized Mining (in Spanish, REINFO), with five more pending removal. Additionally, we have filed criminal complaints for the arrest of those responsible for these criminal acts.

Santa Barbara, Mexico

Illegal mining activities (prospecting or *gambusinaje*) have been going on since this community was founded in the state of Chihuahua. From the start of our operations in 2012, the company has had to face this historic practice, which has become embedded and normalized in the community dynamic, thanks to a discourse of tradition and opportunities for economic development.

The incursions of *gambusinaje* both in and outside the company's underground mine began to increase in 2018. These illegal activities endanger the physical safety of both the illegal miners and company employees, and also our operations and the environment as illegal activities cause damage to both the company infrastructure and the community, posing a risk of structural collapse.

In 2022, the state government led an operation to close the access points on the lands that were being used for illegal mining activities. This action resulted in demonstrations and demands by the *gambusinos* to be allowed to enter company land and continue their illegal mineral extraction. Through our Community Development model, the company offers alternatives for the development of families that depend on illegal mining. Meanwhile, the government continues to promote job creation to provide alternative employment for the *gambusinos*.

The extent to which grievance mechanisms were used to resolve significant disputes related to land use, customary rights of local communities, and indigenous peoples, and the outcome

MM7

The company has addressed all grievances, concerns and requests from the community related to [significant disputes](#) as well as every other case received through the [Community Care Service \(CCS\)](#) system. In all instances, we have installed a team of at least two Community Development specialists in the community, who have opened channels for dialog and trust, in addition to launching strategic activities in benefit of the community based on the Community Development Model (responsible co-existence, human development, economic development).

5.5.3

Community relations and coexistence
(Transportation Division)

GRI 3-3

With presence in 24 states in Mexico and 2 in the United States, building and maintaining mutually respectful relations and coexistence with the communities that neighbor our rail lines is fundamental for the Transportation Division in order to operate safely and efficiently. We evaluate our management approach of community relations and coexistence according to relevant performance indicators to ensure our activities are conducted effectively and efficiently.





Operating under a framework of engagement and respect with the community is one of our most important commitments as a company. In this regard, the activities of the Transportation Division always respect the rights of indigenous peoples and communities as outlined in our Grupo México corporate policy on the [Grupo México website](#).

The Transportation Division offers a reporting line on our [website](#) as part of our efforts to maintain an open channel of communication with the community. Anyone is welcome to submit a complaint or grievance involving our operations via this channel.

For more information about our reporting line, consult the section on [Business Ethics and Integrity](#).

GRI 413-1

We have developed a community engagement model to support our community relations. This model involves 4 strategic lines of action to strengthen our outreach and relationships with the community:

 Solidarity	Dr. Vagón, the Health Train. In collaboration with the Grupo México Foundation, we provide free healthcare services to remote communities in Mexico
	Cine Vagón. Screenings of new releases for remote communities in Mexico
	Construction of necessary infrastructure in communities
 Support for indigenous communities	Community transportation. We offer discount rates for the residents of communities in Chihuahua and Sinaloa in support of those who frequently travel on our line
	Free transportation of goods. We transport donated foodstuffs and materials to the Sierra Tarahumara free of charge
 Coexistence between the railroad and the community	We conduct awareness campaigns and workshops to promote a road culture of respect and accident prevention
 Boosting tourism	Through the Chepe Express, we attract Mexican and international tourism, generating economic spillover in one of the most remote and underprivileged areas of the country, the Sierra Tarahumara

The Transportation Division acknowledges that one of the principal conflicts we encounter with the community is a lack of road culture and that people will try to “beat the train”. As part of our efforts, each year we conduct a flyer campaign at our level crossings, where company personnel hand out information materials on the importance of respecting the train and personal safety.

For more information about this campaign, consult the section on [Occupational Health and Safety](#).

GRI 413-2

The Transportation Division has operations in 24 Mexican states, and also in Texas and Florida in the United States. We also have presence in multiple communities as our rights of way pass through or near all types of urban areas.

>

With the aim of improving road safety and promoting good urban-rail coexistence, we will continue with our level-crossing rehabilitation program throughout 2022.

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5.6 Indigenous Peoples

GRI 3-3

We acknowledge the multicultural and multilingual nature of the countries where we operate, and we respect the human rights of indigenous peoples in line with the United Nations Declaration on the Rights of Indigenous Peoples and International Labor Organization (ILO) Convention 169.

At Grupo México, we respect and foster cultural diversity to build long-term relationships with the communities where we operate. We are aligned and committed to complying with national and local regulatory frameworks on indigenous peoples and communities.

The Grupo México Action Protocol with Indigenous Communities was designed in 2020 to raise awareness and provide training and orientation to company employees, contractors and suppliers, providing them with tools for engaging with indigenous communities near our operations, respecting the worldview, culture and identity of these communities.

The Protocol was built on a roadmap that outlines the steps to ensure respectful relationships with indigenous communities from the onset, the mechanisms for engagement, agreements and follow-up, and also a series of basic tools for consultation, forms and recommendations to act in a way that is culturally appropriate.

GRI 3-3 | SASB EM-MM-210a.3.

Grupo México Policies ¹ related to indigenous peoples	
Code of Ethics	General Sustainable Development Policy
General Human Rights Policy	Policy on Community Relations
General Policy on Diversity, Inclusion and Non-Discrimination, and Zero Tolerance for Workplace or Sexual Harassment-	General Policy of Respect for the Rights of Indigenous Peoples and Communities

¹These policies apply to all company employees, suppliers and contractors in all the countries where we operate.

➤ We are constantly in dialogue with the indigenous communities through different channels of communication and we promote community actions that foster respect and the preservation of their cultures.

5.6.1 Highlights



Supporting the culture and identity of the indigenous communities near five of our mining operations, one wind farm and one mine project in Mexico, Peru and the United States.



Community projects that support economic recovery and promote indigenous culture in the Zapotec and Cochimi communities in Mexico, in the states of Oaxaca and Baja California Sur, respectively.



Strategic social management programs to maintain a connection with the rural farming communities in Peru, with actions that respect their language and traditions.



Ongoing actions at our company operations near indigenous communities in Mexico, Peru and the United States to boost employment.



US\$2.9 million investment to support the Contisuyo Museum in Cuajone to conserve and preserve objects of national heritage.

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5.6.2

Relations with indigenous communities



MEXICO

Guerrero Negro, Mulege, Baja California Sur

El Arco is a project in exploration, situated on the border with Baja California, in the Villa Jesus Maria district, municipality of San Quintin. We have had a Community Development Center here since 2013.



La Ventosa, Juchitan, Oaxaca

Wind farm located near a Zapotec indigenous community. We have lease agreements for the land and our bilingual Community Development Center here was opened in 2014.



PERU

Toquepala, Cuajone y Los Chancas²

Operations near rural farming communities. We have 6 Community Development Centers in these areas, where we offer activities that foster economic and human development. Additionally, we set up *Radio Candarave* in 2014, a radio station that provides information of interest to these High Andean communities and promotes the local culture. In 2022, in the area of influence of the Los Chancas Project, investments were made in social projects related to health, livestock, agriculture, training and infrastructure.



UNITED STATES

Mission, Arizona

Mine partly situated on land owned by the Tohono O’odham nation reservation. We have a lease agreement in place and also an agreement of preferred right of access to jobs. The visitors center here features a section on local mining production.

Ray and Hayden, Arizona

This mining complex is located near two indigenous communities: San Carlos Apache Indian Reservation and Gila River Indian Community. We have agreements with the latter on water rights.



²These rural farming communities are recognized by the Peruvian Constitution and are made up of families connected through their ancestral, social, economic and cultural ties, expressed in their communal ownership of the land, communal work, mutual support and democratic governance.

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5.6 Indigenous Peoples



Zapotec community, La Ventosa, Oaxaca, Mexico

SASB EM-MM-210a.3.
Mexico

Our Social Management Plan is based on a Participative Social Diagnostic that provides statistical, geographic, socioeconomic and qualitative information about the communities, and about their relationship to our operations, to promote measures to mitigate potential negative impacts and measures to optimize positive impacts to generate shared value in benefit of indigenous peoples and communities.

For example, our *Casa Grande Lidxinu’* (“place for everyone” in Zapotec) in Juchitan, Oaxaca, Mexico, is a bilingual community center that promotes the preservation and strengthening of the Zapotec language and culture, as 60% of the local population speaks this language. Additionally, at the end of 2022, we started the *Orquesta y Coro Juvenil de Viento* project (youth choir and orchestra) to offer a space to develop skills in music and singing as a tool for social transformation in three aspects: education, individual and family.

This program currently involves 35 children and youth from La Ventosa, Oaxaca. This first phase of the project provides participants with an introduction to music, teaching them to read notes and sheet music, as well as basic skills in playing wind and brass instruments.

A first Zapotec language course was offered in 2022, *Hrulá diidxazá* (Saving the Zapotec language), delivering more than 120 classes to a group of 23 children and youth. We also held 6 *Mercadito Cultural Binigulazá* (“Descendants from the heavens” in Zapotec) (cultural market) events in the community of La Ventosa, in which 72 entrepreneurs participated and more than 700 visitors from the community, building a network of local entrepreneurs.

The El Arco exploration project is not situated within an indigenous area identified by the National Commission for the Development of Indigenous Peoples. More than 46 miles (75 km) from the project, in Guerrero Negro, Mulege, Baja California Sur, some members of this community identify as Cochimi and we have established a close relationship with them to promote the preservation of their traditions and language.

In 2022, this support included activities like our Auka Summer Camp (“hello” or “good day” in Cochimi) with indigenous volunteers and more than 60 children from the Guerrero Negro community, as well as two workshops on Cochimi culture.

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Peru

Working in collaboration with local governments and institutions, we contribute to improving the quality of life of the farming communities near our operations and projects in Peru.

We have begun anthropological mapping studies in the areas of influence of our Toquepala and Cuajone mine operations (in the Tacna and Moquegua regions, respectively). An advisory team is supporting the preparation of the studies and the implementation of the resulting social management strategies.

Our social management plan includes investment in infrastructure for the economic development of the regions, giving priority to the existing construction systems that are part of the culture and traditions of these rural farming communities, as is the case of the steppe preservation and recovery project in Candarave, where we are supporting these ancestral techniques for soil conservation and optimization of water use for farming purposes. This initiative will contribute to facing climate change by recovering 2,000 acres (810 hectares) of farmland, reconstructing steppes, tilling soil and incorporating organic matter to improve the farmland and then plant native plants.

Working with the High Andean communities of Tacna and Moquegua, we started Radio Candarave in 2014 to broadcast national news pieces in the local language, as well as music programming.

United States

Our relationship with the indigenous peoples in Arizona is conducted according to federal law and the specific codes of each nation. Our operations have mechanisms in place for ongoing communication.

At our Mission operation in Arizona, we collaborated with the Tohono O'odham community offering opportunities at a job fair held in Sells, Arizona in 2022.

- Investment in infrastructure is included in our social management plan to support regional economic development.



Aymara communities in Canilaca, Tacna, Peru

Investment in community programs and projects



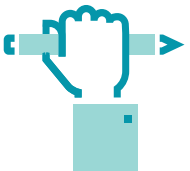
Zapotec community, La Ventosa, Oaxaca, Mexico

5.6.3
Assesment Mechanisms

Our corporate goal is to institutionalize the process for identifying and engaging with the indigenous communities near the operations of our Mining and Infrastructure divisions. In this regard, we carried out the following actions in 2022:



The Office of the United Nations High Commissioner on Human Rights in Mexico provided training on Business and Human Rights, including a module on Indigenous Rights, for all our Community Development personnel in Mexico.



The Peruvian Ministry of Culture trained the Community Development teams in Mexico and Peru that work with indigenous communities.



We are planning a training for our Community Development team in the United States.

Formal grievance mechanisms
SASB EM-MM-210a.3.



Our Community Development Center in Juchitan (Oaxaca, Mexico) has bilingual staff to attend to members of the Zapotec community. All our Community Care Service (CCS) materials are available in Zapotec, and we also have a toll-free line and WhatsApp number with service in Spanish, English and Zapotec.

Grievances at our Mission mine (USA) are channeled through the Mining and Reclamation Plan group. The Tohono O’odham community can contact our Environmental Affairs or Community Development departments at the mine, by phone or email.

We received a total 166 reports (requests, questions and concerns) in 2022 from the communities near our operations where we have identified an indigenous population. We addressed 2 concerns in Guerrero Negro, Baja California, 55 requests and questions in Juchitan, Oaxaca, and 109 concerns in Mission, Arizona.

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Evaluation mechanisms

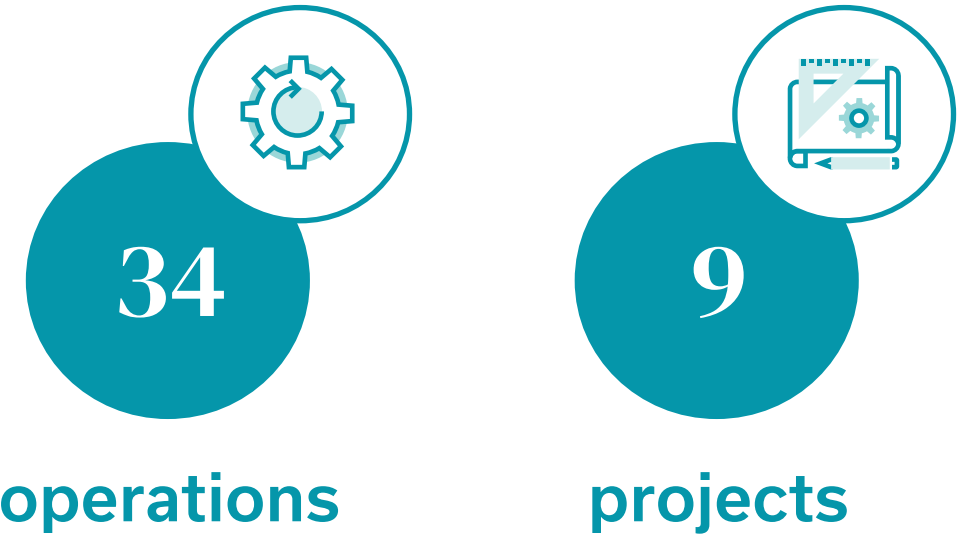
GRI 103-3

We used dialogue and participative social diagnostics as the basis to evaluate our community performance. Additionally, our Action Protocol with Indigenous Communities includes information on fulfilling our agreements, the continuity of our community relations, and regular review of Grupo México's actions with the communities.

Operations on or adjacent to indigenous lands and operations that have formal agreements with indigenous communities

MM5

Our Mining and Infrastructure divisions in Mexico, Peru and the United States have:



Of our total operations, five are adjacent to or in some manner have presence with indigenous communities in Mexico and the United States, and three with rural farming communities in Peru.

We have formal agreements with indigenous communities at four of these five operations (one in Mexico and six in the United States), representing 80% of our operations adjacent to or in some manner having presence with indigenous communities.

In the case of the Cochimi indigenous community in Mexico, we do not have a formal agreement as the community lies outside our area of influence (46 miles (75 km) away). However, our social management programs prioritize respect for their culture and traditions.



Zapotec community, La Ventosa, Oaxaca, Mexico

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Recovering Archaeological Data at Ray, Arizona, United States

We carried out a land exchange between the US Bureau of Land Management and ASARCO as part of our management of the land where our Ray mining operations are conducted in Arizona, United States, which involved exchanging 9,339 acres (3,780 hectares) of public land in Pinal and Gila counties for 7,304 acres (2,955 hectares) of ASARCO private land in Mohave and Pinal counties in Arizona.

Following this exchange, we identified archaeological sites eligible for the US National Register of Historic Places (NRHP), varying from the Archaic period (~8000 BCE - 300 CE) to the mid-20th century, and representing the history of the land and how it was used by the ancestors of various indigenous nations, and also Euro-American descendants.

We have been working closely with the Bureau of Land Management, the Ak-Chin indigenous community, the Gila River indigenous community, the Hopi tribe, the Salt River Pima-Maricopa indigenous community, the Apache San Carlos tribe and the Tohono O’odham nation on the excavation of these sites.

The land exchange provided a unique opportunity to study how the different peoples used these sites over time, identifying that during the Archaic period, the land was used to obtain and process raw materials and wild food resources, and also for crops; rock shelters and caves for rituals, living quarters and storage; and small sites where various families would have lived. Also, the sites dating from the historic period are mostly related to mining and livestock activities at the beginning of the 20th century.

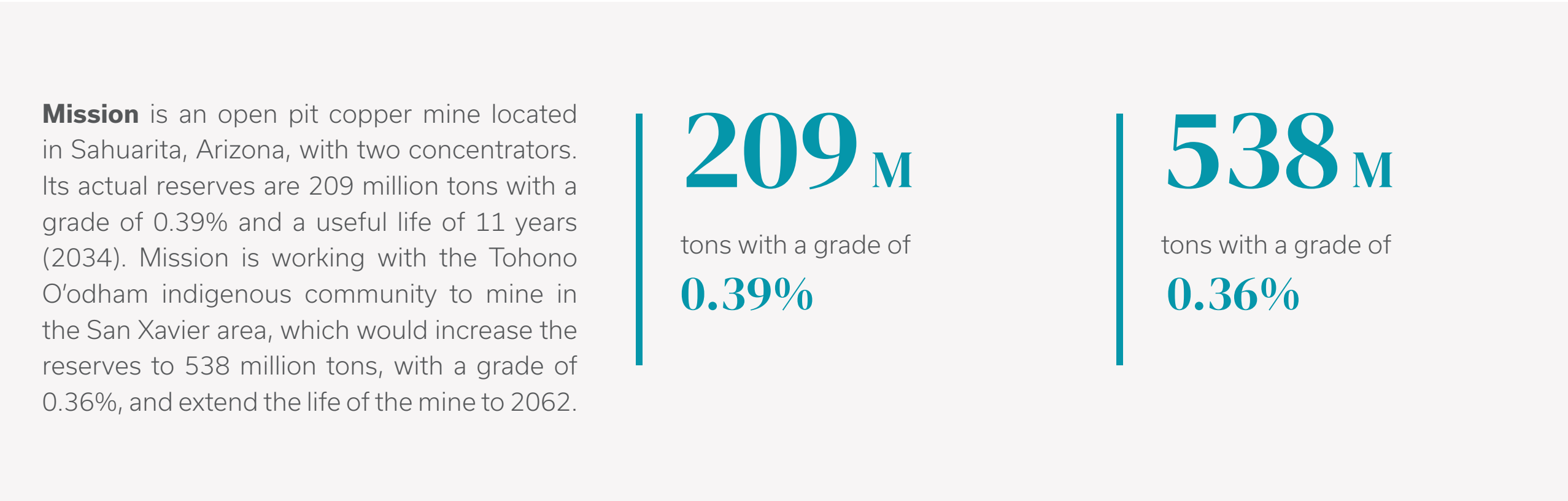
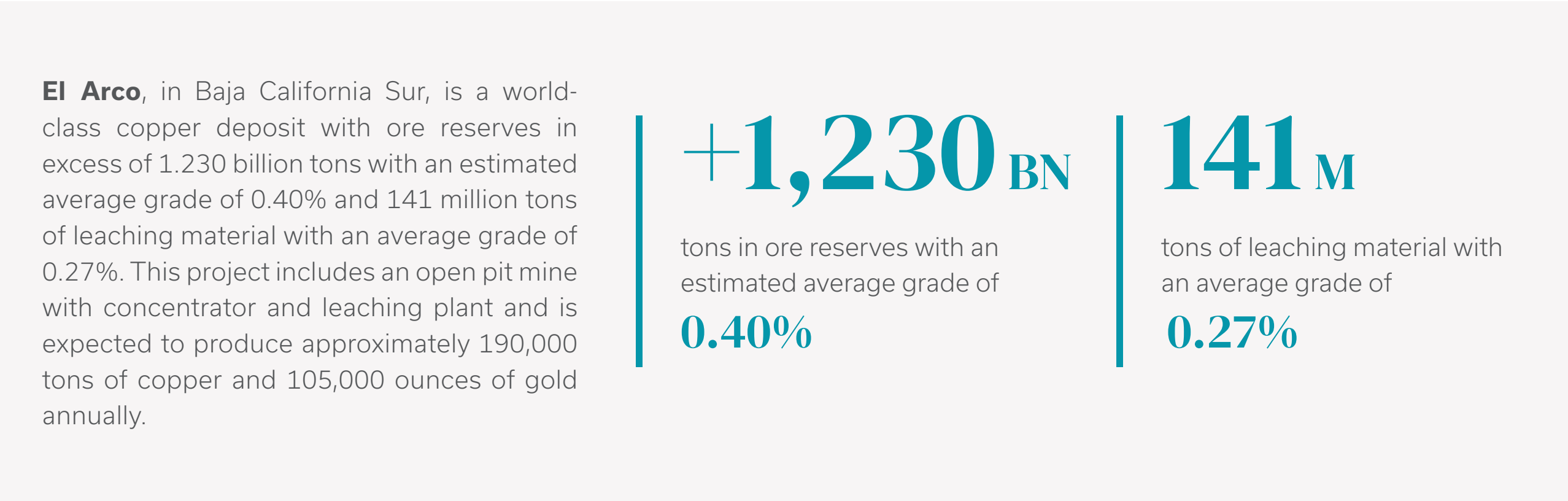
The archaeological excavations were completed in 2022 and the project has entered the analysis and report phase. We are also continuing to interact and dialogue with the local indigenous communities to receive their input and incorporate their perspectives into the interpretation of the archaeological finds.



Archaeological excavations in Arizona, United States

Ore reserves in indigenous communities
EM-MM-210a.2

As part of our efforts to disclose information on our operations near indigenous communities in the direct and indirect areas of influence, the percentage and grade of the probable reserves are detailed following:



Incidents of violations of the rights of indigenous peoples
GRI 411-1

In compliance with national laws, the United Nations Declaration on the Rights of Indigenous Peoples, ILO Convention 169, and the Guiding Principles for Companies and Human Rights, we disclose that Grupo México received no reports of violations of the rights of indigenous peoples in Mexico, Peru or the United States, through our Community Care Service, the Community Development Centers, third parties, or other media.



Member of the Cochimi community, Baja California Sur, Mexico

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6.1 Climate change

GRI 3-3

Climate change is one of the greatest global challenges today, requiring the commitment of governments, companies and society as a whole. Grupo México’s [materiality analysis](#) identifies climate change as one of the most relevant issues in our three divisions, forming the basis for our commitment to reducing our carbon footprint and to promoting energy efficiency. Our Infrastructure Division facilitates renewable energy projects.

Under our risk management and prevention approach, we are working to ensure all our company operations are safe and resilient to climate change, and to extend this resilience to our neighbor communities. Another focus area is mitigating the risks associated with the transition to low-carbon economies, positioning Grupo México as a key player in contributing to the transition to a green economy. We deliver products and services that support this transition, and we are an agent of positive change in the mitigation of global greenhouse (GHG) emissions.


6.1.1 Highlights

At Grupo México, we recognize that climate change is a cross-cutting issue that influences various aspects of our strategy, operations, value chain and the communities with which we work. We therefore acknowledge the importance of defining a strategic response to limit the risks and impacts that climate change may have on our operations, while also supporting the attainment of national and international climate goals, including the Paris Agreement and United Nations Sustainable Development Goal 13: Climate Action.




Cularjahuira dam, Tacna, Peru


During 2022, we revised and updated our strategy on climate change, which is based on the following pillars:




Deliver products and services that support the transition to low-carbon economies



Reduce the organization’s carbon footprint




Increase the resilience of our operations and neighboring communities to the effects of climate change




Align our organizational management with international best practices


Also in 2022, we prepared a GHG emissions reduction roadmap based on the following focus areas:




Investment in renewable electrical power




Electric mine trucks




Fuel substitution in freight locomotives and electrically powered yard locomotives



Energy efficiency in mine operations



Nature-based solutions



Emissions reductions in our value chain (Scope 3)

6.1 Climate Change



Fenicias wind farm, Nuevo León, Mexico

This roadmap has been key in setting our new targets in combating climate change:

 **-15%**

Short term (2027): reduce our absolute emissions (Scope 1 and 2) by 15% for BAU emissions, using 2018 as the base year

 **-35%**

Medium term (2035): reduce our absolute emissions (Scope 1 and 2) by 35% for BAU emissions, using 2018 as the base year

 **Zero net emissions**

Long term (2050): zero net emissions (Scope 1 and 2) for BAU emissions, using 2018 as the base year

Our participation in the “Global Copper Decarbonization Roadmap”¹ working group of the [International Copper Association](#) (ICA) played an important role in setting our mitigation targets. This working group aims to define the contribution of the copper industry to achieving the goals of the Paris Agreement and also actions that could be taken to succeed in this effort.

¹Global Copper Decarbonization Roadmap.

Additionally, we strengthened our climate change governance in 2022 with the following actions:



Our new [Climate Change Policy](#) acknowledges this material topic represents considerable challenges in social, economic and environmental aspects to ensure the continuity of our operations and the safety of our neighbor communities, as well as sustainable development for future generations.



The Mining Division’s Sustainable Development Committee began analyzing strategic areas in third quarter 2022 to identify opportunities for reducing GHG emissions, with particular attention to electrically powered mine trucks and developing projects to supply renewable energy to our mine operations. We have also analyzed our short, medium and long term emissions reduction targets, and reviewed the performance of key indicators, like electricity and fuel consumptions, and GHG emissions.



The Corporate Sustainable Development Department created a central Climate Change office for the three divisions of Grupo México. This office is charged with ongoing monitoring of the implementation of the climate strategy and contributes to aligning our climate change vision and targets, which are presented and confirmed at extraordinary meetings of the Grupo México Board of Directors level Audit and Company Practices Committee, as well as to the SCC Board level Sustainable Development Committee.

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6.1 Climate Change

We have made significant progress in recent years in our performance, management and transparency on issues related to climate change:

- We met our 2022 corporate goal of revising our analysis of risks and opportunities associated with climate change in 2020. The main conclusions drawn from that analysis are included in this report.
- Each year, we complete the climate change questionnaire prepared by the CDP (formerly the Carbon Disclosure Project), which provides a system for environmental disclosure and is globally considered as the most relevant assessment on climate change. We also prepare a gap analysis each year from our annual assessment results in support of ongoing improvement. This led to Grupo México maintaining its “B” rating in 2022, demonstrating our continued effective management of our climate strategy. This rating is higher than the regional average for North America (“C”) and higher than the average for the metal smelting, refining and production sector (“C”).

CDP Rating Scale:



We have also participated in the S&P Global Corporate Sustainability Assessment (CSA) since 2020. Our climate strategy score for Grupo México increased from 56 to 64, between 2020 and 2022, and from 60 to 67 for Southern Copper Corporation, evidence of our ongoing improvement in climate management.



Strengthening our emissions reduction roadmap and announcing the short, medium and long term emissions reduction targets for Grupo México will support us to continue improving our climate performance and our management of reputational risks.

We recognize that climate change management is constantly evolving, requiring us to closely follow new technologies and to continuously monitor the resilience of our operations, our supply chain, and the communities with which we work. Give this, we will be developing a strategy in 2023 to reduce our Scope 3 emissions, and we will also revise our analysis of climate scenarios to consider the most current science-based scenarios, deepen our analysis of transition and physical risks at the operational level, and prepare adaptation and mitigation plans for each of our operations. The results of these new analyses will inform our calculations of potential material financial impacts for Grupo México and for our value chain in the medium and long term.

6.1 Climate Change

6.1.2

Governance

TCFD GOB-A, GOB-B,

In Grupo México we continuously improve our governance structure and practices to ensure the goals of our climate strategy are attained and to align our business portfolio with a low-carbon economy.

Corporate governance mechanisms:

Body	Function
Audit and Company Practices Committee	<ul style="list-style-type: none">The sustainability offices of each division present the environmental, social and governance strategy and management of related risks and opportunities to this Committee at extraordinary sessions.
Sustainable Development Committee at the Board Level of Southern Copper Corporation	<ul style="list-style-type: none">Made up of independent board membersThe SCC Executive Vice-President, who is also the Executive Vice-President of Grupo México (for more information consult the section on Corporate Governance), participates on this Committee.Supervises the management of risks and opportunities associated with climate change.

Our climate strategy, performance and management of related risks and opportunities are presented to both committees, which then share these issues with their Boards of Directors. In 2022, strategic areas related to opportunities for reducing GHG emissions were analyzed, with particular attention to electrically powered mine trucks, fuel substitution in our fleet of locomotives, and developing projects to supply renewable energy to our operations. We have also analyzed our short, medium and long term emissions reduction targets, and reviewed the performance of key indicators, like electricity and fuel consumptions, and GHG emissions.

- > The Mining Division’s Corporate Sustainable Development Department is responsible for the implementation of the Grupo México climate strategy, coordinating the related aspects of the three divisions. This Department regularly reports to the Audit and Company Practices Committee and also to the Executive Vice-President.
- > A Climate Change office was created in 2022 to coordinate the strategy and management of related risks and opportunities in the three divisions, and also to align our climate change vision and targets presented to the Committees. Additionally, the Infrastructure and Transportation divisions each have sustainability offices, which provide internal monitoring of our climate change management, in coordination with the mentioned Climate Change office.

6.1 Climate Change

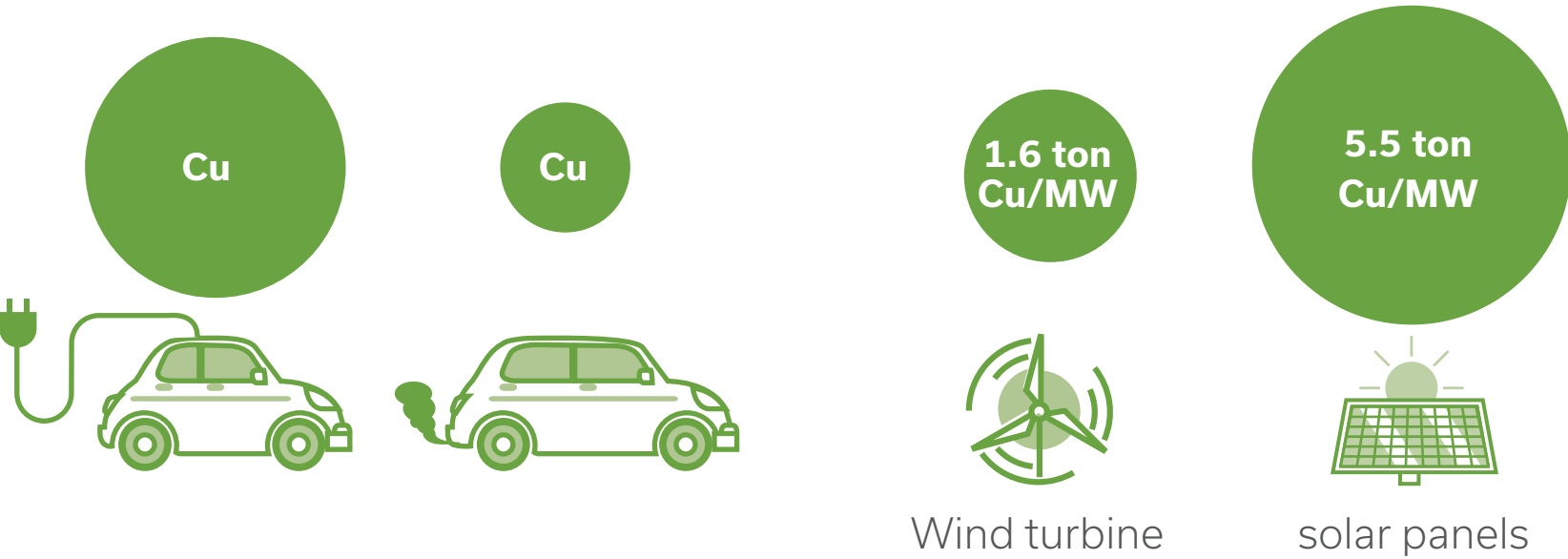
6.1.3
Strategy



Deliver products and services that support the transition to low-carbon economies

Grupo México operates in sectors that promote and facilitate the transition to inclusive low-carbon economies.

The **Mining Division** primarily produces copper, which is essential in the manufacturing of technological solutions that, collectively, have the potential to significantly reduce GHG emissions around the world. For example, copper is used to make components for wind generators, solar panels, smart grids, electric vehicles and cell phones. Electrically powered vehicles contain almost four times more copper than a vehicle with an internal combustion engine. Wind turbines contain up to 1.6 tons Cu/MW and solar production systems use about 5.5 tons cu/MW. Also, as a 100% recyclable metal that does not lose its properties when recycled, copper facilitates the circular economy and helps preserve the environment.

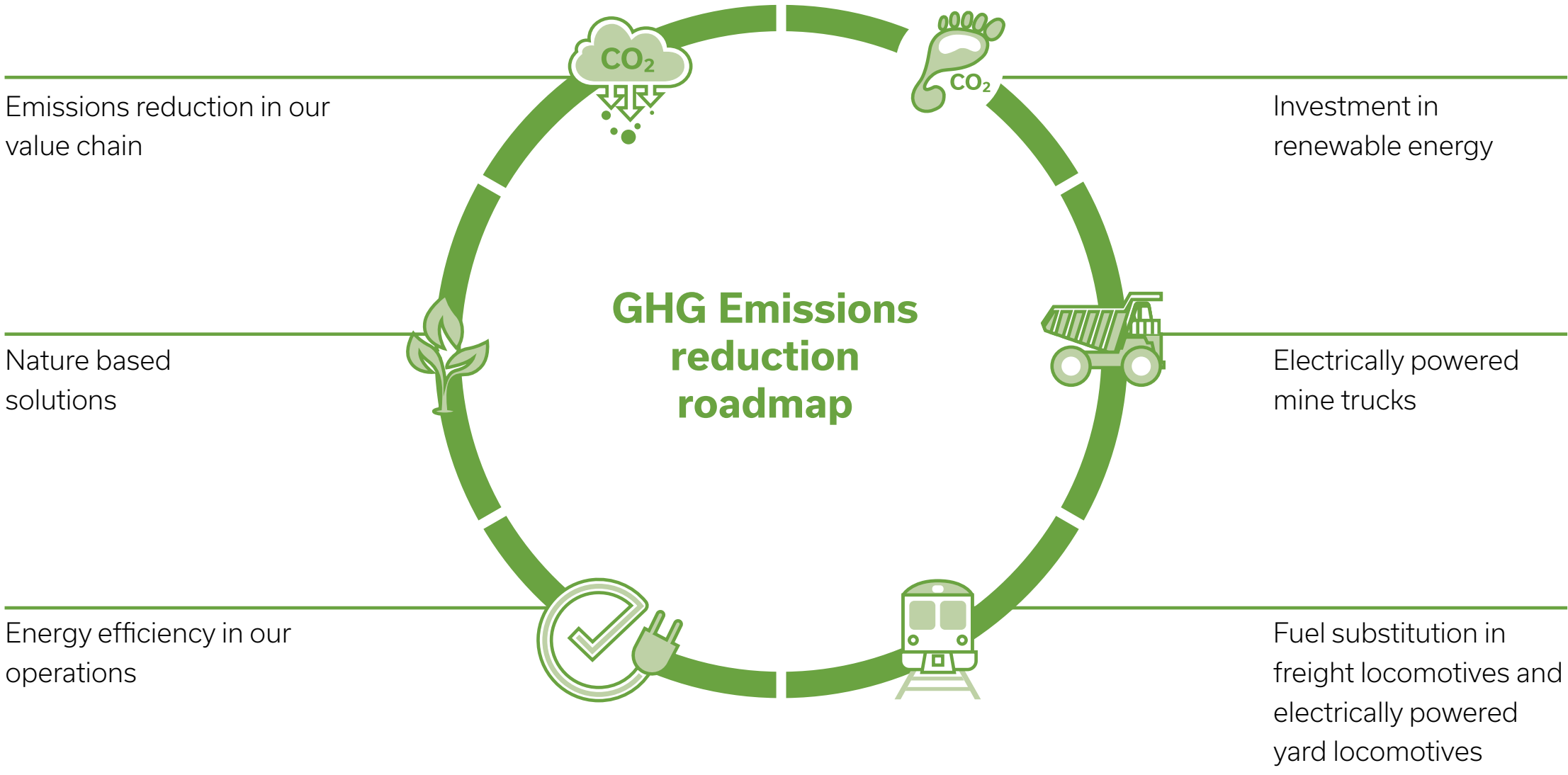


² Estimate based on one 3 MW wind turbine containing nearly 4.7 ton cu.

6.1 Climate Change

Reduce the organization’s carbon footprint

At Grupo México, we are contributing to the transition to low-carbon economies with products and services that produce the lowest carbon footprint possible, forming part of a responsible supply chain. We are collaborating with the International Copper Association (ICA) and our peers to develop a global plan to reduce emissions in the industry, known as the “Global Copper Decarbonization Roadmap”. The results of this initiative have been useful in strengthening our climate strategy and defining our own emissions reduction roadmap.



Investment in renewable electricity



- A first step in reducing our Scope 1 and 2 emissions is to replace diesel and other fuels with electrically powered options.
- Construction of the 168MW Fenicias Wind Farm in the state of Nuevo Leon, which will supply power to our IMMSA mine and processing operations.
- Analysis of sources of renewable energy for future mine projects.
- Prefeasibility studies on the potential to generate renewable energy on site for our mine operations in the United States, which would reduce the Scope 2 emissions associated with these operations. In 2023, we will prepare similar prefeasibility studies for our operarions in Peru.

Electrically powered mine trucks



- Build working groups with mine truck providers to collaborate on defining a strategy to accelerate the production of electrically powered vehicles using renewable energies. As these types of vehicles are not expected to be readily available before 2030, using electrically powered mine trucks will make only a limited contribution to reducing emissions in the short term.
- Analysis of how many of our trucks could be electically powered after 2030, considering their useful life, and how these changes will contribute to our medium and long term emissions reduction targets.
- To reduce our emissions in the short term, in 2023 we will be analyzing the possibility of retrofiting 14 diesel trucks to hybrid (diesel/natural gas) at the Pilares mine.

Nature-based solutions



- Our company nurseries produced 5,846,713 trees in 2022 to reforest areas at our mines and in other regions (in collaboration with Grupo México Foundation volunteer projects), and to absorb GHG emissions.
- Work continues on our long term restoration of the Ite Wetlands. We have created an artificial wetland on approximately 4,000 acres (1,600 hectares) of a former mine waste disposal site, making this the largest coastal wetland in Peru.
- In 2023, we will define how to quantify the environmental and social benefits associated with these projects and we will continue exploring additional projects that have the potential to generate these benefits in the areas where we operate.

³Global Copper Decarbonization Roadmap

6.1 Climate Change

Energy efficiency in our operations



- Redesign, convert and retrofit equipment, improve and reorganize processes, and efficient energy usage training for employees.
- The **Transportation Division** has implemented two fuel saving and emissions reduction initiatives: Trip Optimizers, an automated fuel management and power regulating system that reacts to topographic features to improve train handling on each trip -in 2022, this system has been installed in 279 locomotives; and HP-TON, an operational and logistic strategy that considers the train's maximum towing capacity and the total tonnage of the freight to *move more with less*.
- The **Mining Division** has developed two emissions reduction projects at the Ilo plant: power cogeneration and substituting fuel oil and diesel for natural gas. We are also analyzing the use of additives in the diesel consumption of mine trucks to improve the efficiency of the combustion process. We have created working groups across the three divisions to identify further energy efficiency projects.

Fuel substitution in freight locomotives and electrically powered yard locomotives



- Initiative to analyze the possibility of retrofitting freight locomotives and tenders currently using diesel to hybrid (natural gas/diesel). This project is in its first phase, retrofitting 30 freight locomotives and completing their respective test runs.
- In the second phase of this initiative, to be completed in 2023 and 2024, we will retrofit an additional 120 locomotives, and for 2025, we plan to complete the retrofitting of a total 150 locomotives.
- Another effort of the Transportation Division on the decarbonization roadmap in 2023 will be to assess the feasibility of migrating to 100% electric locomotives (or using alternative technologies and energies).

Emissions reduction in our value chain



- We have opened dialogues with our customers to collaborate on the disclosure of information about our operational emissions.
- The **Mining Division** has a Code of Conduct for Suppliers and Contractors that invites our commercial partners to join in the effort to minimize their greenhouse gas emissions, and to increase their usage of renewable energies and continually improve their energy efficiency.
- For the fourth year in a row, accounting of Scope 3 emissions, where we have identified that the material emissions are mostly related to category 1 (purchased goods and services), category 3 (fuels and energy usage) and category 10 (processing of products sold). As a result of this analysis, we will start to develop an emissions reduction strategy in 2023 that considers joint actions with our suppliers and customers, and which will improve the ESG performance of our value chain.



Combined Cycle Plant, Sonora, Mexico

6.1 Climate Change

Increase the resilience of our operations and neighboring communities to the effects of climate change

One of the key actions to strengthen the resilience of the Grupo México business model is to identify and manage the risks and opportunities related to climate change by analyzing climate scenarios, which we have been doing since 2020. As a result, we are incorporating factors related to climate change into our business decisions involving either risks (e.g., carbon taxes, increased costs related to climate management, physical impacts on operations) or opportunities (e.g., increased demand for copper, substitution of fossil fuels, implementation of low or zero emission technologies).

The scenarios were selected based on the 2017 guidelines of the TCFD⁴, which recommend using Representation Concentration Pathways (RCPs) to analyze physical risks. These pathways provide projections of the GHG concentrations in the atmosphere in the medium and long term, in accordance with the Intergovernmental Panel on Climate Change (IPCC) guidelines. For the transition risk analysis, particularly those associated with carbon pricing mechanisms, the TCFD recommends using the scenarios developed by institutions like the International Energy Agency (IEA). These models inform assessments of the potential medium and long term climate effects from global warming and the outlook for carbon pricing ranges that could be reached in the future in the different regions where Grupo México operates.

These results have been helpful in strengthening our climate strategy, and in understanding the potential financial impacts for the organization. In 2023, we will be revising our analysis of climate scenarios to consider the most recent scenarios recommended by the IPCC in their latest report on climate change (AR6). During this process, we will also deepen our physical risk

analysis at the operational level, and prepare adaptation and mitigation plans for each of our operations.

The results of these new analyses will inform the calculations of potential material financial impacts for our operations and our value chain in the medium (2030) and long (2050) term. This revision will help to lay the foundation for improving our management of climate-related risks, and also ensure that we are meeting the increased demands from our markets, particularly in terms of the new requirements the Securities and Exchange Commission (SEC) is expected to release in the near future on climate disclosures.

Another action we have taken to improve the resilience of our operations to the effects of climate change is to build on recent efforts to understand, prevent and better address the risks associated with water management, both at our facilities and in the watersheds where we operate. In this regard, we regularly review and update our inventory of water-related risks, including droughts and flooding, and also prepare plans to prevent and address these issues.

⁴In particular, the 2017 technical supplement on the use of scenarios in climate risks and opportunities disclosures.



Chepe Express, Transportation Division, Mexico

6.1 Climate Change



Zinc ingots, Zinc Refinery, San Luis Potosí, Mexico

Align our organizational management with international best practices

Our 2022 actions in this regard have essentially been focused on aligning our organizational climate change management with international best practices.

As a result of these efforts, and despite the assessment becoming more and more stringent each year, Grupo México maintained its “B” rating from the CDP’s climate change assessment in 2022, demonstrating our continued effective management of our climate strategy. This rating is higher than the regional average for North America (“C”) and higher than the average for the metal smelting, refining and production sector (“C”).

We have also participated in the S&P Global Corporate Sustainability Assessment (CSA) since 2020 and since then, our climate strategy score has increased from 56 to 64 for Grupo México, and from 60 to 67 for Southern Copper Corporation, evidence of ongoing improvement in our climate performance.

Strengthening our emissions reduction roadmap and announcing the short, medium and long term emissions reduction targets for Grupo México were important achievements for the company in 2022, and will support us to continue aligning our climate strategy with market trends, and continue improving our climate performance and our management of reputational risks.

We have set the following additional goals for 2023:



Develop an incentive program. We are looking at how to gradually incorporate incentives related to the management of physical and transition risks and opportunities, and also the development of measures (e.g., emissions reduction roadmaps at the division and operational levels) to achieve our emissions reduction targets.



Define an internal carbon pricing. We are analyzing how to implement internal carbon pricing that will support our operations in anticipating potential regulations and favor the reduction of their carbon footprint.

6.1 Climate Change

6.1.4
Management
Policies and protocols
TCFD GDR-B

General Sustainable Development Policy Environmental Policy	Outlines our commitment to the Paris Agreement and our contribution to the United Nations Sustainable Development Goals, specifically Goal 13: “Climate Action,” focusing on adopting urgent measures to combat climate change and its impacts.
Climate Change Policy	<p>Acknowledges that combating climate change represents challenges in social, economic and environmental aspects to ensure the continuity of our operations and the safety of our neighbor communities, as well as sustainable development for future generations.</p> <p>Grupo México senior management acknowledge and endorse the various commitments outlined in the policy, which will support the development of adaptation and mitigation plans to effectively manage these challenges and prevent any financial impact on our operations.</p>
For the Mining Division:	<ul style="list-style-type: none">• Heat Stress Prevention Protocols that include how to recognize signs and symptoms, and first aid techniques.• For some sites in Peru, an emergency response protocol for landslides caused by rainfall, as well as a slope stability control program.• Implementation of water retention ponds and side channels to redirect water flows at our mines.• Construction of more resilient dams to contain extreme rainfalls (including overflow channels).
For the Transportation Division:	<ul style="list-style-type: none">• Speed restrictions and operating policies for high temperature conditions.• Maintenance programs for areas that are particularly vulnerable to extreme rainfall and landslides, and also a multiyear program to reinforce bridges, roads and tracks, for natural water drainage and channeling.
For the Infrastructure Division:	<ul style="list-style-type: none">• Emergency response plans to mitigate the risks associated with extreme sea levels. Sea weather conditions are monitored continuously and regular practice drills are conducted with the navy.• For the oil line of business, emergency response protocols for tropical cyclones.

We will be continuing our detailed analysis of the physical risks at the operational level in 2023, and preparing mitigation and adaptation plans to address each. We will also be updating all our programs and protocols, as mentioned, and preparing additional materials for any other risk identified during the new analysis.

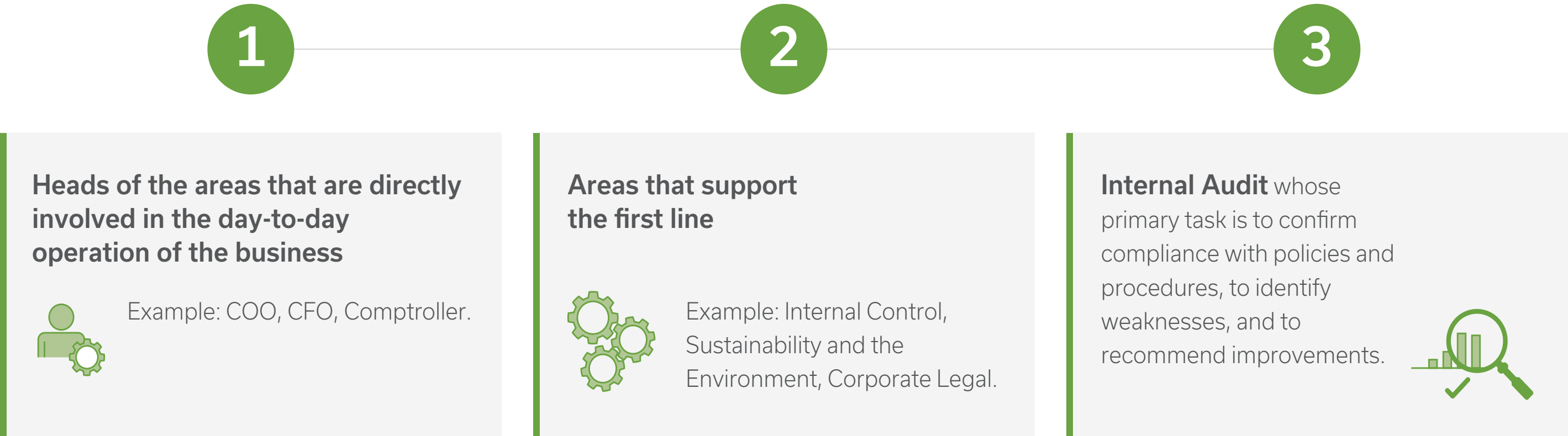
Process for identifying risks and opportunities
TCFD GDR-A, GDR-B, GDR-C

At Grupo México, we identify, prioritize and classify risks based on the degree of significance of the economic, environmental and social impacts, taking into account the influence of stakeholder assessments and decisions in each of our divisions. They are grouped into four segments: (i) business ethics and integrity, (ii) climate change, (iii) communities, and (iv) our people. Identifying deficiencies and opportunities helps us to maintain a process of ongoing improvement and consequent learning to shape a culture focused on strategic risk management from Senior Management levels and throughout the organization.

We follow the three lines of defense model for effective risk management and the control required to comprehensively mitigate the risks of the Mining Division, while at the same time strengthening the way we communicate risk management and supervision. This model provides the basis for effective corporate governance through the accountability of the different governance bodies, the actions of Senior Management, and the assurance provided by the Internal Audit department.

6.1 Climate Change

Lines of defense for risk management



➤ The Corporate Sustainable Development Department has been identifying and analyzing physical and transition risks since 2020, as well as opportunities associated with climate change, applying the TCFD framework.

In 2023, we will revise our analysis of climate scenarios and deepen our physical risk analysis to identify risks and opportunities, and prepare adaptation and mitigation plans for each of our operations. These results of these new analyses, and the respective adaptation and mitigation plans, will be incorporated into the three lines of defense model described above to systematize the identification, assessment and management of risks at the operational level.

Regarding the corporate level management of opportunities identified, the Audit and Company Practices Committee and the Sustainable Development Committee of the **Mining Division** have analyzed strategic areas related to reducing GHG emissions, with particular attention to electrically powered mine trucks, fuel substitution, energy efficiency, and developing projects to supply renewable energy to our operations. As a next step, these committees will further explore the issues related to climate-related risks, which will be revised in 2023. The Risk Committees at each Grupo México division will also be looking at these topics, reporting their performance to the Board of Directors.

➤ Systematizing the management of climate-related risks and opportunities as work of the Audit and Company Practices Committee, the SCC Sustainable Development Committee and the Risk Committees of the three divisions, will support Grupo México in strengthening our climate change governance in the short term.

Short, medium and long term risks and opportunities identified

Physical risk analysis
TCFD EST-A, EST-B, EST-C, GDR-A

Physical risk analysis

Preliminary analysis

Map and prioritize the relevant risks associated with our operations and our value chain, informed by pertinent scientific publications and the characteristics of the assets (including factors like type of operation, geographic location, historic climate impacts, contribution to earnings, among others).

Scenarios

Time horizons - The analysis under the different time horizons considered aspects such as the end of the useful life of our sites, as well as the contract periods and concessions for leased assets. Particular emphasis was placed on the long-term horizon as this would produce more extreme scenarios.

- Short term (2021-2025)
- Medium term (2025-2050)
- Long term (2050-2080)

Climate change scenarios*

Geography

Mexico, USA and Peru, and other countries or regions where we have strategic projects in the planning or exploration stage, like Spain, Ecuador and Chile.

Granularity

Review of corporate mechanisms currently in place.

RCP2.6

Stringent mitigation

Low probability that the average global temperature rise will exceed 2°C.
Probable range of change in the average global temperature by 2100: **0.3-1.7°C.**

RCP4.5

Intermediate mitigation

Probable range of change in the average global temperature by 2100: **1.1-2.6°C.**

RCP8.5

Business as usual (no mitigation)

Unlikely the average global temperature rise will remain below 4°C.
Probable range of change in the average global temperature by 2100: **2.6-4.8°C.**

Combined Cycle Plant, Sonora, Mexico

⁵Source: IPCC, 2014: Climate change 2014: Synthesis report. Contribution of Working Groups I, II and III to the Fifth Assessment Report of the Intergovernmental Panel on Climate Change [Core writing team, R.K. Pachauri and L.A. Meyer (eds.)]. IPCC, Geneva, Switzerland, 157 pages. The analysis incorporated projections from various climate change scenarios. Most of the sources consulted included only projections for RCP 4.5 and RCP 8.5. However, when information was available, we also evaluated scenario RCP 2.6. Scenario RCP 6.0 was not included due to the lack of information available. The projections for scenario RCP 8.5 hold greater relevance for Grupo México as the potential impacts are the most severe. We also reviewed information to identify any trends in recent decades (upward or downward) that could emerge in the short term due to chronic events resulting from gradual changes in temperature and rainfall, and in the intensification of extreme climate scenarios.

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6.1 Climate Change

Results of the physical risk analysis			
Threat	Potential impacts on operations	Potential impacts on the value chain	Examples of existing initiatives
Increased maximum high temperatures	<ul style="list-style-type: none">Reduced workforce productivity and restrictions on some activities, both outdoors and in the underground mines (where operations are stopped when the temperature exceeds the threshold of 90°F (32°C)).Effects on worker health from heat stress.Increased energy consumption.Heat expansion of train tracks affecting the operations of the Transportation Division and also the highways operated by the Infrastructure Division.Potential decrease in power production by the wind farms due to decreased air density caused by high temperatures, which can also overheat the nacelles.The combined cycle power plants operated by the Infrastructure Division could also experience decreased power production. It is estimated that for each 1°C increase in the air temperature above 30°C, the net production of the combined cycle gas turbines decreases 0.3-0.6%.Increased water loss from evaporation at tailings heaps and dams, also reducing capacity to recycle water.	<ul style="list-style-type: none">Interruptions or delays in the supply of key inputs and raw materials, particularly electricity, increasing power demands.Land transportation and distribution routes may be affected by melting asphalt.	<ul style="list-style-type: none">Heat stress prevention protocols that include how to recognize signs and symptoms, and first aid techniques. We also provide courses on how to prevent heat stress.The Transportation Division is developing initiatives to address worker health. For example, more comfortable employee uniforms, water stations, rest areas at worksites.To prevent accidents, the Transportation Division has speed restrictions in place and operating policies for high temperature conditions.
Droughts	<p>Potential decrease in the water supply, which could affect our mine operations:</p> <ul style="list-style-type: none">Limitations on usage to reduce dust emissions.Limitations on operations, like leaching.Increased water demand to compensate increased evaporation.Additional investments to treat water at mines situated in water stress areas.	<p>Competition for water resources could raise water costs or increase the frequency and complexity of community conflicts.</p>	<p>For more information, consult the section on Interaction with water as a shared resource in Water and Effluents.</p>
Extreme rainfall	<ul style="list-style-type: none">Damages to the infrastructure and facilities at our sites and rail lines, particularly in the event of flooding.Production interruptions at some Mining Division and Infrastructure Division sites.In conjunction with other factors, there could be landslides, which would threaten worker safety and the infrastructure of some mines.Service interruptions in the Transportation Division, particularly in the event of sinkholes and landslides.Overflow of dams or deposits.	<ul style="list-style-type: none">Interruptions or delays in the supply of key inputs and raw materials.Transportation and distribution routes may be affected by damages to highways and rail lines.	<ul style="list-style-type: none">The Transportation Division has maintenance programs for areas that are particularly vulnerable to extreme rainfall and landslides, and also has a multiyear program in place to reinforce bridges, roads and tracks, for natural water drainage and channeling.Some Mining Division sites in Peru have an emergency response protocol for landslides caused by rainfall and a slope stability control program. We are also evaluating additional measures to strengthen the program.Implementation of water retention ponds and side channels to redirect water flows at our mines.Construction of more resilient dams to contain extreme rainfalls (including overflow channels).
Flooding	<ul style="list-style-type: none">Potential damage to the infrastructure and facilities at some Mining Division and Infrastructure Division sites, and some Transportation Division rail lines.Production interruptions at some Mining Division and Infrastructure Division sites.Service interruptions or delays in the Transportation Division.Dam or deposit overflows.	<ul style="list-style-type: none">Interruptions or delays in the supply of key inputs and raw materials.Transportation and distribution routes may be affected by damages to highways and rail lines.	<p>All the same mitigation measures as noted for extreme rainfall.</p>

6.1 Climate Change



Barrancas del Cobre, Chihuahua, Mexico

Results of the physical risk analysis			
Threat	Potential impacts on operations	Potential impacts on the value chain	Examples of existing initiatives
Tropical cyclones	<ul style="list-style-type: none">Damages to oil rigs and interruptions in activities.Damages to the infrastructure and facilities of the Transportation Division in coastal areas, as well as service interruptions.Service interruptions or delays in the Transportation Division.Dam or deposit overflows.	<ul style="list-style-type: none">Interruptions or delays in the supply of key inputs and raw materials.Transportation and distribution routes may be affected by damages to highways in coastal areas and ports.	<ul style="list-style-type: none">The Infrastructure Division's oil line of business has emergency response protocols in place for tropical cyclones.The Mining Division has implemented mitigation measures for extreme rainfall, as described above.
Extreme sea levels	<ul style="list-style-type: none">Damages to the Infrastructure Division's oil rigs and to the infrastructure and facilities of the Transportation Division in coastal areas.Potential effects on production at some sites.Service interruptions or delays in the Transportation Division.	<ul style="list-style-type: none">Interruptions or delays in the supply of key inputs and raw materials.Transportation and distribution routes may be affected by damages to highways in coastal areas and ports.	<ul style="list-style-type: none">The Infrastructure Division has emergency response plans in place to mitigate these types of risks. Sea weather conditions are monitored continuously and regular practice drills are conducted with the navy.The Transportation Division has an early warning system for extreme weather events that activates prevention and mitigation measures for these types of risks.

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6.1 Climate Change

Changes for the indicators analyzed, for the RCP4.5 and RCP 8.5 long-term scenarios				
Legend	Threat	Indicators analyzed	Changes projected under RCP4.5 and RCP8.5	Probability ⁶
	Increased maximum high temperatures	Days with temperatures >95°F (35°C)	In some regions, like Arizona and northwest Mexico for example, the number of days per year with highs over 95°F (35°C) will increase 50% compared with the historic period in the RCP4.5 scenario and 200% in the RCP8.5 scenario.	High
	Droughts	Probability of experiencing droughts that could last for several years.	There would be a significant increase ⁷ in Arizona, northwest Mexico and southern Peru, and also in Spain and Chile, under the RC8.5 scenario. Under the RCP8.5 scenarios, studies project for Arizona a 30-50% increase in the probability of megadroughts that could last for several decades, while this increase would be 20-50% for the RCP4.5 scenario.	High
	Extreme rainfall	Changes in the frequency and intensity of extreme rain events, with a return period ⁸ of 30 years.	The return period would change, so that extreme rainfall events would be more acute and frequent in all countries, except Spain. The maximum increase projected would reach 15% for the RCP4.5 scenario, compared with the historic period, and 26% for the RCP8 scenario, for our sites in Sonora.	Moderate
	Flooding	Changes in the magnitude of flooding with a return period of 100 years.	More frequent and more intense rainfall events, as well as drastic changes in the magnitude of flooding would affect a limited number of sites in Mexico (La Caridad, Processing Plant) and in the United States (Ray and Hayden).	Moderate
	Tropical cyclones	Frequency of tropical cyclones registering category 3 or higher on the Saffir-Simpson scale.	Increased ocean temperatures would lead to an increase in the number of tropical cyclones category 4 or higher on the Saffir-Simpson scale with probability of making landfall in Mexico or the United States. For example, the projections indicate 5-15 tropical cyclones category 4 or higher on the Pacific coast could make landfall per decade, in addition to those recorded in the historic period. For the Atlantic Ocean, projections indicate up to 5 additional tropical cyclones category 4 or higher per decade, compared against the historic period, with the possibility of landfall in Mexico or the United States. The projections are similar for both the RCP4.5 and the RCP8.5 scenarios.	Low
	Extreme sea levels	Changes in the frequency of extreme sea levels with a return period of 100 years.	The gradual increase in sea levels would significantly increase the frequency of extreme sea levels (e.g., storm surges), which could cause coastal flooding in places like Sonora, Veracruz and Florida. The increase, compared against the historic period, would reach 10% for the RCP4.5 scenario and would exceed 100% in the RCP8.5 scenario. Events that currently have a 1% annual probability of occurrence could reach 100% annual probability in the long term.	High

⁶ Three levels of probability were used, based on the granularity of the projections and the quality of the sources available: high (the information comes from one or more studies that have used regionalization methods or studies that are based on various climate models with narrow projections); moderate (the information comes from one or more studies that have used regionalization methods or studies that are based on various climate models with broad projections); low (the information comes from studies that do not meet the quality criteria described or which are limited in terms of the modeling methods used).

⁷ Significant, in this context, means the projections for the threat show a statistically relevant change, considering the models and conclusions of the studies and sources consulted.

⁸ The return period for a weather or climate event is a metric to estimate the probability of occurrence of a threat, indicating the approximate time (in years) between one event that reaches or exceeds a certain threshold and the next event with similar characteristics in terms of intensity and magnitude. For example, an event with a return period of 30 years would occur, on average, once every 30 years, or in other words, has a 3.3% chance of presenting in any given year.

6.1 Climate Change

Physical risks associated with climate change as identified under the RCP8.5 scenario, long term (2050-2080), for Grupo México sites with an end of life or concession after 2050 ⁹										
Division					Types of risk					
	Country	Site	Type	Location	Increased maximum high temperatures	Droughts	Extreme rainfall	Flooding	Tropical cyclones	Extreme sea levels
Mining	Chile	Catanave	Future Project	Parinacota						
	Ecuador	Chaucha	Future Project	Cuenca & Guayaquil						
	Spain	Andalusia	Future Project	Seville						
	USA	Hayden	Plant	Arizona						
		Ray	Mine & Plant	Arizona						
	Mexico	Anganguao	Future Mine Project	Michoacan						
		Buenavista del Cobre	Mine & Plant	Sonora						
		Buenavista Zinc	Future Mine Project	Sonora						
		Chalchihuites	Future Mine Project	Zacatecas						
		Processing Plant	Plant	Sonora						
		El Arco	Future Project	Baja California						
		El Pilar	Future Project	Sonora						
		La Caridad	Mine & Plant	Sonora						
		Pilares	Future Project	Sonora						
		Lime Plant	Mine & Plant	Sonora						
		Central Repair Shop	Plant	Chihuahua						
		Guaymas Terminal	Plant	Sonora						
		Zinc Refinery	Plant	San Luis Potosi						
	Peru	Tantahuatay	Gold Mine	Cajamarca						
		Los Chancas	Future Project	Apurimac						
		Tia Maria	Future Project	Arequipa						
		Cuajone	Copper Mine	Moquegua						
		Toquepala	Plant & Mine	Tacna						
		Ilo	Plant	Ilo						
Transportation	EUA	Florida East Coast		Florida						
		Texas Pacifico		Texas						
	México	Ferromex								
		Ferrosur								

⁹ Active or future operations for which no risks were identified, or which will terminate before 2050, have been omitted.

6.1 Climate Change

Summary of operational physical risks resulting from the analysis of climate change scenarios and their impact on the business, strategy and financial planning



The potential physical impacts of climate change on our operations are highly uncertain and depend on the geographic location of each site. These may include changes in precipitation patterns, water shortages, changes in temperatures, sea levels, storm patterns and storm intensities. These effects may have an adverse impact on the cost, production and financial performance of our operations. In addition, substantial weather-related conditions could affect our relationships and agreements with our major customers and suppliers by materially affecting the normal flow of our transactions, particularly those that are sea-related. Severe weather events could damage transportation infrastructure and cause interruptions or delays in the supply of key inputs and raw materials, and also products sold. Therefore, we monitor fluctuations in weather patterns in the areas where we operate, as well as evaluate our water demands, as weather changes may result in increases or decreases that would affect our water needs.



As part of our supply chain risk management strategy, we seek to ensure that our suppliers have a reliable supply chain structure while maintaining the continuity of our operations, adjusting delivery times and back-up reserves as necessary. We support all our relationships with our customers and suppliers through contracts and negotiation processes, creating strategic partnerships to provide, for example, railroads, construction services in the event a port is closed, energy or alternative energy sources in the event of an energy shortage that could affect our operations.



We will be revising and deepening our analysis of climate scenarios in 2023 to identify new physical risks at the operational level, and prepare adaptation and mitigation plans for each of our operations. We will also start to develop a reduction strategy for Scope 3 emissions that will include joint actions with our suppliers and customers and improve the ESG performance of our supply chain.



To date, weather conditions have not posed significant problems in our relationships and agreements with our customers or suppliers, because of the strategic partnerships we have built. From a long-term perspective, there is a risk of a material impact from changes in weather-related conditions that could affect our relationships and agreements with customers and suppliers in the future by affecting the normal flow of our transactions, particularly sea-related transactions.

6.1 Climate Change

Analysis of transition risks and opportunities associated with climate change

TCFD EST-A, EST-B, EST-C, GDR-A

Analysis of transition risks and opportunities associated with climate change

Opportunities associated with climate change

- Increased revenue
- Increased competition in electricity costs
- Reduced emissions from our operations by fostering a low-emission supply chain.

Transition risks associated with climate change

- Analysis of current regulations on carbon pricing mechanisms
- Carbon pricing analysis based on global decarbonization scenarios (2025-2040)

Opportunities associated with climate change

Grupo México is one of the world’s largest copper producers and our stakeholders increasingly recognize the importance of copper in the migration to low-carbon economies, therefore the implications of climate change could benefit the company's reputation. However, this is conditioned on our commitment to supporting the attainment of the goals of the Paris Agreement and our ability to demonstrate clear and sustained progress in the decarbonization process for our operations.



Increased revenue. Copper is a critical component in many of the technologies required for the transition to low-carbon economies, including wind and solar power generation, electric vehicles, and power grids, among others. Therefore, demand for copper is expected to increase significantly in the future, which could drive up prices and positively impact Grupo México earnings.



Increased competition in electricity costs. The cost of generating renewable electricity is going to become more and more competitive, compared with conventional power plants, which offers the opportunity to reduce operating costs and GHG emissions at our operations.



Copper cathodes, Amarillo, United States



Reduced emissions from our operations by fostering a low-emission supply chain. Copper is a critical material for electrically powered vehicles in general, and for mine vehicles in particular, due to it being used as a component in the electric batteries that power these types of vehicles. Our suppliers, who use these batteries, are in the process of building a roadmap to bring electrically powered mine trucks to market in the medium term (2030), with the support of Grupo México. By producing a portion of the copper used in this market, we will be contributing to the manufacturing of these trucks, while also reducing the emissions from our copper extraction processes (Scope 1), by eliminating our diesel consumption, and those of our supply chain (Scope 3).

We will be revising our identification and assessment of opportunities associated with climate change in 2023 and the positive impacts on the company's finances resulting from this revision.

6.1 Climate Change

Transition risks associated with climate change

In Grupo México we assess different types of transition risks associated with climate change, including risks related to changes in technology and operations, market trends, credit risks and regulatory changes. This assessment is described in detail in the section on [Sustainability Risk Management](#), concluding that the risks indicated have not had a material impact on the company's economic performance, but this could change in the future. Therefore, we will continue to measure and report the impact that these risks could generate, to inform the development of appropriate mitigation measures.

The costs of greenhouse gas emissions associated with Grupo México operations could have more immediate financial relevance. For this reason, we prepared an analysis of transition risks resulting from carbon pricing mechanisms, composed of two focus areas:

↓

↓

Analysis of current applicable regulations ¹⁰	Analysis of potential future carbon costs
Identify relevant carbon pricing mechanisms (including carbon taxes and emissions trading systems), present in the countries where Grupo México has operations and projects.	Calculate potential financial impacts of carbon pricing mechanisms for the period 2025-2040, based on three global decarbonization scenarios. ¹¹

- In Grupo México we have considered the potential impact of the transition risk associated with climate change in terms of technological and operational changes, implementing measures aimed at reducing the use of fossil fuels and greenhouse gas emissions, and improving energy efficiency and optimizing water usage.

¹⁰Regulations in effect at the beginning of 2021.
¹¹Two scenarios from the International Energy Agency were considered: 1) According to current regulations, and 2) Scenario of Sustainable Development Goals. From the IPCC, multiple decarbonization pathways aligned to a temperature change of 1.5°C were considered to represent the most ambitious scenario.



Fenicias Park, Nuevo León, Mexico

6.1 Climate Change



Fenicias Park, Nuevo León, Mexico

Measures aimed at reducing the use of fossil fuels and GHG emissions:

- Consume energy from external renewable sources supplied by two hydroelectric plants for the operations in Peru.
- Use clean electricity supplied by the **Infrastructure Division** through high-efficiency combined cycle power plants and, soon, the Fenicias wind farm.
- Improve, redesign, convert and retrofit equipment, rational use of resources, and environmental training for personnel.
- Operate water recovery systems that help to conserve water and minimize the impact on nearby streams.
- Reforestation programs to stabilize the surface of tailings dams and to improve the water cycle.
- Operate a desalination plant for our operations in Ilo, Peru.

Additionally, the implementation of low or zero emission technology for heavy mine trucks is not yet commercially available, but as mentioned, we are working with our suppliers on defining a strategy that will accelerate the availability of electrically powered mine trucks using renewable energies. This initiative arose after identifying as a risk associated with technological and operational change that Grupo México is unlikely to have access to sufficient supply of electrically powered trucks before 2030 (and thus, reduce our Scope 1 emissions) due to the saturation of demand for electrically powered trucks.

We are not currently tracking the costs for implementing these measures separately, but we will begin to do so with the revision of our analysis of risks and opportunities in 2023.

On the other hand, consideration has also been given to how changing market trends or credit risks resulting from the demand for global and national greenhouse gas emission reduction targets may affect our business, financial position or operating results. Grupo México recognizes that potential climate-related changes in market trends may include reduced demand for goods that produce significant greenhouse gas emissions or that are related to carbon-based energy sources, as well as increased demand for goods that are low carbon or sourced materials that help to reduce emissions.

It is likely that large copper consumers will increasingly seek to purchase low or zero emission products as a way of achieving their own GHG emissions reduction targets. Being slow to adapt to this trend, or without preparing adequately could result in reputational risks for the organization or lost opportunities in the market.

Changes in regulations related to climate change in Mexico, the United States and Peru have not had a material impact on our operations. However, we are expecting additional environmental laws and regulations

in the future to mitigate greenhouse gas emissions in the jurisdictions where we operate. In this regard, we have prepared an analysis of possible future carbon pricing associated with different decarbonization scenarios to assess how the resulting figures could impact the company financially. This analysis highlights that emission costs under the most ambitious decarbonization scenarios could be up to 70% higher for the company under a “business-as-usual” GHG emissions generation scenario, compared to a scenario under which the GHG emissions reduction would be in line with the expectations of the Paris Agreement (science-based targets).

In line with government efforts to combat climate change, Grupo México is working to reduce GHG emissions at our operations, following the emissions reduction roadmap described in this section below (6.1.5). Efforts to comply with stricter environmental protection programs in the United States, Peru and Mexico, in conjunction with relevant trade agreements, could impose restrictions and imply additional costs for our operations. Consequently, there may be a need to make significant related investments in the future.

6.1 Climate Change

Analysis of current carbon pricing systems

United States	Mexico	Peru	Spain
<p>There are carbon pricing mechanisms in 11 states, but not in the states where we have operations (Arizona, Texas and Florida).</p>	<p>There are federal land state fossil fuel taxes, and also an emissions trading system in pilot phase.</p>	<p>No carbon pricing mechanism.</p>	<p>Our Los Frailes mine project will be subject to the European Union emissions trading system, as well as a federal tax on fluorinated gases.</p>
<p>There are currently no bases on which to estimate any carbon pricing for the United States at the federal level or for the states where Grupo México has operations. However, this could change considering the new decarbonization goals published by the government in 2021 (to achieve zero net GHG emissions by 2050).</p>	<p>Tax rates range from US\$2.5/tCO2 to US\$12.5/tCO2, approximately¹². The relevant taxes for Grupo México include a federal tax and two state taxes (Baja California and Zacatecas).</p> <p>Mexico continued to pilot an emissions trading system in 2022, therefore the allocation of allowances was free and determined by the federal government. However, as this system moves into its operational phase in 2023, and the various elements of this phase are defined (e.g., offsetting program, auctions with financial implications), we will be able to quantify future costs for the operations that are currently participating in this program. Considering other emissions trading systems globally, it is estimated that the costs per allowance could be in excess of US\$7 for the startup of the emissions trading system in Mexico.</p>	<p>Although the Peruvian government has expressed its intention to set a carbon price, no carbon pricing mechanism is expected to be implemented in the short term. This is because the Nationally Determined Contribution (NDC), revised in 2020, does not include a carbon pricing system. The situation could change in 2025, when the national contributions come up for review.</p>	<p>The European Union has had an Emissions Trading System in place, applicable in Spain, since 2005. Prices per ton of CO2e varied between €29 and €87 in 2021. The system is in its fourth phase, covering the period 2021-2030, which will enable a linear reduction on the emissions cap and, as a consequence, on emissions allowances. Considering the changes to the emissions trading system will be aligned with the highest level of climate ambition, it is feasible that prices will increase in the future.</p> <p>There is also a tax on fluorinated gases in Spain, which is not a carbon tax, but a greenhouse gas tax.</p>

¹²Implies a 2.5% annual reduction in GHG emissions, in terms of the base year.



















6.1 Climate Change

Carbon pricing analysis based on global decarbonization scenarios (2025-2040).

This analysis considered different scenarios, with projections of Grupo México’s emissions and possible future carbon pricing.

The emissions projections considered in the analysis include the operational emissions of Grupo México under “business-as-usual” (BAU) scenarios, as well as a scenario aligned with an absolute reduction equivalent to that associated with Science-Based Targets (SBT), with a “below 2°C” ambition¹³. This will support better estimates of the financial implications for the company in a climate action scenario.

The carbon pricing projections used were aligned with the global decarbonization scenarios of 1.5°C, 1.75°C and 1.9 -3.5°C as shown in the table below.

Scenarios	Current IEA regulations scenario (1.9-3.5°C). ¹⁴ Considers the energy and carbon pricing regulations currently in effect.	Scenario aligned with the Sustainable Development Goals (1.75°C). ¹⁵ Ambition aligned with the United Nations Sustainability Goals of the IEA.	IPCC 1.5°C scenarios. ¹⁶ Most ambitious scenario with the highest carbon pricing.
Grupo México emissions – SBT (aligned with ‘below 2°C’)	 Emissions: Reduced	 Emissions: Reduced	 Emissions: Reduced
	 Pricing: Lowest	 Pricing: Moderate	 Pricing: High
	 Impact: Minimum	 Impact: Low	 Impact: Medium
Grupo México emissions – BAU	 Emissions: Increased	 Emissions: Increased	 Emissions: Increased
	 Pricing: Lowest	 Pricing: Moderate	 Pricing: Highest
	 Impact: Medium	 Impact: High	 Impact: Major

- > A BAU emissions scenario for Grupo México, combined with high carbon pricing associated with ambitious climate action scenarios (1.75°C and 1.5°C), could have a material financial impact on the company. Under these scenarios, the future pricing per ton of carbon could exceed US\$100 in Europe by 2030, while the carbon markets in other regions where we operate will remain in their early stages.
- > The financial implications for Grupo México associated with the potential future carbon pricing would decrease 60-70% considering an SBT emissions scenario, compared with a BAU scenario, current regulations scenario, the SDG scenario or the 1.5°C scenario.

¹³ Implies a 2.5% annual reduction in GHG emissions, in terms of the base year.
¹⁴ More information available at: <https://www.iea.org/reports/world-energy-model/stated-policies-scenario>
¹⁵ More information available at: <https://www.iea.org/reports/world-energy-model/sustainable-development-scenario>
¹⁶ More information available at: <https://data.ene.iiasa.ac.at/iamc-1.5c-explorer/#/about>

6.1 Climate Change

Adaptation and mitigation projects

We are continually looking for ways to strengthen our risk management mechanisms and to make our operations and neighboring communities more resilient by adopting a preventive approach to eliminating or mitigating risks. For example, we have improved the emergency response and contingency plans for our operations by developing adaptation projects to make our operations safer and more resilient, including actions such as:

- Increasing efficiency in the usage of fresh water.
- Strengthening infrastructure and facilities to increase their resilience to adverse weather conditions.
- Developing engineering works to improve rainwater management and to channel excess water.
- Modernizing and improving ventilation systems in underground chambers.

The **Transportation Division** has developed action protocols to minimize the impact of climate events on our facilities, considering multiple scenarios ranging from damage to signaling systems to landslides, mudslides and floods. The Transportation Division also operates a multiyear program to reinforce bridges, roads and tracks, for natural water drainage and channeling.

The **Mining Division** has implemented measures to increase the resilience of our neighbor communities, including projects that focus on preventing risks associated with water usage and water stress. In Peru, we built more than 125 miles (200 km) of irrigation channels and 400 reservoirs to benefit 20,000 farmers. Recently, we completed the construction of the Cularjahuira dam, built in collaboration with the community and local authorities, to contribute to water sustainability in one of the most arid regions on the planet, situated near our mine operations and the Atacama Desert. These efforts are complemented by productive technification and land recovery projects, such as in the town of Borogueña in southern Peru, where we implemented a program to improve the productivity of 700 farmers.



La Caridad waste deposit, Sonora, Mexico

6.1 Climate Change

6.1.5
Metrics and Targets

Quantitative indicators

Energy consumption
GRI 302-1, TCFD MYO-A

Total energy consumption (fuels and electricity) by country and subsidiary (GJ) GRI 302-1| SASB EM-MM-130a.1					
Division / Subsidiary	2022	2021	2020	2019	Variación 2022-2021 (%)
Total MIN DIV	52,942,758	51,310,021	49,082,890	52,072,515	3.18%
SCC	46,971,120	44,609,792	43,244,904	43,208,095	5.29%
Mexico (MM)	29,274,794	27,343,238	26,743,178	26,450,947	7.06%
Peru (SPCC)	17,696,326	17,266,554	16,501,726	16,757,148	2.49%
USA (ASARCO)	5,971,638	6,700,229	5,837,986	8,864,420	-10.87%
Total TRA DIV	17,624,701	18,216,612	17,469,906	19,836,559	-3.25%
Mexico	16,264,664	16,921,974	15,873,940	17,190,295	-3.88%
USA	1,360,036	1,294,638	1,595,966	2,646,264	5.05%
Total INF DIV	24,219,428	25,120,070	26,037,483	28,189,659	-3.59%
Total Grupo México	94,786,887	94,646,703	92,590,279	100,098,733	0.15%

The **Mining Division** increased its fuel energy consumption (primarily diesel) in the regions where we operate, due to the increased hauling distances at our open pit sites. Energy consumption by our railroad operations decreased 3.25% with the implementation of Horse Power-Ton (HP-Ton) and Trip Optimizer logistic strategies, which improve the efficiency of moving freight on our trains using less fuel.

¹⁷ Gigajoules



72.1%

Fuel consumption accounts for 72.3% of the energy consumed by Grupo México, while the remainder is electricity purchased and self-generated.



2022

In 2022, Grupo México's total energy consumption was 94,568,503 GJ.¹⁷

6.1 Climate Change

Greenhouse gas emissions (GHG)
GRI 302-3, 305-1, 305-2; 305-5, TCFD MYO-A, MYO-B

We report the GHG emissions resulting from our activities (Scope 1 and 2) and for the fourth year in a row, we also report the GHG emissions associated with our value chain (Scope 3).

Scope 1	Scope 2	Scope 3
Include all emissions generated from the use of fossil fuels by fixed and mobile sources, and also emissions from chemical and physical processes, in the case of the Mining Division emitted during lime production. ¹⁸	Include indirect emissions from the consumption of electricity produced by third parties.	Include all other indirect emissions associated with the company’s activities, upstream and downstream. The Scope 3 emissions produced by our value chain are included in the inventories to identify opportunities to collaborate with our supplier and customer stakeholders to promote emission reduction measures outside of our Grupo México operations.

The 2022 GHG emissions inventory was prepared according to the guidelines of the Greenhouse Gas Protocol¹⁹, with a corporate focus that considers the multiple synergies between the three divisions of Grupo México to avoid a double accounting of the GHG emissions. For example, the power the Infrastructure Division supplies to the Mining Division and to the Transportation Division, and also the rail services the Transportation Division provides to the Mining Division.

The emissions accounting followed an operational control approach that includes all material operations of the three divisions. Also, and in alignment with the GHG Protocol guidelines, Scope 2 emissions were calculated using the ‘market-based’ approach and the ‘location-based’ approach. The Scope 2 emissions reported here refer to the ‘market-based’ approach, unless otherwise indicated.

Estimates were used to calculate the Scope 1 emissions from fuel consumption in fixed and mobile sources, not direct measuring. Excluded from our Scope 1 emissions are: Buenavista del Cobre landfill and the wastewater treatment plants at our different operations, due to their negligible values in the total emissionsreported for Grupo México.

¹⁸ Fugitive emissions associated with the use of cooling and air conditioning equipment are included as they account for 0.4% of the Scope 1 emissions for all of Grupo México.

¹⁹ "Corporate Accounting and Reporting Standard – Revised Edition" and the "Value Chain (Scope 3) Accounting and Reporting Standard" supplement to the GHG Protocol, prepared by the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD).

²⁰ Market-based calculations consider contractual instruments for renewable energies (for example, renewable energy certificates, power contracts, and "green" tariffs) estimating the emissions associated with supplying electricity. Different from market-based calculations, location-based calculations consider only regional power production averages when calculating emissions.

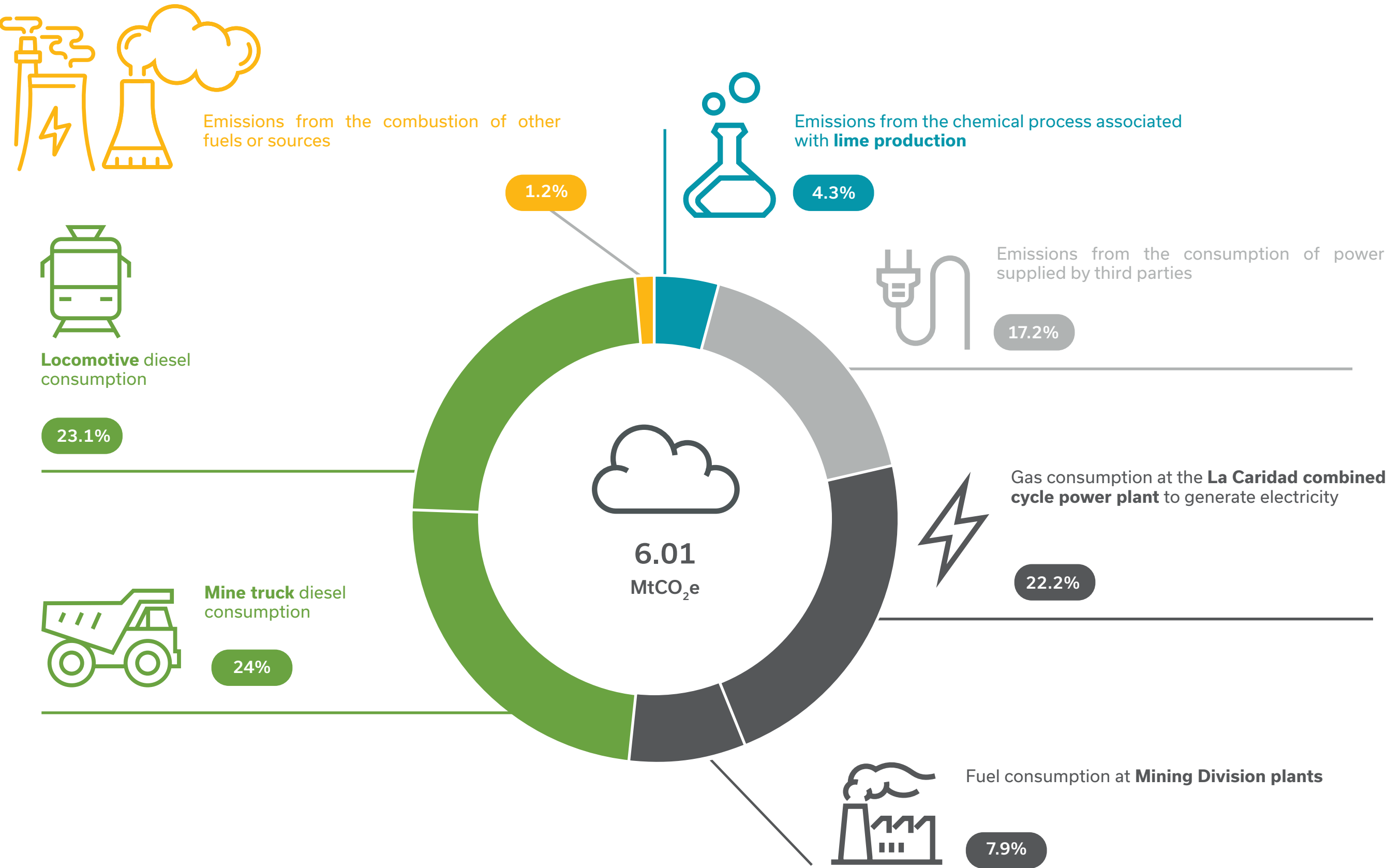
6.1 Climate Change

Operational emissions – Scope 1 and 2
SASB EM-MM-110a.1; TR-RA-110a.1; IF-EU-110a.1,
TCFD MYO-B

Operational emissions include Scope 1 and 2 emissions. In the particular case of Grupo México, operational emissions are those produced by the use of fuels in fixed and mobile sources, electricity purchased from third parties outside Grupo México, and process emissions during lime production (CO2 emissions produced during the transformation of limestone to lime).

Considering our three divisions, the total operational emissions of Grupo México were 6,010 ktCO2e in 2022. The most relevant source of emissions is the consumption of fuels in mobile sources (representing 46.7% of the total operational emissions) followed by combustion in fixed sources (30.1%) and the consumption of third-party electricity (17.2%)²¹.

The 2022 operational emissions are detailed by category below.



²¹ Emissions from electricity generation by the La Caridad Combined Cycle Power Plant, on-site generation or El Retiro are accounted for as Scope 1 emissions associated with the Infrastructure Division.

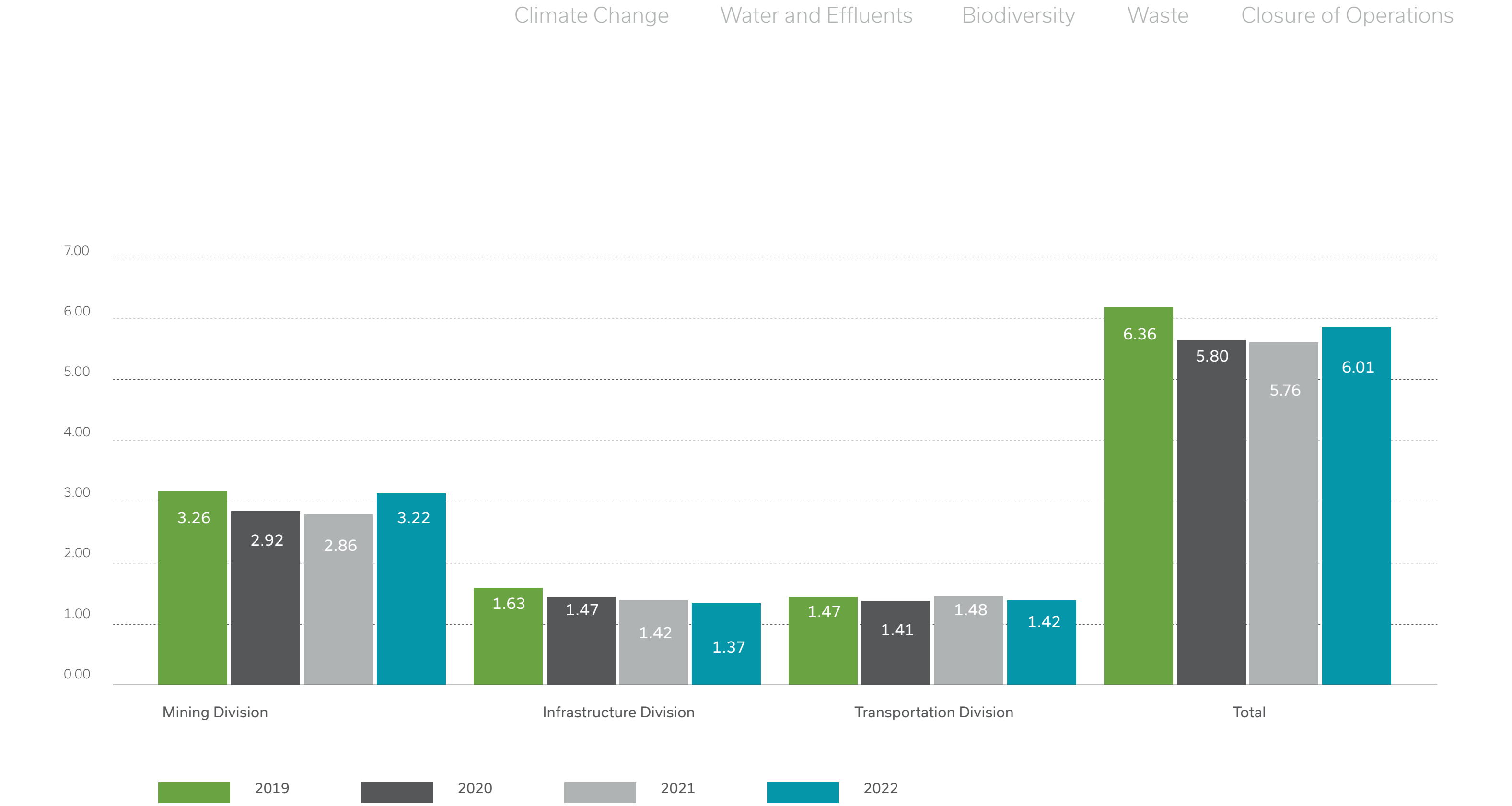
6.1 Climate Change

Grupo México’s operational emissions in 2022 were 4.3% higher than in 2021, largely due to:

- Increased production at the lime plant to return to pre-pandemic levels (26% increase in emissions over 2021)
- Increased consumption of third-party electricity (25% increase in emissions over 2021), due mainly to the IMMSA Zinc Refinery in Mexico ceasing to consume power from the El Retiro wind farm. Also, electricity consumption increased, in general, because of the increased production at the Zinc Refinery and at the Buenavista del Cobre concentrators to restore production to pre-pandemic levels
- Aumento del consumo de combustóleo en las operaciones mineras de Perú (14% de aumento de emisiones con respecto al 2021).
- Increase in combustion consumption in mining operations in Peru (14% increase in emissions compared to 2021)
- Measurement for the first time of the company’s fugitive refrigerant emissions

Any comparison with 2020 or 2021 should be made with consideration that those were relatively atypical years because of the COVID-19 pandemic.

²⁰Market-based calculations consider contractual instruments for renewable energies (for example, renewable energy certificates, power contracts, and “green” tariffs) estimating the emissions associated with supplying electricity. Different from market-based calculations, location-based calculations consider only regional power production averages when calculating emissions.



²¹Emissions from electricity generation by the La Caridad Combined Cycle Power Plant, on-site generation or El Retiro are accounted for as Scope 1 emissions associated with the Infrastructure Division.

6.1 Climate Change

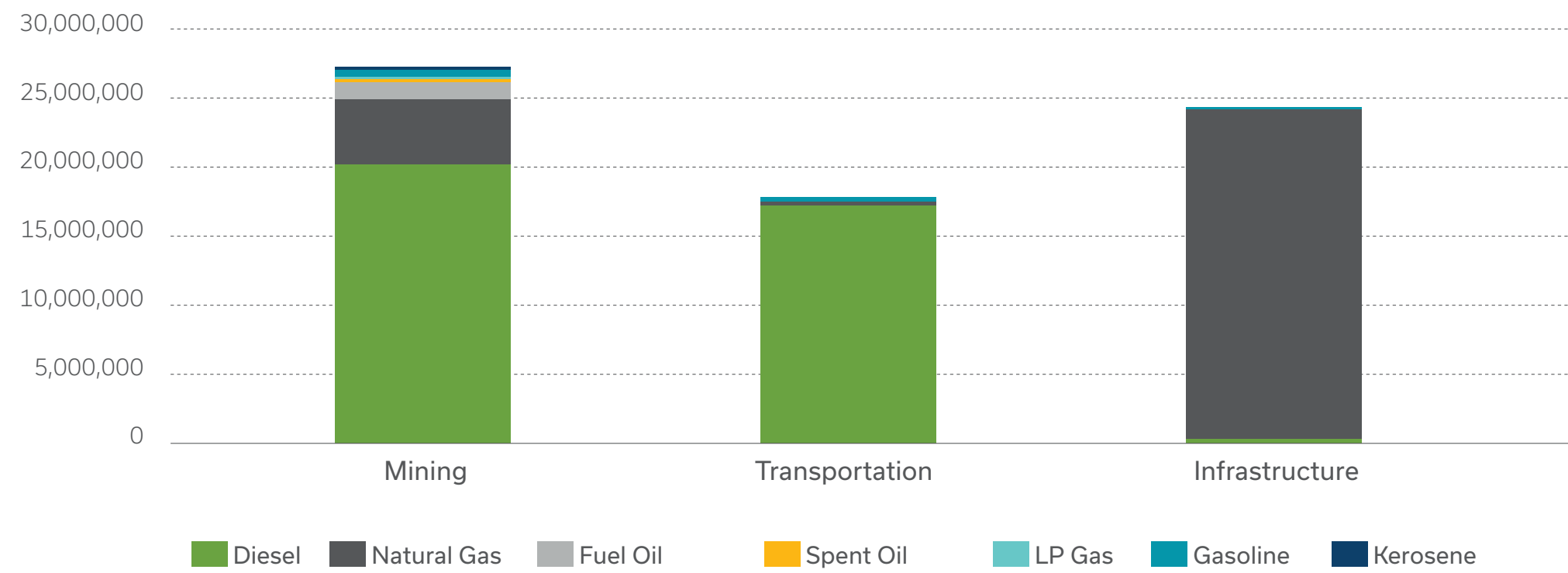
Operational Emissions													
GRI 302-3, 305-2 | SASB EM-MM-110a.1; TR-TRA-110a.1													
Division / Subsidiary	2022 (MtCO ₂ e)			2021 (MtCO ₂ e)			2020 (MtCO ₂ e)			2019 (MtCO ₂ e)			Total variance 2022-2021 (%)
	Scope 1	Scope 2	Total	Scope 1	Scope 2	Total	Scope 1	Scope 2	Total	Scope 1	Scope 2	Total	
Total MIN DIV	2.19	1.02	3.22	2.05	0.81	2.86	1.82	1.1	2.92	1.99	1.27	3.26	12.50%
SCC	2.00	0.61	2.61	1.81	0.43	2.24	1.64	0.6	2.25	1.73	0.6	2.34	16.51%
Mexico (MM)	1.28	0.44	1.72	1.13	0.26	1.39	1.01	0.43	1.45	1.04	0.43	1.46	23.68%
Peru (SPCC)	0.72	0.17	0.89	0.68	0.17	0.85	0.63	0.17	0.8	0.7	0.18	0.87	4.78%
USA (ASARCO)	0.19	0.41	0.61	0.24	0.38	0.62	0.18	0.5	0.68	0.26	0.67	0.92	-2.00%
Total TRA DIV	1.41	0.01	1.42	1.47	0.02	1.48	1.4	0.01	1.41	1.46	0.02	1.47	-3.92%
Mexico	1.32	0.01	1.33	1.38	0.01	1.38	1.3	0.01	1.31	1.28	0.01	1.29	-3.95%
USA	0.09	0.00	0.10	0.09	0.01	0.1	0.1	0	0.1	0.18	0	0.18	-3.46%
Total INF DIV	1.37	0.00	1.37	1.42	0	1.42	1.47	0	1.47	1.63	0	1.63	-3.65%
Total Grupo México	4.97	1.04	6.01	4.94	0.83	5.76	4.69	1.12	5.81	5.08	1.29	6.37	4.30%

Uncertainty analyses were not prepared for the emissions data and information.

Fuels

GRI 302-1, 302-4 | SASB TR-RA-110a.3 | TCFD MYO-A

Consumption of fuels (GJ) in 2022 by division and type of fuel



> Grupo México’s total fuel consumption in 2022 was 68,385,244 GJ, representing a 0.85% decrease compared with 2021.

6.1 Climate Change

Diesel and natural gas are the most used fuels in the organization, representing 55% and 42% of our total fuel consumption, respectively. In terms of total GHG emissions from the use of fuels, diesel represented 48.5%, while natural gas, being a cleaner fuel, contributed 26.7%. The principal consumers of diesel in Grupo México were the Mining Division (53.4%) to move mine trucks, and the Transportation Division (45.6%) to move locomotives, while the principal consumer of natural gas was the Infrastructure Division (83%), with the La Caridad combined cycle power plant being the primary consumer. The Mining Division accounts for the remaining 17% of the natural gas consumed, mainly by the Processing Plant and the Lime Plant in Sonora.

Even though diesel consumption at our mine operations increased because of the greater hauling distances at open pit sites, Grupo México’s overall consumption decreased 1% due to efficiency measures implemented by the Transportation Division. Natural gas consumption decreased 2.3%, due mainly to lower consumption at the La Caridad combined cycle power plant because of major maintenance performed on one of the turbines, while the consumption of fuel oil at our operations in Peru increased 14%.

Total fuel consumption (GJ) GRI 302-1 y 302-4| SASB EM-MM-130a.1					
Division / Subsidiary	2022	2021	2020	2019	Variance 2022-2021 (%)
Total MIN DIV	26,687,316	25,824,547	22,539,763	24,802,317	3.3%
SCC	23,823,553	22,298,456	19,948,887	20,615,271	6.8%
Mexico (MM)	14,319,810	13,341,052	11,668,361	11,841,271	7.3%
Peru (SPCC)	9,503,744	8,957,404	8,280,526	8,774,000	6.1%
USA (ASARCO)	2,863,762	3,526,092	2,590,876	4,187,046	-18.8%
Total TRA DIV	17,490,892	18,034,289	17,328,458	19,684,339	-3.0%
Mexico	16,161,349	16,815,368	15,764,106	17,073,314	-3.9%
USA	1,329,542	1,218,921	1,564,352	2,611,025	9.1%
Total INF DIV	24,207,036	25,112,209	26,030,720	28,182,646	-3.6%
Total Grupo México	68,385,244	68,971,045	65,898,941	72,669,302	-0.85%



Cuajone mine pit, Peru

6.1 Climate Change

2022 Fuel consumption by division, country and type of fuel (GJ) SASB TR-RA-110a.3							
Division / Subsidiary	Spent oil	Fuel oil	Diesel	Gasoline	Natural Gas	LP Gas	Kerosene
Total MIN DIV	113,379	1,301,208	20,077,185	225,119	4,741,770	219,462	9,129
SCC	113,379	1,301,208	17,611,129	176,545	4,414,171	197,927	9,140
Mexico (MM)	113,379	38,605	9,435,833	172,878	4,414,171	135,750	9,140
Peru (SPCC)	-	1,262,603	8,175,296	3,667	-	62,177	-
USA (ASARCO)	-	-	2,466,056	48,574	327,599	21,534	-
Total TRA DIV	-	-	17,183,644	185,782	116,754	4,711	-
Mexico	-	-	15,901,489	139,007	116,142	4,711	-
USA	-	-	1,282,155	46,776	612	-	-
Total INF DIV	-	-	357,507	29,808	23,819,535	186	-
Total Grupo México	113,379	1,301,208	37,618,336	440,709	28,678,059	224,359	9,140
% of the whole	0.17%	1.90%	55.01%	0.64%	41.94%	0.33%	0.01%



El Retiro wind farm, Oaxaca, Mexico

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6.1 Climate Change



Transportation Division, Mexico

Grupo México emissions from fuel consumption in fixed combustion sources by type of gas SASB SASB EM-MM-110a.1				
Division / Subsidiary	tCO ₂ e	tCO ₂ e		
		CO ₂	CH4	N2O
Total MIN DIV	1,433,516	1,409,626	2,388	21,502
SCC	1,256,487	1,237,099	1,932	17,456
Mexico (MM)	710,018	700,343	1,137	9,946
Peru (SPCC)	546,470	538,164	795	7,510
USA (ASARCO)	177,029	172,527	456	4,046
Total TRA DIV	1,410,949	1,285,834	2,194	122,922
Mexico	1,317,518	1,194,746	1,956	120,815
USA	93,431	91,087	237	2,107
Total INF DIV	27,132	26,601	57	474
Total Grupo México	2,871,597	2,722,061	4,638	144,918

Grupo México emissions from fuel consumption in mobile combustion sources by type of gas SASB SASB EM-MM-110a.1				
Division / Subsidiary	tCO ₂ e	tCO ₂ e		
		CO ₂	CH4	N2O
Total MIN DIV	468,879	468,062	502	1,315
SCC	452,196	450,431	459	1,305
Mexico (MM)	281,203	280,903	145	155
Peru (SPCC)	170,993	169,528	314	1,151
USA (ASARCO)	17,683	17,631	43	9
Total TRA DIV	.	.	.	.
Mexico	.	.	.	.
USA	.	.	.	.
Total INF DIV	1,339,572	1,338,244	670	659
Total Grupo México	1,809,452	1,806,306	1,173	1,973

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6.1 Climate Change

Electricity
GRI 302-1, 302-4 | TCFD MYO-A

Electricity consumption by country and division, 2019-2022									
GRI 302-1									
Division / Subsidiary	2022		2021		2020		2019		Variance 2021-2022 (%)
	MWh	GJ	MWh	GJ	MWh	GJ	MWh	GJ	
Total MIN DIV	7,293,178	26,255,442	7,079,298	25,485,474	7,373,091	26,543,127	7,575,055	27,270,198	3.0%
SCC	6,429,880	23,147,567	6,197,593	22,311,336	6,471,116	23,296,017	6,275,785	22,592,824	3.7%
Mexico (MM)	4,154,162	14,954,985	3,889,496	14,002,186	4,187,449	15,074,817	4,058,243	14,609,676	6.8%
Peru (SPCC)	2,275,717	8,192,582	2,308,097	8,309,150	2,283,667	8,221,200	2,217,541	7,983,148	-1.4%
USA (ASARCO)	863,299	3,107,876	881,705	3,174,137	901,975	3,247,110	1,299,271	4,677,374	-2.1%
Total TRA DIV	37,169	133,809	50,645	182,323	39,290	141,447	42,284	152,220	-26.6%
Mexico	28,699	103,315	29,613	106,606	30,509	109,834	32,495	116,981	-3.1%
USA	8,471	30,494	21,033	75,717	8,781	31,613	9,789	35,239	-59.7%
Total INF DIV	3,442	12,392	2,184	7,861	1,879	6,763	1,948	7,013	57.6%
Total Grupo México	7,333,790	26,401,643	7,132,127	25,675,658	7,414,261	26,691,337	7,619,287	27,429,431	2.8%

➤ Electricity consumption in 2022 was 7,333,790 MWh (26,401,643 GJ). The Mining Division accounted for 99.4% of the total electricity consumed, while the Transportation Division and the Infrastructure Division consumed 0.5% and less than 0.1%, respectively . Compared with 2021, total electricity consumption increased 2.8% in 2022, mainly due to the increased production at the Zinc Refinery and at the Buenavista del Cobre concentrators to restore production to pre-pandemic levels.

²² Due to rounding of figures, the sum may not total 100%.

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6.1 Climate Change

The total emissions associated with electricity consumption (Scope 2) were 1035 ktCO2e in 2022, representing a 24.7% increase over 2021. This was principally because of the increased electricity consumption mentioned and the reduced proportion of renewable electricity consumed by the IMMSA operations. As a result, the overall proportion of renewable electricity decreased from 22.6% to 19.8% in 2022.

As the Mining Division accounted for 99.4% of the total electricity consumed by the organization, the following table details consumption by source for the subsidiaries of the Mining Division.



Toquepala Unit, Tacna, Peru

2022 Electricity consumption by source (in MWh) GRI 302-1 SASB EM-MM-130a.1										
Division / Subsidiary Renewable sources	Renewable sources					Non-renewable sources				
	Generated on site	Supplied by the Infrastructure Division (El Retiro)	Supplied by the grid (unrelated third parties)	Subtotal renewable sources	Subtotal renewable sources (%)	Generated on site	Supplied by the Infrastructure Division	Supplied by the grid (unrelated third parties)	Subtotal non-renewable sources	Subtotal non-renewable sources (%)
Total MIN DIV (MWh)	19,664	19,199	1,410,033	1,448,896		50,372	3,051,926	2,741,984	5,844,282	
SCC	19,664	19,199	1,410,033	1,448,896	23%	50,372	3,051,926	1,878,686	4,980,984	77%
Mexico	0	19,199	0	19,199	0.46%	50,372	3,051,926	1,032,666	4,134,964	99.54%
Peru (SPCC)	19,664	0	1,410,033	1,429,697	63%	0	0	846,020	846,020	37%
USA (ASARCO)	0	0	0	0	0%	0	0	863,299	863,299	100%
Total MIN DIV (%)	0.27%	0.26%	19.33%	19.87%		0.69%	41.85%	37.60%	80.13%	

6.1 Climate Change

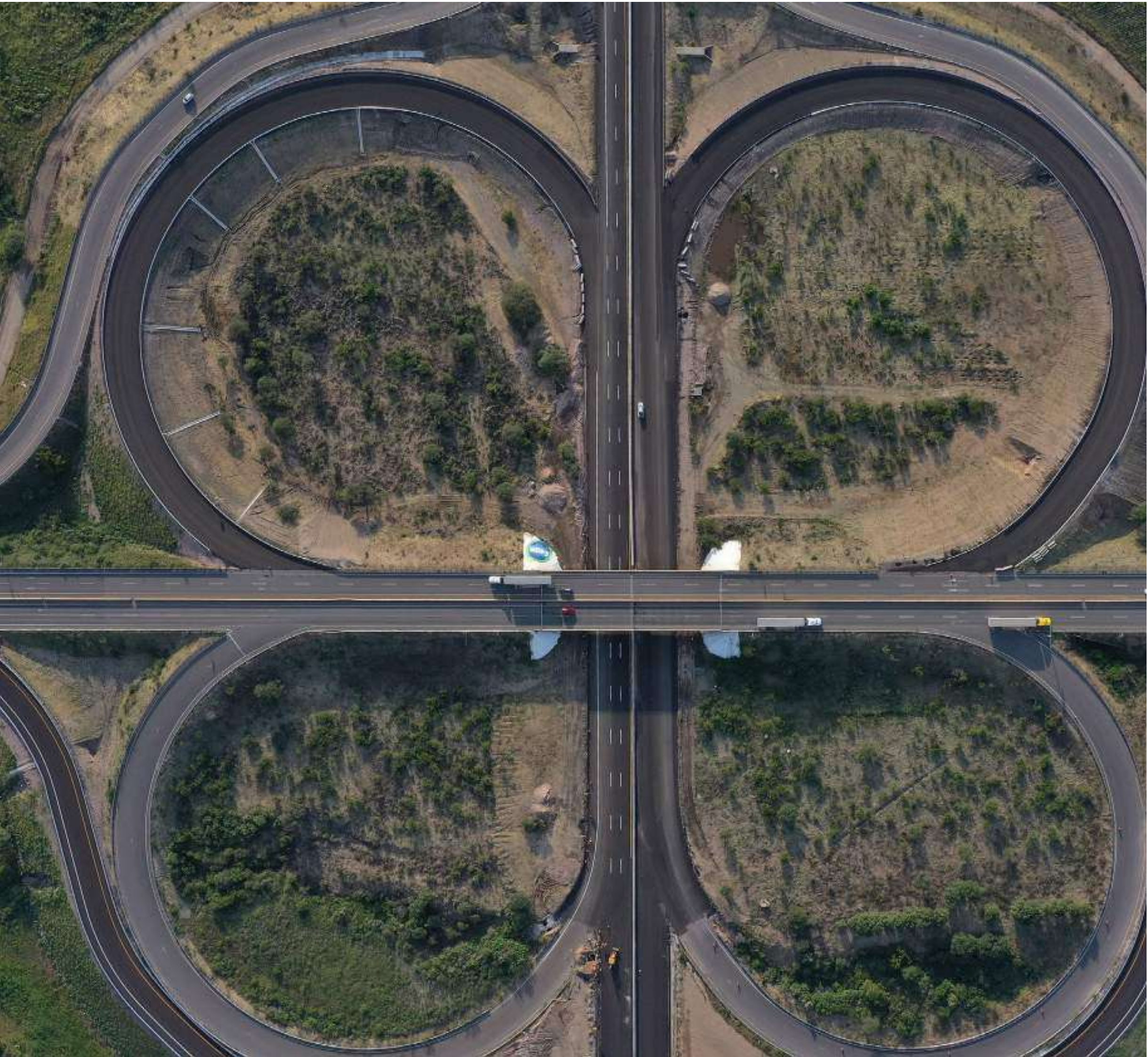
The majority of the electricity consumed by our mine operations in Peru comes from renewable sources (63%). The proportion of renewable electricity consumed by SCC and the Mining Division is 23% and 19.8%, respectively. The emission factor of the Infrastructure Division’s Combined Cycle Power Plant in Sonora is lower (5%) compared to Mexico’s national grid.

Mining Division grid power SABS EM-MM-130a.1		
Subsidiary	% electricity supplied by the grid	% electricity supplied off the grid
SCC	51.15%	48.85%
Mexico (MM)	24.86%	75.14%
Peru (SPCC)	99.14%	0.86%
USA (ASARCO)	100.00%	0.00%
Total DMIN	56.93%	43.07%

Scope 3 emissions
GRI 305-3 | TCFD MYO-B

➤ The total Scope 3 emissions in 2022 were 8,999 ktCO2e. The three main categories for Grupo México are: purchased goods and services, processing of products sold, and fuel and energy usage, representing 35%, 25% and 17%, respectively.

The emissions associated with processing of products sold are relevant only to the Mining Division, as this Division supplies raw materials to other companies that manufacture finished and semi-finished products. While this category of emissions is the second most significant, the principal product sold, copper, is essential in manufacturing clean and renewable technologies, which are needed for the transition to low-carbon economies.



Highways, Infrastructure Division, Mexico

6.1 Climate Change

Scope 3 emissions by category ²³		
Upstream emissions	(ktCO ₂ e)	70%
Purchased goods and services ^b	3,145	35%
Fuel and energy usage ^c	1,520	17%
Upstream transportation and distribution ^d	829	9%
Capital goods ^e	717	8%
Waste generated by operations ^f	70	1%
Employee commuting	14	0.15%
Business travel ^g	3.5	0.04%
Downstream emissions		30%
Processing of products sold ^h	2,247	25%
Downstream transportation and distribution ⁱ	398	4%
Downstream leased assets ^j	55	1%
Total Grupo México	8,999	100.0%

Notes about the chart

^a Numbers rounded to the nearest digit.

^b Emissions associated with the extraction, production and transportation of the fuels used by the organization. This category also includes the fuels used to generate the electricity supplied by third parties and which is consumed in the operations of Grupo México. Also included are the emissions from energy lost during transmission and distribution.

^c Emissions generated by the transportation and distribution provided by third parties to the Mining Division and the Infrastructure Division (including sea, rail and road transportation paid for by the company).

^d Includes the emissions associated with the manufacturing of the capital goods acquired by Grupo México.

^e Emissions associated with air travel by employees and contractors.

^f The emissions in this category are those produced by Grupo México customers when they process the products sold into other finished or semi-finished products. The calculation for this category includes the processing of the copper, molybdenum, zinc, lead and cadmium the organization sold in 2020.^g Las emisiones de esta categoría son aquellas que emiten los clientes de Grupo México, al procesar los productos adquiridos en otros productos en proceso de acabado y terminados. El cálculo de esta categoría incluye el procesamiento del cobre, molibdeno, zinc, plomo y cadmio, que vendió la organización en 2020.

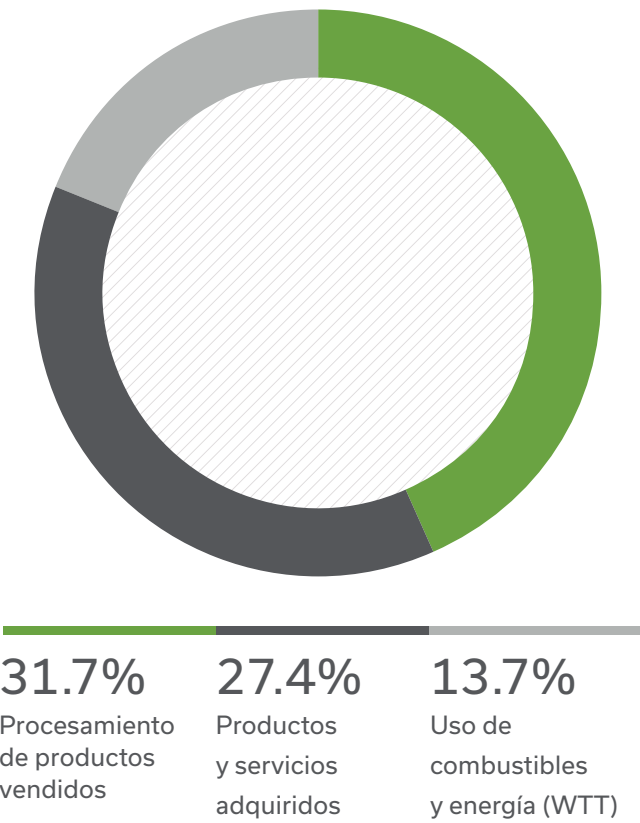
^h Emissions associated with the fuel consumption of the oil rigs leased by the Infrastructure Division, considering only the fuels paid for by Grupo México.

ⁱ Emissions produced by the transportation and distribution provided by third parties to the Mining Division and the Infrastructure Division (including sea, rail and road transportation).

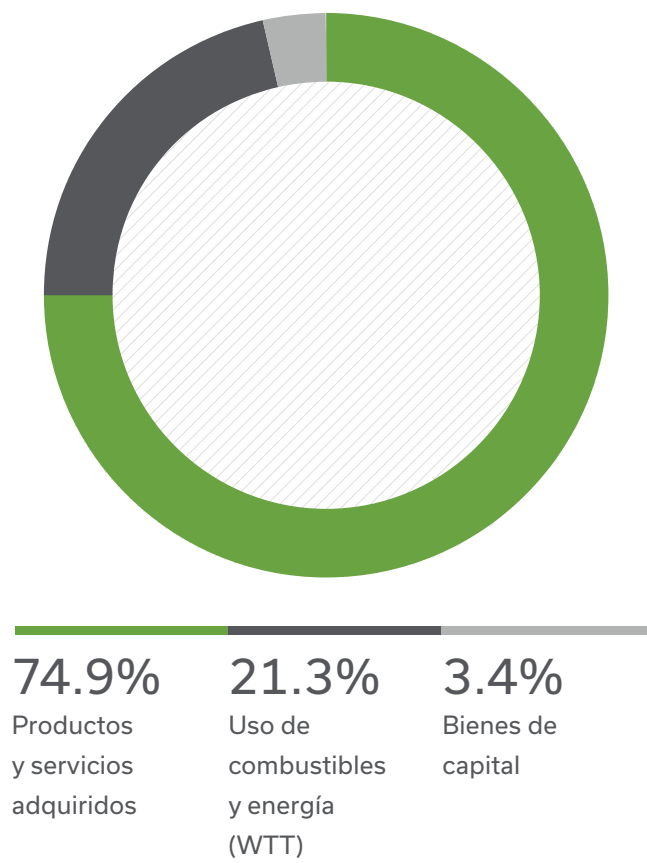
^j Emissions associated with managing waste from operations (landfills, recycling, incineration, etc.).

For more information, consult the section on SCC and Transportation Division Scope 3 emissions in [Annexes](#). The following charts show the distribution of Scope 3 emissions for each division, reflecting the characteristics of their activities:

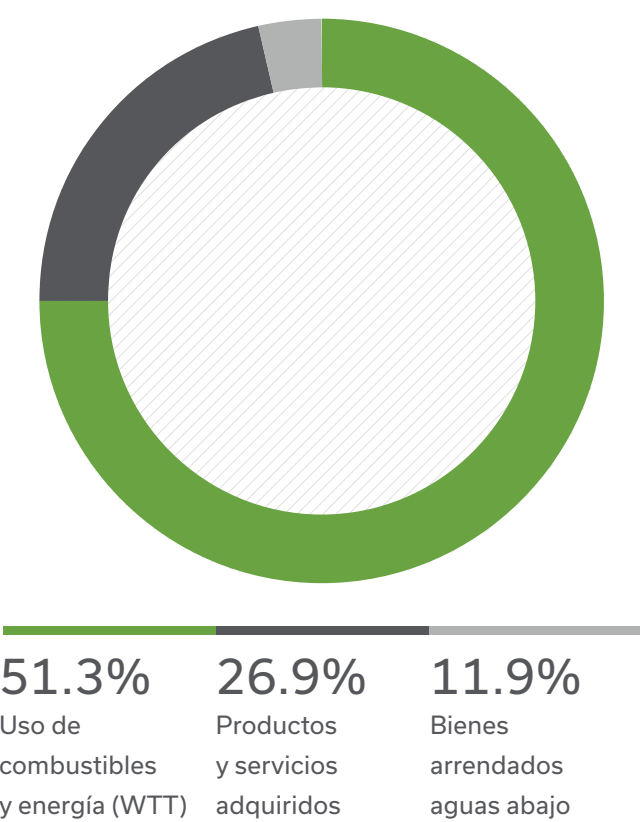
Emissions by category - Mining Division



Emissions by category - Transportation Division




Emissions by category - Infrastructure Division




²³ Numbers rounded to the nearest digit.

6.1 Climate Change


Summary of the Grupo México corporate carbon footprint
TCFD MYO-B




In 2022, GHG emissions, including all **three scopes, totaled 15,01 ktCO₂e. Scope 1 emissions increased 0.7% over 2021, mainly due** to the increased diesel consumption associated with greater hauling distances at open pit sites, the increased consumption of fuel oil at our mines, and the increased production at the lime plant to restore production to pre-pandemic levels.



Scope 2 emissions increased 25% mainly due to the IMMSA Zinc Refinery in Mexico ceasing to consume power from the El Retiro wind farm. Also, electricity consumption increased, in general, because of the increased production at the Zinc Refinery and at the Buenavista del Cobre concentrators to restore production to pre-pandemic levels.

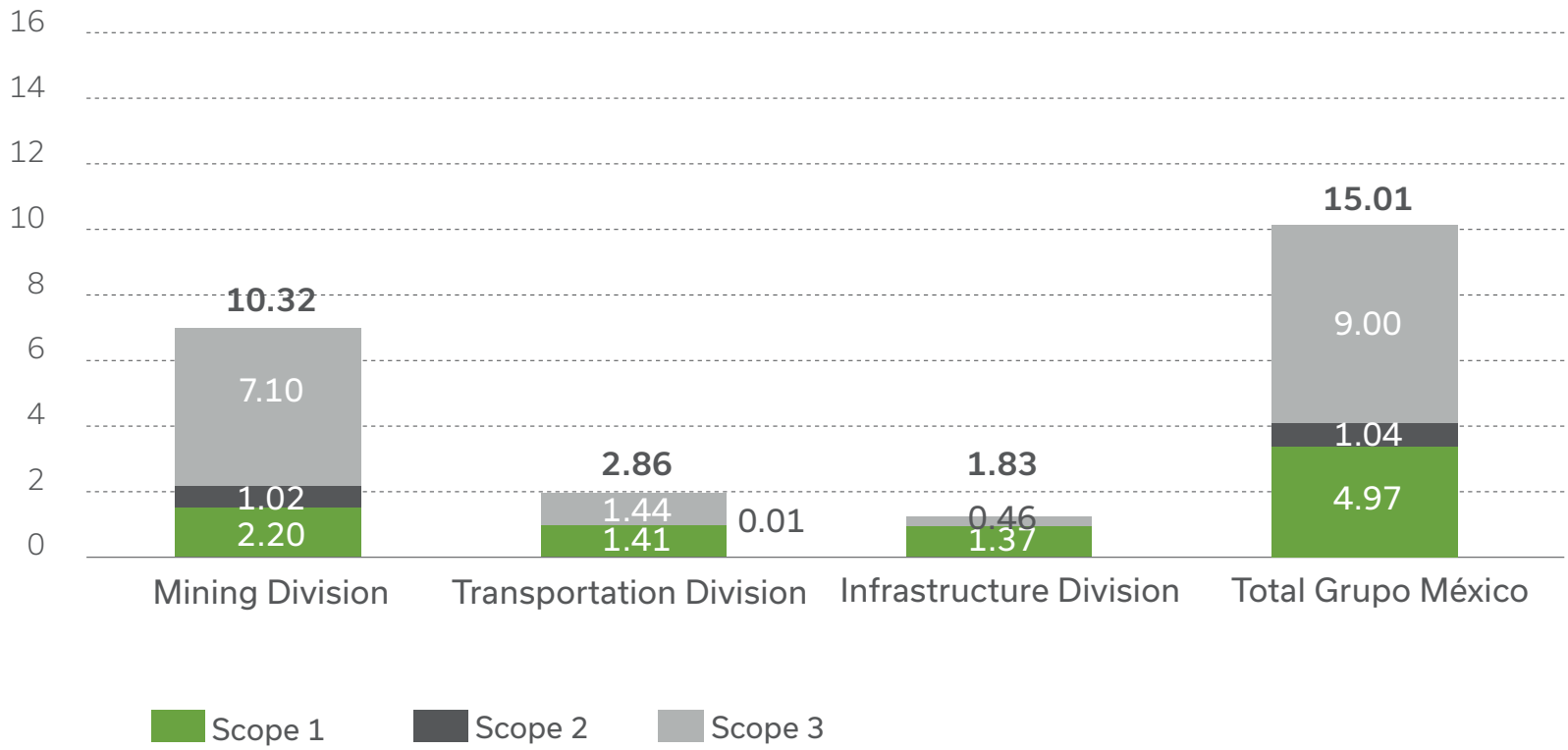


The Scope 3 emissions reported in 2022 were 29.5% higher than in 2021, due, in part, to operations reporting information with greater granularity this year.

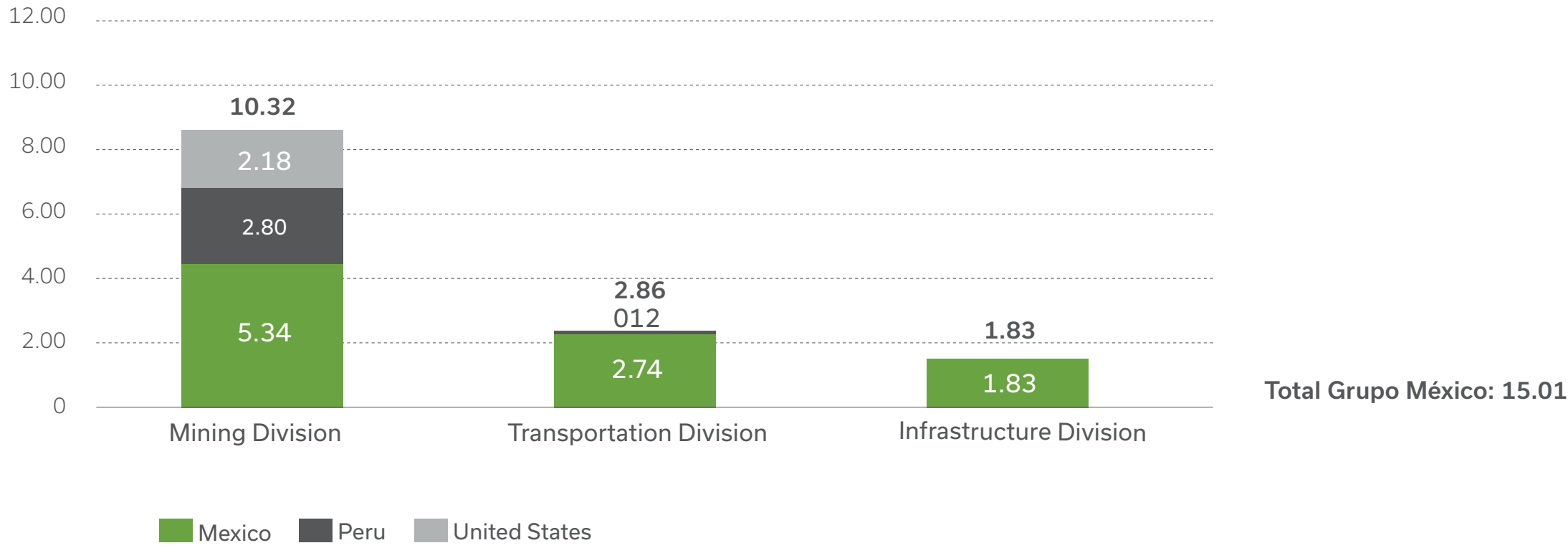


Scope 1 emissions are higher in the Mining Division and are relatively comparable in the Infrastructure Division and Transportation Division, while the Scope 2 and 3 emissions are primarily associated with mining activities.

Total Scope 1, 2 and 3 emissions by division and scope



Total Emissions MtCO₂e



6.1 Climate Change

Climate Change

Water and Effluents

Biodiversity

Waste

Closure of Operations

The breakdown of emissions by type of scope for our subsidiary SCC is: 2 ktonCO₂e Scope 1, 0.61 ktonCO₂e Scope 2, and 5.53 ktonCO₂e Scope 3.

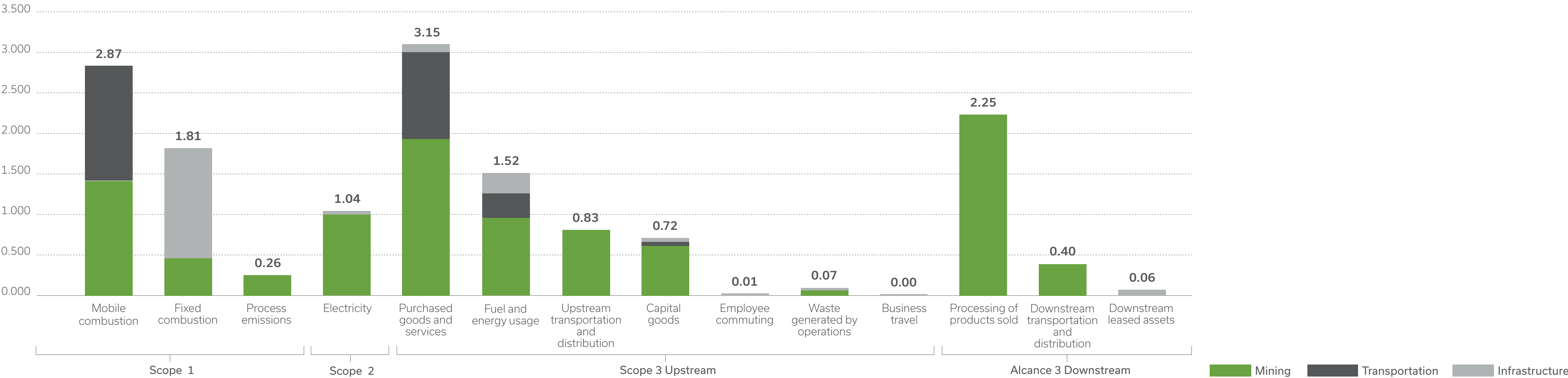
At a global level, considering Scope 1, 2 and 3 emissions, the principal sources of emissions are associated with:

- Scope 3 emissions, related to purchased goods and services (C1) in the three divisions (21%).
- Fuel consumption in mobile sources, which mainly includes hauling by mine trucks and the railroad (19.1%).

- Scope 3 emissions, related to the processing of mine products sold (C10), such as concentrates, cathodes and wire rod (15%).
- Fixed sources, being the consumption of natural gas at the Combined Cycle Power Plant in Sonora, the primary source (12%).
- Scope 3 emissions, associated with the production of the fuels and electricity we use (C3) in the three divisions (10.1%).
- Electricity consumption in the Mining Division and the Transportation Division (7%).

- Scope 3 emissions related to upstream transportation and distribution (C4) in the three divisions (5.5%).
- Scope 3 emissions associated with capital goods (C2) purchased by the company, such as products with a long useful life used in production contributed (4.7%).
- These categories together represent 94.4% of the total Scope 1, 2 and 3 emissions associated with the activities of Grupo México.

2022 Total Greenhouse Gas Emissions (MtCO₂e)



6.1 Climate Change



Combined Cycle Plant, Sonora, Mexico

Grupo México total emissions by scope, subsidiary and country (ktCO ₂ e) GRI 305				
	Direct emissions (Scope 1)	Indirect emissions from electricity consumption (Scope 2)	Emissions associated with our value chain (Scope 3)	Total emissions
Mining Division	2,194	1,023	7,097	10,314
SCC	1,999	610	5,528	8,138
Mexico (MM)	1,282	437	3,616	5,335
Peru (SPCC)	717	173	1,913	2,803
USA (ASARCO)	195	413	1,568	2,176
Transportation Division	1,411	11.1	1,439	2,861
Mexico	1,318	7.9	1,415	2,741
USA	93	3.1	24	120
Infrastructure Division	1,367	1.5	464	1,832
Total Grupo México	4,972	1,036	9,000	15,007

➤ Considering the three scopes, our mine operations in Mexico are the primary source of emissions (35.5%), followed by our operations in Peru (18.6%), representing a total of 54.2% for SCC. Our railroad operations in Mexico represent 18.2%, while the Infrastructure Division in Mexico represents 12.2%, and mine and railroad operations in the United States represent 14.5% and 0.8%, respectively.

6.1 Climate Change

Emissions reduction

At Grupo México, we have been operating mitigation projects for several years, particularly related to energy. Initiatives in Mexico like the *El Retiro* Wind Farm in the state of Oaxaca and cogeneration at the Processing Plant in Nacozari have increased our consumption of renewable energy and reduced our emission intensity. Additionally, third parties supply renewable energy to our operations in Peru. These efforts have reduced our corporate carbon footprint by avoiding the emission of greenhouse gases (GHG) each year. These achievements are summarized in the following table, which includes the avoided emissions in 2022 (including mitigation projects implemented in prior years) and the emissions that will be reduced when the Fenicias Wind Farm starts operations.

Summary of avoided emissions in 2022 by mitigation and renewable energy measures				
Division	Project	Type	Avoided consumption (MWh/year)	Avoided emissions ²³ (ktCO ₂ e/year)
Projects implemented in prior years				
SPCC (AMC)	Power purchased from the grid	Renewable hydroelectric power	1,429,697	745.44
MM (AMC)	METCO	Cogeneration (reusing smelter gases to generate electricity)	50,372	*
Grupo México	El Retiro	Wind power	29,641	12.89
Total (ktCO ₂ e/año)				758.34
Infraestructure	Fenicias	Renewable energy - 168 MW Wind Farm	.	250 (future)

We are working at the methodological level to calculate and align the final reductions associated with this project to a specific reduction protocol.

²³ The scenarios established to estimate the reduction of emissions were established by Grupo México from a conservative point of view and they are not aligned to a specific protocol or guide to date. The projects presented have not been subjected to a verification process with an approach under which the methodology, principles and assumptions used in the scenarios established to estimate the reduction of emissions are validated

6.1 Climate Change

Targets and goals

TCFD MYO-C

2018-2022 Corporate targets



Increase the use of renewable electricity to 25% across the organization

	2019	2020	2021	2022	2027 Target	2035 Target
Consumption of renewable electricity (%)	18.6	19.8	22.6	19.8	At least 25%	50%

Renewable electricity consumption increased gradually between 2019 and 2021, but then decreased to 19.8% in 2022, due to the IMMSA Zinc Refinery in Mexico ceasing to consume power from the El Retiro wind farm. The principal source of renewable energy in 2022 was the renewable electricity from the grid in Peru (19.3% of the Mining Division’s total electricity). When the Feinicias wind farm starts operations, the use of renewable electricity across the organization will increase to at least 25%, which is our target for usage of renewable energies by 2027.

> We have set new emission intensity reduction targets of 20% by 2027 and 50% by 2035, both in terms of 2022.



Reduce the greenhouse gas emission intensity of the Mining Division by 5%

	2019	2020	2021	2022	Variance (%) 2019-2022
Emission intensity (tCO ₂ e/tCu)	3.7	3.4	3.5	3.7	0%
Energy intensity (GJ/tCu)	41.9	39.3	42.8	43.6	4.1%

Grupo México has been measuring the emission intensity of the Mining Division since 2018, expressed in tons of CO2eq per ton of copper mined. In 2019, we set the target of reducing our emission intensity by 5%, using 2019 as the base year. This target was reached in 2021 achieving an intensity reduction of 5.4%, compared with 2019. However, the emission intensity was 3.7 tCO2e/tCu in 2022, which represents the same intensity as the 2019 base year. We have set new emission intensity reduction targets of 20% by 2027 and 50% by 2035, both in terms of 2022.



Revise our risks and opportunities assessment in relation to climate change

We have been analyzing the risks and opportunities associated with climate change since 2020, following the TCFD guides. We will deepen our physical risk analysis at the operational level in 2023 to prepare adaptation and mitigation plans. These results of these new analyses will inform the calculation of potential material financial impacts for our operations and value chain in the medium (2030) and long (2050) term.



Publish new medium and long term GHG emissions reduction targets

Consult the section on emission reduction targets below.

6.1 Climate Change

New short, medium and long term emissions reduction targets
TCFD MYO-C

We prepared a Scope 1 and 2 emissions reduction roadmap for Grupo México in 2022 to define new our short, medium and long term targets.

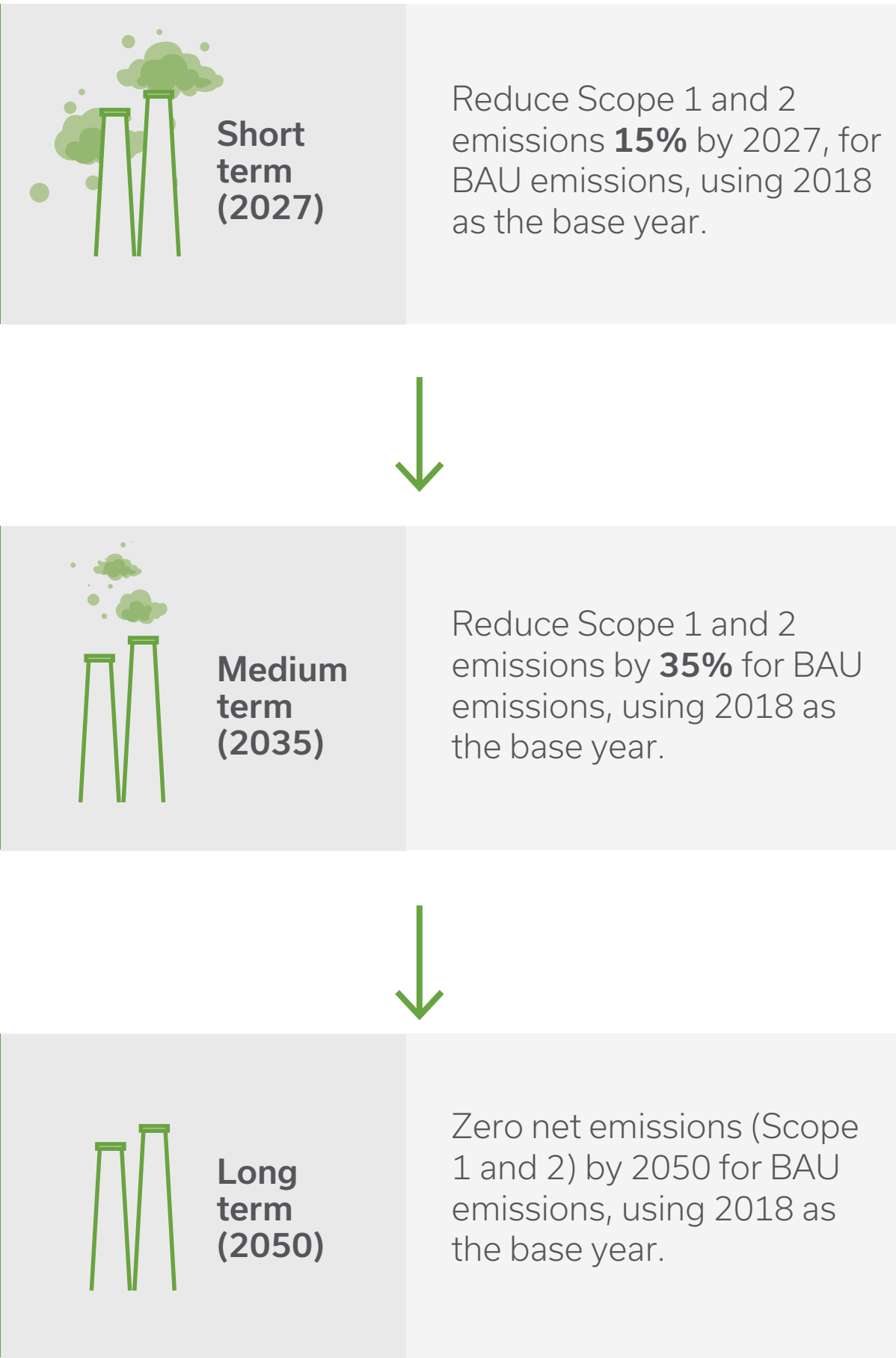
An important part of this effort was our active participation in the “Global Copper Decarbonization Roadmap” working group of the International Copper Association (ICA), which aims to define the contribution of the copper industry to achieving the goals of the Paris Agreement, and also actions that could be taken to succeed in this effort.

Our goals are aligned with the ICA roadmap as follows:

- We have considered 2018 as the base year as the emissions for the following two years may not be representative due to the economic slowdown caused by the pandemic.
- From 2018, we have prepared emissions projections for the short (2027), medium (2035) and long (2050) term, considering new projects to be undertaken by the Mining Division and that our operations will grow in response to increased demand for copper because of its importance in the transition to low-carbon economies. We also considered “Business-As-Usual” (BAU) scenarios to understand how our emissions would increase if we were to take no action to reduce or mitigate them.

- We have concluded that our Scope 1 and 2 emissions reduction in the medium and long term is dependent on the status of technologies related to producing electrically powered mine trucks and locomotives, the substitution of fossil fuels for alternative fuels (like hydrogen), and the capturing and storing or use of carbon dioxide. The short term reductions may be achieved with energy efficiency measures and investments in green electrification measures, by constructing new renewable energy projects or negotiating new green Power Purchase Agreements (PPAs), and International Renewable Energy Certificates (iRECs).
- Additionally, we will be developing an emissions reduction strategy for our value chain (Scope 3), following the recommendations of the International Copper Association (ICA) GCDR initiative.

Targets and goals



²⁴ Global Copper Decarbonization Roadmap

6.1 Climate Change



Station at Fenicias Park, Nuevo León, Mexico

Short term (2027)

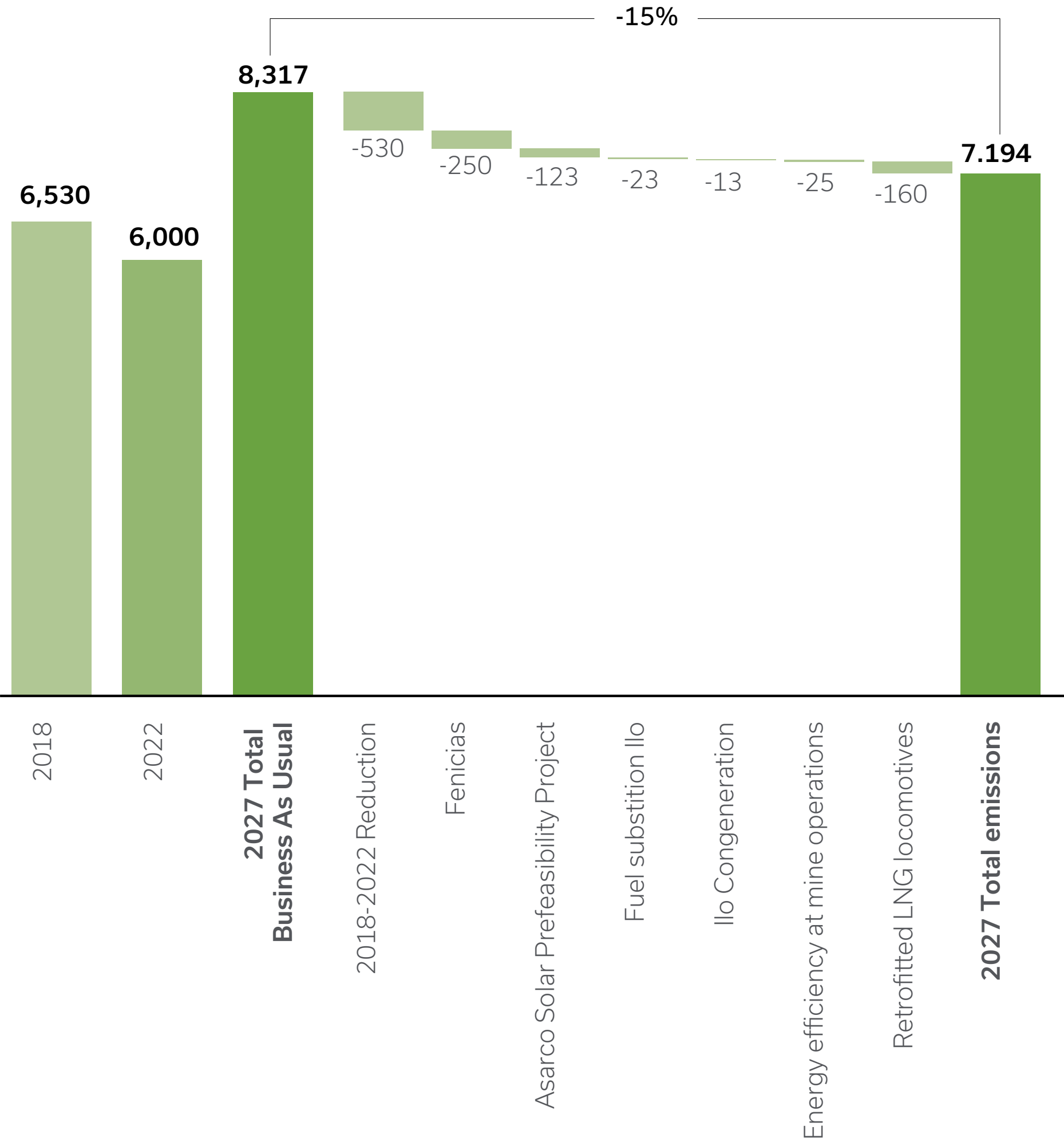
Reduce our Scope 1 and 2 emissions by **15% by 2027 for BAU emissions, using 2018 as the base year.**

Actions:

- **Invest in renewable electricity.** We have invested US\$256 million in the construction of the 168MW Fenicias wind farm. Once in operation, this project is estimated to avoid approximately 250 ktCO₂ e Scope 2 emissions, increasing the renewable electricity usage of the organization by at least 25%. Additionally, we are preparing feasibility studies for our mine operations in the United States to understand the potential to generated renewable energy on site and, thus, the additional emissions reduction from this investment, which we estimate could be around 123 ktCO₂ eq of Scope 2 emissions. This emissions reduction would mean generating, through renewable energies, approximately 32% of the current power demands of our ASARCO operations.
- **Energy efficiency:** The Mining Division is developing the following GHG emissions reduction projects at the Ilo plant, which will produce reductions of approximately 36 ktCO₂ eq CO₂eq starting in 2024:
 - » Power cogeneration using the residual furnace heat at the smelter to generate steam-based electricity.
 - » Substituting fuel oil and diesel for natural gas, by using dry natural gas in plant equipment and processes.
 - » Additionally, we are identifying similar energy efficiency actions for our operations in Mexico, which could be implemented in the short term, and analyzing the use of additives in mine truck diesel consumption to improve the combustion process.
- **Substituting fuels in mine trucks and locomotives:** To reduce our emissions in the short term, in 2023, we will be analyzing the possibility of retrofitting 14 diesel trucks at the La Caridad mine to hybrid (diesel/natural gas). We are also analyzing the possibility of retrofitting freight locomotives and tenders currently using diesel to hybrid (natural gas/diesel). This project is in its first phase, retrofitting 30 freight locomotives and completing their respective test runs. We expect to start the second phase of this initiative in 2023-2024 to retrofit an additional 120 locomotives. For 2025, we plan to complete the retrofitting of a total 150 locomotives, which will reduce emissions by approximately 160,000 tons CO₂eq, starting 2026.

6.1 Climate Change

2027 Emissions Reduction



Notes about the chart

The information shown here is based on concept analyses, the results of which, together with the current status of project development, were used to inform the approximations for the values presented here. In 2023, we will continue working on more specific studies (e.g., the ASARCO feasibility) to strengthen and refine the reductions identified.

At Grupo México, we report all data with transparency. Therefore, we note that the “2027 Business as usual” bar considers the estimated growth that best reflects the reality of the different divisions of our company this year, including the mine projects that will start operations 2023-2027 and which will produce emissions if reduction actions are not taken from the onset.

The total reduction compared against the 2027 Total Business as Usual is 14%, however, we have rounded off our target to 15% for practical purposes.

6.1 Climate Change



Mining Division, Peru

Medium Term (2035)

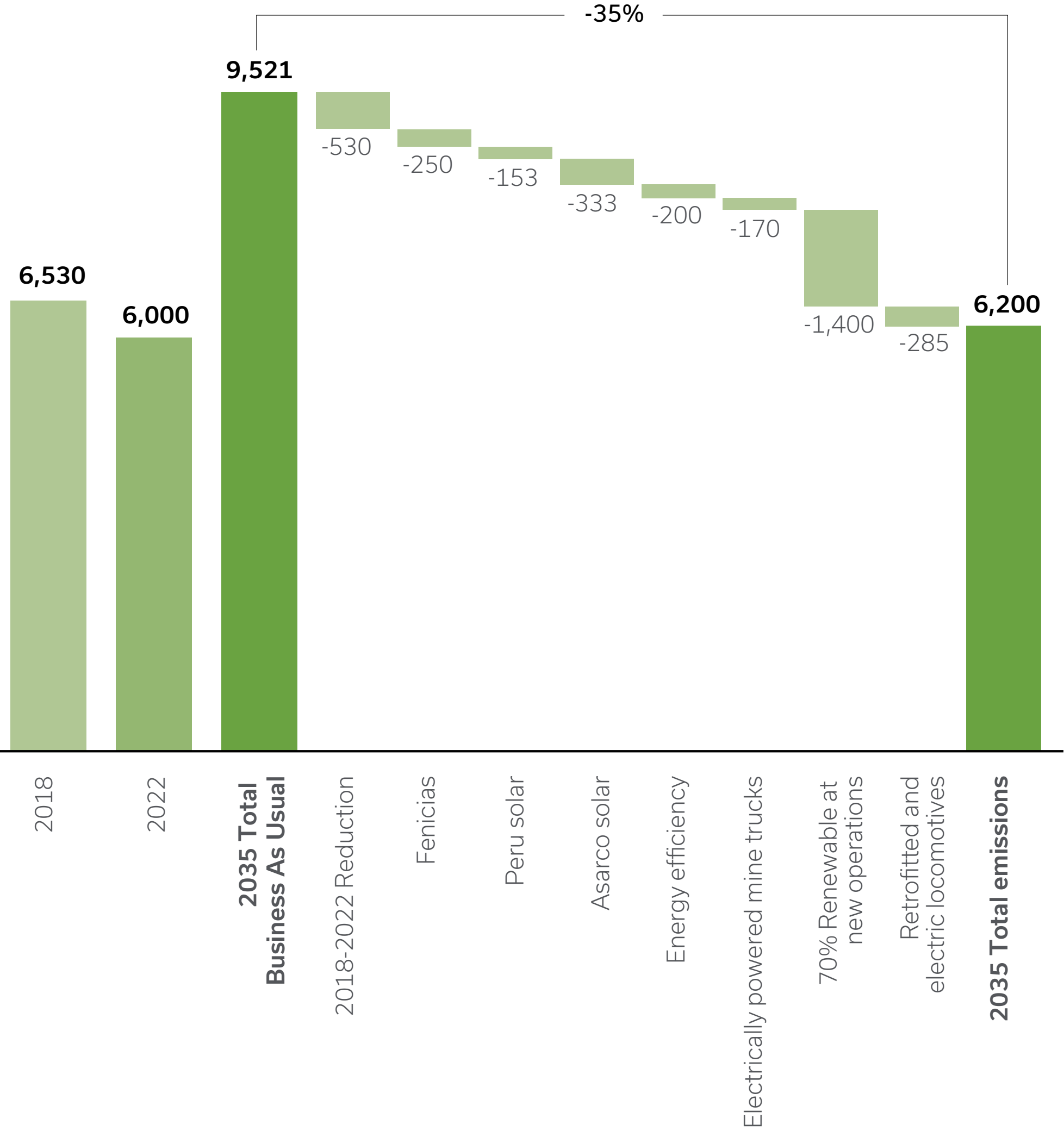
Grupo México has set as our 2035 target reducing our Scope 1 and 2 emissions by **35% for BAU emissions, using 2018 as the base year.**

Actions:

- **Electric mine trucks.** This project will make only a limited contribution to reducing GHG emissions in the short term, as these types of vehicles are not expected to be readily available before 2030. We have started to prepare an analysis of how many of our trucks could be electrically powered between 2030 and 2035, considering their useful life, and assuming the electrically powered trucks will be available from our suppliers, we estimate approximately 20% of our current fleet of trucks could be electrically powered, which would represent a reduction of approximately 170 ktCO₂eq.
- **Continue investing in renewable electricity for existing projects.** Assuming the Fenicias wind farm will still be in operation, from 2027 on, we estimate that our ASARCO and Southern Peru operations could cover at least 90% of their current electricity needs from renewable energy sources, by negotiating new green power purchase agreements, international clean energy certificates, or the construction of greater capacity renewable energy generation projects. This would mean a reduction of approximately 486 ktCO₂eq.
- **Invest in renewable energies for new mine projects.** We estimate Grupo México will have new projects in operation by 2035. If we consider that all new Mining Division operations would operate at 70% renewable electricity by 2035, including the electricity needs of 15% of their mine trucks, we estimate the BAU emissions could be reduced by approximately 1,400 ktCO₂eq.
- **Electrically powered locomotives:** In addition to fuel substitution for locomotives, we believe that as of 2028 we will be starting to electrify around 30% of our yard locomotives, which could reduce the emissions of the Transportation Division by an additional 125 ktCO₂eq, approximately, by 2035, assuming this technology is readily available by then. This project would mean a total reduction of 285 ktCO₂eq associated with the Transportation Division, considering the achievements made by 2027.
- **Additional energy efficiency projects.** In 2023, we will continue working to redesign, convert and retrofit equipment, improve and reorganize processes, and provide efficient energy usage training for employees, to identify additional opportunities for energy efficiency. With these actions, we would expect to reduce the overall energy consumption of our operations by at least 5% by 2035, which would represent at least an additional 200 ktCO₂eq by 2035.

6.1 Climate Change

2035 Decarbonization Roadmap



Notes about the chart

The information shown here is based on concept analyses, the results of which, together with the current status of project development, were used to inform the approximations for the values presented here. In 2023, we will continue working on more specific studies (e.g., energy efficiency at the La Caridad Combined Cycle Power Plant) to strengthen and refine the reductions identified.

At Grupo México, we report all data with transparency. Therefore, we note that the “2035 Business as usual” bar considers the estimated growth that best reflects the reality of the different divisions of our company this year, including the mine projects that will start operations 2023-2035 and which will produce emissions if reduction actions are not taken from the onset.

The total reduction compared against the 2035 Total Business as Usual is 34.8%, however, we have rounded off our target to 35% for practical purposes.

6.1 Climate Change



Ferromex, Transportation Division, Mexico

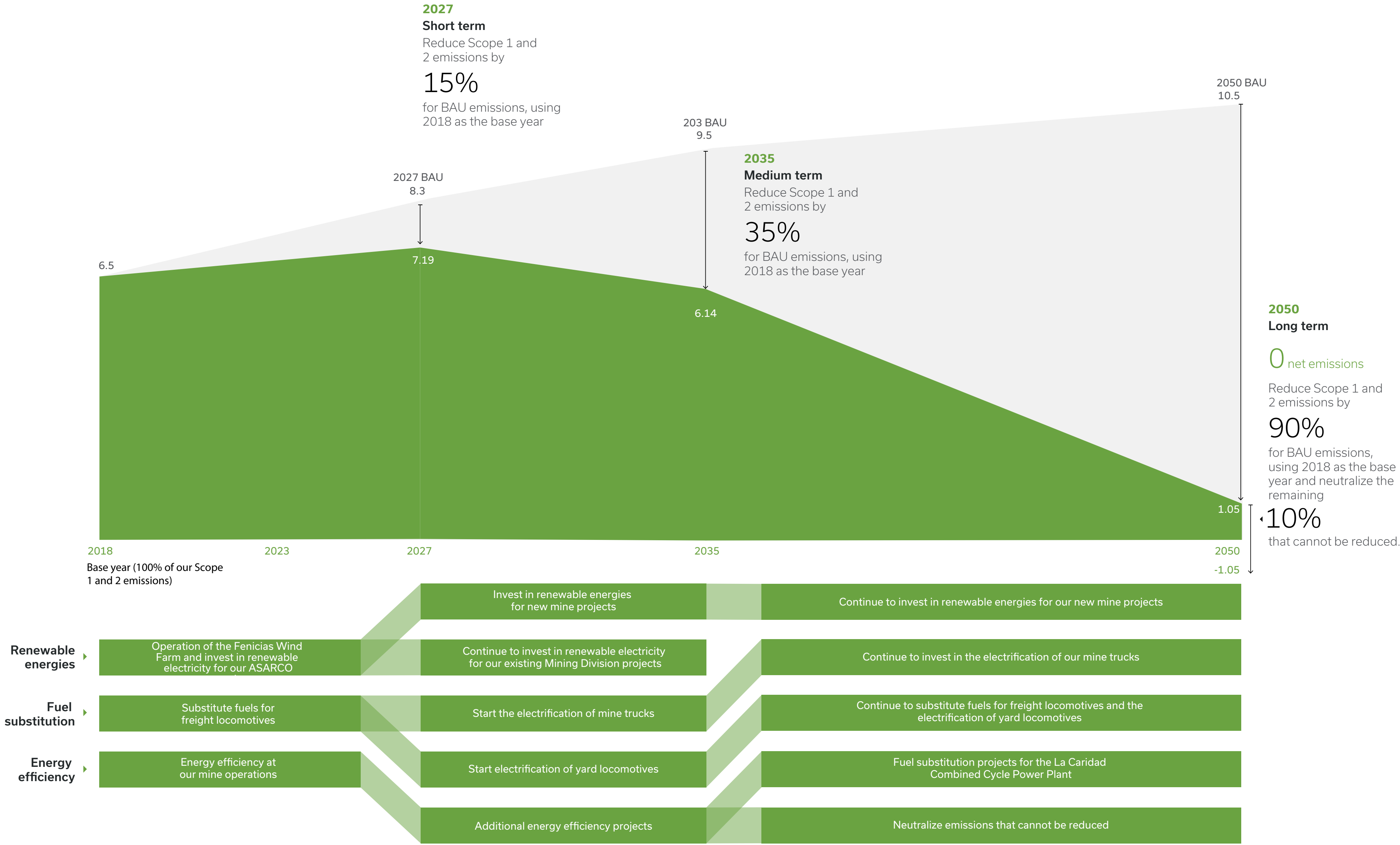
Long term (2050)

Our goal is **zero net emissions** (Scope 1 and 2) for Grupo México by **2050, for BAU emissions, using 2018 as the base year.**

Actions:

- **Continue investing in electrically powered mine trucks.** By 2050, we expect 100% of our current fleet of diesel mine trucks to be electrically powered, as we estimate that by then all our trucks will have reached the end of their useful life, therefore there will be an opportunity to invest in new electrically powered trucks. We believe that having a 100% electric fleet by 2050 is crucial to achieving our target of zero net emissions by 2050.
- **Continue investing in renewable energies for new mine projects.** By 2050, we have set the goal of all our operations, including new projects, operating on renewable energies, which will significantly reduce our Scope 2 emissions.
- **Continue investing in electrically powered locomotives.** Our goal is that the majority of the Transportation Division’s locomotives will be electric by 2050.
- **Develop long term fuel substitution projects.** Ideally, the electricity generated at our La Caridad combined cycle power plant will gradually be replaced with renewable energies in the medium and long term, but if that is not possible, we believe that these emissions can be reduced by substituting natural gas for hydrogen, expecting the production and supply of this alternative fuel will be a reality by 2030.
- **Neutralize the emissions that cannot be reduced.** To achieve our target of zero net emissions by 2050, we will need to take actions to neutralize those carbon emissions that are difficult or impossible to reduce, which we estimate will be around 10% of the BAU emissions calculated for 2050. Such actions may include capturing and sequestering or using the carbon dioxide from the direct emissions produced by the chemical process associated with lime production and the residual energy from generating power by natural gas at our La Caridad combined cycle power plant, reforestation or afforestation, implementing nature-based solutions, or even purchasing carbon offsets. In the short term, we will be developing a neutralization strategy based on these elements, to understand the neutralization options that will be available in the future to support our attainment of zero net emissions by 2050.

6.1 Climate Change



6.1 Climate Change

We want to highlight that at Grupo México, we support the Science Based Targets initiative (SBTi), the primary goal of which is to help companies to set emissions reduction targets in line with climate science and the goals of the Paris Agreement. We have included the recommendations of this initiative in the preparation of the targets outlined above, analyzing whether they are in keeping with what the most recent climate science considers necessary in order to achieve the goals of the Paris Agreement: limit global warming to well below 2°C above preindustrial levels and pursuing efforts to limit warming to 1.5°C.

However, given that we need to incorporate the long term growth of the company to better reflect a more realistic and transparent projection of our “business as usual” emissions, and taking into account it is probable that the technological solutions that will be key to reducing our emissions will only be ready in the long term, we have concluded that, at this time, we are not able to set reduction targets that are aligned with the recommendations of this initiative.

The next action to strengthen our climate change strategy, and by consequence, achieve the Scope 1 and 2 emissions reduction targets presented here, is to continue strengthening our emissions reduction roadmap in 2023. Also in 2023, we plan to continue identifying additional opportunities to reduce emissions, analyzing the capital expenditures required and the anticipated annual costs to implement the actions described here.

As we move forward with this review, we will be open to analyzing whether our reduction targets will require adjustments to align with climate science and the SBTi initiative. Meanwhile, we are open to collaborating with this initiative in the development of a specific guide for the mining sector, which we believe would significantly drive the efforts of the sector to set emissions reduction targets in line with the Paris Agreement.



Santa Bárbara Unit, Chihuahua, Mexico

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6.2 Water and Effluents

GRI 3-3

Water is an essential resource for sustainable development. Economic activities, ecosystems and humans depend on its availability and quality. Water is so important to sustainability that the United Nations (UN) has explicitly recognized the human right to water and sanitation since 2010, affirming these are essential rights that underlie all other human rights.

Responsible water management, from a comprehensive perspective and preventive approach, is one of the pillars in the Grupo México sustainable development strategy, aligning with United Nations Sustainable Development Goal 6, which calls for the efficient and sustainable use, recycling and reuse of water.

We recognize the importance and the challenges of the sustainable management of this resource. In this regard, Grupo México is committed to caring for water as an essential and strategic element in our operations, for the wellbeing of our communities, and for biodiversity conservation. This care includes activities throughout the lifecycle of our projects and our productive chain that focus on responsible water usage and the quality of the water we return to the environment.

Climate change represents a threat to the stability of the water cycle and the availability of this resource, while increasing the vulnerability of our operations and the communities we interact with every day. Because of this, we take considerable care to understand, prevent and better address the risks associated with water management, both at our sites and for the basins and watersheds where we operate, involving various stakeholders, principally our communities.

According to the [World Resources institute Aqueduct: Water Risk Tool](#), 74% of our operations are situated in high water stress zones, representing 95% of Mining Division sales.

The water our operations consume comes from water tables, surface water, wastewater, recycled water and, on occasion, from the public supply. Our mining operations use volumes of water in different proportions for extraction and processing activities. Water is also used to transport mine waste (tailings). The close relationship between mining and water requires the responsible and informed management of this resource to ensure its sustainable use.

The water stress assessments we prepare for all our sites and neighboring communities form the base for our water management approach. These assessments identify the local and regional conditions, and also the current and future risks associated with this resource. They also help us to contribute to providing timely solutions to the needs of the community, to protecting the ecosystems, and to reducing the risks associated with water management.

> **Our Mining Division has 18 active mine operations in the United States, Mexico and Peru, which together account for 99% of the company’s total water consumption.**


Map of river basins and watershed where Grupo México has presence

River basin
or watershed




6.2 Water and Effluents


6.2.1
Highlights




We received a B rating from the CDP (formerly, the Carbon Disclosure Project) for the first time this year, for our performance in Water Security, positioning Grupo México above the average for the metals industry and above the average for North America, one step away from achieving the leadership category.




Improved efficiency in water reclaiming for reuse in our operations.



We are working on diversifying and balancing our water supply matrix by increasing our use of reclaimed water and treated wastewater in our processes.




Executive project for a wastewater treatment plant in Ilo, Peru, with an average capacity of 54 gal/s (206 L/s). This project will benefit more than 75,000 local residents, without increasing water rates.



Executive project to install a rural clean water and sanitation system in Yacango, Torata, Peru. This project will provide clean water with a flow of up to 0.4 gal/s (1.39 L/s) from the Torata treatment plant, and includes 139 household hookups. Additionally, the project will install 137 lightweight outhouses with self-cleaning biodigesters as the homes are spread over moderately rugged terrain. This project will serve 414 residents.




Steppe improvements in the province of Candarave, Peru: 2,367 farmers benefited and 2,361 acres (955.65 hectares) improved with this 2-stage project: steppe reconstructions and soil improvement. Steppes are terraces that are contained and supported by stone walls to prevent fertile soil from being lost due to water erosion. This form of hill farming is part of the ancestral culture that has been passed from generation to generation and has served as a means of farming in the most rugged terrains in the province of Candarave. We are working with the farmers and the Peruvian government, through the Ministry of Agricultural Development and Irrigation. The second phase of the project will remove earth and incorporate organic matter to add nutrients and improve the soil structure before planting.




Canal improvements in the districts of Candarave, Camilaca and Curibaya in Peru: These projects will benefit 218 farmers on 406.5 acres (164.51 hectares), improving system efficiency by 35%, transporting water over 3 miles (4,785 meters) of concrete reinforced canals and other hydraulic works to help control the speed and force of water through the canals.


6.2 Water and Effluents



The four desalination plants installed in Ilo have a combined production capacity of around 880 gal/min (200 m3/hr). Three of these desalination plants are at the smelter and one at the refinery, supplying water for the operational processes at both facilities and for the employee complex at Ilo.



\$14 million pesos invested in Nacozari, Mexico to ensure the supply of clean water to the community (14,369 residents). This project included the construction of an 8 gal/s (30 L/s) water treatment plant, electrical upgrade for the supply source “Filter Chamber 1”, electrical upgrade for the supply source “Filter Chamber 3”, replacing filtering equipment, installing pipes, and correcting slopes, among other activities.



Improvements to the water supply system infrastructure and equipment in Cananea, Mexico, representing an investment of \$118 million pesos to benefit 39,408 local residents. This project is improving the local water service with works on 11 extraction wells, the installation of 3 pumps at the main pumping station, a project to section the system, repair leaks, and change out pipes and instrumentation, among other activities.

6.2.2 Governance

The organizational structure of Grupo México supports efficient water management at our operations.

In the Mining Division, water management is regularly reported to upper management and to the Corporate Sustainable Development Department. Additionally, our environmental performance is reported quarterly to the Sustainable Development Committee, which includes senior company officers, such as the CEO and Executive Vice-President, and prepares strategies to achieve our defined goals.

Additionally, we participate in the governance for the river basins and watersheds where we operate, primarily in Mexico and Peru, through the corresponding “River Basin Commissions”.



Ite wetlands, Tacna, Peru

6.2 Water and Effluents

Roles and responsibilities at the different company levels



Mining Division collaborators, Mexico

Frequency of review and monitoring for the material topic

Our water management actions are constantly reviewed and monitored through our environmental management systems, environmental monitoring and surveillance programs, and clean industry programs. These programs and systems set the roles and responsibilities of those involved, the frequency of their activities, verification, reporting, and define the actions to control, mitigate and prevent water-related risks.

A report is submitted to site management and to the Corporate Environmental Affairs Department each month, reporting our water consumption by operational area, fresh and reclaimed water usage (m3/ TMS), water production costs, sources, weather data and rainfall, occlusion and evaporation rates. The Sustainable Development Committees review performance every three months.

6.2 Water and Effluents

6.2.3
Strategy and Management

The Grupo México [Environmental Policy](#), commits us to minimizing our discharges, and to avoiding and reducing the risks and damages that our operations could cause to water sources. Through responsible water management, from a comprehensive perspective and with a preventive approach, Grupo México is committed to continue caring for water as an essential and strategic element in our operations, for the wellbeing of our communities, and for biodiversity conservation.

Our strategy aims to maintain and, where possible, improve the wellbeing of the communities influenced by our operations, and also preserve the integrity of the supply sources for our sites. This strategy is built on five pillars:

- 1

Management of the risks associated with water usage at our operations.
- 2


Improvement in efficient water usage at our operations.
- 3

Assurance that the water we return to the environment is good quality.
- 4


Collaboration with other players in the management of the river basins and watersheds where we work.
- 5

Generation of value added in water management.


Our Sustainable Water Management Protocol commits and encourages us to:




Reduce our water footprint and minimize our wastewater discharges, maximizing reuse practices.




Regularly update the water balances for each of our operations.




Review and regularly update our analysis of risks and opportunities to address these in a timely manner.




Regularly monitor the water tables and meteorological variables associated with our operations.



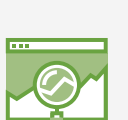
Maintain a current inventory of the water-related risks and the environmental and social repercussions that our operations could cause to water sources, the risks that climate change represents for our operations, and plans for prevention and attention.



Promote a transition in our water matrix to gradually, and wherever possible, replace fresh water sources with treated, reclaimed or desalinated water.



Prepare scenarios to analyze the potential impact of water shortages on our operations.



Use environmental performance indicators that contribute to improving this performance through a process of ongoing improvement based on recognized best practices.

6.2 Water and Effluents



Contribute to protecting the environmental services that ecosystems provide, through water harvesting projects and reforestation in the river basins and watersheds where we operate.



Incorporate sector best practices on reporting and engagement with stakeholders and to ensure regulatory compliance.



Collaborate with other stakeholders, particularly in the management of the river basins and watersheds where we work, to protect and preserve this shared resource.

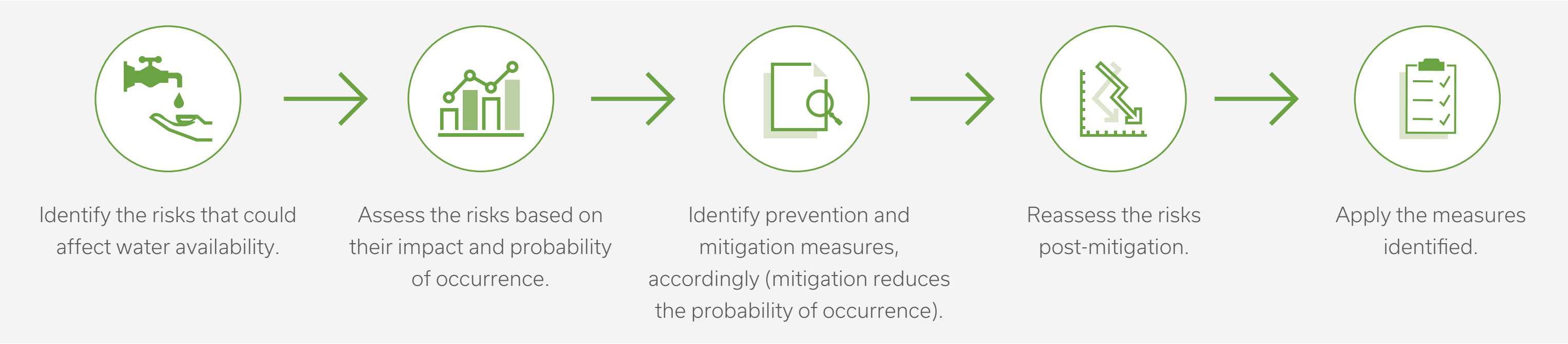
The Protocol sets the minimum requirements to be considered in the planning, management and implementation of water resources throughout the lifecycle of our projects, and also the responsibilities of each company department and operation. The specific roles and responsibilities are laid out in the environmental management systems. The protocol also includes actions throughout the lifecycle of our projects and productive chain, regarding water usage and the quality of the water when it is returned to the natural environment.

Process for identifying risks and opportunities

We identify the risks and impacts associated with water management from before starting our projects through supporting technical studies for zoning changes, preventive reports, and environmental impact assessments, which we update whenever there is a major change at an operation. These diagnostic tools inform different actions to prevent the risks and potential impacts on water resources and water users, including the ecosystems.

The risk assessment is updated whenever there is a change to the original scenario, to reflect the new circumstances.

The risk assessment process includes:



Various areas of our Mining Division participate in this permanent process, particularly the Water Resources Department, the Environmental Affairs Department, and our operations.



Sonora, Mexico






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6.2 Water and Effluents

Description of the short, medium and long term risks and opportunities identified for the material topic

Our Mining Division has five active mining operations in the United States, two of which were exposed to negative water-related impacts in 2022. Our Silver Bell mine experienced a prolonged drought that resulting in requiring more water for dust control and processing. Electricity consumption increased for this same reason, as did our operating costs. The basin affected by this event was the Avra Valley, between Silver Bell and Tucson, in the Tucson Active Management Area (TAMA). Although this event caused an increase in our operating costs, it is not considered a significant impact on the business or the site.

Our Mining Division has three active mining operations in Peru, which account for 37% of our total water extraction. Two of these operations (Toquepala and Cuajone) were exposed to intense rainfall in 2022, with the resulting flooding and landslides complicating access to the mines. The employee camp was also affected, and the integrity of the water supply lines. Although this event affected our operations, it is not considered a significant impact on the business or the sites involved.

Description of the short, medium and long term risks and opportunities identified for the material topic	
Type of impact	Actions on potential opportunities
 Legal	<ul style="list-style-type: none">• Compliance with water extraction and usage permits for groundwaters and surface waters.
 Water availability	<ul style="list-style-type: none">• Monitoring the water systems at our operations to determine water availability, volume and quality, and to identify and mitigate the risks associated with water management.• Improve water efficiency in our processes.• Improve efficiency in reclaiming water.• Diversify supply sources.• Reduce competition for this resource.• Works to increase water harvesting and conservation.
 Water quality	<ul style="list-style-type: none">• Monitoring water quality.• Contamination prevention.
 Impacts on infrastructure and facilities from weather events	<ul style="list-style-type: none">• Design (storm seasons)• Auxiliary facilities (overflow canals, rainwater diversions, contingency systems, etc.)• Preventive weather monitoring• Incorporate international good practices, like the International Council on Mining and Metals (ICMM) Water Stewardship Framework.
 Reputational	<ul style="list-style-type: none">• Diversify supply sources (wastewater)• Social responsibility• River basin and watershed projects (water capturing, soil erosion prevention)• Involving other relevant players in water management• Publish information

6.2 Water and Effluents

Measures to address and manage negative impacts

➤ Our [ISO 14001](#), certified environmental management systems help us to identify, prevent and, as necessary, mitigate the impacts our operations may cause during the different stages of their lifecycle.

We have been working on reinforcing water and tailings dams at *Buenavista del Cobre* in Sonora, *Hayden* in Arizona, *San Martin* in Zacatecas, and *Charcas* in San Luis Potosi to ensure their safety and prevent potential impacts on operations, the environment, and our neighbor communities. To prevent risks from flooding and the resulting impacts, we design and execute protection works in susceptible areas to protect our employees, operations, and infrastructure, specifically at the Santa Barbara operation.

Accredited and approved labs regularly test the quality of our discharge wastewater to ensure we are in compliance with the regulatory limits and parameters.

Other specific actions (programs, initiatives, etc.)

- Tailings filtering en situ, test plant - Quebrada Honda, Peru. Design capacity of 10,000 t/d. This one of a kind press filter has 140 chambers (with 141 plates 13.5’ x 16’ (4.12 m x 4.85 m)) that open and close via a hydraulic system, and is the largest capacity press filter for tailings in the market. The press filter is operated by two centrifugal pumps, each with a 600 hp motor and controlled by a frequency shifter. Each filtering cycle takes about 15.5 minutes, at the end of which, the hydraulic system sequentially opens the 140 chambers to initiate the discharge of filtered tailings onto an apron feeder that transports the filtered tailings to a pile via conveyor belt. The filtered tailings have an average humidity of 15%. During this test phase, the filtered tailings are hauled by truck from the pile to the final disposal area within the current impoundment.
- Improvement of the infrastructure and equipment for the water supply system in Cananea, Sonora. Deficiencies in the water infrastructure of the community near our Buenavista del Cobre operations cause a loss of up to 49% from leaks, therefore we replaced pumping equipment, sectioned the system and repaired the existing leaks to benefit the 39,408 residents of Cananea.
- Project to capture wastewater from the city of Agua Prieta and channel it to Buenavista del Cobre to replace fresh water. This project is aligned with our Sustainable Water Management Protocol, specifically with the commitments to promote transitioning our water matrix to gradually, and wherever possible, replace the supply of fresh water for treated, reclaimed or desalinated water, reducing our water footprint, and reducing our wastewater discharges, maximizing reuse practices and collaborating with other stakeholders to protect and conserve this shared resource.

- “Water, take it seriously” education program. The focal point of this major awareness campaign on caring for and saving water is a temporary exhibition installed at our [Casa Grande cultural centers](#). The campaign is directed at the general community and focuses on topics that include the realities of water around the world, the water cycle, water footprint, good water practices in mining, and a call for community action.
- Drought Management Plan for the Tacna Region. This instrument, unique in Peru, was developed in collaboration with the Australian government and is a tool for implementing actions to reduce impacts on the most vulnerable zones, according to the water events scale. This tool has been made available to those responsible for managing the water resources in the region and to take actions on the occurrence of extreme events.
- Water Management Plan for the Locumba River Basin. Under this plan, we have prepared a diagnostic of the water resources and hydraulic infrastructure available in the Locumba River Basin and defined a strategic plan to improve water usage, today and in the future. This diagnostic has been made available to the national, regional and local authorities, to inform their investment decisions and ensure rational and efficient water usage, and also water security for the local communities.

6.2 Water and Effluents

Description of the influence and involvement of stakeholders in the measures adopted

The regulatory authorities (Semarnat¹, CONAGUA², SENACE³, ANA⁴, and Arizona and Texas state governments in the United States) authorize water rights and environmental impact assessments, and approve measures to prevent, mitigate and offset environmental impacts throughout the lifecycle of our operations. Of note is that the environmental impact authorization process in Mexico and Peru involves evaluations that include public consultations with persons holding interest in the project. These public consultations are held during the design and approval stage, and nonprofit and community stakeholders usually participate.

Supervisory authorities (OEFA⁵, Profepa⁶, Arizona and Texas state governments and the USEPA in the United States) monitor compliance with these obligations in terms of their effectiveness and timeliness.

The communities are involved in our water management through our due diligence and community engagement mechanisms as part of our Community Development model: [Participative Social Diagnostics, the Community Care Service](#), and [the Community Committees](#). Through these tools, we identify the needs and concerns raised by the community regarding this resource and we build solutions, together. In Toquepala, Peru, the Environmental Supervisory and Monitoring Committee is made up of members of the civil society, authorities and company representatives, who actively participate in quarterly environmental monitoring, hold events to share the results, and convey the environmental concerns of the community to the company.



Buenvista del Cobre, Sonora, Mexico

¹ Ministry of the Environment and Natural Resources (Mexico)
² National Water Board (Mexico)
³ National Environmental Certification Service for Sustainable Investments (Peru)
⁴ National Water Board (Peru)
⁵ Environmental Assessment and Inspection Agency (Peru)
⁶ Environmental Protection Agency (Mexico)
⁷ United States Environmental Protection Agency (USA)

6.2 Water and Effluents



Zinc Electrowinning Refinery, San Luis Potosí, Mexico

6.2.4 Metrics and Targets

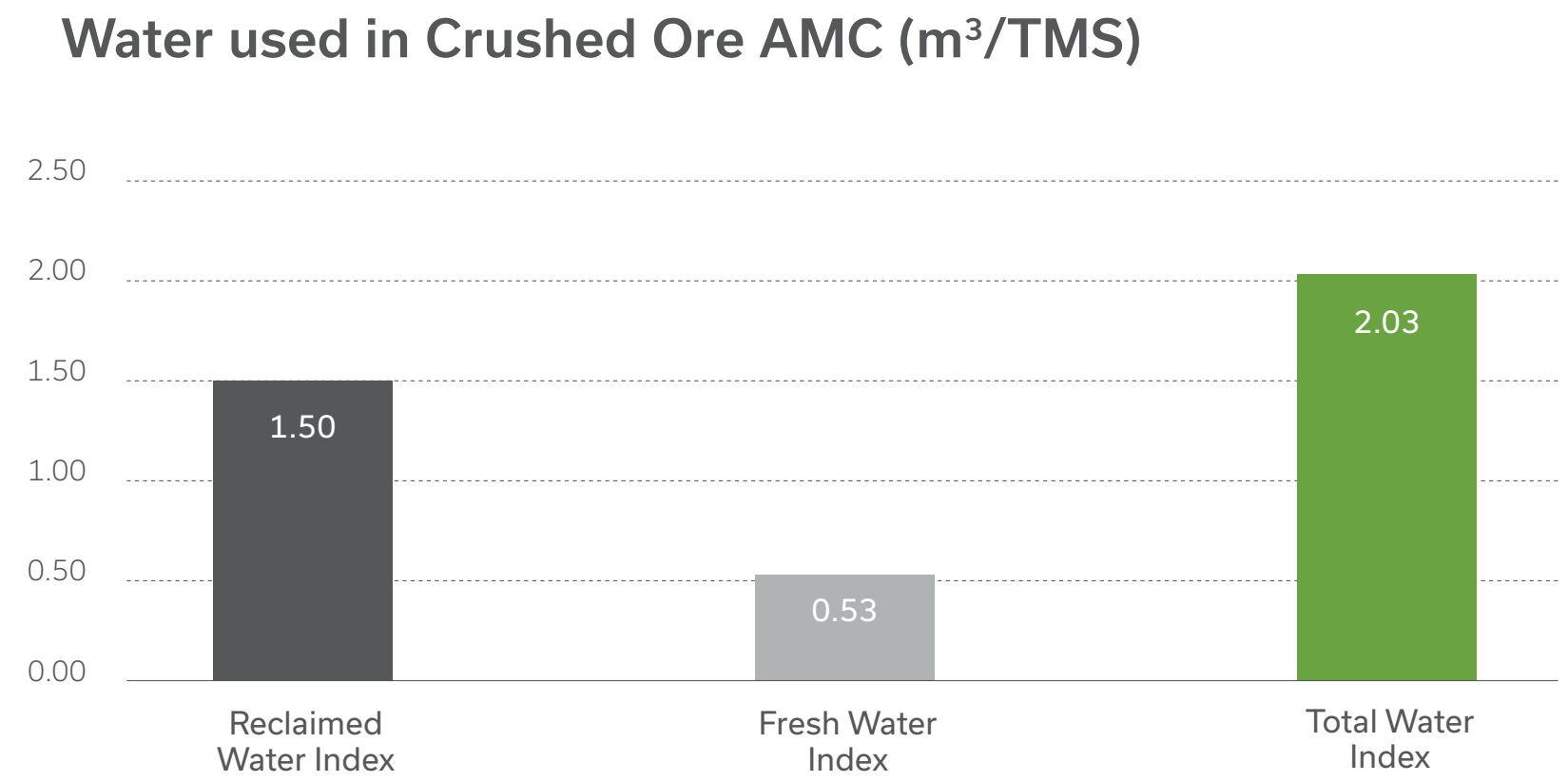
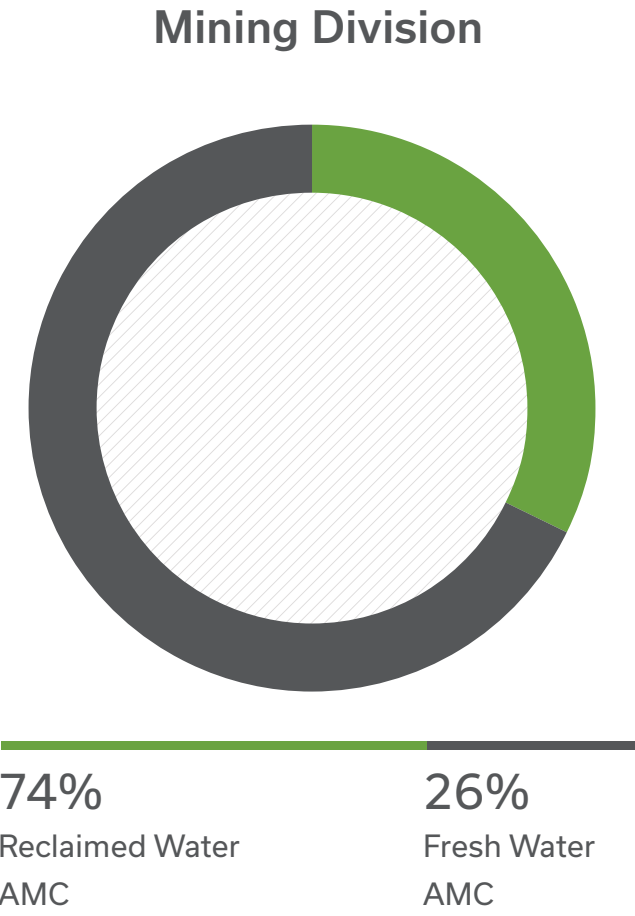
KPI results / achievements this year

Fresh water and reclaimed water consumption by Americas Mining Corporation concentrator plants.

	Crushed Ore AMC
TMS	196,880,000

	Total Water AMC	Fresh Water AMC	Recycled Water AMC
%	100	26	74
m³	400,073,077	104,019,000	296,054,077

	Total Water Index AMC	Fresh Water Index AMC	Reclaimed Water Index AMC
m³ / TMS	2.03	0.53	1.50



TMS: Dry Metric Tons (in spanish, TMS)

Goals, Targets and Status

We will continue with the implementation of initiatives in 2023 that contribute to aligning AMC closure plans with international best practices:

- Reduce consumption of fresh water by 5% at our production sites, compared with 2022.
- Recirculate 83% of the process water.
- Replace up to 10% of our total freshwater usage with wastewater, treated or desalinated water at our operations.
- Make progress towards full adoption of ICMM and CDP expectations.
- Detailed water balances for each site, updated annually.
- Detailed monitoring of the priority watersheds where we operate.
- Reforestation of approximately 500 acres (200 hectares) in river basins and watersheds in high water stress zones, per year.
- Active participation in the governance of the river basins and watersheds where we operate.
- In reference to contributing to the UN Sustainable Development Goals (SDGs), designate 30% of our SDG investments to improving water availability (quality and quantity) in our communities.

Strategic axis		Goal 2030	Main indicators
Water Management		Reduction in First-use water consumption per production unit by 5% considering 2022 baseline.	m³ / ton mashed
		Water recirculation from processes up to 83%	Recirculated water / consumed water
		Use, treatment or desaltation of waste water in our operations up to 10% from total consumption of first-use water.	waste water / first-use water
		Full compliance with ICMM & CDP expectations. Rely on a Water Management Protocol	guidelines met/ total guidelines
		Rely on detailed water balances for each facility and it's yearly updates.	# of balances / # of units
		Detailed behaviour monitoring of the acquifers in which we operate.	# of monitoring / # of units
		500 ha reforestation in basins located in regions of high-water stress per year	Reforested area
		Participation in the governance of the basins where we operate	# of basin organizations with participation / # of total basin organizations
		Dedicate 30% of the total contributions made to SDG's in investments that increase water availability to communities in quality or quantity	Investment earmarked for shared value water projects / Investment allocated to SDGs

6.2.5
Next Steps

Effectiveness of the processes, measures and goals to manage the material topic, lessons learned and how these have been incorporated

We strive to ensure our efforts in responsible water management at our operations are effective, and we adjust these efforts as needed to achieve our goals. In addition to evaluating our performance through our water management indicators, our actions are verified with the certification of our environmental management systems and the independent assurance of our Sustainable Development Report. These verification systems identify opportunities for improvement, which we incorporate into our environmental management systems through change management processes.

We involve the authorities, the academic and scientific communities, our local communities, and the civil society in our actions. We are clear that building alliances is essential in achieving our goals.

6.2 Water and Effluents

Our efforts in 2023 are aimed at:



Water-related risk management at our operations, through ongoing monitoring of water availability and quality in the water tables where we operate, to determine their behavior and take timely action on any risk of access to this resource. Regular review of company standards for the construction and operation of large-scale mine waste facilities, ensuring these are constructed to the highest safety standards and can withstand extreme weather events.



Drought prognoses with short-term and multiyear scenarios to prepare climate and water models to estimate the future water availability for our operations.



Improve water efficiency at our operations, using the latest technology equipment and innovative systems to reduce water consumption and maximize reuse. For example, the incorporation of circuits to recirculate water in our processing and tailings processes, or implementing the latest technologies in concentrate thickening, which will permanently change our production processes, improving water efficiency and reducing operating costs. These actions have contributed, and will continue to contribute, to better recycled water rates.



Assurance that the water we return to the environment is of good quality, through treatment processes, monitoring and analysis. We pay special attention to the proper handling of mine waste, particularly to avoid the release of acid drainage or the erosion and release of tailings to downstream water sources.



Collaboration with other players in managing the watersheds where we work, through a comprehensive management approach that seeks to manage and develop water resources in a sustainable and balanced way, taking into account the social, financial and environmental interests of the local users where operate. We participate in river basin commissions in Mexico and Peru, where authorities and interested parties make decisions together.



Contribute to informed decision-making, providing surface and groundwater surveys, and also alternatives in water management, for the users of the river basins and watersheds where we operate.



Generate value added in water management, through projects that promote environmental services and high-value ecosystems, like water filtration to the subsoil, soil erosion prevention, maintenance of ecological flows in the watersheds, and the restoration and creation of new ecosystems.



Treatment plant, Mining Division, Peru



Combined Cycle Plant, Sonora, Mexico

6.2.6 Infrastructure Division

GRI 3-3

Our Infrastructure Division is committed to efficient water usage and to managing the use of this resource considering the social, financial and environmental implications, affirming our commitment to water care in all our processes. Our efforts adhere to Mexican regulations, and we adopt international standards voluntarily.

We use water in different ways at our more than 20 worksites, primarily for power generation, supplying the oil rigs, laying roads, preparing concrete, etc., therefore it is essential that we constantly monitor water discharges from our processes, improve our water efficiency, and maintain the environmental awareness of all our employees and stakeholders.

In order to do so, we have defined 3 pillars to execute the comprehensive management of water resources:

- 1. Protección integral de recursos hídricos.
- 2. Eficiencia y recirculación del recurso hídrico en nuestras operaciones
- 3. Participación activa con partes interesadas

Interactions with water as a shared resource

GRI 303-1

We're committed to meeting strict compliance with Mexican legislation, and to avoiding any negative impact on the environment or our communities. In this regard, we have a procedure in place to identify and review the legal requirements, monitor indicators monthly and take early action via our risk management processes, implementing operational controls to reduce our impact on the ecosystems.

Our environmental management system is designed to prevent impacts on ecosystems, waterbodies and communities, and we address related issues in three ways, primarily:

- 1. Annual review of the water stress status of the river basins and watersheds where we operate to identify problems of over-exploitation, among others. This analysis uses public information from the Mexican National Water Board and international public tools.
- 2. Quarterly monitoring of the quality of effluents according to Mexican legislation to maintain the quality of the waterbodies in the regions where we operate.
- 3. Through the Reporting Line, we listen to the communities and address their concerns and needs to avoid disputes involving water usage in our processes.

Management of impacts related to water discharges

GRI 303-2

An independent firm accredited by the Mexican accrediting agency (Entidad Mexicana de Acreditación, A.C.) monitors the water discharges at our worksites quarterly, considering more than 20 physical, biological, chemical and radioactive parameters, aligned with Mexican standard NOM-001-SEMARNAT-1996, which includes the type of body that receives the discharge.

Regarding our offshore operations, in addition to the national standard, we align with the international directives defined in the MARPOL convention (International Convention for the Prevention of Pollution from Ships).

6.2 Water and Effluents

Water Extraction
303-3

Water extraction (ML)				
	2022	2021	2020	2019
Total sea water	112	112	106	168
Total groundwater	3,165	3,637	3,932	3,917
Total surface water	30	5	106	82
Total recycled water / third parties	0	15	418	231
Total	3,307	3,741	4,561	4,398

All the water our Perforadora México rigs use is extracted from the sea and subjected to a desalinization and treatment process to be able to use it for human consumption and the operational processes at each site. After use, the water is treated with an electrolysis or osmosis process before it is returned to the sea.

Of the water consumed by our operations, 92% comes from groundwater, used to generate electricity at our Combined Cycle Power Plant in Nacozeni, Sonora, while 99% of the water used at the plant is groundwater and only 1% comes from surface water. Our MW/h to water consumption ratio is 1.1, which demonstrates the high efficiency of our processes.

Other industrial processes provide 75% of the water consumed by our Construction subsidiary. The water is treated, and on meeting Mexican quality standards, it is reused in our construction processes. In this way, we are caring for the ecosystems and the watershed.

We note that our Infrastructure Division has no operations in water stress zones.

- > The highest consumers of water in the Infrastructure Division use freshwater (total dissolved solids ≤ 1000 mg/l).
- > 3% comes from other water (total dissolved solids > 1000 mg/l).



Mangroves in Laguna de Términos, Campeche, Mexico

6.2 Water and Effluents

Water discharges
303-4

The Infrastructure Division channels water discharges to two destinations, primarily:

- a. Terrestrial surface waterbodies: as most of our operations are on land, 92% of our discharges are confined to federal terrestrial waterbodies.
- b. Marine waterbodies: discharges at our offshore platform operations represent 8% of our total discharges for the Infrastructure Division.

In both cases, our water discharges meet the quality required by national and international water regulations.

The principal contaminants in our wastewater are associated with biological oxygen demand (BOD) and chemical oxygen demand (COD) parameters, and also nitrates, nitrites, sulfates and ammonium.

Water discharges at our operations are processed at biological, chemical and electrolysis treatment plants to ensure organic contaminants are removed in adherence of Mexican compliance parameters.

Water discharges by subsidiary (ML)					
Subsidiary	Final Destination	2022	2021	2020	2019
Energy	Surface water	494	530	564	777
Oil	Seawater	40	60	47	138
Highways	Surface water	9	7	6	2
Construction	Surface water	3	0.3	3	4
Fuels	Surface water	0	0.1	0.1	–
	Total	546	597	620	921



Campeche platform, Infrastructure Division, Mexico

6.2 Water and Effluents

6.2.7
Transportation Division*

Although water is not a material topic or a critical element for our Transportation Division operations, we acknowledge the importance and urgency of caring for this non-renewable resource. We are committed to reinforcing and improving our usage and interaction with water to maintain its availability and access for generations to come.

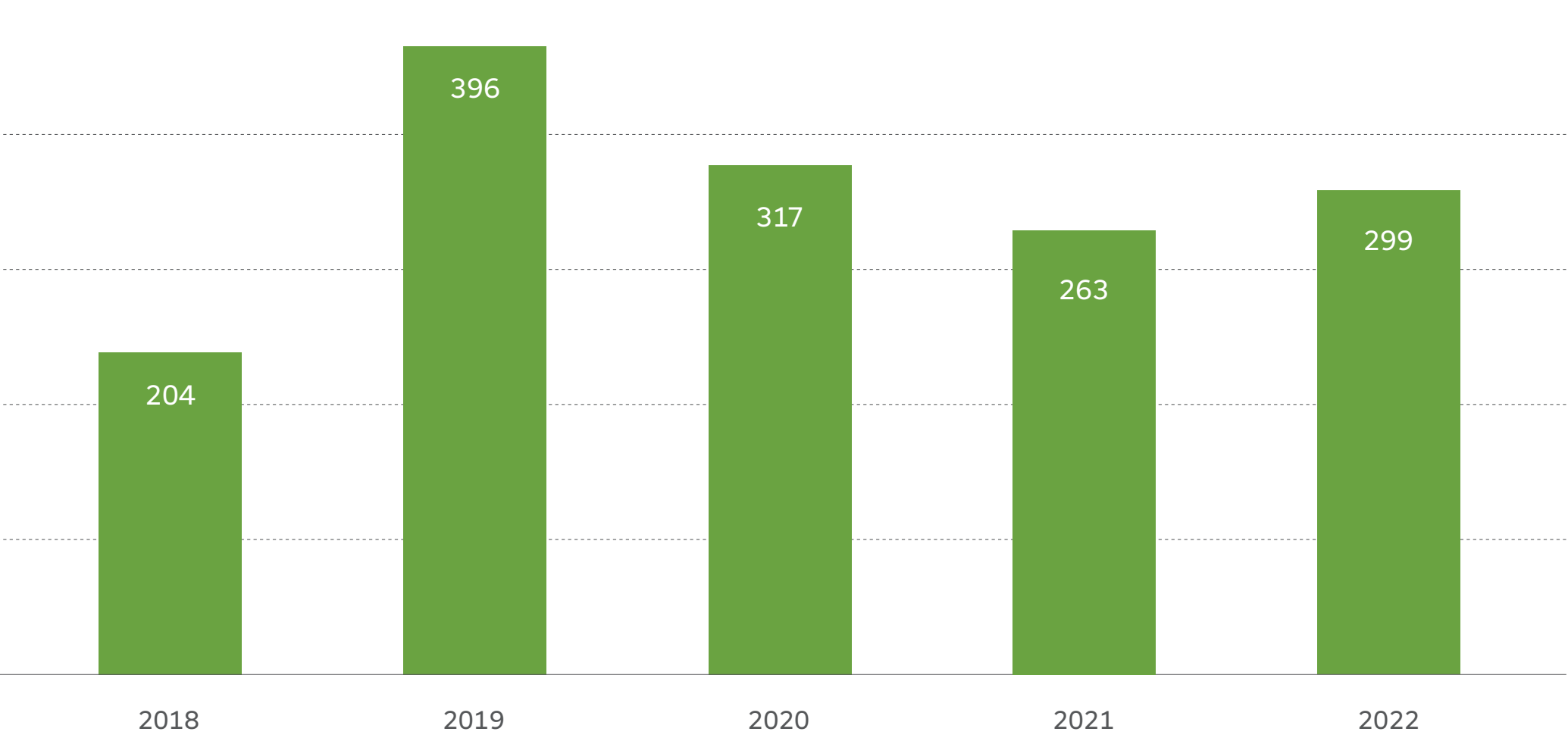
Our Transportation Division consumed 299 ML of fresh water in 2022, used mostly for washing locomotives, for cooling systems, and at our offices. This consumption is summarized following:

2022 Water consumption by type of source (ML)			
Source	Mexico	USA	Total
City supply	78	65.00	143
Well	156	-	156
Total consumption	234	65.00	299



Ferromex, Transpot Division, Mexico

Water consumption ML



Type of Source	2018	2019	2020	2021	2022
City supply (m³ millions)	53	181	108	99	143
Well (m³ millions)	151	215	209	164	156
Total (m³ millions)	204	396	317	263	299

*For the Transportation Division, the extraction of water is equal to its consumption.

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6.3 Biodiversity

GRI 3-3 |

In Grupo México we understand that biodiversity is the variety and variability of life on Earth. The survival of life itself depends on it, as does the stability of the ecosystems that provide different provision and regulation environmental services, such as recharging the groundwater or absorbing carbon from the atmosphere via photosynthesis. A significant portion of the global economy depends on biodiversity and healthy ecosystems, which today are at risk because of human activities and climate change (for more information consult the section on [Climate Change](#)).

The Grupo México [materiality analysis](#) identifies our Mining Division as being the most relevant of our three division in terms of biodiversity. Mines tend to be in remote, and sometimes environmentally sensitive, areas. If mining activities are not conducted responsibly, they may cause long-term harm to the biodiversity.

According to the Millennium Ecosystem Assessment¹, by the end of this century, climate change will likely have become one of the principal driving forces in biodiversity loss. The current rate of global warming is already affecting species and ecosystems around the world, particularly those that are the most vulnerable.

6.3.1 Highlights

In Grupo México we understand the importance of conserving and protecting the biodiversity and the ecosystems at and around our sites. We work responsibly to avoid, insofar as possible, impacting the biodiversity from our projects and operations.

We align with the Convention on Biological Diversity (CBD), the results of the United Nations Biodiversity Conference (COP15-2022), and the adoption of the Kunming-Montreal Global Biodiversity Framework (GBF).

¹ The Millennium Ecosystem Assessment was called for by the United Nations Secretary-General Kofi Annan in 2000. Launched in 2001, it sought to assess the impacts of changes to the ecosystems on human wellbeing, and the scientific basis for the actions needed to improve the conservation and sustainable use of these ecosystems, as well as their contribution to human wellbeing.



Ite wetlands, Tacna, Peru

6.3 Biodiversity

We are also committed to the 2030 Agenda, and more specifically Goal 15: Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and biodiversity loss.

In support of these efforts, we have prepared a Biodiversity Management Protocol for the Mining Division, compliance with which will be compulsory for all our [mine operations](#) starting in 2023. This protocol sets roles and responsibilities - including for our suppliers- and commits us to:



1. Contribute to the conservation of biodiversity by protecting and recovering species, their habitats and ecosystems.

Our work in 2022 in the protection and conservation of habitats and ecosystems included progress on our project to create and maintain the Ite wetlands on the southern coast of Peru, now stretching 3,230 acres (1,307 hectares), to which we are adding another 220 acres (90 hectares). We also have a management plan in place for this important conservation area. With these efforts, we are contributing to protecting, restoring and creating habitats, not only in benefit of the biological diversity, but demonstrating proven and effective low-cost measures to mitigate and adapt to climate change through “green infrastructure”.

Additionally, we prepared a study to voluntarily undertake a 9,850 acre (3,987 hectare) conservation project in the Sonora mountains in Mexico involving mesquite and alligator juniper forests, microphyllous desert scrub, xerophytic mesquite, and grasslands, that are partially deteriorated. This project will recover the original conditions of the ecosystems there and contribute to maintaining and restoring connectivity between habitats to avoid isolating wildlife populations in the region, while also supporting the continuity of the biological processes. Another benefit is the dispersion of individuals, which is vital for the successful colonization of other areas, reducing the vulnerability of local species to extinction, and promoting gene flow and genetic diversity, and the conservation of the diversity of species.

To contribute to the protection and conservation of species, our collaboration continues with the Binational Conservation Program for the Mexican Wolf (*Canis lupus bayleyi*), in which Mexican and US environmental authorities also participate, and a significant number of academic institutions and nonprofit environmental organizations. Through natural or assisted reproduction, exchange of specimens, basic and applied research, the release of specimens into the wild, and raising social awareness with educational programs, we continue to contribute to the preservation of the genetic inventory and the recovery of this emblematic species in the wild.

In collaboration with the Peruvian Ministry of Agriculture and Irrigation (Moquegua and Tacna Region) National Forestry and Wildlife Service, we are also participating in the monitoring of the Darwin’s Rhea (*ñandú andino* or *Rhea pennata*), which is classified as being under “critical threat” in the areas around our operations in the High Andes. The first campaign for this project was held in July 2022.

We also started a new conservation project in 2022 for free-tailed bats (*Tadarida brasiliensis*) at our underground mine sites in Mexico). This project will protect resident and migratory populations, and conduct non-mining economic activities through the sustainable use of the biological diversity, and increase the productivity of the food production systems, in preparation for the closure of our operations. The project includes a strong environmental awareness and education component on the different biodiversity values and the contributions of nature to the wellbeing of the community and their economy.

6.3 Biodiversity



Barrancas del Cobre, Chihuahua, Mexico



2. Not explore or develop new projects in declared Natural World Heritage sites².

We are currently not exploring, nor do we have operations, in declared Natural World Heritage sites.



3. Design and manage new operations and changes in existing operations, in a way that is compatible with the value for which they were designated protected areas³ and high biodiversity value areas⁴.



4. Achieve zero net deforestation and a positive net impact on the biodiversity.

We significantly increased the amount of area reforested in Mexico in 2022 (4,370 acres (1,769 hectares)), which, for the second year in a row, surpasses the area affected by our operations (350 acres (142 hectares)) in the same period. With this and other actions, we are progressing towards our goal of a positive net impact on biodiversity by 2030. Healthy ecosystems sustain the supply and quality of water, and provide protection against water-related threats and disasters. The grasslands, forests and other forms of vegetation we are restoring provide an essential source of protection for watersheds in highland areas, helping to reduce the velocity of run-off, protect against erosion, balance seasonal peaks and dips in water flow, and minimize the sludge and sediments that flow downstream.

²Precisely delineated areas with outstanding universal value from the point of view of science, conservation or natural beauty (World Heritage Convention, 1972).

³Biosphere reserves designated by the UNESCO and protected areas declared by national legislation.

⁴Wetlands of international importance under the Ramsar Convention; priority land regions in Mexico; areas of importance for the conservation of birds in Mexico (AICA); KBA Partnership key biodiversity areas (KBAs).

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6.3 Biodiversity



Mangroves in Laguna de Términos, Campeche, Mexico



5. Assess and prevent significant risks and impacts to the biodiversity and ecosystem services at our operations.

In 2022, we continued to collaborate with the Arizona Game & Fish Department on the management of bighorn sheep (*Ovis canadensis*) on our properties in southern Arizona, contributing to maintaining healthy flocks in the region, while supporting genetic diversity. Managing the populations through direct manipulation of specimens from these wild populations supports their conservation.

We also strengthened our monitoring of emblematic species in the areas around our operations, noting particularly birds of prey and felines -with emphasis on the bobcat (*Lynx rufus*⁵3)-, in the Mexican Sonora mountains. This project was started in 2018.



6. Timely compliance with all applicable legal obligations associated with biodiversity management, during the construction, operation and closure of sites, and also in the post-closure stage.



7. Ongoing improvement of our performance in biodiversity management.

We started to prepare studies in 2022 to introduce monitoring ecological integrity at five of our open pit and underground mines in Mexico. This project will bring us closer to setting science-based biodiversity conversation goals and more precise measuring of our progress towards a positive net impact.

We have also included new performance indicators that will help us to more effectively and efficiently assess our goals to achieve zero net deforestation and a positive net impact on the biodiversity.

⁵The lynx or bobcat (*Lynx rufus*) is one of the six feline species found in Mexico and is the only feline species (*Felidae* family) with a short tail

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8. Involve the local communities, environmental authorities, research institutions, nonprofits and our business partners in our biodiversity actions, where appropriate and insofar as possible.

Our collaboration with outside stakeholders is diverse, as described below in the section [“Description of the influence and involvement of stakeholders in the measures adopted”](#).



9. Promote the adoption of best practices in biodiversity management with our business partners.

We are currently monitoring seven biodiversity management plans at our operations in Mexico that are in or adjacent to (within 1.25 mi (2 km)) protected or high biodiversity areas (for more information consult below in this section [“Measures to address and manage negative impacts”](#)).



We recently received Wildlife Habitat Council ([WHC](#)) certification for the wildlife conservation efforts of our Buenavista del Cobre Environmental Management Center, a project that focuses on the sheltering, protection, exhibition, reproduction, reintroduction, and scientific and ethological research of wildlife.



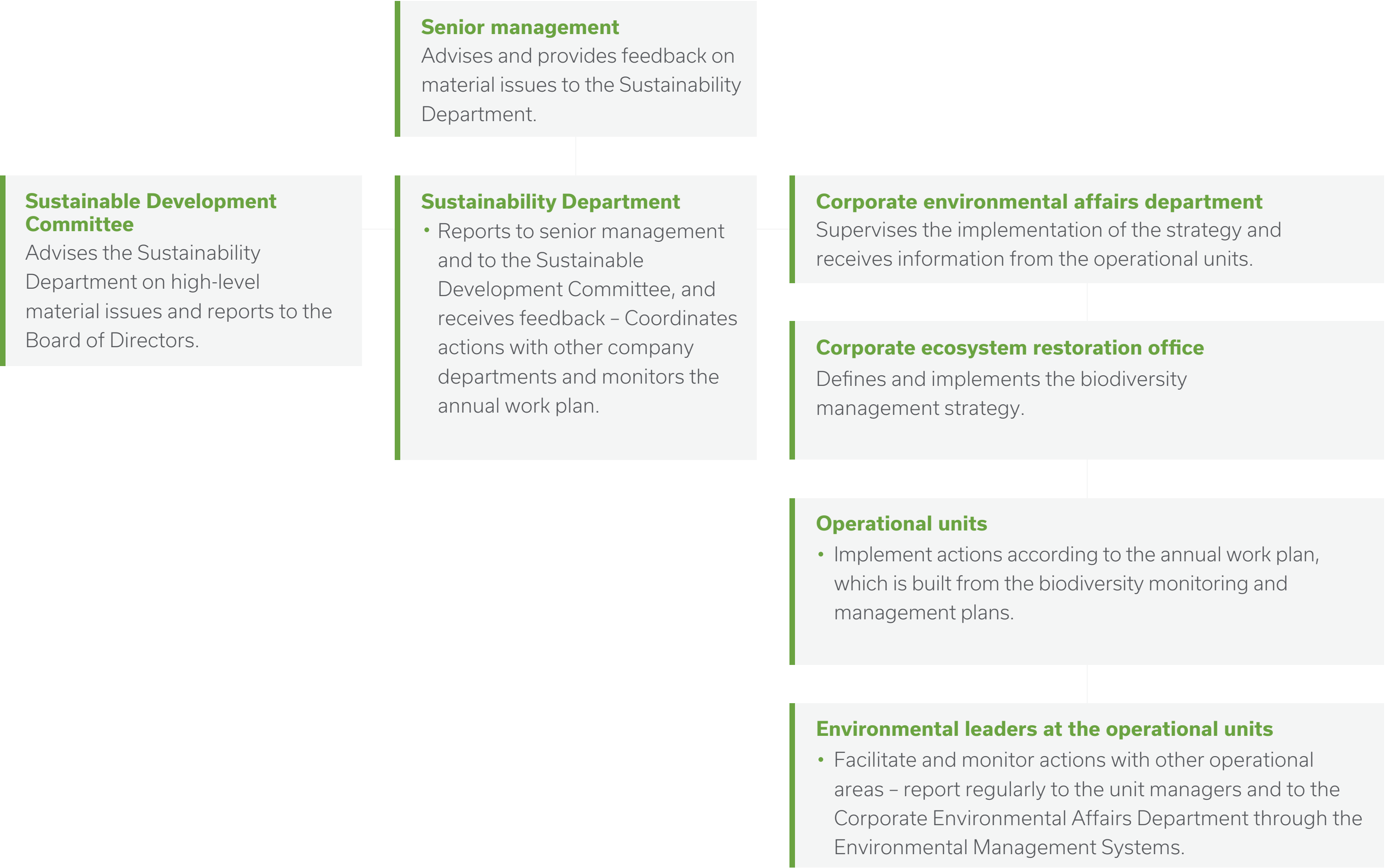
Environmental Management Unit, Sonora, Mexico

6.3.2
Governance

The organizational structure of Grupo México supports efficient biodiversity management at the local level, at each site, which is supervised by the Environmental Affairs Department of each division and in each country.

The Mining Division regularly reports its biodiversity management to the Corporate Sustainable Development Department. Additionally, environmental performance is reported quarterly to the Sustainable Development Committee, in which senior management participate, including the president and executive vice-president, and where strategies are set to achieve our goals.

Roles and responsibilities at the different levels of the company



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Frequency of review and monitoring of the material topic by the roles responsible

Our biological diversity management actions are constantly reviewed and monitored through our environmental management systems (mostly [ISO 14001](#) certified), which outline the roles and responsibilities of those involved, and the frequency of actions, verification and reporting.

This monitoring includes meeting our forest offset obligations, as well as our commitments under our [environmental policy](#) and the biodiversity protocol -particularly *zero net deforestation* and *positive net impact-*, and monitoring our contractors in terms of related issues.

A report is presented each month to the department at each operation and to the Corporate Environmental Affairs Department. Additionally, performance is reported to the Sustainable Development Committees quarterly for review.



Environmental Management Unit, Sonora, Mexico

6.3 Biodiversity

6.3.3
Strategy and Management

Our [Environmental Policy](#) sets out our commitment to achieving a positive net impact on biodiversity. To attain this, we work with various stakeholders, mainly environmental authorities and academic and research institutions, to develop and maintain important projects that go beyond our regulatory obligations.

Our [Code of Conduct for Suppliers, Contractors and Relevant Commercial Partners](#) involves our value chain in the management of this priority topic and invites them to contribute to the protection and conservation of the biodiversity, adopting the commitments of zero net deforestation and positive net impact. We also monitor the performance of our inputs suppliers and service providers on our properties through legal documents that require them to protect the flora and fauna, avoid unnecessary clearing, and to take the measures necessary to protect the ecosystems.

Our Biodiversity Management Protocol commits us to protecting and fostering the biodiversity applying the mitigation hierarchy of avoid, reduce, restore and offset potential impacts that, over the life of our sites, could negatively affect the biodiversity.

Our actions seek to:



We are committed to following international best practices and recognized procedures for conducting these activities. For example, we have started using the internationally accepted ecological integrity monitoring approach to assess the conditions of the ecosystems and the biodiversity, and to implement management actions. This approach has four components: identify conservation targets, identify the key ecological attributes, identify acceptable variances for each attribute, and assign an integrity rating to each conservation target.

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Our ecosystem restoration activities in Mexico are designed based on the Guide for preparing supportive technical studies, issued by the Mexican Ministry of the Environment and Natural Resources (in Spanish, the SEMARNAT), and success is determined by both this regulatory authority and by law, and by the Mexican Environmental Protection Agency (in Spanish, PROFEPA) through regular reports prepared by our operational units and with field inspection visits.

Also, in Grupo México we have a detailed procedure in place for addressing complaints, used by our [Community Care Service](#).

Identifying risks and opportunities

We identify the risks to biodiversity before embarking on a new project through environmental impact assessments, which are updated whenever there is a significant change in our operations. These diagnostics assist in defining different actions to prevent impacts on the ecosystems, and according to the mitigation hierarchy, to mitigate and offset such impacts when they cannot be avoided. Also, we use diagnostics of our biodiversity management plans to identify opportunities to contribute to a positive net impact on the biodiversity, not only in the areas surrounding our sites, but with a broader scope to contribute to not only the preservation of populations of relevant species and their habitats, but to the recovery of ecosystems, the creation of new ecosystems (like wetlands), and the recovery of threatened species.

Our ongoing monitoring around our operations helps us to detect relevant changes in the biological and ecological value of these ecosystems. This monitoring includes the use of camera

traps, transects and sampling to determine changes. We will continue this monitoring in 2023, incorporating ecological integrity assessments, starting at two open pit mines and three underground mines that are situated in areas with high biodiversity value.

The monitoring component of our environmental management systems ([ISO 14001](#)) ensures we fulfill our obligations and supports us to follow up on the responsibilities of our service providers in terms of protecting the biodiversity.

We have started to prepare biodiversity-related risk prevention manuals for our operations in Sonora to specifically address the risks associated with each facility.

Description of the risks and opportunities identified for the material topic in the short, medium and long term

Biodiversity loss is a risk associated with mining that tends to be underestimated. While human activities can affect the biodiversity, when the biodiversity is deteriorated, this in return, can then affect operations. The impacts of biodiversity loss can go far beyond the mere disappearance of plant and animal species contributing to food insecurity, exacerbating climate change, affecting microclimates and human health, and can destabilize communities, particularly those most underprivileged and vulnerable.

⁶ ICMM - Good Practice Guidance for Mining and Biodiversity
⁷ Los Provision services are ecosystem services that describe the material products that ecosystems produce, which include food, water and other resources. Regulation services include climate and air quality, sequestering and storing carbon, the moderation of natural phenomena, wastewater treatment, erosion prevention and conservation of soil fertility, pest control, pollination, and regulation of water flows.

The undesired impacts on the company and our operations include those associated with reduced provision and regulation environmental services⁷:

- Reduced water availability. Impacts on the forest cover contribute to the depletion of groundwater by reducing the filtration capacity because of soil erosion. This carries negative impacts not only on company operations, but also for other water users, especially the local communities.
- Reduced food production in the communities where we operate due to soil loss, reduced pollination, increased pests and reduced water supply.
- Increased risk of fire. Soil erosion and reduced moisture content can support fires to spread, which would threaten our infrastructure, operations and neighbor communities.
- Flooding from flash floods. The inability of the soil to filter and reduce the force of the water can result in violent water flows that would negatively impact our facilities, and also our neighbor communities.

Meanwhile, we have identified the nature of the significant direct and indirect impacts that our operations may cause to the biodiversity. For each, we have also identified opportunities for prevention or reduction, insofar as possible.

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Actions taken on potential opportunities				
Type of impact / risk	Prevention:	Mitigation:	Restoration:	Offset:
Habitats and ecosystems affected by land transformation	<ul style="list-style-type: none">Wherever possible, use areas already impacted, like existing communication routes or sites that are in the closure process.Avoid affecting areas through negligence.Reserve areas with high biological / ecological value and promote ecological conservation areas.	<ul style="list-style-type: none">Recover resources like soil and plant matter to use in restoration projects.Rescue specimens of flora and fauna species with conservation value.Take early remediation actions, during the operational stage, for areas affected by our operations (concurrent remediation).Implement dust reduction measures.	<ul style="list-style-type: none">Soil restoration and works projects to divert and capture water to recover flora and fauna habitats.Develop closure plans that include restoring the landscape and the functional conditions of the ecosystems affected.	<ul style="list-style-type: none">Reforest impacted areas outside of our operations.Soil recovery projects and water and wind erosion prevention.Water harvesting projects.And in general, meet full compliance with the measures set by the environmental authorities to avoid, restore and offset specific or cumulative environmental impacts, temporary or permanent.
Reduction of species populations with high biological/ecological value	<ul style="list-style-type: none">Avoid affecting areas with high value for the health of emblematic species populations or with high conservation value, like wildlife corridors, nesting, mating and breeding areas.Monitoring the status of the biodiversity and populations of relevant species to take prompt action where necessary.	<ul style="list-style-type: none">Rescue and relocate specimens of threatened, endemic, high biological value or that are slow or non-moving, or recovery species, as classified by the UICN and the regulations of the countries where we operate.Monitor the status of specimens and their evolution in the translocation sites.	<ul style="list-style-type: none">Recover ecosystems, habitats and vital ecosystem services for the populations of emblematic species affected or with high conservation value.Carry out actions for captive breeding and the repopulation of areas affected by our operations.	<ul style="list-style-type: none">Recover ecosystems, habitats and vital ecosystem services for populations of threatened species.Captive breeding and reintroduction of threatened species into the wild in original population distribution areas.And in general, meet full compliance with the measures to avoid, reduce, restore and offset specific or cumulative environmental impacts, temporary or permanent, set by the environmental authorities.
Contamination of waterbodies and ecosystems from dust, emissions, discharges or accidents	<ul style="list-style-type: none">Monitor and control the solution management systems to avoid contingencies.Reduce the release of dust from our tailings dams and access roads.	<ul style="list-style-type: none">Use controls to prevent waste, dust, solutions or acid drainage from reaching waterbodies or ecosystems near our sites in volumes or concentrations that could be harmful to the biodiversity and the functions and services of the ecosystems.Monitor emissions and discharges to take prompt action if the limits are exceeded so as to be harmful to the biodiversity and the functions and services of the ecosystems.	<ul style="list-style-type: none">Remediate sites impacted by our operations to recover the existing conditions prior to the impact.And in general, meet full compliance with the measures set by the environmental authorities to avoid, reduce, restore and offset specific or cumulative environmental impacts, temporary or permanent.	-

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We have identified sensitive areas and species or with high biological value around our mine operations. Some of our operations are adjacent to different types of protected natural areas as presented following:

Operational sites in or adjacent to protected areas or areas of high biodiversity value (GRI 304-1)*									
Site	MM (MEXICO)					ASARCO (USA)			
	Buenavista del Cobre	Charcas	La Caridad	Metalúrgica del Cobre	Lime Plant	Hayden	Silver Bell	Ray	Mission
Inside high biodiversity or protected areas	Ramsar ⁸ No. 2044 Ajos-Bavispe ecosystem, area of influence San Pedro River Basin RTP ⁹ -41 Cananea-San Pedro AICA ¹⁰ No. 126, Western Sierra Madre systems KBA ¹¹ Western Sierra Madre mountain system	KBA Sierra Catorce	RTP-44 Bavispe-El Tigre AICA No. 126, Western Sierra Madre systems KBA Western Sierra Madre mountain system	RTP-44 Bavispe-El Tigre AICA No. 126, Western Sierra Madre systems KBA Western Sierra Madre mountain system	AICA No. 38 Western Sierra Madre mountain system KBA Western Sierra Madre mountain system	No	No	No	No
Adjacent to high biodiversity or protected areas (1.25 mi / 2 km)	No	No	ANP ¹² Bavispe flora and fauna protection area	RTP-42 Sierras Los Ajos – Buenos Aires – La Purica	No	Gila River area	Ironwood Forest National Monument	Gila River area	Pima Pineapple Cactus Priority Conservation Areas KBA: Lower San Pedro River

* For the purposes of this table, “in or adjacent” is defined as an operational site being within 1.25 miles (2 km) from the outer edge of a protected area or an area with high biodiversity value.

⁸ Wetlands of international importance under the Ramsar Convention, Iran, 1971.
⁹ Priority Land Regions in Mexico, determined by the National Commission for the Knowledge and Use of Biodiversity (in Spanish, CONABIO), are areas where ecosystem conservation is a priority for the preservation of the endemic species that inhabit these ecosystems, determined by criteria of biology, threat to maintaining the biodiversity and opportunity for conservation.
¹⁰ Areas of importance for the conservation of birds in Mexico (in Spanish, AICA). These areas are determined by criteria that include the diversity of species, endemic species, presence of threatened species, and diversity of ecosystems.
¹¹ Key biodiversity areas (KBAs) determined by the KBA Partnership.
¹² Protected natural area under Mexican legislation.

6.3 Biodiversity

We have also identified the relevant species around our mine operations, as indicated in the following table.

IUCN red list threatened species and national conservation list species with habitats in areas affected by operations (GRI 304-4) ¹³																			
Mining Division																			
IUCN Red List (IUCN Classification)	Mexico							Peru				Total SCC	USA				Total Mining Division		
	Buenavista del Cobre	Charcas	La Caridad	Metco	Lime Plant	San Martin	Santa Barbara	IUCN Classification	Cuajone	Ilo	Toquepala		Hayden	Mission	Ray	Silver Bell			
	Vulnerable	3	0	1	1	0	0	0	Vulnerable	2	1		1	0	0	0		0	9
	Endangered	0	2	0	1	0	0	0	Endangered	0	1		2	0	0	0		0	6
	Critically Endangered	0	0	0	0	0	0	0	Critically Endangered	0	0		0	0	0	0		0	0
Extinct in the Wild	0	0	0	0	0	0	0	Extinct in the Wild	0	0	0	0	0	0	0	0	0		
National Lists	NOM-059-SEMARNAT-2010							Supreme Decrees 004-2014 & 046-2006				SCC	Endangered Species Act (ESA)				Total Mining Division		
Threatened	23	12	5	8	3	7	6	Endangered	1	6	4	75	1	1	1	0	78		
In danger of extinction	7	2	2	2	0	0	0	Critically Endangered	2	0	3	18	0	0	0	0	18		
Probably extinct in the wild	7	0	0	0	0	0	0	Extinct in the Wild	0	0	0	7	0	0	0	0	7		
Subject to special protection	40	26	9	9	6	14	11	Vulnerable	7	5	6	133	0	0	0	0	133		

¹³ Consult the list of threatened species in the Biodiversity annex.

6.3 Biodiversity

Biodiversity management by operational site									
Mining Division									
Site	Biodiversity diagnostic	Biodiversity management plan (ICMM)	Biodiversity monitoring	Potential risk	Water stress	Restauración/reforestación	Conservation projects	Involvement of others	2023 Goals
Charcas Charcas, San Luis Potosi, Mexico	✓	Prepared in 2021, implementation in progress	Was not carried out in 2022	Contamination of ecosystems / Affected habitats	Extremely High	Nursery with production capacity of 300,000 plants/year 160 acres (65 ha) reforested in 2022 with 32,767 plants	No conservation projects in 2022	-	Develop an ecological integrity monitoring model for adjacent ecosystems.
San Martin Sombrerete, Zacatecas, Mexico	✓	Prepared in 2021, implementation in progress	Was not carried out in 2022	Contamination of ecosystems / Affected habitats	Medium - High	Nursery with production capacity of 798,000 plants/year	Rescue and relocation of 149 specimens of flora	-	Develop an ecological integrity monitoring model for adjacent ecosystems.
Santa Barbara Santa Barbara, Chihuahua, Mexico	✓	Prepared in 2021, implementation in progress	Was not carried out in 2022	Contamination of ecosystems / Affected habitats	Extremely High	-	Conservation of bat populations	UNAM Ecology Institute Community	Develop an ecological integrity monitoring model for adjacent ecosystems. Bat population conservation projects.
San Luis Potosi Zinc Refinery San Luis Potosi, San Luis Potosi, Mexico	⊘	Not applicable, urban area	Not applicable, urban area	Contamination of ecosystems	Extremely High	Nursery with production capacity of 1,998,000 plants/year		-	Not applicable, urban area
Buenavista del Cobre Cananea, Sonora, Mexico	✓	Prepared in 2021, implementation in progress	Was not carried out in 2022	Contamination of ecosystems / Reduction of populations of species with high biological / ecological value	Extremely High	Nursery with production capacity of 1,800,000 plants/year 2,600 acres (1,057 ha) reforested in 2022 with 1,092,476 plants	Buenavista del Cobre Wildlife Conservation Management Center Rescue and relocation of 111 specimens of fauna and 522 specimens of flora	<i>US Fish & Wildlife Service / Semarnat / Conanp</i> Mexico-USA Binational Committee for the Mexican Gray Wolf Conservation Program Universidad de Queretaro UNAM Faculty of Geology	Develop an ecological integrity monitoring model for adjacent ecosystems. Collaborate with the Binational Conservation Program for the Mexican Wolf (<i>Canis lupus bayleyi</i>)
La Caridad Nacozari de Garcia, Sonora, Mexico	✓	Prepared in 2021, implementation in progress	Diversity of species and home environment for felines Diversity of species and home environment for birds of prey	Contamination of ecosystems / Reduction of populations of species with high biological / ecological value	Extremely High	1,410 acres (571 ha) reforested in 2022 with 271,744 plants	Rescue and relocation of 19 specimens of fauna and 11,287 specimens of flora	-	Develop an ecological integrity monitoring model for adjacent ecosystems. Continue to monitor birds of prey. Continue to monitor felines, with emphasis on bobcats (<i>Lynx rufus</i>).

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6.3 Biodiversity

Biodiversity management by operational site										
Mining Division										
Site	Biodiversity diagnostic	Biodiversity management plan (ICMM)	Biodiversity monitoring	Potential risk	Water stress	Restauración/reforestación	Conservation projects	Involvement of others	2023 Goals	
Metalúrgica de Cobre in Nacozari Nacozari de Garcia, Sonora, Mexico	✓	Prepared in 2021, implementation in progress	Diversity of species and home environment for birds of prey Diversity of species of mammals and birds	Contamination of ecosystems	Low / Extremely High	Nursery with production capacity of 1,800,000 plants/year 138 acres (56 ha) reforested in 2022 with 26,818 plants	Rescue and relocation of 19 specimens of fauna	Aviario Sonorense para la Protección de Especies Silvestres A. C.	Monitoring of large and medium felines. Monitoring of songbirds and grassland birds. Monitoring of birds of prey. Monitoring of reptiles.	
Lime Plant Agua Prieta, Sonora, Mexico	✓	Prepared in 2021, implementation in progress	Was not carried out in 2022	Contaminación de ecosistemas	Extremely High	-	No	-	Develop an ecological integrity monitoring model for adjacent ecosystems.	
Guaymas Terminal Guaymas, Sonora, Mexico.	⊘	No	Not applicable, urban area	Contamination of ecosystems	Extremely High	Yes	No	-	Not applicable, urban area	
Toquepala Tecna, Peru	✓	Being prepared	Was not carried out in 2022	Contamination of ecosystems	High	-	No	-	Prepare the biodiversity management plan.	
Cuajone Moquegua, Peru	✓	Being prepared	Was not carried out in 2022	Contamination of ecosystems	Extremely High	-	Conservation of the Darwin's Rhea (<i>ñandú andino</i> or <i>Rhea pennata</i>)	National Forestry and Wildlife Service of Peru	Continue our collaboration with the National Forestry and Wildlife Service of Peru to monitor populations of Darwin's Rhea (<i>ñandú andino</i> or <i>Rhea pennata</i>).	
Ilo Tecna, Peru	✓	Being prepared	Was not carried out in 2022	Contamination of ecosystems	High	-	Yes - Ite Wetlands	Ite Community Goat farmers in the region	Prepare the biodiversity management plan.	

6.3 Biodiversity

Biodiversity management by operational site									
Mining Division									
Site	Biodiversity diagnostic	Biodiversity management plan (ICMM)	Biodiversity monitoring	Potential risk	Water stress	Restauración/reforestación	Conservation projects	Involvement of others	2023 Goals
Mission Arizona, Pima County, Sahuarita, USA	➡	Will be prepared in 2023	The status of the biodiversity will be assessed in 2023	Habitats effected	High	-	-	-	Prepare the lte wetlands management plan.
Ray Arizona, Pinal County, Kearny, USA	➡	Will be prepared in 2023	The status of the biodiversity will be assessed in 2023	Habitats effected	Extremely High	-	-	-	Prepare the biodiversity management plan.
Silver Bell Arizona, Pima County, Marana, USA	➡	Will be prepared in 2023	The current status of the biodiversity will be assessed in 2023	Habitats effected	High	-	Conservation of the bighorn sheep (<i>Ovis canadensis</i>)	Arizona Game & Fish Department	Continue our collaboration with the Arizona Game & Fish Department in the conservation of the bighorn sheep (<i>Ovis canadensis</i>). Prepare the biodiversity management plan.
Amarillo Amarillo, Texas, USA	🚫	Not applicable, urban area	Not applicable, urban area	Contamination of ecosystems	Low	-	No	-	Not applicable, urban area
Hayden Arizona, Gila & Pinal Counties, Hayden and Winkelman, USA	➡	Will be prepared in 2023	The current status of the biodiversity will be assessed in 2023	Habitats effected	Extremely High	-	No	-	Not considered

6.3 Biodiversity

Description of the real and potential impacts of the material topic, negative and positive, the related risks and opportunities for the business, strategy and financial planning

The principal negative environmental impact on our operations is changing the land, which can fragment ecosystems and the connectivity between them. This eventually increases the vulnerability of the populations to limiting their dispersion and gene flow and can locally reduce the availability of resources for shelter and food.

We modified 570 acres (231 hectares) of Mining Division land in 2022, principally secondary oak forest shrub vegetation, oak forest, natural grassland and microphyllous desert scrub in Mexico and desert scrub in the United States and Peru, as a result of the expansion of our sites. These modifications were carried out in compliance with current environmental regulations and include mitigation actions, such as the recovery of fertile soils and organic matter to then be used in restoration works, and also the rescue and relocation of slow-moving flora and fauna to suitable areas for their development.

In this regard, under our ambitious reforestation and ecosystem restoration plan, we restored 7.7 times more land than we affected this year. The plan includes not only soil erosion control and recovery works, water capturing and filtration and reforestation with native species, but also follow-up actions to ensure the recovery of the ecosystem services.

Other potential impacts on nature are caused by the dispersion of dust (for more information, consult the [section on Waste](#)) and changes to local water flows, which we prevent and mitigate through constant watering of the roads and unfinished surfaces at our sites, and using the upstream and downstream monitoring at our sites to ensure that the availability and quality of the water that passes through our operations would not be affected downstream (for more information consult the [section on Water and Effluents](#)).

Without doubt, accidents that involve releasing mine waste or chemical substances from our processes represent a potential risk, which we address through very rigorous critical environmental risk management (for more information consult the section on [Sustainability Risk Management](#)).

Our restoration actions contribute to mitigating and offsetting the impacts caused by changing or modifying land, as described above (for more information consult the [section below on “Measures to address and manage negative impacts”](#)).

To ensure that the resources needed to restore the landscape at the end of the useful life of our sites are available, we periodically prepare financial estimates and maintain a financial reserve that guarantees the recovery of the original environmental conditions at the end of our operations, in addition to post-closure monitoring that will detect any deviation from the recovery plans (for more information consult the [section on Closure of Operations](#)).

Measures to address and manage negative impacts

Our [ISO 14001](#) certified environmental management systems help us to identify, prevent and, where necessary, mitigate the impacts our operations may cause.

The Mining Division also has seven biodiversity management plans in place at the sites where biodiversity management is most relevant: the Buenavista del Cobre, La Caridad, Santa Barbara, San Martin and Charcas mines, and also the Metalúrgica de Cobre and Lime plants. These plans follow the ICMM Good Practice Guide for Mining and Biodiversity and address both the characteristics of the area at and around the sites, and the operations conducted there. The plans take a preventive approach and include actions like using camera traps to detect the presence or absence of animals, preparing and updating inventories, logging hours of activity and other behaviors, diversity estimates, monitoring populations in different environments, and abundance and density estimates. With this, we can prevent human actions that could disturb species of special interest and their populations, or the functions of the ecosystems they inhabit.

It is important to highlight that our biodiversity management plans in Mexico consider the interaction of our operations with priority conservation areas, as determined by the National Commission for the Knowledge and Use of Biodiversity (in Spanish, CONABIO), the National Commission for Protected Natural Areas (in Spanish, CONANP), the Ramsar Convention¹⁴, and the International Union for the Conservation of Nature (IUCN).

¹⁴ Convention on wetlands of international importance, specifically waterbird habitats, Ramsar, Iran, 1971.

6.3 Biodiversity

Significant impacts of activities on biodiversity (GRI 304-2)															
Site	MM (Mexico)							SPCC (Peru)			ASARCO (USA)				Total Mining Division
	Buenavista del Cobre	Charcas	La Caridad	Metalúrgica del Cobre in Nacozari	Lime Plant	San Martin	Santa Barbara	Cuajone	Toquepala	Ilo	Silver Bell	Hayden	Ray	Mission	
Size of the site (hectares)	49,061.01	269.70	21,629.00	6,656.00	962.00	704.00	776.34	19,399.7	119,618.2	3,377.2	6,601.00	20,785.23		7,689.03	257,618.41
Total area physically altered by the mine activity (hectares)	10,064.56	194.33	4,120.05	413.77	154.86	131.98	304.6	2,970.66	12,361.80	871.7	1,485.35	807.37	4,546.80	3,340.85	41,768.68
Area of the mine physically altered by the mine activity in 2022 (hectares)	35.9	0	99.45	0	0	6.43	0	37.6	47.5	0	0	0	4.2	0	231.08
Total area with permanent and irreversible impact (hectares)	1,188.53	0	658.59	0	100.29	0	0	723.02	828.4	0	390.83	0	1851.0	1,985.0	7,725.66
Site assessed and mapped for biodiversity in the last five years	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Not located in or adjacent to protected areas or areas of importance for biodiversity	In progress	In progress	In progress	In progress	-

6.3 Biodiversity

We are working on preparing plans for our ASARCO and SPCC operations and expect this project to be completed by the end of 2023. In both cases, we have completed the information gathering stage for the ecosystems and biodiversity at and near our operations. For our Toquepala and Cuajone operations, we are assessing Andean scrub ecosystems, near Pajonal de Puna Seca, which include habitats like riverside forests, wetlands, high Andean lakes, and steppe mountains, among others. The Ito operations are located on the coast, corresponding to the coastal desert ecosystem. In the United States, our operations are located in desert scrub ecosystems, and in Mexico in oak forest, natural grassland and microphyllous scrub ecosystems.

Our reforestation program is one of Grupo México's emblematic environmental programs, with nurseries and greenhouses that have an extensive plant production capacity. We produced 5,846,713 specimens in 2022 (18% more than in 2021). Some of our reforestation projects are carried out in collaboration with the [Grupo México Foundation](#), which donates plants to various non-profits, who use them to reforest different areas . Other reforestation projects are coordinated with the authorities, mainly to define the areas to reforest.

In terms of restoration actions, we built 1,038 filter dams in 2022 around our La Caridad mine and processing plant, both in Sonora, resulting in the retention of 16,570 tons of soil, preventing this loss. Also, we built 522 trenches, which retain 13,483 tons of soil; 29 dams to retain an additional 91,920 tons, and 28 miles (45 km) of level curves that capture 9,478 tons of silt. Additionally, we have constructed 14 dams and 143 filter trenches to harvest 691,877 cubic yards (528,978 cubic meters) of rainwater.

Habitats restored or protected (GRI 304-3)							
Mining Division							
Site	MM (Mexico)			Peru			
	Buenavista del Cobre	La Caridad	METCO	Nueva Rosita	Charcas	Toquepala	Cuajone
Name of the high biodiversity or protected area	Inside: Ramsar Site No. 2044 Ajos-Bavispe ecosystem, area of influence San Pedro River Basin RTP-41 Cananea-San Pedro AICA No. 126, Western Sierra Madre systems KBA Western Sierra Madre mountains	Inside: RTP-44 Bavispe-El Tigre AICA No. 126, Western Sierra Madre mountains KBA Western Sierra Madre mountains Adjacent: ANP Bavispe flora and fauna protected area	Inside: RTP-44 Bavispe-El Tigre AICA No. 126, Western Sierra Madre systems KBA Western Sierra Madre mountains Adjacent: RTP-42 Sierras Los Ajos – Buenos Aires – La Púrica	Outside of high biodiversity or protected areas.	Inside: KBA Sierra Catorce		
Total area reforested in hectares	1057	571	56	19	65	0.631	2.02
Total specimens reforested	1,092,476	271,744	26,818	16,513	32,767	465	285
Net gain (Areas restored / areas impacted)	29.39	5.7	56	19	65	0.013	0.053

6.3 Biodiversity

Description of the influence and involvement of stakeholders in the measures adopted

Biodiversity conservation requires a lot of technical and scientific information making the collaboration of academic and research institutions necessary. These types of stakeholders participate with Grupo México in the monitoring and assessment of the biodiversity status in the regions where we operate.

The *Universidad Nacional Autónoma de México* (UNAM) Faculty of Geology helps us, for example, by developing techno-soils for ecological restoration. We work closely with the Universidad de Querétaro, among others, on efforts to reintroduce Mexican wolf specimens and to repopulate areas where until recently, this species was considered extinct in the wild by the Mexican authorities.

We have partnered with UNAM Ecology Institute researchers to prepare diagnostics on the status of different bat populations around our underground mines, and we are developing conservation and environmental education actions with a long-term vision. With the participation of these institutions, we are continually enriching our projects and actions in benefit of the protection and conservation of biodiversity.

Additionally, we have been working on developing alliances and capacities to promote the protection of ecosystems and biodiversity. The company continues to build new relationships with relevant stakeholders in biodiversity conservation, such as the recent collaboration for the conservation of bats with the *Universidad Nacional Autónoma de México* Ecology Institute, or with the *Universidad Autónoma de Baja California* for the conservation of the totem pole cactus (*Lophocereus schottii monstrosus*), a species endemic to the Baja California desert.

This project includes research activities that, in turn, generate opportunities for thesis development and internships, in addition to developing skills in our environmental areas.

Similarly, environmental nonprofits and our communities play an essential role in the success of these initiatives. Without their involvement and commitment, the road would be much more difficult.

In Mexico, we involve the community in our bat conservation projects at our underground mines through environmental education programs, and in Peru, through the development of the Ite wetlands, where we also are working long-term with local goat farmers to achieve a [sustainable usage of the available resources](#).

Biodiversity conservation is also a priority for the authorities. We work with the environmental authorities in the countries where we have operations. For example, in Mexico and the United States, we coordinate with the Ministry of the Environment and Natural Resources (in Spanish, SEMARNAT) and with the Fish & Wildlife Service, who provide guidelines for the Mexican wolf recovery project. In Peru, we collaborate with the Ministry of Agriculture and Irrigation (Moquegua and Tacna Region) National Forestry and Wildlife Service on the monitoring of the Darwin’s rhea (*ñandú andino*, *Rhea pennata*), and in Mexico, with the National Commission for Protected Natural Areas to manage protected natural areas through our participation on the Advisory Committees for some of these areas . We also participate on basin committees in Mexico and Peru, which are collegiate groups that review, among other things, the environmental management of water considering the ecosystems as users.



Valle de los Cirios, Baja California, Mexico

¹⁵ Los Cirios Valley flora and fauna protection area in Baja California and the Alamos Sierra-Cuchuiacui River flora and fauna protection area in Sonora, Mexico.

6.3 Biodiversity

6.3.4
Metrics and Targets

Performance indicators

Our quantitative indicators are listed following:

In addition to the above, we have generated greater awareness and sensitivity among our personnel and our neighbor communities in terms of biodiversity values and the environmental services provided by the ecosystems, and our efforts as the company to protect them. Company employees rated environmental conservation actions 4.35 on the 2021 ECO Survey, which rates on a scale of 1 to 5.

Performance indicators					
Indicator	Unit	2022	2021	2020	Δ %
Plant production	# plants	5,849,378	4,955,922	4,350,363	18.03%
Reforestation	# plants reforested	1,441,068	229,141	335,354	528.90%
	Area reforested (hectares)	1,772	252	333	603.17%
Area restored / Area impacted	Hectares	1,772 / 231	252 / 204	333 / 550	518.55%
	Rate	7.7	1.24	0.60	

Flora and fauna specimens rescued with protection status, endemic or with high biological/ecological value.					
Unit	Buenavista del Cobre	La Caridad	Metco	San Martin	Total
Flora specimens rescued	522	11,287	0	149	11,958
Fauna specimens rescued	111	19	19	54	203
IUCN Red List Species (IUCN Classification)	0	0	1	1	2
Vulnerable	0	0	1	0	1
Threatened	0	0	0	1	1
Critically Threatened	0	0	0	0	0
Extinct in the Wild	0	0	0	0	0
Species according to national classification NOM-059-SEMARNAT-2010	8	10	6	4	28
Threatened	2	3	1	1	5
In danger of extinction	0	0	1	0	1
Probably extinct in the wild	0	0	0	0	0
Subject to special protection	6	7	4	3	14

6.3 Biodiversity

Targets and goals

Our priority is to reverse net biodiversity loss and to be net positive by 2030, where the positive impacts outweigh the negative.

To achieve this, we have started working on transitioning towards science-based targets, focusing on the risks to ecosystems and their components, with a global purpose and which are aligned with the Montreal Agreement on Biodiversity (COP 15): i) that our targets contribute to the protection and conservation of terrestrial and marine areas through protected areas and other effective conservation measures; ii) that they contribute to the restoration of currently degraded areas, and iii) that they contribute to monitoring, assessment and transparent reporting of the risks and impacts on biodiversity at our operations and value chain.



Nursery, Mining Division, Mexico

Mining Division goals & targets in biodiversity management

2023 Goal	2023 Target
 Contribute to the continuity of the ecosystem functions in the Binational Ecoregion (Mx-EU) "Southern Semiarid Elevations".	Create a wildlife corridor with a voluntarily designated conservation area in Sonora, Mexico.
 Reforestation and ecosystem restoration.	Restore an area greater than that affected by our new operations, with emphasis on Mexico.
 Management plan for the Ite wetlands in Peru.	Have an approved management plan for the Ite wetlands that is in the process of being implemented.
 Bat conservation project at underground mines.	Determine the size and influence of a colony of free-tailed bats (<i>Tadarida brasiliensis</i>) and establish a conservation program.
 Biodiversity monitoring projects at our operations with ecosystem integrity ratings.	Publicly report the status of the biodiversity at relevant Minera México sites.
 Progress in the implementation of initiatives that contribute to aligning AMC biodiversity management with the ICMM guides.	Have biodiversity management plans in place at relevant Asarco and SPCC sites.
 Continue our cooperation with the Arizona Game & Fish Department for the conservation of healthy bighorn sheep populations.	Continue to manage specimens in coordination with the Arizona state at our Silver Bell site.

6.3 Biodiversity

6.3.5

Next Steps

Effectiveness of processes, measures and goals in managing the material topic, lessons learned and how these have been incorporated

We strive to ensure that our efforts in biodiversity conservation are effective, and when they are not, correct whatever is necessary. In addition to assessing our performance based on biodiversity management indicators, our actions go through a verification process with the certification of our environmental management systems, the independent assessment of our Sustainable Development Report, and the assessment of our first biodiversity conservation project by the Wildlife Habitat Council. Verification systems provide ways to continuously identify opportunities for improvement, which are incorporated through the change management processes of our environmental management systems.

Decisions are informed by the best information available, based on science, and considering not only the environmental aspects, but also social, cultural and economic. It is therefore important to involve the academic-scientific community, the public and the civil society in our actions. Biodiversity conservation is only possible, in many cases, through its sustainable use, making it very important to combine conservation needs with the economic improvement of the local communities. Our biodiversity conservation and awareness projects include social and economic components from which we are learning a lot.

Building alliances is essential to advance in attaining our common goal of protecting the biodiversity and its value for future generations. These alliances must also include the authorities, particularly in those cases where the government holds authority over the biological diversity. We have also learned that to be successful, we need to resolve the conflicts that sometimes hinder the path of conservation, such as the current conflict between wildlife populations and human activities over the use of land. Biological diversity is linked to other complex management processes, like those related to climate change, water management and pollution prevention. Therefore, a broad and comprehensive vision is required in order to be successful. We are working to better understand these relationships to more clearly reflect them in our policies and procedures.

Lastly, and perhaps the most important, is to ensure that our personnel understand that caring for biodiversity is everyone’s responsibility, and that they have the tools to contribute. In this regard, we dedicate significant efforts to providing training on caring for the environment.



Ite wetlands, Tacna, Peru

6.3 Biodiversity

Other specific actions (programs, initiatives, etc.)



Ite wetlands, Tacna, Peru



Reversing history: The Ite Wetlands in Peru

Located in southern Peru, at the mouth of the Locumba River in the Tacna region, near the border with Chile, these wetlands are home to over 150 species of birds (resident and migratory), and other flora and fauna. Today, these are the largest coastal wetlands in the country and represent a site with high biodiversity value for South America.

The 3,860 acre (1,562 hectare) site had been a mine waste deposit for nearly three decades. We have physically and chemically stabilized 3,230 acres (1,307 hectares) through a long-term restoration process that involves building small wetland areas, flooding areas to inhibit the oxidation of the remnant pyrites, testing with vegetation tolerant to changes in pH (like natural grasses, reeds and rushes, and cattails), applying organic matter, building a water infrastructure to control the water levels, which includes floodgates, channels, dumps and pipes, and we continuously monitor different physical-chemical parameters and metals.

As a result, an important ecosystem for biodiversity conservation, and for the wellbeing of the local community, has developed there. The environmental services generated in the wetlands include, among others, water storage in one of the most arid zones on the planet and the sequestering of carbon from the atmosphere.

Its natural beauty and diversity of animal and plant life make the Ite Wetlands a popular and highly appreciated place for visitors and recreation. This project generates income in the local economy and today, the Ite Wetlands are a reference site for education and environmental research.

6.3 Biodiversity



Environmental Management Unit, Sonora, Mexico



Reversing history: The Mexican wolf repopulating in the forests of Mexico

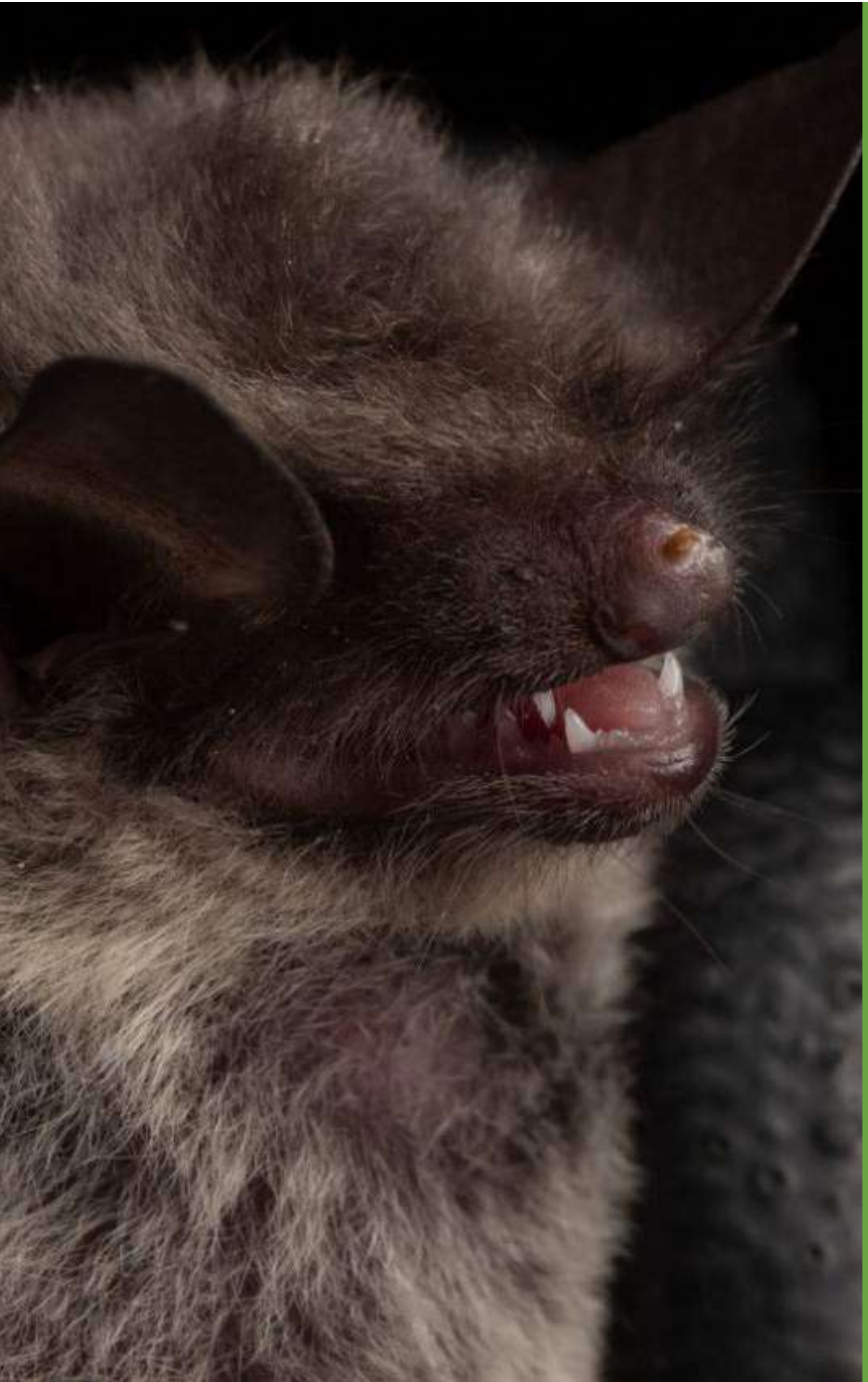
The Mexican gray wolf (*Canis lupus baileyi*) plays a role that is fundamental to maintaining balance in the ecosystems it inhabits, regulating the populations of other species, contributing to maintaining biological diversity.

Until the first half of the last century, the Mexican gray wolf inhabited the wild areas of Arizona, New Mexico and Texas in the United States, and in the Western and Eastern Sierra Madre mountains in Mexico, down to the neo-volcanic range in Central Mexico. After a strong eradication campaign in the first half of the 20th century, the Mexican gray Wolf practically disappeared in the wild and was declared probably extinct.

Aware of the environmental repercussions of this situation, and in accordance with UN Sustainable Development Goal 15: Life on Land, in 2011, Grupo México adopted the Mexican gray wolf as the insignia for the Center for the Conversation, Management and Sustainable Use of Wildlife (known in Spanish as the UMA) at Buenavista del Cobre, in Cananea, Sonora. This Center contributes to the recovery of this species by reintroducing specimens in their natural habitats.

As of today, our Center has housed 51 Mexican wolf specimens and has witnessed the birth of 23 cubs. In a coordinated effort with the Mexican and United States authorities through the Binational Program for the Recovery of the Mexican Wolf, 25 specimens have been reintroduced at sites originally inhabited by this species.

With this important contribution by Grupo México, the Mexican Gray Wolf has recently been moved from the “Probably extinct in the wild” category to “In danger of extinction”, affirming the company’s commitment to biodiversity protection efforts.



Bat specimen, Chihuahua, Mexico



Environmental protection and the local economy - Conservation of bat populations in Chihuahua, Mexico

Grupo México has established a Bat Conservation Program in collaboration with UNAM Ecology Institute researchers and students. This project arose from visits by technical specialists in 2021 to different Grupo México sites in Baja California, Sonora, Chihuahua and Zacatecas, where it was determined that a management plan was needed for bats . This plan would be useful where there are colonies within the facilities and mines of the company.

This Management Plan, along with various research highlighting the value of these bats and the ecosystem services they program, would support the development of an effective awareness and environmental education program focused on the people directly involved, which would help to control any difficulties in the normal operation of the mines.

By protecting bat colonies, Grupo México is driving an assessment process for the role bats play in guaranteeing the continuity of environmental services, as keeping these colonies at our sites healthy, they will serve as effective pest control for crops. This insectivore species devours tons of insects every night, maintaining production and avoiding the use of pesticides, saving farmers unnecessary expenses and avoiding contamination by unwanted chemicals in crop fields.

It is important to note that, despite being highly recognized as biological regulators that feed on multiple insects that are pests for some crops, including corn and potatoes, bats have a misguided negative reputation, mostly because of their nocturnal habits, myths, and stories and legends deeply rooted in different cultures.

Bat colonies play an important role in the surrounding ecosystems. Because of the large concentrations in caves, when bats emerge, they need to travel long distances to find food.

Conservatively estimated, they travel at least 30 miles (50 km) each night, although many travel more than 80 miles (130 km). They are capable of flying even greater distances, as this species is highly migratory and one of the fastest in the air, reaching up to 100 mph (160 km/h). Considering the minimum distance mentioned, we could calculate the area of influence of bats at any mine site as being around 3,30 square miles (7,850 km²) or even greater.

6.3 Biodiversity



Nursery, Sonora, Mexico



Recovering habitats and environmental services in Sonora, Mexico

Global efforts to restore and create forest cover have many chemical, social and biological benefits. Planting new trees can help to reduce CO2 concentrations in the atmosphere. Greenhouse gases, like carbon dioxide and methane, contribute significantly to a changing climate. Forests are effective natural carbon sinks that absorb large amounts of carbon released from the burning of fossil fuels. Reversing global deforestation is a key element for an effective mitigation strategy to combat global warming.

Reforestation is one of Grupo México’s emblematic environmental programs. Our nurseries and greenhouses have an extensive production capacity (6.8 million plants) and in 2022, we produced 5,846,713 plants. Some of our reforestation projects are carried out in collaboration with the Grupo México Foundation, which donates plants to various nonprofits, who use them to reforest different areas. Other reforestation projects are coordinated with the authorities, mainly to define the areas to reforest.

To recover and protect the soils of the ecosystems near our operations, we built 1,038 filter dams in 2022 around our La Caridad mine and processing plant (METCO), both in Sonora, resulting in the retention of 16,570 tons of soil, preventing this loss. We also built 522 trenches, which retain 13,483 tons of soil; 29 dams to retain an additional 91,920 tons, and 28 miles (45 km) of level curves that capture 9,478 tons of silt. Additionally, we have constructed 14 dams and 143 filter trenches to harvest 691,877 cubic yards (528,978 cubic meters) of rainwater.

We also reforested 4,084 acres (1,653 hectares), representing 7 times more than the area impacted for the same period (553 acres (224 hectares)).

6.3 Biodiversity



La Cabellera, Sonora, Mexico



La Cabellera: Voluntary conservation of nearly 9,900 acres (4,000 hectares) of ecosystems in Mexico

Areas Voluntarily Designated for Conservation (in Spanish, ADVC) are sites that support the preservation of biodiversity and ecological balance in Mexico, while fostering community engagement.

Under a landscape management program, the Conanp has proposed designating an additional 9,800 acres (3,987 hectares) as ADVC for the conservation of the biocultural richness of Mexico, to foster wildlife corridors and to increase connectivity between existing protected natural areas. La Cabellera is situated in the southern part of the municipality of Cananea and in the northern part of the municipality of Arizpe, on land property of Buenavista del Cobre, S. A. de C. V., in the state of Sonora.

Mesquite and alligator juniper forests, microphyllous desert scrub, xerophytic mesquite, and grasslands, both natural and artificial.

The landscape approach enables connectivity between systems to maintain the ecological processes, reduce the fragmentation and isolation of ecosystems, and contribute to the long-term survival of species and communities.

In other words, it’s about conserving more land with existing Protected Natural Areas so the flora and fauna have more opportunities to survive.

A long-term strategy is needed to achieve this goal, as well as coordination with the three levels of government, civil society, private and financial sectors, and national and international organizations. Among other benefits, mitigate climate change, improve the quality and quantity of water, and provide ecosystem services for productive activities.

The socio-environmental challenges we face in Mexico require alliances and coordination with the community, organizations and all three levels of government.

6.3 Biodiversity



Environmental Management Unit, Sonora, Mexico



Buenavista del Cobre Environmental Management Center in Cananea, Mexico

Belonging to Grupo México, this wildlife conservation center is one of the first to have a designated space (3 acres (1.3 ha), two additional enclosures and four observation and treatment buildings, among others) for the rescue of an emblematic species of the southern United States and northern Mexico: the Mexican Gray Wolf.

The Mexican Gray Wolf is a critically endangered species according to the International Union for Conservation of Nature Red List of Threatened Species, making these conservation efforts even more important.

The consistency of this work, which enables the conservation of genetic information for the Mexican Gray Wolf, places our conservation center (in Spanish, the UMA) second in successful reproduction of this species.

A highlight is the birth last April of a pair of cubs, resulting from mating one specimen from New Mexico with another from Cananea, under the agreements of the Binational Committee for the Recovery of the Mexican Gray Wolf.

Achievements like those of the Grupo México Wildlife Conservation Management Center help to give credibility and to solidify our business social responsibility actions in different places around the country.

6.3 Biodiversity

6.3.6

Transportation Division

GRI 304-1, 304-2

The primary business of the Transportation Division is to transport freight by rail, which does not negatively impact, fragment or affect ecosystems, as our operations are conducted over rail lines that were concessioned to Grupo México in 1998. Considering that most of the rail network in Mexico was built in the 19th and 20th centuries, and that the Transportation Division is not permitted to change the original rail lines, we can assume that the impact on the biodiversity from land alterations occurred during construction and would then not be caused by our current operations.

Although a quality service and operation require the construction and/or improvement of infrastructure, we ensure all such projects are carried out in strict adherence of local, state and federal environmental laws and regulations.

The vegetation that grows in the right of way is controlled for safety reasons, as this may cause accidents by obstructing the view of the crew or damaging the track infrastructure.

The operations of the Transportation Division are not generally located in areas with high biodiversity value, with the exception of rail lines that cross some zones that were declared protected after the railway system was built. These zones are mostly located in the states of Coahuila, Colima, Sinaloa, Sonora and Veracruz. When our operations could impact the biodiversity, by crossing zones declared protected, we comply with all environmental requirements in the design, construction and operation of the works, in addition to having monitoring mechanisms in place for clearing vegetation, soil compaction and erosion.

Although biodiversity is not a material topic for the Transportation Division, we operate under a vision of sustainability where we address all potential negative and positive impacts on the environment caused by our operations. Transitioning to an operation that prevents, reduces and mitigates all potential environmental impacts is one of our key objectives.



Ferromex, Transportation Division, Mexico

6.3.7

Infrastructure Division

In the Infrastructure Division, we're committed to maintaining balance between our operations and the environment. To achieve this, we actively promote environmental education with workshops and trainings for our employees. We also install relevant signage and require strict compliance with national and international regulations.

Our range of operations presents significant challenges in terms of mitigating risks and impacts on biodiversity. We have, therefore, implemented various measures and taken specific actions as laid out in our Environmental Impact Assessments.

The Infrastructure Division does not have operations in protected areas or areas with high biodiversity value. However, our operations closest to these areas are:

- The La Caridad power plant in Sonora is located 12.5 miles (20 km) from the Sierra de Ajos, Buenos Aires and Purica protected natural areas.
- Our oil sector administrative offices in Ciudad del Carmen, Campeche, are located adjacent to the Laguna de Términos protected wildlife area.
- The Cerro del Cubilete protected natural area is located 18.5 miles (30 km) from the Salamanca-Leon Highway and the Silao Bypass, which do not invade or affect the protected areas.

6.3 Biodiversity

No damage was caused to ecosystems by the onshore or offshore operations of the Infrastructure Division in 2022. We complied with the conditions of our Environmental Impact Assessments, and we voluntarily reforested areas near our work sites.

Our Oil line of business renewed their respective International Oil Pollution Prevention certifications, which validate the integrity of the facilities to prevent damages such as leaks or wastewater contamination, and we also renewed our Clean Industry certification for 4 of our rigs and 1 onshore facility.

Habitats protected or restored
304-3

We reforested various areas in 2022:

- La Caridad Combined Cycle Power Plant, Nacozari, Sonora: We have been conducting conservation work since the start of this project, reforesting 9 areas with a total 1,491 individuals of 19 different species. During 2022, we voluntarily reforested 4.74 acres (1.92 hectares) with 765 individuals.
- El Retiro Wind Farm, Juchitan, Oaxaca: For 2022, we set as a project the recovery of forest conservation areas that are known nesting and resting sites for resident and migratory birds. With the assistance of the team from the educational garden, we reinforced fencing with cement posts and new wireframes, planting 192 individuals in 5 areas, for which we installed drip irrigation lines to ensure their survival.

- Fenicias Wind Farm, Nuevo Leon: We reforested 131 acres (53 hectares) in 2022 with sideoats grama, 247 acres (100 hectares) with 2 species of flora, and two slopes, all as part of our compliance with the Environmental Impact Assessment and the Technical Studies.
- Carmen Sector, Ciudad del Carmen, Campeche: Under the Environmental Impact Assessment for the maintenance of the Sonora Jack-Up Rig, we completed the Playa Norte Coastal Dune Soil Conservation and Reforestation Program in a migratory bird nesting area. We also planted 450 specimens of Coccoloba uvifera, also known as sea grape.
- Also for Carmen Sector, we voluntarily reforested a RAMSAR site along the San Jose River, to the east of the municipality of Carmen, Campeche. This activity was completed with the support of Universidad Autónoma del Carmen (UNACAR), planting a total 205 individuals of 4 native wetlands species.
- Inland Port, Guanajuato: Under the Environmental Impact Assessment for the Salamanca-Leon highway, we relocated 408 individuals of 12 different native species in 2022.

IUCN Red List species and national conservation list
species with habitats in areas affected by operations
GRI 304-4

Most of the species protected by the Infrastructure Division are classified as “low concern”, with only one species that could present a higher vulnerability.

Category	Mexico (NOM 059-SEMARNAT-2019)
Critically endangered	0
Endangered	0
Vulnerable	0
Nearly threatened	1
Low concern	33
Total	34

01

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Annexes

6.4 Waste

6.4.1
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Governance



6.4.3
Strategy and
Management



6.4.4
Metrics and
Targets



6.4.5
Next
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6.4.6
Infrastructure
Division



6.4.7
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Division



6.4 Mine waste

GRI 3-3

Given the nature of our operations, our mining activities generate the most waste. Mine waste is produced by the extraction and processing of ore and can potentially produce acid drainage and contain some metals in concentrations that would require special handling and disposal to prevent impacts on the environment. Our mining operations also tend to occupy significant tracts of land that need to be reintegrated into the natural landscape.

Responsible waste management is an essential part of our sustainable development strategy. Grupo México aligns with United Nations Sustainable Development Goal 12 to reduce the waste we produce and promote reuse and repurposing.

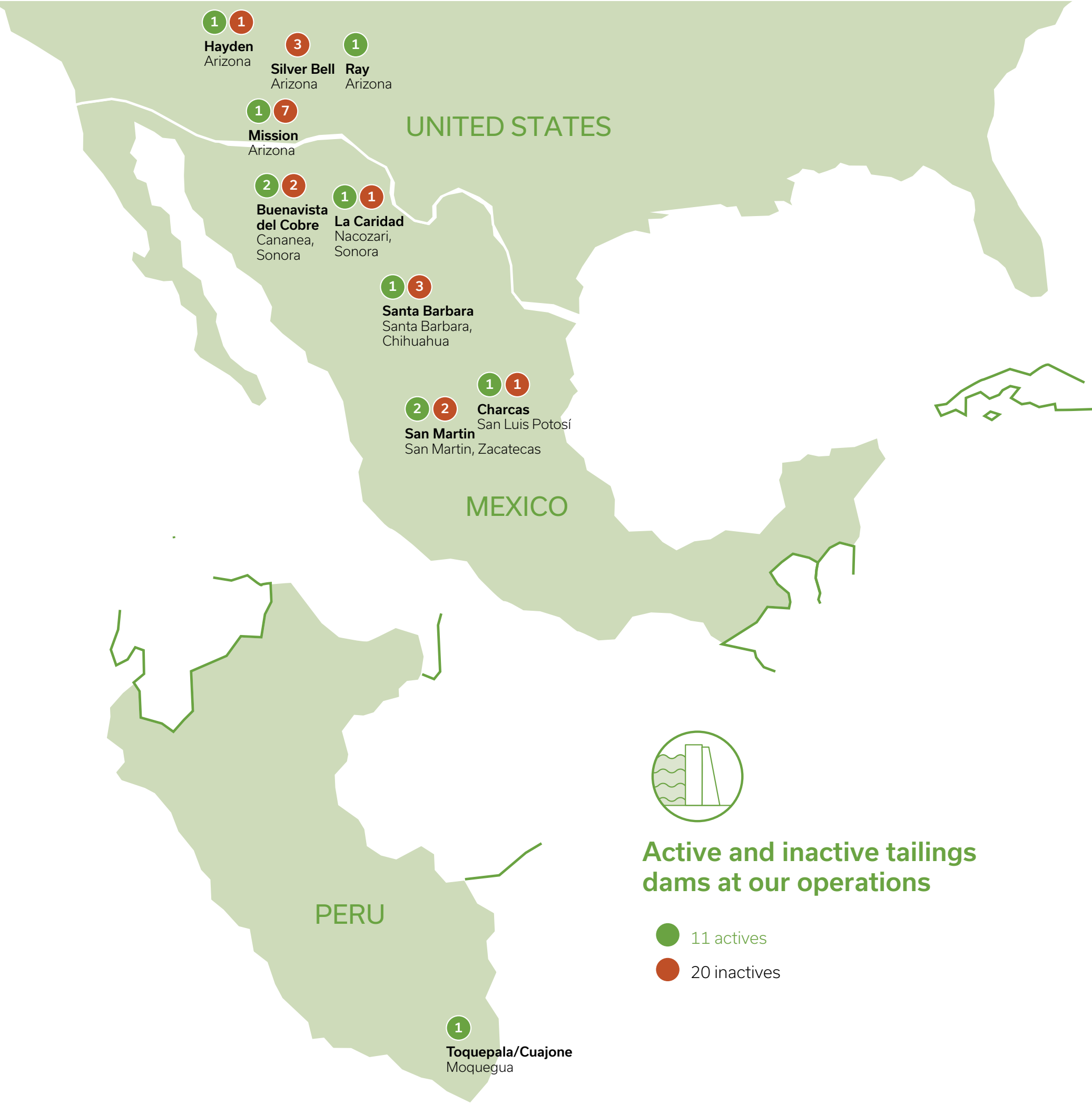
This requires our operations to take on this responsibility and give priority to safety at our mine waste impoundments and the systems that feed these facilities, throughout their lifecycle, including closure and post-closure. Sharing relevant information with the public and collaboration with the authorities and our neighbor communities also contribute to achieving this goal.

We apply the principles of waste management hierarchy and, wherever possible, circular economies by identifying opportunities that prevent waste, contribute to preserving the value of the materials and, where possible, encourage solutions to mitigate and control the risks associated with waste management. For more information on other waste, both hazardous and requiring special handling, consult the section [Annexes](#).

Lastly, we give special attention to the ongoing improvement of our actions for emergency preparedness and response, and also the safe closure of our mine waste facilities.

*For more information about our tailings dams, review the [Annexes](#).

Active and inactive* tailings dams at our operations



6.4 Waste

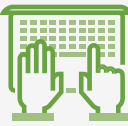
6.4.1
Highlights



We maintained the safety factors at all our active tailings impoundments within the acceptable values set by the International Commission on Large Dams (ICOLD) and the Canadian Dam Association (CDA). The Dam Safety Review (DSR) is a periodic and systematic review carried out by an independent qualified Review Engineer to evaluate the safety of a dam and potential failures.



We set up a Tailings System Review Committee, a high-level technical group that conducts independent technical reviews of the design, construction, operation, closure and management of our tailings systems, and forms part of the governance system, providing an additional level of review to develop a solid risk and quality management system for all stages of the tailings impoundment lifecycle, including closure.



We publish on our website relevant information on our active tailings impoundments, our commitments to safe management, and key figures.



Representing a US\$ 16.8 million investment, we have been working on a project to filter tailings at a test plant at our Quebrada Honda tailings impoundment in Peru. This is the largest capacity press filter in the market, with a design capacity of 10,000 t/d and 140 chambers that open and close via a hydraulic system.



Using mine waste to prepare artificial soils that will be used for our closure actions and site restoration (for more information, for more information, consult the section [Closure of Operations](#).



Tailings dam, La Caridad, Sonora, Mexico

6.4 Waste

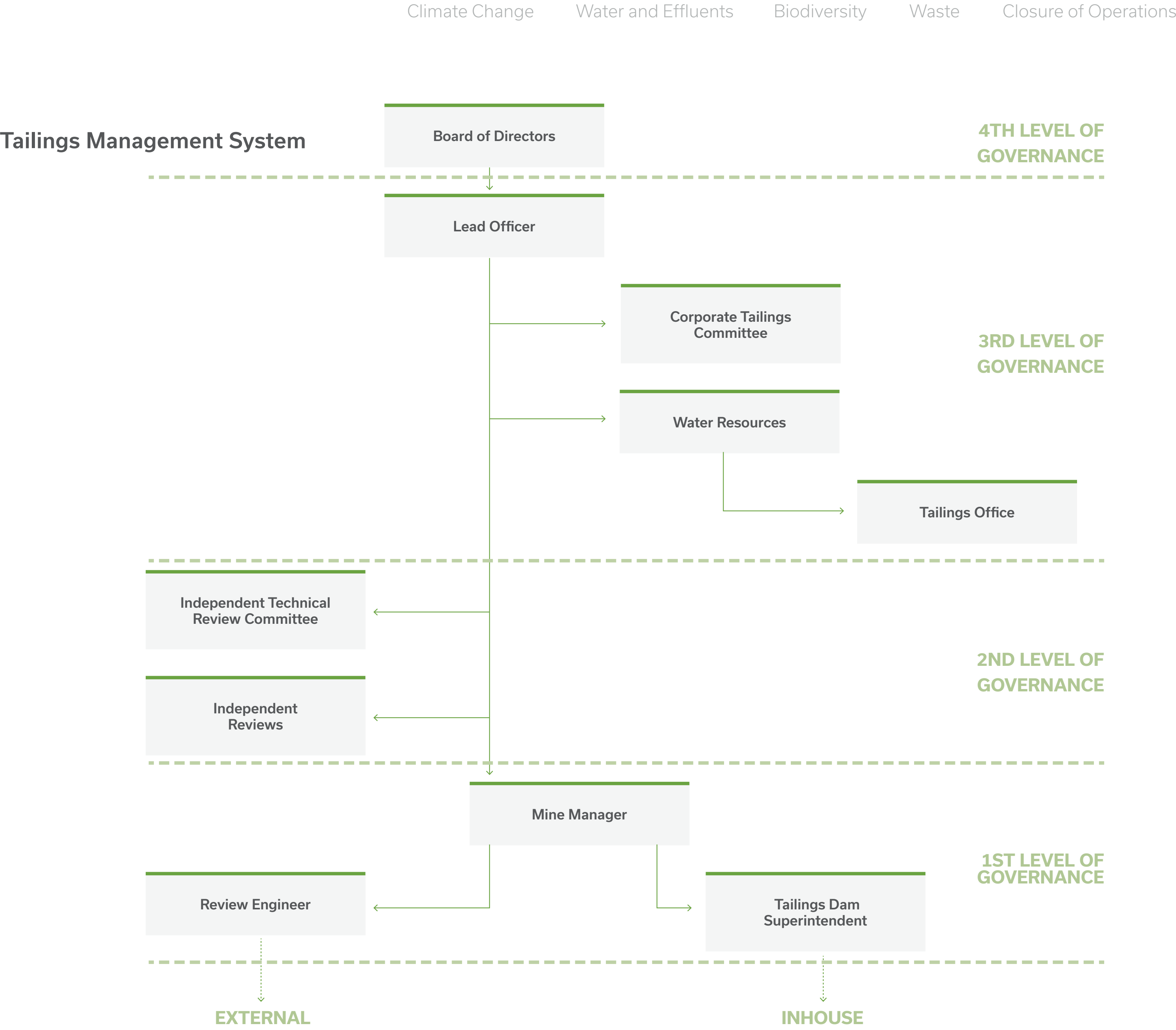
6.4.2 Governance

Grupo México has an organizational structure that supports efficient mine waste management at our operations.

Our Tailings System Review Committee was started in July 2022. This high-level technical group conducts independent technical reviews of the design, construction, operation, closure and management of our tailings systems, providing an additional level of review to develop a solid risk and quality management system for all stages of the tailings impoundment lifecycle, including closure and post-closure. The committee has its own charter to provide a framework for the operation of the Committee and define its procedures (for more information, consult [Policies and Procedures](#) in the section on Corporate Governance).

The Mining Division regularly reports its mine waste management to the Corporate Sustainable Development Department. Additionally, our environmental performance is reported quarterly to the Sustainable Development Committee, which includes senior company officers, such as the CEO and Executive Vice-President, and prepares strategies to achieve our defined goals.

The system is described following:



6.4 Waste

Roles and responsibilities of the different company levels

- Sustainable Development Committee**
Advises the Sustainability Department on relevant topics and reports to the Board of Directors.
- Upper management**
Advises and provides feedback to the operational areas involved in our tailings systems.
- Tailings System Review Committee**
Conducts independent reviews of the design, construction, operation, closure and management of our tailings systems, and reports to upper management.
- Water Resources Department**
Reports to upper management and supervises the operation of the tailings impoundments.
- Engineering and Construction Department**
Reports to upper management on the construction of tailings impoundments.
- Sustainability Department**
Reports to upper management and to the Sustainable Development Committee and receives their feedback. Coordinates actions with other areas of the company and follows up on the annual work plan.
- Operational sites**
Implement actions according to the annual work plan, including specific actions related to mine waste management.
- Environmental leaders at our operational sites**
Facilitate and follow up on actions with other operational areas. Regularly report to site management and to the Corporate Environmental Affairs Department via the Environmental Management Systems.



Mining Division collaborators, Mexico

Frequency of review and monitoring for the material topic

Our mine waste management actions are constantly reviewed and monitored through our environmental management systems, which define the roles and responsibilities of those involved, the frequency of their activities, verification and reporting.

A report is submitted to site management and to the Corporate Environmental Affairs Department each month. The Sustainable Development Committees review performance every three months.

The Tailings System Review Committee meets monthly to address relevant issues associated with tailings management.


6.4 Waste

6.4.3
Strategy and Management
GRI 301-1, 306-2, 306-3, G4MM3


The Grupo México’s [Environmental Policy](#) outlines our commitment to plan, design, construct and operate our facilities responsibly and with a preventive approach during their lifecycle, and also our mission to minimize our impact on the soil, and to reduce our waste, discharges and emissions.

Our [General Policy on Tailings Systems](#) has been in place since 2019 and promotes international best practices for: i) the design, construction, operation and monitoring of our tailings facilities; ii) the classification of the tailings facility through the evaluation of the conditions downstream; iii) the design, implementation and operation of monitoring systems to manage the risks associated with each phase of the tailings deposit lifecycle; iv) emergency response preparedness. This policy was recently updated to align with the ICMM Global Industry Standard on Tailings Management.


Our strategy seeks to:




Design and operate monitoring systems to manage the risks associated with each stage in the lifecycle of our mine waste management facilities, with particular focus on tailings.




Develop plans and design criteria for impoundments that would minimize the risks associated with each stage of the lifecycle, including closure and post-closure.




Develop an organizational culture of prevention that promotes learning, communication and early detection of problems associated with managing mine waste.




Define and implement levels of review as part of a solid risk and quality management system for all stages in the lifecycle of these facilities.




Ensure a safe and environmentally appropriate closure of active and inactive mine waste facilities, including the post-closure stage (for more information, consult the section on [Closure of Operations](#)).




Develop an organizational culture of prevention that promotes learning, communication and early detection of problems associated with managing mine waste.



Develop and maintain current a multidisciplinary knowledge base (social, engineering, environmental) to support our mine waste management throughout the lifecycle, including the closure and post-closure of our tailings impoundments.



Publicly report relevant aspects of our mine waste management and address concerns raised by our neighbor communities.



Maintain current our emergency response systems associated with managing mine waste.

6.4 Waste

Tailings facilities (with and without closure plans)



Environmental considerations during the lifecycle of our mine waste deposits.



6.4 Waste



Tailings dam, Quebrada Honda, Tacna, Peru

Process for identifying risks and opportunities

We identify the risks and impacts associated with mine waste management from before starting our projects through environmental impact assessments, which we update whenever there is a major change at an operation. These diagnostic tools inform different actions to prevent risks and potential impacts on people and ecosystems.

The risk assessment is updated whenever there is a change to the original scenario, to reflect the new circumstances of the mine waste facility, aligning with the recommendations of the ICMM (for more information, consult the section on [Sustainability Risk Management](#) in Our Approach).



All our tailings systems have undergone a safety review and are in compliance with the safety factors recognized by the International Commission on Large Dams (ICOLD) and the Canadian Dam Association (CDA). These periodic and systematic reviews are carried out by independent qualified Review Engineers to evaluate the safety of a dam and potential failures.

We need to predict the flow of the tailings contained in an impoundment that could be released and the route it would take according to the local hydrography in order to properly assess the risks of a potential failure at our tailings impoundments. These failure assessments are essential to identifying the potential effects of an accident on the human population and the ecosystems, to then define response actions. This also requires estimating the volume of tailings that could be released, the quantity of water in the tailings, the concentration of the tailings, a hydrographic survey, and defining the downstream flows from the impoundment.

Our mine waste management and disposal facilities are in a constant process of both construction and operation, and where possible, we take advantage of this to initiate closure activities in areas that are no longer affected by our operations (for more information, consult the section on [Concurrent Remediation](#) in Closure of Operations), which in addition to reducing risks, contributes to improving our environmental performance and to making closures more cost effective.

6.4 Waste

Description of the short, medium and long term risks and opportunities identified for the material topic

Safety is one of the fundamental pillars in our sustainable management at Grupo México. In support of this, our [General Policy on Tailings Systems](#) incorporates international best practices for handling and preventing accidents.

We have identified the significant direct and indirect impacts that our handling of mine waste at our operations may cause.

The environmental impacts we need to address include:



Modification of the geoforms resulting from our mining operations, which may cause collapses at surface and underground projects, erosion at the mine waste facilities, impacts on surface or underground drainage, and fragmentation of ecosystems, among others.









Acid drainage leaks, containing metals that could contaminate surface and underground waterbodies.



Impacts on the continuity and functioning of ecosystems because of changes to the soil and fragmented ecosystems.

The actions required to prevent these impacts and effects may, in turn, produce negative environmental impacts on the air, soil, water and ecosystems.

Description of the short, medium and long term risks and opportunities identified for the material topic	
Type of impact	Actions on potential opportunities
<div></div> <div>Legal and regulatory</div>	<ul style="list-style-type: none">• Full and timely compliance with all legal and regulatory obligations.• Training to ensure familiarity with obligations, how to meet compliance and the consequences of not doing so.
<div></div> <div>Health and safety</div>	<ul style="list-style-type: none">• Training to ensure familiarity with the measures to prevent accidents.• Monitoring and control of company safety regulations.• Monitoring contractor performance.
<div></div> <div>Environment</div>	<ul style="list-style-type: none">• Implementation of preventive measures to reduce impacts on air, soil, water and ecosystems.• Restoration of the natural landscape, taking into consideration the type of ecosystem and continuity of the ecosystem functions.• Reintroduction of native species or species with a protection classification.• Restoration of environmental services, like water capture.
<div></div> <div>Social</div>	<ul style="list-style-type: none">• Strengthen community relations.• Provide information to the neighbor communities.• Address the concerns of the communities.• Strengthen the community infrastructure.• Strengthen the social weave through sports and cultural activities.
<div></div> <div>Financial</div>	<ul style="list-style-type: none">• Undertake closure activities prior to the end of the life of our mine waste facilities.• Hold in reserve the resources necessary to ensure we meet our closure obligations and closure plan expectations.
<div></div> <div>Reputational</div>	<ul style="list-style-type: none">• Planning and follow-up for a safe closure, with value added.• Leave a positive legacy at the site.

6.4 Waste

Description of the real and potential, negative and positive impacts of the material topic, the associated risks and opportunities for the business, strategy and financial planning

Most of the waste the Mining Division produces is classified as high-volume mine waste, which is characterized as inert or posing a minimal risk to the environment. We generated 683,726,291 tons of mine waste in 2022, 71% of which was rock waste.

Mine waste is disposed of in situ at company sites, in facilities for inert material, slag heaps and tailings dams. These are infrastructure and engineering works that meet the design and operation requirements set by environmental regulations to impound waste in stable geological formations.

AMC Mine Waste															
	Total DIV MIN			SCC			Minera México (Mexico)			SPCC (Peru)			ASARCO (USA)		
	2022	2021	2020	2022	2021	2020	2022	2021	2020	2022	2021	2020	2022	2021	2020
Slag and other smelter and refinery waste	1,716,589	1,562,781	1,696,791	1,716,589	1,562,781	1,696,791	663,905	697,855	759,970	1,052,684	864,926	936,821	0	0	0
Rock waste or overburden	486,264,155	425,721,871	314,072,100	421,956,829	369,191,458	262,016,100	182,218,777	143,322,030	87,742,100	239,738,052	225,869,428	174,274,000	64,307,326	56,530,413	52,056,000
Tailings	198,375,051	204,163,195	202,971,891	174,278,833	179,797,989	178,462,310	110,248,245	109,970,100	110,021,747	64,030,588	69,827,889	68,440,563	24,096,218	24,365,206	24,509,581
Total mine waste (ton)	686,355,795	631,447,847	518,740,782	597,952,251	550,552,228	442,175,201	293,130,927	253,989,985	198,523,817	304,821,324	296,562,243	243,651,384	88,403,544	80,895,619	76,565,581

The disposal of this waste requires, in part, additional land that will be impacted by the change of land use.

Areas impacted by mine waste impoundments (tailings and overburden) 2022									
Operation	Buenavista del Cobre	La Caridad	Cuajone	Toquepala	Hyden	Silver Bell	Ray	Mission	Total
Tailings (hectares)	0	64.29	133.2		0	0	3.12	0	200.61
Overburden (hectares)	60.68	28.5336	37.6	35.8	0	0	0	0	162.61

Mine waste facilities may generate acid drainage as mine waste usually contains residual and variable quantities of reactive metal sulfides, which produce and release acid drainage when they oxidize.

This is a very important environmental and financial responsibility at our mining operations. Acid drainage may take years to develop and may remain for decades. We take measures to avoid and control acid drainage, from the start of the project, and which support prediction, evaluation and control. These measures are specific to each site, mainly because of their geologic, hydrologic, topographic and climate characteristics.

6.4 Waste



Tailings dam, Santa Barbara, Chihuahua, Mexico

Operating Unit:		Produced rock volume capable of creating ARD (t)
Mexico		
Buenavista de Cobre (BVC)		140,916,671.00
OMINA (La Caridad)		42,039,843.00
Peru		
Toquepala		100,379,235.00
Cuajone		94,777,706.00
Asarco		
Ray		11,039
Silver Bell		21,554
Total		378,146,048.00

We promote three types of measures at our mines to prevent and, where necessary, control potential acid drainage:

1. Control acid generating reactions (primary control, preventive), by eliminating components (sulfides, oxygen and water) or limiting the reaction speed by modifying the environment (pH, temperature and bacteria).
2. Control the migration of contaminants (secondary control, mitigation), mix of acid consuming rock with acid producing rock, by diverting water to prevent contact with mine waste, for example, or using covers to reduce infiltration (clay soil).
3. Collection and treatment (tertiary control, mitigation), through active and passive systems.

We have two projects in development for the reuse of smelter slag, one at Hayden, Arizona and the other at *Metalúrgica de Cobre* in Sonora, Mexico.

6.4 Waste

Measures to address and manage negative impacts

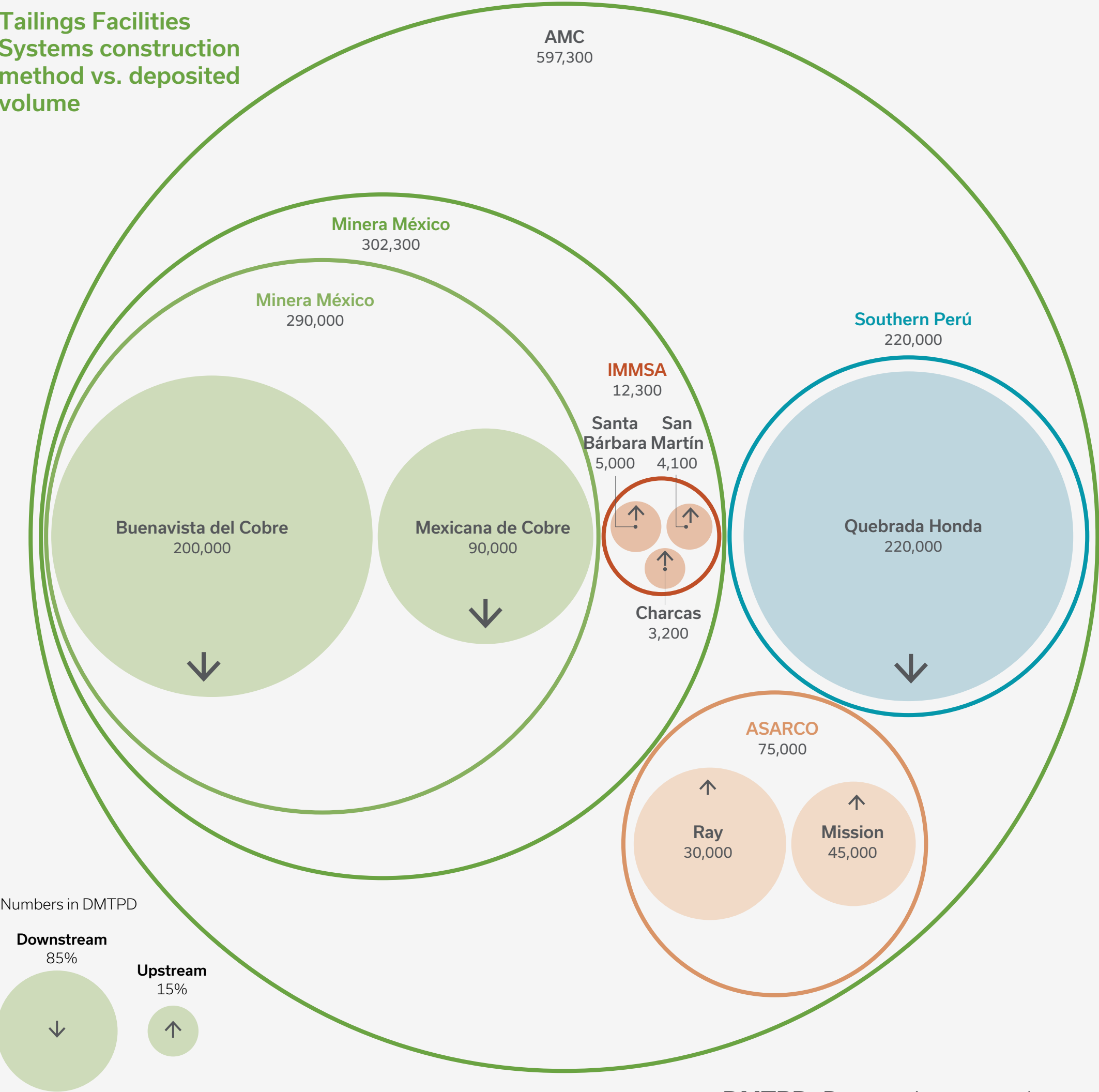
The sustainable management of our Mining Division waste focuses on four pillars:

- 1. Safe handling of tailings and waste,for which we are implementing the ICMG Global Industry Standard on Tailings Management, supported by our [General Tailings System Policy](#), and incorporating international best practices for: i) the design, construction, operation and monitoring of our tailings facilities; ii) the classification of the tailings facility through the evaluation of the conditions downstream; iii) the design, implementation and operation of monitoring systems to manage the risks associated with each stage of the tailings deposit lifecycle; iv) emergency response preparedness.

All active and inactive tailings facilities at our AMC operations will undergo an independent safety review in 2023.

In addition to these reviews, as shown in the chart below, we favor tailings dams built according to the “downstream” method, which is internationally recognized as being the safest.

Tailings Facilities Systems construction method vs. deposited volume



Numbers in DMTPD

Downstream
85%

Upstream
15%

DMTPD: Dry metric ton per day

6.4 Waste

2. Monitoring tailings dam curtains. We monitor the safety of our tailings dams through desk, lab and field studies and surveys. In the field, we monitor the curtains or containment structures using manually operated instruments like open piezometers, observation tubes, and reference markers for collimation and leveling. Acknowledging the importance of early detection, in real time, of stresses and deformations in the structures and the water pressure in the tailings pores and soils in reservoirs and curtains, our tailings dams are being equipped with instruments for automatic monitoring by telemetry with the installation of vibrating wire piezometers, inclinometers, extensometers, accelerograph stations, GNSS antennas for collimation and leveling by telemetry, and also prisms and automated stations. We will soon be incorporating InSAR technology (Interferometric synthetic aperture radar) to monitor curtain movements at our mine waste facilities.

We monitor weather in real time at our mines, through automated telemetric meteorological stations to inform our hydrologic surveys and our adaptations to climate change. We also measure volumes or levels and flows in sections or at hydraulic control points to log reclaimed water and the volumes stored in the tailings dams. Additionally, we

regularly conduct exploratory surveys of the tailings dam curtains and reservoirs taking disturbed and undisturbed soil and tailings samples, standard penetration assays, electric piezocone testing for pore pressure dissipation, permeability and piezometric levels, among others, to update the knowledge base for each tailings facility and review their structural and hydraulic geotechnical safety.

- 3.** Safe closure of mine waste facilities, ensuring their physical and chemical stability, post-closure monitoring, considering environmental and social aspects, to reintegrate the land and restore its ecosystems. We also ensure our actions are compatible with future use and align with the interests of our neighbor communities. Grupo México is committed to creating a sustainable social legacy for future generations and the environment, through our Community Development model (for more information, consult the section on [Closure of Operations](#)).
- 4.** Adherence to the hierarchy for managing non-mine waste: prevent, reduce, reuse, recycle, treat and dispose, in this order and as feasible. Our waste management strives to prevent the release of harmful substances into the environment and promotes reuse or recycling, according to the hierarchy for managing our non-mine waste.
- 5.** Our [ISO 14001](#) certified environmental management systems help us to identify, prevent and, as necessary, mitigate the impacts our mine waste and its management may cause to ecosystems and environmental quality.

6.4 Waste

Other specific actions (programs, initiatives, etc.)

- Acid draining diagnostic and design of long-term solutions for prevention and control. Acid drainage is primarily produced by the oxidation of metal sulfides and may be present for decades. Therefore, acid draining identification, prevention and control is of the utmost importance. Because of how acid drainage is produced, it is not a concern at all our mines, however it must be addressed properly to avoid unwanted impacts on water and the environment following the end of a mine’s useful life. We are currently designing indicative/predictive tests for our facilities in Sonora, Mexico, to better predict the quality and quantity of the acid drainage at this site.
- Slope safety and behavior diagnostic for open pits, waste rock piles and slag heaps. We use high-resolution satellite images to regularly monitor deformations through satellite interferometry to prevent unwanted events and facilitate the closure of operations. With this, we can assess the magnitude of potential morphological changes at our mine waste facilities, and estimate the direction, evolution and magnitude of observed movements with millimetric precision, and calibrate and/or validate the geotechnical models for these structures.
- Develop artificial soil production techniques. Creating a layer of fertile soil is a critical step in restoring the ecosystems in the areas potentially

impacted by our mining activities. Natural reforestation can be extremely difficult, particularly in desert or semi-desert zones, where most of our operations are located, which are characterized by shallow soil and being deficient in organic matter and nutrients. We are working with the Universidad Nacional Autónoma de México to build knowledge in the production of technosoils using mine waste. (For more information, consult the section on [Biodiversity](#).)

- Production of native plants for reforesting and restoration. We have 8 nurseries (7 in Mexico and one in Peru) with an annual production capacity of more than 5 million plants, most of which are native to the zones where we operate. Our Vegetation Restoration and Production Department uses these plants for projects both in and outside our properties. (For more information, consult the section on [Biodiversity](#).)
- Develop infrastructure to channel rainwater and prevent the erosion of mine waste facility structures.



Tailings dam, La Caridad, Sonora, Mexico

6.4 Waste

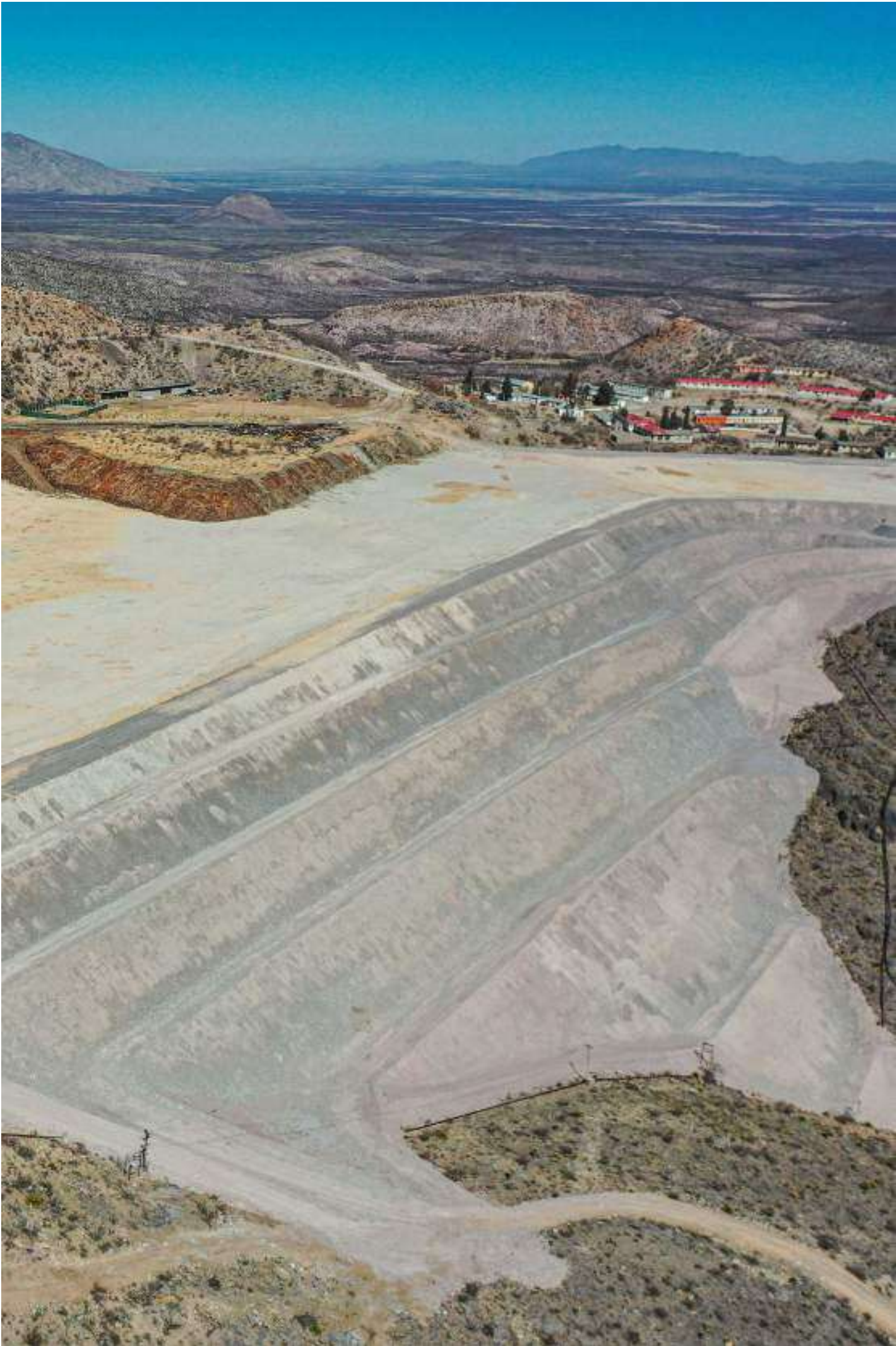
Description of the influence and involvement of stakeholders in the measures adopted

The regulatory authorities (Semarnat¹, SENACE², and the Arizona and Texas state governments in the United States) authorize our environmental impact assessments and approve measures to prevent, mitigate and offset environmental impacts throughout the lifecycle of these facilities, and particularly for the end of operational life stage. Of note is that the environmental impact authorization process in Mexico and Peru involves evaluations that include public consultations with persons holding interest in the project. These public consultations are held during the design and approval stage, and nonprofit and community stakeholders usually participate.

Supervisory authorities (OEFA³, Profepa⁴, Arizona and Texas state governments and the USEPA⁵ in the United States) monitor compliance with these obligations in terms of their effectiveness and timeliness.

The communities are involved in our waste management through our due diligence and community engagement mechanisms as part of our Community Development model: Participative Social Diagnostics, the Community Care Service, and the Community Committees. Through these tools, we identify the needs and concerns raised by the community regarding mine waste and we build solutions, together. (For more information, consult the section on [Local Communities](#)).





¹ Ministry of the Environment and Natural Resources (Mexico)
² National Environmental Certification Service for Sustainable Investments (Peru)
³ Environmental Assessment and Inspection Agency (Peru)
⁴ Environmental Protection Agency (Mexico)
⁵ United States Environmental Protection Agency (US)



Tailings dam, Santa Eulalia, Chihuahua, Mexico

6.4.4 Metrics and Targets

Our Mining Division uses performance and management indicators, which Grupo México continually reviews and monitors. These indicators include the following components:

-  Acceptable safety factors* for our active tailings dams.
-  Percentage of compliance with the [General Tailings Systems Policy](#) and the ICMM Global Tailings Management Standard.
-  Percentage of significant risks that have functional critical controls in place at all sites.
-  Percentage of remediation at inactive tailings dams.

6.4 Waste

Goals, targets and status

Our mine waste management of tailings dams, overburden and smelter slag aims to guarantee the safety of both people and ecosystems.



6.4 Waste

6.4.5

Next Steps

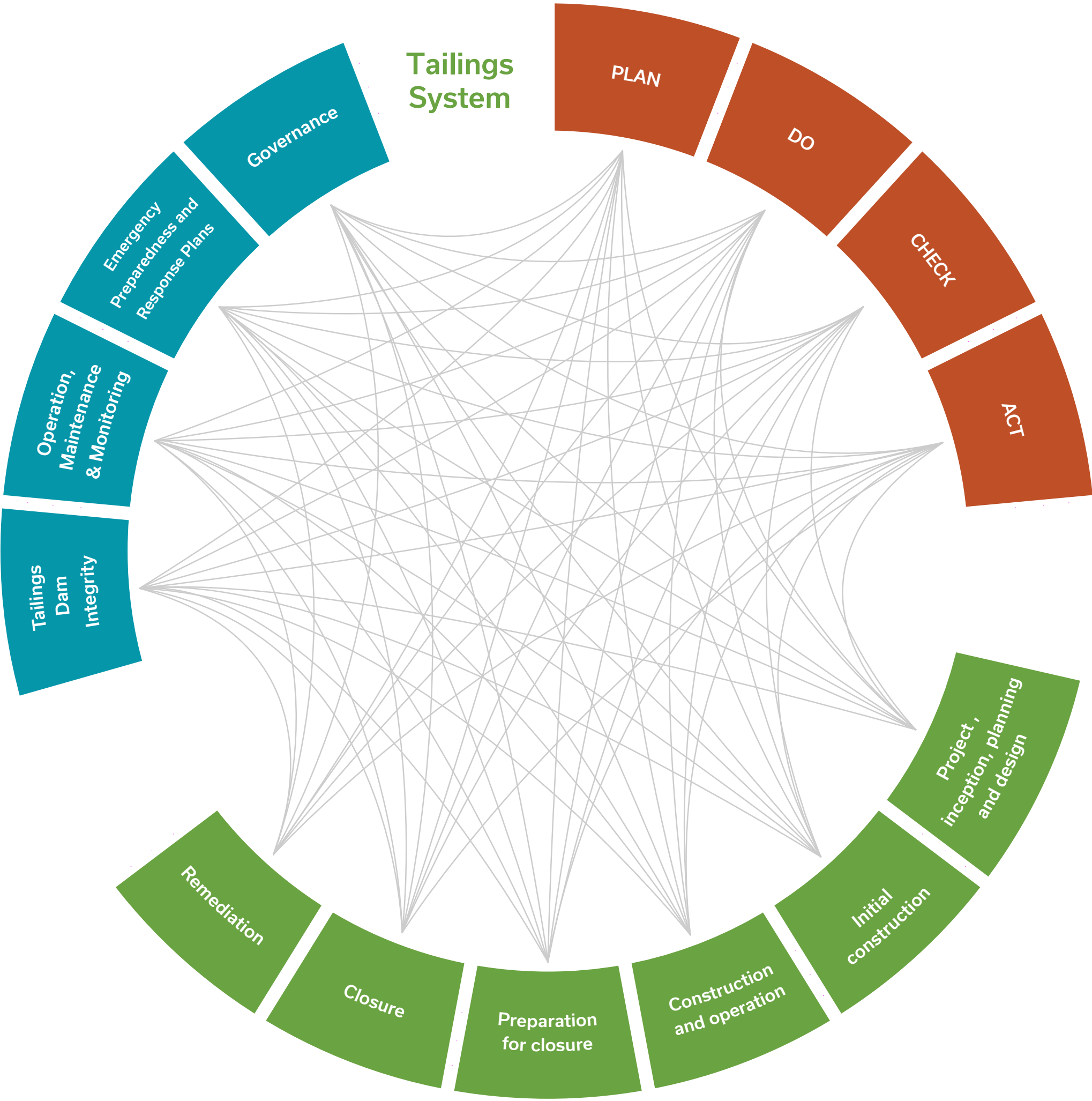
Effectiveness of the processes, measures and goals to manage the material topic, and also lessons learned and how these have been incorporated

We strive to ensure our efforts to contribute to the safe and responsible closure of our operations are effective, and we adjust these efforts as needed to achieve our goal. In addition to evaluating our performance through our closure of operations indicators, our actions are verified with the certification of our environmental management systems and the independent assurance of our Sustainable Development Report. These verification systems identify opportunities for improvement, which we incorporate into our environmental management systems through change management processes.

We know that to achieve our goals effectively, we need to make decisions supported by the best information available, based on science, and considering not only the environmental, but also the social, cultural and economic aspects. It is therefore important to involve the authorities, the academic and scientific communities, our local communities, and the civil society in our actions. We are clear that building alliances is essential in achieving our goals.

Our Independent Technical Review Committee for tailings systems will:

- Review the design, construction, risk management, governance and any other related risk that could affect our tailings dams, ensuring the right people with the right experience are involved
- Review the curtain load capacity criteria and review the risk mitigation measures adopted to reduce these risks according to ALARP (As low as Reasonably Practical) criteria.
- Review alternative tailings dam designs.
- Prepare design basis reports (DBR).
- Determine the frequency of dam safety reviews.

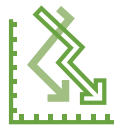


6.4 Waste

Regarding acid drainage prevention, we are planning to:



Wherever possible, use already impacted land for mine waste impoundments.



Wherever possible, use waste rock to reduce the potential for acid drainage.



Maintain our acid drainage capturing and pumping systems to reincorporate this into our leaching heaps.



Continue our projects to reduce the exposure of potential acid drainage producing waste to conditions that enable this process.



Reincorporate mine land into the natural landscape at the end of its useful life (for more information, consult the section on [Closure of Operations](#)).



Combined Cycle Plant, La Caridad, Sonora, Mexico

6.4.6
Infrastructure Division
GRI 3-3

We are committed to rigorous waste separation and to promoting reuse, wherever possible, and also responsible usage of resources and energy.

Comprehensive waste management at our operations has been strengthened through environmental awareness strategies, interinstitutional efforts, and recycling campaigns. For example, the slurry produced by the wastewater treatment plant at our *La Caridad* Combined Cycle Power Plant is passed through a composting process to enrich the natural soil with organic matter.

Organizational management
3-3

Our comprehensive waste management is based on four pillars:



Compliance with environmental policies



Spill prevention and control



Environmental culture and training



Maximize use of materials and waste, aligned with the principles of circular economy

6.4 Waste

Evaluation mechanisms
GRI 3-3

We use monitoring and evaluation mechanisms for our processes to ensure our handling of hazardous and non-hazardous waste is in compliance with regulations at all our worksites. The principal tools we use are:

- Monthly reports of indicators to comply with the Annual Operations Certificate for each worksite.
- Random inspections conducted by the Internal Audit department each year at both the corporate and worksite levels.

Our Infrastructure Division holds as a priority returning waste to the productive chain, avoiding impoundment wherever possible. Our actions in this regard include:

- Separating and classifying waste where it is produced, to prevent contamination at the origin.
- Assess waste requiring special handling to identify potential for recycling and/or reuse, as permitted by regulations.
- Promote sustainable purchasing to prevent producing large volumes of waste.
- Conduct PET collection campaigns, for subsequent donation.
- Hold talks and campaigns on caring for the environment.

Waste diverted from disposal and waste directed to disposal
306-4 and 306-5

The waste produced in 2022 was managed comprehensively, in compliance with regulations, promoting reuse, separation, recycling, and any other method to avoid impoundment.

As a result, 96% of our hazardous waste was reincorporated into other industrial chains, providing a raw material for other users.

Hazardous waste by disposal method	2022	2021	2020
Waste sent for recovery	TON	TON	TON
Reuse	0.36	0.090	0
Recycling	393.08	438.44	254.49
Total	393.44	438.53	254.49
Waste sent for final disposal			
Incineration with energy recovery	164.49	116.12	114.1
Incineration without energy recovery	0	1.18	4.0
Impoundment in controlled facilities	19.40	36.39	57.61
Other	0	57.29	0
Total	183.89	210.98	175.71
Total	576.83	649.51	428.53

Most of our non-hazardous waste (also known as requiring special handling) is produced by water treatment at the *La Caridad* Combined Cycle Power Plant.

Non-hazardous waste by disposal method	2022	2021	2020
Waste sent for recovery	TON	TON	TON
Reuse	31.16	88.22	0
Recycling	1,052.36	366.99	265.1
Composting	5,612.16	6,430.96	5,777
Total	6695.68	6,886.17	6,042.14
Waste sent for final disposal		TON	TON
Impoundment at controlled facilities	36.42	41.12	100.31
Total	36.42	41.12	100.3
Total	6,732.1	6,927.29	6,142.45

6.4 Waste

Significant spills
GRI 306-3

Our personnel receive ongoing training on topics related to environmental care, handling hazardous substances, and disposal of hazardous and non-hazardous waste. We also monitor our worksites constantly to identify any irregularity and avoid potential impacts on the environment.

There were no spills in 2022 involving chemical substances or hazardous waste at any of our worksites, therefore we were not subject to any technical or legal reporting requirement with the Mexican authorities.

Materials used by weight or volume
301-1

In the Infrastructure Division depend on different inputs to guarantee the operation of our six lines of business. The most used materials in the Infrastructure Division are summarized following:

	Materials	2022	Unit
1	Construction materials	115,450,793	kg
2	Fuels	9,701,436.15	L
3	Chemicals	4,256,392.47	lts
4	Clean water	3,195,075.92	m3
5	Steel	1,093,822.94	kg
6	Oil	563,223.78	L

*Significant spill greater than 1m³.

6.4.7
Transportation Division
GRI 3-3

The Transportation Division manages waste according to the regulations in each region where we operate, with particular attention to handling, storage and shipment for final disposal. We have developed alliances and hold shared responsibility with third parties authorized to transport waste for the different productive chains.

The hazardous waste we produce comes from our repair shops where we perform maintenance, fueling and repairs for our railcars and locomotives.

All our repair shops maintain a monthly log of the type and quantity of hazardous waste produced, and also track the final disposal of this waste. This service is provided by a third party accredited by the environmental authorities, for the transportation and final disposal of this waste.



Maintenance of units in Transportation Division, Mexico

6.4 Waste

Waste Management



Hazardous waste produced and its disposal

GRI 306-3, 306-5


Country	Ton	Use
Mexico	1,203.32	Final disposal
USA	1,233.22	Final disposal
GMXT	2,436.54	

Spills

GRI 306-3


Our Transportation Division has a response protocol in place to address spills of materials, which, depending on the type of event, involves different mechanisms for prevention and coordinated action with different levels of the organization and governments in the regions where we operate.

Our emergency response protocol for spills is structured as follows:




Prevention

The prevention activities the Safety Committee will take are defined.



Response

The Contingency Plan is activated on the occurrence of a chemical 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 that may be required.

There were no significant spill events or fines in 2022.

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6.5

Closure of Operations

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Division



6.5 Closure of Operations

At Grupo México, we aspire to leave a positive legacy for future generations. This is embodied by our commitment to leaving a positive net social and environmental impact, and also to preventing, mitigating and offsetting the potential impacts that our activities may cause throughout the lifecycle of our projects, acknowledging that the use of the land will often change when our operations complete their useful life.

The closure of sites used for industrial activities is one of our most important challenges, particularly for our mining-metallurgical sites, because the process is carried out over a long time and the potential impacts may manifest even after the operations have ended, if not foreseen and avoidance measures implemented correctly in advance.

The transition to the closure of a mine operation is a long-term process and the effective planning and implementation depends on the magnitude and types of impacts on the environment, the communities and the company. In particular, we strive to avoid residual impacts and restore the land impacted by our operations to its original conditions and reassess the soil, to either restore ecosystem functions and services, or to generate value added using the land for a different purpose in benefit of the communities that accompany us during the life of our mines. The closure of operations process also seeks to reduce as much as possible the potentially negative social and economic impacts that the closure may cause if not carried out carefully.

Climate Change

Water and Effluents

Biodiversity

Waste

Closure of Operations

6.5.1 Highlights

Mine closure is a comprehensive and dynamic process and to carry it out responsibly, we must consider all the stakeholders involved: authorities, communities, trade unions, suppliers, contractors, employees and their families, nonprofits, and even the ecosystems. Because of its nature, the facilities associated with a mining operation change over time and as a result, the considerations for its safe closure. For these two reasons, the closure of a mine is intimately related to its operations and all stages its lifecycle.

Furthermore, for us, closure is much more than a technical-administrative formality, it is a process for a specific event in the lifecycle of a mine.

The Grupo México Mining Division works with relevant stakeholders to define and review the minimum expectations for the closure of operations in the regulatory, environmental, social and labor aspects. A responsible and responsive closure process will produce better, more effective and cost efficient results, by addressing risks early, building a gradual social transition, and restoring the land we occupy.




Ex Copper Plant confinement, San Luis Potosí, Mexico

6.5 Closure of Operations


Our actions and achievements in 2022 include:




Preparing a Closure of Operations Protocol for our mines, which outlines the commitments, directives, responsibilities and monitoring mechanisms for these activities.




Updating updated our inventory of mining-metallurgical facilities to estimate the effort and resources required to meet our obligations, but primarily to guarantee the safe and timely closure of our operations.




Updating the estimate closure costs for all our operations to more accurately calculate the financial reserve to guarantee not only compliance with obligations, but also [best practices for this activity](#).




Working on the diagnostics for our sites to update our closure plans considering current best practices.




Updating the closure plans for our underground mines (San Martin, Charcas and Santa Barbara).




Updating the closure plans for our Amarillo (Texas) and Hayden (Arizona) plants.




Developing knowledge in the production of technosoils and testing their use in Sonora, Mexico and at Aznalcollar, Spain.



Developing and maintaining our production capacity of native plants for reforestation and ecosystem restoration, ensuring needs of concurrent and definitive closures are covered. For more information, consult the section on [Biodiversity](#).



Exploring alternatives for economic diversification in the communities where we operate. For more information, consult the section on [Local Communities](#).



Creating a Corporate Ecosystem Restoration Office. For more information, consult the section on [Biodiversity](#).

6.5 Closure of Operations

6.5.2 Governance

Grupo México has an organizational structure¹ that supports managing the closure of our operations efficiently.

The Mining Division regularly reports its closure of operations management to the Corporate Sustainable Development Department. Additionally, our environmental performance is reported quarterly to the Sustainable Development Committee, which includes senior company officers, such as the CEO and Executive Vice-President, and prepares strategies to achieve our defined goals.

Roles and responsibilities of the different company levels regarding the closure of operations

- **Board of Directors.** Advises and provides feedback to the Board of Directors regarding decision-making involving the closure of operations.
- **Executive Leadership.** Advises and provides feedback to the Board of Directors regarding decision-making involving the closure of operations.
- **Sustainable Development Committee.** SSupervises actions related to the closure of operations reported to the Sustainability Department.
- **Sustainability Department.** Reports to upper management and to the Sustainable Development Committee and receives their feedback. Coordinates actions with other areas of the company and follows up on the annual work plan for closure of operations.
- **Operational sites.** Implement actions according to the annual work plan, including specific actions related to our existing closure plans.
- **Corporate Environmental Affairs and Community Development departments.** Implement strategies and receive closure of operations information from the sites.
- **Environmental and community development leaders at our operational sites.** Facilitate and follow up on actions with other operational areas. Regularly report to site management and to the Corporate Environmental Affairs Department via the Environmental Management Systems.

Roles and responsibilities of the different company levels regarding the closure of operations

Board of Directors



Executive Leadership



Sustainable Development Committee



Sustainability Department



Operational sites



Site environmental leader

¹ For more information on the roles and responsibilities of each level of our governance structure, consult the section on [Corporate Governance](#).

6.5 Closure of Operations



Collaborators in Fenicias wind farm, Nuevo León, Mexico

Frequency of review and monitoring for the material topic

Our closure of operations actions are constantly reviewed and monitored through our environmental management systems (mostly [ISO 14001](#) certified), which defines the roles and responsibilities of those involved, the frequency of their activities, verification and reporting.

A report is submitted to site management and to the Corporate Environmental Affairs Department each month.

Our closure plans undergo a detailed review, assessment and update every five years or whenever there are significant changes to the facilities at our operational sites. Our closure obligations as set by the environmental authorities are also updated in such event.

The updated plans for our operations in Peru and the United States are submitted to the corresponding authorities for approval, while the environmental protection authorities in each country are responsible for following up with reviews and inspections.

6.5 Closure of Operations

6.5.3
Strategy and Management

The Grupo México [Environmental Policy](#), outlines our commitment to plan, design, construct and operate our facilities responsibly and with a preventive approach throughout their lifecycle, and also to minimize our impact on the soil, and to reduce our waste, discharges and emissions.

Our [Community Development Policy](#) addresses the social aspects of our operations and commits us to ongoing listening and dialogue with the communities through different communication mechanisms, to providing timely and relevant information for our stakeholders, and to fostering the economic and social development of the communities where we operate.

We also have a Closure of Operations Protocol in place, which commits us to ensuring our decision-making processes throughout the lifecycle of our operations give consideration to the closure process, taking into account our employees, trade unions, our social and environmental values, our obligations, safety, risks to humans and to the ecosystems, costs, and the expectations of our stakeholders.



Ite wetlands, Peru

> The Protocol sets the minimum requirements for the planning, management and implementation of the closure of operations throughout the lifecycle, and also the responsibilities of each operational area and company site. The specific roles and responsibilities are outlined in our environmental management systems.

The Protocol requires us to have and maintain current a social baseline obtained from official sources of information that includes social indicators and preliminary studies to then define the initial reference parameters for comparison against subsequent measures during the lifecycle of our projects, including their closure. We also use social inequality and human development indexes to measure our company efforts at the local level.

Our operations are required to have a plan that outlines the bases for the effective planning and implementation of the closure of operations. These plans are updated every five years and include pre-closure activities.

6.5 Closure of Operations

Additionally, we hold in reserve the necessary resources to guarantee a successful closure, including supporting the diversification of the local economy for the social closure. The calculation for this reserve ensures the costs associated with the restoration, repair, offsetting or remediation of the environment on the closure of a site are covered, at present value, and also their disclosure. We have a specific procedure for the calculation in each country where we operate, which is primarily based on the obligations set by law.

Our strategy considers the guidance of the International Council on Mining and Metals (ICMM) and the Economic Commission for Latin America and the Caribbean (ECLAC) to identify the potential impacts our operations may cause and also the areas of opportunity to mitigate and extend the positive impacts, from the community perspective. Our goal is to maintain and, wherever possible, improve the wellbeing of the communities near our operations, and also preserve the integrity of the ecosystems at our sites, focusing on:

- Integrating closure planning into the lifecycle of the operation.
- Building and continually updating a knowledge base (with physical, biophysical and socioeconomic information) for our sites to support informed decision-making during the lifecycle.

- Preparing and updating every 2 years social diagnostics for each operation, defining the areas of influence, stakeholder engagement program, stakeholder mapping, social baseline, capacity building for the local community, and social management strategies.
- Identifying the risks inherent to the closure process.
- Reviewing and regularly updating the risks and opportunities analysis to address these in a timely manner.
- Identifying the actions for each stage of a site's lifecycle and defining a plan for the execution of these actions.
- Mitigating the environmental and social impacts our closure (and pre-closure) activities may cause.
- Defining performance criteria to demonstrate the success of our closure actions.
- Estimating, evaluating, and updating the closure costs for each operation to guarantee the reserve holds the necessary resources. This estimate includes post-closure costs.

This is an iterative and ongoing process that we conduct with stakeholders prior to the closure of operations, wherever possible, to reduce the risks and the potential impacts in a timely manner, enriching our closure plans, and engaging the parties involved in the execution of these plans. Building close relationships and trust with the communities and other stakeholders is essential for us.

Process for identifying risks and opportunities

We identify the risks and impacts associated with the closure of operations from before starting our projects through environmental impact assessments, which we update whenever there is a major change at an operation. These diagnostic tools inform different actions to prevent risks and potential impacts on people and ecosystems.

The risk assessment is updated whenever there is a change to the original scenario, to reflect the new circumstances of the mine.

The risk assessment process involves:

1. Identify the risks that may require changes to the closure of the operation.
2. Assess the risks based on their impact and probability of occurrence.
3. Identify prevention and mitigation measures, accordingly (mitigation reduces the probability of occurrence).
4. Reassess the risks post-mitigation.
5. Update the estimate closure costs.
6. Carry out the activities outlined in the closure plan.

Our sites involve different types of facilities that have a variable useful life, therefore there are opportunities to partially begin specific closure activities prior to the definitive closure of the project. This translates into a gradual closure process, with the consequent advantages of reducing risks and costs.

6.5 Closure of Operations



Tailings dam, La Caridad, Sonora, Mexico

Description of the short, medium and long term risks and opportunities identified for the material topic

We have identified the significant direct and indirect impacts that the closure of our mining operations may cause. Our closure activities address not only environmental, but also social and economic aspects. For each operation, we have also identified opportunities to prevent and reduce these impacts as much as possible.

The environmental impacts we need to address regarding the closure of a mine include:






- Modification of the geoforms resulting from our mining operations, which may cause collapses at surface and underground projects, erosion at our mine waste facilities, impacts on surface and underground drainage, and fragmentation of ecosystems, among others.
- Acid drainage leaks, containing metals that could contaminate surface and underground waterbodies.
- Impacts on the continuity and functioning of ecosystems because of their fragmentation.



For more information, consult the section on [Biodiversity](#).

The works required to avoid these potential impacts, and also the dismantling, demolition, soil remediation and recovery of the natural landscape, may, in turn, produce other effects on the air, soil, water and ecosystems.

The impacts on health and safety may include injuries and even loss of life when safety standards are not followed, or as a result of some of the potential environmental impacts described above, like slope collapses in pits, galleries or mine waste facilities.

Socially, the impacts on the communities within the area of influence of an operation may involve employment, cultural heritage, and economic activity. Ensuring a next step for the workers employed at the site and supporting alternative economic activities for these employees and local residents is essential for the closure plan to be successful.

Description of the short, medium and long term risks and opportunities identified for the material topic	
Type of impact	Actions on potential opportunities
<div></div> <div>Legal and regulatory</div>	<ul style="list-style-type: none">• Full and timely compliance with all legal and regulatory obligations• Training to ensure familiarity with obligations, how to meet compliance and the consequences of not doing so
<div></div> <div>Health and safety</div>	<ul style="list-style-type: none">• Training to ensure familiarity with the measures to prevent accidents and occupational diseases.• Monitoring and control of company safety regulations and related legislation• Monitoring contractor performance
<div></div> <div>Environment</div>	<ul style="list-style-type: none">• Implementation of preventive measures to reduce impacts on air, soil, water and ecosystems.• Restoration of the natural landscape, taking into consideration the type of ecosystem and continuity of the ecosystem functions• Reintroduction of native species or species with a protection classification• Restoration of environmental services, like water capture
<div></div> <div>Social</div>	<ul style="list-style-type: none">• Support the diversification of economic activities in the area of influence of the operation.• Promote the integration of company employees into the economic activities of the community.• Foster micro and small businesses, certifications with technical institutes, job fairs.• Generate value added during the transition in the change of land use• Strengthen the community infrastructure• Community Committee to follow up on closure plan programs• Strengthen the social weave through sports and cultural activities
<div></div> <div>Financial</div>	<ul style="list-style-type: none">• Undertake closure activities prior to the end of the operational life of our sites.• Hold in reserve the resources necessary to ensure we meet our closure obligations and closure plan expectations.

Description of the short, medium and long term risks identified for the material topic	
Type of impact	Aprovechamiento de oportunidades potenciales
 Reputational	<ul style="list-style-type: none">• Planning and follow-up for a safe closure, with value added.• Leave a positive legacy at the site.
 Labor	<ul style="list-style-type: none">• Build an inventory of talent.• Relations and collaboration with chambers and similar industries.• Accompaniment of eligible personnel in processing their retirement.• Outplacement training.

Measures to address and manage negative impacts

Our [ISO 14001](#), certified environmental management systems help us to identify, prevent, and where necessary, mitigate the impacts our operations may cause during the various stages of a site lifecycle.

- **Knowledge base.** We maintain and update a knowledge base built, first, from the diagnostics prepared for the environmental impact assessments, which identify the potential impacts and corresponding prevention, mitigation and offsetting measures. To this, we add the social baseline, inventory of sites, the estimate of reserves required to meet our closure obligations, estimate of the geologically active material, and the classification of the tailings at each site, and also information on successful closure practices, including our experiences in the development of technosoils, reforestation and restoration, and remediation, early

and definitive, waste impoundment, monitoring environmental parameters and soil assessments, accordingly.

- [Restoration of ecosystems](#)
- [Concurrent remediation](#)
- Productive and sustainable projects
- Community Care Service and orientation regarding the closure
- Financial guarantees

We are working on updating the social closure plans for each of our operations. These plans outline the strategies for involving stakeholders, setting the social baseline, and also impact assessments, risk management, programs that promote economic development through workshops on finance-related topics, opportunities for relocation, job fairs, and courses on entrepreneurship, all especially designed for our employees and contractors.

During the operation, and with particular emphasis on the closure and post-closure, we seek out opportunities to leave a sustainable legacy for our communities, with skills development programs, productive projects and linkages to foster employment opportunities. We support the local economy by focusing on diversifying the productive activities, with programs like [Forjando Futuro](#), taking into the local industries and sustainability.

We also consider supports for programs like our Community Development Centers in the communities where we operate, for a certain time post-closure.

6.5 Closure of Operations

Case study:
Responsible Closure of the Tailings Dam at Mission, Arizona

Our 20,000 acre (8,094 hectare) Mission open pit mine complex formally began operations in 1961. A portion of this land is situated on property owned by the Tohono O’odham Nation, a consideration in the closure plan for this site since 1959, when this indigenous community leased 5,125 acres (2,074 hectares) to ASARCO. The case of the Mission closure is significant because here we were able to address both environmental and social considerations together, which has aided in returning the land to the ecosystem in a way that is both compatible and in harmony with the interests of the local communities.

The Mission Mining and Responsible Closure Plan included overburden, erosion prevention controls, and operation and maintenance mechanisms for the closure of spaces (i.e., tailings dams, rock and waste storage facilities, and also active and inactive pits). The priority has been to convert the areas impacted into self-sustainable ecosystems that are safe, stable, functional and appropriate for this area, resulting in the landowners creating the Sonora Desert Native Plant Community.

RESULTS

- In collaboration with the San Xavier District of the Tohono O’odham Nation, we completed the remediation in 2022 with the responsible closure of three tailings dams and two waste and rock storage areas, totaling 3,000 acres (1,214 hectares) remediated during the first phase.
- We covered the land, planted native plants, and carried out engineering works to guarantee their survival.
- We contributed a wide variety of native plants, grasses, trees, bushes and wildflowers adapted to the arid climate to plant nearly 6,000 acres (2,400 hectares) of the Sonora desert in Arizona.

LESSONS LEARNED AND NEXT STEPS

- We know that the future of the industry depends on how we conduct our operations in the present.
- We meet our needs of today, mindful of future generations.
- Our efforts in sustainable development focus on caring for both the environment and the wellbeing of our communities while our sites are in operation and after their closure.



Mission, Arizona, United States

6.5 Closure of Operations

Other specific actions

- Acid drainage diagnostic and design of long-term solutions for prevention and control. Acid drainage is primarily produced by the oxidation of metal sulfides and may be present for decades. Therefore, acid draining identification, prevention and control is of the utmost importance. Because of how acid drainage is produced, it is not a concern at all our mines, however it must be addressed properly to avoid unwanted impacts on water and the environment following the end of a mine’s useful life. We are currently designing indicative/predictive tests for our facilities in Sonora, Mexico, to better predict the quality and quantity of the acid drainage at this site. With this information, we will be better positioned to face this potential environmental impact at our operations.
- Slope safety and behavior diagnostic for open pits, tailings dams, waste rock piles and slag heaps. To prevent unwanted events and facilitate the closure of operations, at Buenavista del Cobre, for example, we use cutting-edge technology to monitor and control deformations through satellite interferometry at open pits, waste rock piles and dam curtains. With this, we can assess the magnitude of potential deformations at these mine waste facilities, and estimate the direction, evolution and magnitude of observed movements with millimetric precision, and calibrate and/or validate the geotechnical models for these structures.

- Develop artificial soil production techniques. Creating a layer of fertile soil is a critical step in restoring the ecosystems in the areas impacted by our mining activities. Natural reforestation can be extremely difficult, particularly in desert or semi-desert zones, where most of our operations are located, which are characterized by shallow soil and being deficient in organic matter and nutrients.
- Production of native plants for reforesting and restoration. We have eight nurseries (seven in Mexico and one in Peru) with an annual production capacity of more than 5 million plants, most of which are native to the zones where we operate. Our Vegetation Restoration and Production Department uses these plants for projects both in and outside our properties. For more information, consult the section on [Biodiversity](#).
- Develop infrastructure to channel rainwater and prevent the erosion of mine waste facility structures.
- Boost economic development from the operational stage through to the closure, focusing on capacity building, job conversion or retraining, and strengthening the local institutions.
- Maintain close communication and engagement with stakeholders to follow up on agreements.

Description of the influence and involvement of stakeholders in the measures adopted

The regulatory authorities (Semarnat², SENACE³, and the Arizona and Texas state governments in the United States) authorize our environmental impact assessment and approve measures to prevent, mitigate and offset environmental impacts throughout the lifecycle of each facility, and particularly for the closure or end of operational life stage. Of note is that the environmental impact authorization process in Mexico and Peru involves evaluations that include public consultations with persons holding interest in the project. These public consultations are held during the design and approval stage, and nonprofit and community stakeholders usually participate.

Supervisory authorities (OEFA⁴, Profepa⁵, Arizona and Texas state governments and the USEPA⁶ in the United States) monitor compliance with these obligations in terms of their effectiveness and timeliness.

There is also some participation by financial authorities in terms of guaranteeing the existence of sufficient financial reserves to meet our closure obligations for all Grupo México operations.

In the academic community, we are working with the *Universidad Nacional Autónoma de México* to develop knowledge in the production of technosoils using mine waste.

² Ministry of the Environment and Natural Resources (Mexico)
³ National Environmental Certification Service for Sustainable Investments (Peru)
⁴ Environmental Assessment and Inspection Agency (Peru)
⁵ Environmental Protection Agency (Mexico)
⁶ United States Environmental Protection Agency (US)

6.5 Closure of Operations



Ex Copper Plant confinement, San Luis Potosí, Mexico

6.5.4
Metrics and Targets

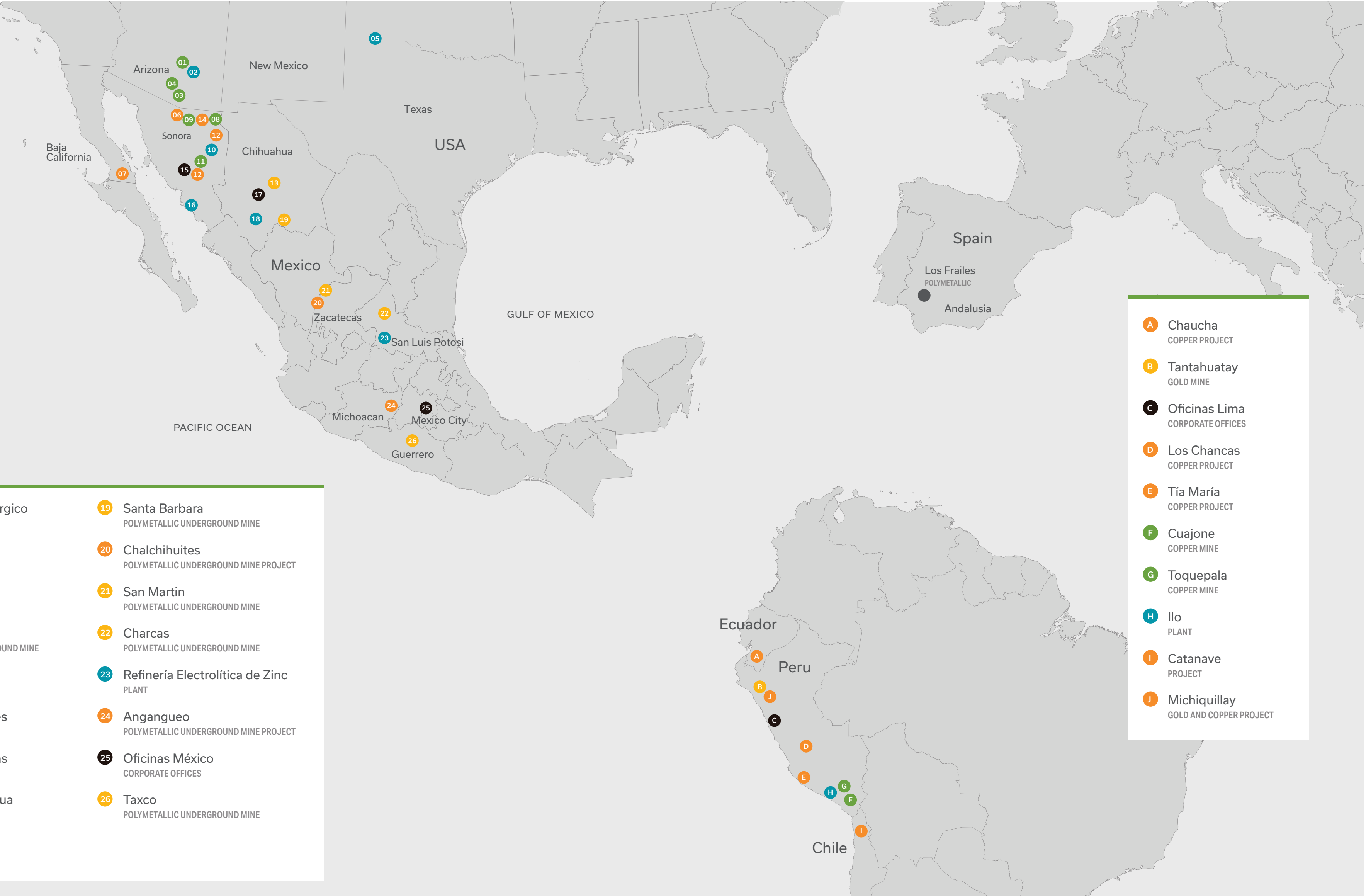
We aim is to ensure the long-term physical, chemical and biological stability of sites that are no longer in operation, while also preventing potential risks to personal health and safety, and to the environment.

Our plans include a hierarchy for the closure of a site, which focuses first on restoring the original conditions of the site, then developing alternative uses for the land to produce greater benefits than had been in place prior to the mining operation, and lastly, reconstruct the site to an acceptable level according to regulations.

6.5 Closure of Operations

Mining

01 Ray MINE & PLANT	10 Complejo Metalúrgico PLANT	19 Santa Barbara POLYMETALLIC UNDERGROUND MINE
02 Hayden PLANT	11 La Caridad MINE	20 Chalchihuites POLYMETALLIC UNDERGROUND MINE PROJECT
03 Mission MINE	12 Pilares COPPER PROJECT	21 San Martin POLYMETALLIC UNDERGROUND MINE
04 Silver Bell MINE & PLANT	13 Santa Eulalia POLYMETALLIC UNDERGROUND MINE	22 Charcas POLYMETALLIC UNDERGROUND MINE
05 Amarillo PLANT	14 Buenavista Zinc ZINC PROJECT	23 Refinería Electrolítica de Zinc PLANT
06 El Pilar COPPER PROJECT & PLANT	15 Hermosillo Offices CORPORATE OFFICES	24 Angangueo POLYMETALLIC UNDERGROUND MINE PROJECT
07 El Arco COPPER PROJECT	16 Terminal Guaymas PLANT	25 Oficinas México CORPORATE OFFICES
08 Planta de Cal MINE	17 Oficinas Chihuahua CORPORATE OFFICES	26 Taxco POLYMETALLIC UNDERGROUND MINE
09 Buenavista del Cobre MINE	18 Taller Central PLANT	



- A Chaucha
COPPER PROJECT
- B Tantahuatay
GOLD MINE
- C Oficinas Lima
CORPORATE OFFICES
- D Los Chancas
COPPER PROJECT
- E Tía María
COPPER PROJECT
- F Cuajone
COPPER MINE
- G Toquepala
COPPER MINE
- H Ilo
PLANT
- I Catanave
PROJECT
- J Michiquillay
GOLD AND COPPER PROJECT




Performance indicators

We use the following metrics to measure our performance:

- Percentage of sites with closure plans
- Restoration and remediation actions
 - [Area restored / area impacted](#)

Performance indicators			
Unit	2022	2021	2020
% sites with closure plans	40%	25%	15%
Area restored / area impacted	1,772 / 231	252 / 204	333 / 550
Deforestation rate	7.7	1.24	0.60

2025 Mining Division closure of operations goals and targets

Goal 2025	Target 2025
 Ensure the safe, effective and efficient closure of our facilities.	Have environmental and social closure plans in place for all our operations.
 Reduce our closure responsibilities each year with pre-closure actions.	Restore a larger area than that impacted each year.
 Guarantee the necessary resources for the safe and successful closure of all our operations.	Update the estimate closure costs for each of our operations.



Tailings dam, Santa Eulalia, Chihuahua, Mexico

6.5 Closure of Operations


6.5.5
Next Steps


Effectiveness of the processes, measures and goals to manage the material topic, and also lessons learned and how these have been incorporated


We strive to ensure our efforts to contribute to the safe and responsible closure of our operations are effective, and we adjust these efforts as needed to achieve our goal. In addition to evaluating our performance through our closure of operations indicators, our actions are verified with the certification of our environmental management systems and the independent assurance of our Sustainable Development Report. These verification systems identify opportunities for improvement, which we incorporate into our environmental management systems through change management processes.


We know that to achieve our goals effectively, we need to make decisions supported by the best information available, based on science, and considering not only the environmental, but also the social, cultural and economic aspects. It is therefore important to involve the authorities, the academic and scientific communities, our local communities, and the civil society in our actions. We are clear that building alliances is essential in achieving our goals.


Our efforts in 2023 are aimed at:

- 

Identifying gaps in information that should be covered with the knowledge base for each operation.
- 

Continuing to update our closure plans.
- 

Preparing the remaining closure plans.
- 

Continuing to explore alternatives to protect the resources of the communities and develop economic alternatives in relation to the closure of operations.
- 

Developing improved capacities for the close of operations (soils, plant production, labs, studies, surveys, training, governance).

6.5.6
Infrastructure Division

Our Energy subsidiary has closure plans for:

- *La Caridad* Combined Cycle Power Plant in Nacozari, Sonora
- *Fenicias* Wind Farm in Nuevo Leon
- *El Retiro* Wind Farm in Oaxaca

These plans outline measures for the facility dismantling and abandonment stage, including environmental actions to prevent and mitigate potential impacts, and also for the site restoration and remediation stages.

In the social aspect, as with the Mining Division, our Community Development Model is implemented throughout the useful life of our projects, including dismantling the infrastructure, closure and post-closure.

Our presence, through the Community Development Centers and during the construction and operation stages, prepares the nearby communities to build their productive and human development skills so that, as the closure approaches, they have alternatives for when the project ends.

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Section	# GRI	Disclosure	Global Compact Principles	External Assurance	Section	Additional Notes
GRI 2: GENERAL DISCLOSURES 2021						
The organization and its reporting practices	2-1	Organizational details			About Grupo México	
	2-2	Entities included in the organization's sustainability reporting			About Grupo México	
	2-3	Reporting period, frequency and point of contact			About this Report	
	2-4	Restatements of information			About this Report	
	2-5	External assurance			About this Report	
Activities and workers	2-6	Activities, value chain and other business relationships			About Grupo México Supply Chain Management	
	2-7	Employees			About Grupo México Our People	
	2-8	Workers who are not employees			Our People	
Governance	2-9	Governance structure and composition			Corporate Governance	
	2-10	Nomination and selection of the highest governance body				
	2-11	Chair of the highest governance body				
	2-12	Role of the highest governance body in overseeing the management of impacts	Principles 7, 8			
	2-13	Delegation of responsibility for managing impacts				
	2-14	Role of the highest governance body in sustainability reporting				
	2-15	Conflicts of interest				
	2-16	Communication of critical concerns	Principles 1, 2, 10			
	2-17	Collective knowledge of the highest governance body				
	2-18	Evaluation of the performance of the highest governance body				
	2-19	Remuneration policies				
	2-20	Process to determine remuneration				
Strategy, policies and practices	2-21	Annual total compensation ratio				
	2-22	Statement on sustainable development strategy			Letter from the Chairman of the Board	
	2-23	Policy commitments			Human Rights	

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Material Topic	Standard	# GRI	Disclosure	Global Compact Principles	External Assurance	Section
Water and Effluents	3: Material Topics 2021	3-3	Management of material topics	Principles 7, 8, 9		Water and Effluents
	303: Water and Effluents 2018	303-1	Interactions with water as a shared resource	Principles 7, 8, 9	✓	
		303-2	Management of water discharge-related impacts	Principles 7, 8, 10	✓	
		303-3	Water withdrawal	Principle 8	✓	
		303-4	Water discharge	Principles 8, 9	✓	
			Water consumption	Principle 8	✓	
Biodiversity	3: Material Topics 2021	303-5	Management of material topics			Biodiversity
	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	Principle 8	✓	
		304-2	Significant impacts of activities, products and services on biodiversity	Principle 8	✓	
		304-3	Habitats protected or restored		✓	
		304-4	IUCN Red List species and national conservation list species with habitats in areas affected by operations			
	Mining and Metals Sector Supplement	G4-MM2	The number and percentage of total sites that require biodiversity management plans, and the number of those sites with plans in place	Principle 8		
Climate Change	3: Material Topics 2021	3-3	Management of material topics	Principle 7, 8		Climate Change
	201: Economic performance 2016	201-2	Financial implications and other risks and opportunities due to climate change	Principles 7, 8, 9		
	302: Energy 2016	302-1	Energy consumption within the organization	Principle 8	✓	
		302-2	Energy consumption outside the organization		✓	
		302-3	Energy intensity	Principle 8		
		302-4	Reduction of energy consumption			
		302-5	Reductions in energy requirements of products and services			
	305: Emissions 2016	305-1	Direct (Scope 1) GHG emissions	Principles 8, 9	✓	
		305-2	Energy indirect (Scope 2) GHG emissions	Principles 8, 9	✓	

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Climate Change	305: Emissions 2016	305-3	Other indirect (Scope 3) GHG emissions		✓	Climate Change
		305-4	GHG emissions intensity	Principles 8, 9		
		305-5	Reduction of GHG emissions	Principles 8, 9	✓	
		305-7	Nitrogen oxides (NOx), sulfur oxides (Sox) and other significant air emissions	Principles 8, 9	✓	
Local Communities	3: Material Topics 2021	3-3	Management of material topics	Principles 1, 2		Local Communities
	203: Indirect economic impacts 2016	203-1	Infrastructure investments and services supported	Principle 6		
		203-2	Significant indirect economic impacts			
	413: Local communities 2016	413-1	Operations with local community engagement, impact assessments and development programs		✓	
		413-2	Operations with significant actual and potential negative impacts on local communities	Principles 2, 8		
	Mining and Metals Sector Supplement	G4-MM6	Number and description of significant disputes relating to land use, customary rights of local communities and indigenous peoples	Principles 1, 2	✓	
		G4-MM7	The extent to which grievance mechanisms were used to resolve disputes relating to land use, customary rights of local communities and indigenous peoples, and the outcomes	Principles 1, 2		
Human Rights	3: Material Topics 2021	3-3	Management of material topics	Principles 1, 2, 6		Human Rights
	406: No-discrimination 2016	406-1	Incidents of discrimination and corrective actions taken	Principles 1, 2, 6		
	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			
	408: Child labor 2016	408-1	Operations and suppliers at significant risk for incidents of child labor			
	409: Forced or compulsory labor 2016	409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor			
	410: Security practices 2016	410-1	Security personnel trained in human rights policies and procedures	Principles 1, 2		
	412: Human rights assessment 2016	412-1	Operations that have been subject to human rights reviews or impact assessments	Principles 1, 2		

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Human Rights	412: Human rights assessment 2016	412-2	Employee training on human rights policies and procedures	Principles 1, 2, 6	✓	Human Rights
		412-3	Significant investment agreements and contracts that include human rights clauses or that underwent human rights screening	Principles 1, 2		
Business Ethics	3: Material Topics 2021	3-3	Management of material topics			Business Ethics
	205: Anti-corruption 2016	205-1	Operations assessed for risks related to corruption	Principle 10		
		205-2	Communication and training about anti-corruption policies and procedures	Principle 10	✓	
		205-3	Confirmed incidents of corruption and actions taken	Principle 10	✓	
	206: Anti-competitive behavior 2016	206-1	Legal actions for anti-competitive behavior, anti-trust and monopolistic practices	Principle 10		
	307: Environmental compliance 2016	307-1	Non-compliance with environmental laws and regulations	Principle 8		
	415: Public policy 2016	415-1	Political contributions			
	419: Socioeconomic compliance 2016	419-1	Non-compliance with laws and regulations in the social and economic area			
Economic Performance	201: Economic performance 2016	201-1	Direct economic value generated and distributed			Shared Value
	204: Procurement practices 2016	204-1	Proportion of spending on local suppliers	Principle 1	✓	
Our People	3: Material Topics 2021	3-3	Management of material topics	Principles 1, 2, 3, 4, 5, 6		Our People
	202: Market presence 2016	202-1	Ratios of standard entry-level wage by gender compared to local minimum wage	Principle 6		
	401: Employment: 2016	401-1	New employee hires and employee turnover	Principle 6	✓	
		401-2	Benefits provided to full-time employees that are not provided to temporary or part-time employees	Principle 6		
		401-3	Parental leave	Principle 6		
	402: Labor/Management relations 2016	402-1	Minimum notice periods regarding operational changes			
	404: Training and education 2016	404 -1	Average hours of training per year per employee		✓	
		404 -2	Program for upgrading employee skills and transition assistance programs			

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Material Topic	Standard	# GRI	Disclosure	Global Compact Principles	External Assurance	Section
Our People	404: Training and education 2016	404-3	Percentage of employees receiving regular performance and career development reviews			Our People
	405: Diversity and equal opportunity 2016	405-1	Diversity of governance bodies and employees	Principle 1, 6		
		405-2	Ratio of basic salary and remuneration of women to men		✓	
	Mining and Metals Sector Supplement	G4-MM4	Number of strikes and lockouts exceeding one week's duration, by country	Principle 3	✓	
Indigenous Peoples	3: Material Topics 2021	3-3	Management of material topics			Indigenous Peoples
	411: Rights of indigenous peoples 2016	411-1	Incidents of violations involving rights of indigenous peoples	Principles 1, 2		
	Mining and Metals Sector Supplement	G4-MM5	Total number of operations taking place in or adjacent to indigenous peoples' territories, and number and percentage of operations or sites where there are formal agreements with indigenous peoples' communities	Principles 1, 2	✓	
Waste	3: Material Topics 2021	3-3	Management of material topics			Waste
	301: Materials 2016	301-1	Materials used by weight or volume		✓	
	306: Waste 2020	306-3	Waste by type and disposal method	Principle 8	✓	
		306-4	Waste diverted from disposal	Principle 8	✓	
		306-5	Waste directed to disposal	Principle 8	✓	
	Mining and Metals Sector Supplement	G4-MM3	Total amounts of overburden, rock, tailings and sludges, and their associated risks	Principle 8	✓	
Occupational Health and Safety	3: Material Topics 2021	3-3	Management of material topics	Principle 1		Workplace Health and Safety
	403: Occupational Health and Safety 2018	403-1	Occupational health and safety management system	Principles 1, 2		
		403-2	Hazard identification, risk assessment and incident investigation	Principles 1, 2	✓	
		403-3	Occupational health services	Principles 1, 2		
		403-4	Worker participation, consultation and communication on occupational health and safety	Principles 1, 2, 3, 6	✓	
		403-5	Worker training on occupational health and safety	Principles 1, 2, 6		
		403-6	Promotion of worker health	Principles 1, 2		
		403-8	Workers covered by an occupational health and safety management system	Principles 1, 2		
		403-9	Work-related injuries	Principles 1, 2	✓	
		403-10	Work-related ill health	Principles 1, 2	✓	

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SASB Standard: Metals and Mining 2018						
SASB Topic	Code	Disclosure	Unit of Measure	Omissions and/or Restatements	Section	Additional Notes
Accounting parameters						
Water management	EM-MM-140a.1	Total fresh water withdrawn	Thousand cubic meters (m³)	We do not have this information for ASARCO.	Water and Effluents	110,321 total fresh water withdrawn.
		Total fresh water consumed	Thousand cubic meters (m³)	We do not have this information for ASARCO.	Water and Effluents	415,503 total fresh water consumed.
		Percentage of water withdrawn in high or extremely high water stress zones (thousand cubic meters (m³)	Percentage (%)	We report the value for high water stress zones (mega liters). We do not have this information for ASARCO.	Water and Effluents	Water withdrawn in water stress zones, as percentage of total withdrawn for 2022: Mexico (Minera México): 49.3% Peru (SPCC): 49.6% Mining Division (without ASARCO) (Southern Copper Corporation): 49.5%.
	EM-MM-140a.2	Number of incidents of non-compliance associated with water quality permits, standards and regulations	Number		Water and Effluents	No incidents in 2022.
Waste and hazardous materials managements	EM-MM-150a.1	Total weight of hazardous waste recycled	Metric tons (t), percentage (%)		Waste	For our response to this content, we consider the following waste processing: reuse, recycling, composting, restoration, sale and others equivalent to recovery) (not incineration, see details in the report). We report the % recovery by country/subsidiary.
	EM-MM-150a.2	Total weight of mineral processing waste, percentage recycled	Metric tons (t), percentage (%)		Water and Effluents	We produce three main types of mine waste for which we report their disposal: - Slag and other smelter and refinery waste; third parties recover metals from waste with high iron content (as is the case at Metalúrgica del Cobre). - Rock waste or overburden; sometimes used on site, when there is no potential for acid drainage, to build or reinforce slopes, to cover tailings dams, and as fill for underground mines. We do not calculate the % used. It is expensive to transport this waste; therefore, it tends to be used on site. - Tailings; impounded in dams, 0% reuse.

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SASB Standard: Metals and Mining 2018						
SASB Topic	Code	Disclosure	Unit of Measure	Omissions and/or Restatements	Section	Additional Notes
Accounting parameters						
Waste and hazardous materials managements	EM-MM-150a.3	Number of tailings impoundments, detailed by MSHA hazard potential	Number			<p>We have 31 tailings impoundments, detailed as follows:</p> <p>16 in Mexico, 14 in the United States, and 1 in Peru. Of these, 11 are active and 20 inactive.</p> <p>The classification of these facilities varies by country and according to applicable regulations. The impoundments in Mexico have been classified as low risk, according to Official Mexican Standard NOM-141-SEMARNAT-2003.</p> <p>The impoundments in Peru and the United States have been classified according to Canadian Dam Association (CDA) Guidelines: Low: 8; High threat: 1; Very high threat: 1; Extreme threat: 5</p>
Biodiversity impacts	EM-MM-160a.1	Description of environmental management policies and practices for active sites	n/a		Biodiversity	<p>The Grupo México Environmental Policy outlines our commitment to achieving a positive net impact on biodiversity. To achieve this goal, we are collaborating with different stakeholders, primarily the environmental authorities and academic and research institutions, to develop and maintain important projects that go beyond our regulatory obligations.</p> <p>The biodiversity management protocol for our Mining Division (https://...) is mandatory for all our mine operations as of 2023 and establishes roles and responsibilities - including for our suppliers -, and commits us to:</p> <ul style="list-style-type: none">- Contribute to biodiversity conservation through the protection and recovery of species, their habitats and ecosystems.- Not explore or develop new projects at declared Natural World Heritage sites.- Design and manage new operations and changes to existing operations in a way that is compatible with the value for which they were designated protected areas and high biodiversity areas.- Achieve a zero net deforestation and a positive net impact on the biodiversity.- Assess and prevent significant risks and impacts to the biodiversity and ecosystem services at our operations.- Timely compliance with all applicable legal obligations associated with biodiversity management, during the construction, operation and closure of sites, and also in the post-closure stage- Ongoing improvement of our performance in biodiversity management.- Involve the local communities, environmental authorities, research institutions, nonprofits and our business partners in our biodiversity actions, where appropriate and insofar as possible.- Promote the adoption of best practices in biodiversity management with our business partners.
	EM-MM-160a.1	Percentage of mine sites where acid rock drainage is predicted	Percentage (%)			100% of our mines in Peru, Mexico and the United States. We are reporting this information, for the first time, in our 2022 Sustainable Development Report.

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SASB Topic	Code	Disclosure	Unit of Measure	Omissions and/or Restatements	Section	Additional Notes
Accounting parameters						
Biodiversity impacts	EM-MM-160a.1	Percentage of mine sites where acid rock drainage is actively mitigated	Percentage (%)			100% of our mines in Peru, Mexico and the United States. We use impoundment and repumping systems.
	EM-MM-160a.2	Percentage of mine sites where acid rock drainage is under treatment or remediation	Percentage (%)			100% of our mines in Peru, Mexico and the United States. We use impoundment and repumping systems.
	EM-MM-160a.3	Percentage of (1) proved and (2) probable reserves in or near sites with protected conservation status or endangered species habitat	Percentage (%)			
Security, human rights and rights of indigenous peoples	EM-MM-210a.1	Percentage of (1) proved and (2) probable reserves in or near areas of conflict	Percentage (%)	Not applicable		The company does not operate in areas of conflict, as defined by the SASB.
	EM-MM-210a.2	Percentage of (1) proved and (2) probable reserves in or near indigenous land	Percentage (%)	0.40%	Indigenous Peoples	
	EM-MM-210a.3	Discussion of engagement processes and due diligence practices with respect to human rights, indigenous rights and operation in areas of conflict	n/a		Human Rights Indigenous Peoples	The company does not operate in areas of conflict, as defined by the SASB. For a detailed description of the engagement process and due diligence practices with respect to human rights and indigenous rights, see Management Approach in chapters Human Rights and Indigenous Peoples .
Community relations	EM-MM-210b.1	Discussion of process to manage risks and opportunities associated with community rights and interests	n/a		Human Rights Local Communitities	
	EM-MM-210b.2	Number and duration of non-technical delays (days, hours)	Number, days	54		1Q2022 Financial Report

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SASB Standard: Metals and Mining 2018						
SASB Topic	Code	Disclosure	Unit of Measure	Omissions and/or Restatements	Section	Additional Notes
Accounting parameters						
Labor relations	EM-MM-310a.1	Percentage of active workforce covered under collective bargaining agreements, by national and non-national employees.	Percentage (%)		Our People	All union employees in each country are nationals.
	EM-MM-310a.2	Number and duration of strikes (days, hours)	Number, days			There were no strikes in 2022 involving more than 1,000 employees.
Workplace health and safety	EM-MM-320a.1	MSHA all-incidence rate	Various		Workplace Health and Safety	MSHA - 1.31 (company employees only). The rate is calculated per 200,000 man hours.
	EM-MM-320a.1	Fatality rate	Various		Workplace Health and Safety	Fatality rate - 0.01 (employees), 0.013 (contractors). The rate is calculated per 200,000 man hours.
	EM-MM-320a.1	Near miss frequency rate (NMFR)	Various			NMFR - 5.99 (employees), 1.42 (contractors). The rate is calculated per 200,000 man hours.
	EM-MM-320a.1	Average hours of health, safety and emergency response training for (a) full-time employees and (b) contract employees	Hours		Workplace Health and Safety	Average training hours for company employees - 7.75, contractors - 3.36 (calculated as 116, 579 training hours divided by 15,047 employees, and 38,746 training hours divided by 11,535 contractors)
Business ethics and transparency	EM-MM-510a.1	Description of the management system for prevention of corruption and bribery throughout the value chain	n/a		Business Ethics	
	EM-MM-510a.2	Production in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index	Metric tons (t) saleable			The Mining Division has operations in Mexico, the United States and Peru only, with projects in Chile, Argentina, Ecuador and Spain. None of these countries are ranked in the 20 lowest positions in Transparency International's Corruption Perception Index.

Mining Division Production

SASB EM-MM-000.A

The production of the Mining Division is summarized below, with a report for each mineral detailing the amounts produced of the different products, by subsidiary and region: Minera México (Mexico), SPCC (Peru) and ASARCO (USA).

The consolidated production of the Mining Division is also disclosed in our annual financial report.

Copper (tons)												
Distribution	2020				2021				2022			
	Scheduled: 10 May 2023 11:45 to 14:00, CST	SPCC	ASARCO	Total	Minera México	SPCC	ASARCO	Total	Minera México	SPCC	ASARCO	Total
Concentrates (TMS)	1,917,206	1,563,437	365,419	3,846,062	1,954,090	1,455,742	364,151	3,773,983	1,903,432	1,251,406	318,493	3,473,331
Content in Concentrates	453,545	397,779	95,762	947,086	452,612	372,614	94,207	919,433	456,824	312,852	79,623	849,298
SX/EW Content (Cathode)	124,038	26,010	31,796	181,844	107,220	25,754	32,400	165,374	116,612	26,380	32,524	175,516
Total Mine Content	577,583	423,789	127,558	1,128,930	559,832	398,368	126,607	1,084,807	573,436	339,232	112,147	1,024,814
Smelter Content	372,816	362,655	119	735,590	374,571	321,964	138	696,673				-
Refinery	240,407	286,275	85	526,767	242,667	260,177	-	502,844	245,672	289,387	-	535,059
Refined (Refineries + SX/EW)	364,445	312,285	31,796	708,526	349,887	285,931	32,400	668,218	362,284	315,767	32,524	710,575
Refined, converted into Rod	129,441	-	69,988	199,429	150,124	-		150,124	156,448	-	47,346	203,794
Refined, converted into Sheet	-	-	-	-	-	-	-	-	-	-	-	-

Zinc (tons)												
Distribution	2020				2021				2022			
	Minera México	SPCC	ASARCO	Total	Minera México	SPCC	ASARCO	Total	Minera México	SPCC	ASARCO	Total
Concentrates	132,519	0	0	132,519	135,055	0	0	135,055	124,044			124,044
Content in Concentrates	68,452	0	0	68,452	66,958	0	0	66,958	60,010			60,010
Refinery	102,440	0	0	102,440	92,672	0	0	92,672	99,893			99,893

Lead (tons)												
Distribution	2020				2021				2022			
	Minera México	Southern Perú Copper Corporation	ASARCO	Total	Minera México	Southern Perú Copper Corporation	ASARCO	Total	Minera México	SPCC	ASARCO	Total
Concentrates	38,343	0	0	38,343	33,763	0	0	33,763	32,531			32,531
Content in Concentrates	20,277	0	0	20,277	17,104	0	0	17,104	16,590			16,590

Gold (ounces)												
Distribution	2020				2021				2022			
	Minera México	SPCC	ASARCO	Total	Minera México	SPCC	ASARCO	Total	Minera México	SPCC	ASARCO	Total
Content in Concentrates (ounces)	61,955	11,231	-	73,186	52,080	8,551	-	60,631				-
Refinery (ounces)	33,729	7,315	-	41,044	33,085	6,937	-	40,022	35,250	5,972		41,223

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Silver (ounces)												
Distribution	2020				2021				2022			
	Minera México	SPCC	ASARCO	Total	Minera México	SPCC	ASARCO	Total	Minera México	SPCC	ASARCO	Total
Content in Concentrates (ounces)	15,798,340	5,741,347	1,270,766	22,810,453	13,589,068	5,373,332	1,271,822	20,234,222				-
Refinery (ounces)	8,653,764	3,967,206	-	12,620,970	7,611,546	3,985,085	-	11,596,631	8,569,423	3,740,746		12,310,169

Molybdenum												
Distribution	2020				2021				2022			
	Minera México	SPCC	ASARCO	Total	Minera México	SPCC	ASARCO	Total	Minera México	SPCC	ASARCO	Total
Content in Concentrates	16005	14,244	0	30249	15430	14,831	0	30261	14,966	10,557		25523

Other products												
Distribution	2020				2021				2022			
	Minera México	SPCC	ASARCO	Total	Minera México	SPCC	ASARCO	Total	Minera México	SPCC	ASARCO	Total
Coal	0	0	0	0	0	0	0	0				0
Coke	0	0	0	0	0	0	0	0				0
Sulfuric Acid	1,148,558	1,203,850	0	2,352,408	1,162,454	1,066,472	0	2,228,926	1,181,386	1,210,181	0	2,391,567
Cadmium	640	0	0	640	526	0	0	526	671			671
Lime	279,626	0	0	279,626	274,403	0	0	274,403	346,066			346,066

SASB Standard: Rail Transportation 2018						
SASB Topic	Code	Disclosure	Unit of Measure	Omissions and/or Restatements	Section	Additional Notes
Accounting parameters						
Accident and safety management	TR-RA-540a.1	1.1 Number of accidents and incidents	Number			Accidents resulting in personal injury (employees, third parties), as reported to the Mexican Railroad Regulatory Agency: 2019: 297 2020: 204 2021: 266 2022: 235
	TR-RA-540a.2	2.1 Number of accident releases of hazardous material	Number			One accident involving compromised hazardous material reported to the environmental authority.
		2.2 Number of non-accident releases of hazardous material (not caused by derailment, collision, or other accidents)	Number			There were no significant releases that did not result from an accident.
	TR-RA-540a.3	3.1 Number of Federal Railroad Administration (FRA) recommended violation defects	Number			Not available
	TR-RA-540a.4	4.1 Frequency of internal railway integrity inspections	Various	The details of the inspections are not publicly available; the investment in maintenance is.		Not available

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SASB Standard: Engineering and Construction Services 2018							
SASB Topic	Code	Disclosure	Unit of Measure	Omissions and/or Restatements	Section	Additional Notes	
Activity parameters							
Activity Metric	IF-EN-000.A	Number of active projects	Number			Our active projects at close of each year: 2018: 13 projects 2019: 12 projects 2020: 13 projects 2021: 17 projects 2022: 19 projects	
	IF-EN-000.B	Number of commissioned projects	Number			Two projects were delivered in 2022: a) “Lime Plant” (Sonora), and (b) “Airdrome” (Sonora).	
	IF-EN-000.C	Total backlog	Number			At 2022 close, the value of the portion of projects not yet completed, meaning revenue contractually committed, but which cannot yet be reported on our balance sheet, was \$4.407 billion Mexican pesos.	
Accounting parameters							
Environmental impacts of project development	IF-EN-160a.1	Number of incidents of non-compliance with environmental permits, standards and regulations	Number		Business Ethics and Integrity	All projects and operations were in compliance with national environmental laws in 2022; therefore, the Infrastructure Division received no penalties.	
	IF-EN-160a.2	Discussion of process to assess and manage environmental risks associated with project design, siting and construction	n/a		Biodiversity		
Structural integrity and safety	IF-EN-250a.1	Amount of defect and safety-related rework costs	Reporting currency	Not available in our monitoring indicators.		All projects executed and delivered meet quality, environmental, and workplace health and safety requirements; therefore, there was no additional cost for rework due to defects.	
	IF-EN-250a.2	Total monetary loss as a result of legal proceedings associated with defect and safety-related incidents	Reporting currency			There were no sanctions in this regard.	
Workforce health and safety	IF-EN-320a.1	1.1 Total recordable incident rate (TRIR)	Various		We report the lost time injury frequency rate (LTIFR). We do not use the TRIR metric.	0.25 24% lower than 2021	
		1.2 Fatality rate for (a) direct employees and (b) contract employees	Various		Workplace Health and Safety	There were no fatalities in the Infrastructure Division, for the 7th year in a row.	

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SASB Standard: Engineering and Construction Services 2018							
SASB Topic	Code	Disclosure	Unit of Measure	Omissions and/or Restatements	Section	Additional Notes	
Accounting parameters							
Lifecycle impacts of buildings and infrastructure	IF-EN-410a.1	Number of (1) commissioned projects certified to a third party multi-attribute sustainability standard and (2) active projects seeking such certification	Number			México Compañía Constructora does not have projects with sustainable infrastructure certifications, because of the types of projects we develop (e.g., mining infrastructure). We do have the corresponding health and safety certifications for the work, and the environmental and social assessments required.	
	IF-EN-410a.2	Discussion of process to incorporate operational energy and water efficiency considerations into project planning and design	n/a			We strive to ensure that our projects, and particularly their construction phase, produce the least environmental and social impacts possible, implementing mitigation and/or offsetting measures in all cases. For the construction phase, the characteristics of the equipment we use are key and we look for the best performance in fuel consumption. Regarding materials and techniques, we look for those that are efficient in the use of resources, including water.	
Climate impacts of business mix	IF-EN-410b.1	Amount of backlog for (1) hydrocarbon-related projects and (2) renewable energy projects. Meaning, revenue contractually expected in the future but hast not been recognized (at close of the reporting period).	Reporting currency			There were no new hydrocarbon or renewable energy projects in 2022.	
	IF-EN-410b.2	Monetary loss for cancellations associated with hydrocarbon-related projects	Reporting currency				
	IF-EN-410b.3	Monetary amount (value) of non-energy projects associated with climate change mitigation	Reporting currency			No such investment in 2022.	
Business ethics	IF-EN-510a.1	(1) Number of active projects and (2) backlog in countries that have the 20 lowest rankings in Transparency International's Corruption Perception Index	Number			México Compañía Constructora (included in the Grupo México Infrastructure Division) only has projects in Mexico, which is not ranked in the lowest 20 positions in Transparency International's Corruption Perception Index.	
	IF-EN-510a.2	Total amount of monetary losses as a result of legal proceedings associated with charges of (1) bribery or corruption and (2) anti-competitive practices	Reporting currency		Business Ethics and Integrity	There were no reports or legal actions in 2022 associated with anti-competitive practices, bribery or corruption.	
	IF-EN-510a.3	Description of policies and practices for prevention of (1) bribery or corruption and (2) anti-competitive behavior in the project bidding processes	n/a		Business Ethics and Integrity	At Grupo México, including the Infrastructure Division and subsidiaries, we operate under the COSO framework for internal control, risk management, and fraud deterrence, applying this also for bidding processes and commercial relationships to win projects.	

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SASB Standard: Electric Utilities and Power Generators 2018							
SASB Topic	Code	Disclosure	Unit of Measure	Omissions and/or Restatements	Section	Additional Notes	
Activity parameters							
Activity Metric	IF-EU-000.A	Number of (1) residential, (2) commercial and (3) industrial customers served	Number			The La Caridad combined cycle power plant produces electricity for the Grupo México Mining Division (Metalúrgica del Cobre, Operadora de Minas e Instalaciones Mineras (OMINSA) - Buenavista del Cobre) and sells the surpluses to the Mexican Electricity Commission (CFE) and on the Mexican Wholesale Market. The El Retiro wind farm sells 25% to Cinemex and the remainder is allocated to Grupo México, 25% to Ferromex (Transportation Division) and 75% to IMMSA (Mining Division).	
	IF-EU-000.B	Total electricity delivered to (1) residential, (2) commercial, (3) industrial, (4) all other retail customers, and (5) wholesale customers	Megawatt hours (MWh)			See response I IF-EU-000.A	
	IF-EU-000.C	Length of transmission and distribution lines (Kilometers (KM))	Kilometers (km)			We do not have or operate transmission lines; only the connection from the El Retiro Wind Farm to the CFE connecting point (less than 12 miles (20 km)).	
	IF-EU-000.D	Total electricity generated, percentage by major energy source, percentage in regulated markets	Megawatt hours (MWh),			The electricity generated by the La Caridad combined cycle power plant and the El Retiro wind farm is reported as: Combined cycle power plant - México Generadora de Energía (MGA) <ul style="list-style-type: none">• 3,732,554.65 MWh in 2018• 3,456,418.89 MWh in 2019• 3,463,560.89 MWh in 2020* 3,342,825.49 MWh in 2021* 3,211,109.75 MWh in 2022 El Retiro wind farm <ul style="list-style-type: none">• 189,601.44 MWh in 2018• 160,755.39 MWh in 2019• 174,738.64 MWh in 2020• 171,884.02 MWh in 2021• 175,854.31 MWh in 2022	
	IF-EU-000.E E	Total electricity purchased	Percentage (%)			All electricity consumed at the combined cycle power plant is self-generated. In the case of the wind farm, the majority is self-generated, but a portion is purchased from the CFE. These annual data are: 2018: 1,153 MWh 2019: 992 MWh 2020: 813 MWh 2021: 854.37 MWh 2022: 805 MWh	

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7.2 SASB Indicators Index

SASB Standard: Electric Utilities and Power Generators 2018							
SASB Topic	Code	Disclosure	Unit of Measure	Omissions and/or Restatements	Section	Additional Notes	
Accounting parameters							
Greenhouse gas emissions and energy resource planning	IF-EU-110a.1	Gross global Scope 1 emissions (metric tons (t) CO ₂ e)	Metric tons (t) CO ₂ e		Climate Change	2022: 1,337,759 ton CO2e	
		Percentage of emissions covered under emissions-limiting regulations (metric tons (t) CO ₂ e)	Percentage (%)		Climate Change	All our power generation assets are located in Mexico. Mexico has mandatory emissions reporting to the National Registry (in Spanish, RENE), although this is not a regulation to restrict emissions. However, the emissions trading system (ETS) sets an emissions limit for operations with annual emissions over 100,000 tCO ₂ e, only from fixed sources. Currently, only one Infrastructure Division operation exceeds this threshold, our La Caridad combined cycle power plant, reporting emissions of 1,337,574 ton CO ₂ e, which represents 99% of the total Scope 1 emissions of our Infrastructure Division energy business. The Mexican ETS is still in a trial period (until 2023).	
		Emissions covered under emissions-reporting regulations (metric tons (t) CO ₂ e)	Metric tons (t) CO ₂ e		Climate Change	The emissions subject to disclosure are those produced by the La Caridad combined cycle power plant and reported following. 2018: 1,557,371 ton CO ₂ e 2019: 1,477,567 ton CO ₂ e 2020: 1,451,714 ton CO ₂ e 2021: 1,341,350 ton CO ₂ e 2022: 1,337,574 ton CO ₂ e	
	IF-EU-110a.2	Greenhouse gas (GHG) emissions associated with power deliveries	Metric tons (t) CO ₂ e		Climate Change	The principal emissions source associated with our power deliveries are the emissions of our La Caridad combined cycle power plan, reported at 1,337,574 tonCO ₂ e for 2022.	
	IF-EU-110a.3	Discussion of long-term and short-term strategy to manage Scope 1 emissions, emissions reduction targets, and an analysis of performance against those targets	n/a		Climate Change	See targets reported for Grupo México in the sections above.	
	IF-EU-110a.4	Number of customers served in markets subject to renewable portfolio standards (RPS)	Number		Climate Change	All our Infrastructure Division energy business activities are in Mexico. The Mexican Energy Reform (2013) promotes electricity generation projects with renewable sources, including the development of a clean energy certificate (CEC) market. The electricity customers of Grupo México Energía (the energy business of the Infrastructure Division) are Minera México and Ferromex (part of Grupo México), meaning self-consumption, and therefore they are not subject to renewable portfolio standards. We also deliver electricity to Cinemex.	
		Percentage of fulfillment of renewable portfolio standards (RPS) target by market	Percentage (%)		Climate Change	The Mexican regulation that promotes renewable electricity does not state renewable electricity targets for generators; it does provide for CEC purchases when generators consume fossil fuels. The Infrastructure Division is not required to generate renewable electricity; however we promote renewable electricity with our El Retiro and Fenicias wind farms.	

SASB Standard: Electric Utilities and Power Generators 2018							
SASB Topic	Code	Disclosure	Unit of Measure	Omissions and/or Restatements	Section	Additional Notes	
Accounting parameters							
Energy affordability	IF-EU-240a.1	Average retail electric rate for residential customers	Various	This topic does not apply to México Generadora de Energía because of the type of operation and energy sources			
		Average retail electric rate for commercial customers	Various				
		Average retail electric rate for industrial customers	Various				
	IF-EU-240a.2	Average monthly electric bill for residential customers for 500 KWh of electricity delivered per month	Reporting currency				
		Average monthly electric Bill for residential customers for 1,000 KWh of electricity delivered per month	Reporting currency				
	IF-EU-240a.3	Number of residential customer electric disconnections for non-payment, percentage reconnected within 30 days	Number, Percentage (%)				
	IF-EU-240a.4	Discussion of impact of external factors on customer affordability of electricity, including the economic conditions of the service territory	n/a				
Workforce health and safety	IF-EU-320a.1	Total recordable incident rate (TRIR)	Various	We report the lost time injury frequency rate LTIFR). We do not use the TRIR metric.		Reporting only the 3 energy operations of the Infrastructure Division, there were 0 incapacitating incidents (or lost time injuries) in 2022. At the Infrastructure Division level, the indicator is reported as 0.25 annual.	
		Fatality Rate (FR)			Workplace Health and Safety	Zero fatalities reported at our 3 energy operations or at the Infrastructure Division level in 2022.	
		Near miss frequency rate (NMFR)				We consider near misses as incidents that involve economic loss, with no employee injury. There were 0 in 2022.	
End-use efficiency and demand	IF-EU-420a.1	Percentage of electric utility revenues from rate structures that are decoupled	Percentage (%)	This topic does not apply because of the type of operation and commercialization being mostly internal			

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7.2 SASB Indicators Index

SASB Standard: Electric Utilities and Power Generators 2018							
SASB Topic	Code	Disclosure	Unit of Measure	Omissions and/or Restatements	Section	Additional Notes	
Accounting parameters							
End-use efficiency and demand	IF-EU-420a.1	Percentage of electric utility revenues from rate structures that contain a lost revenue adjustment mechanism (LRAM)	Percentage (%)	This topic does not apply because of the type of operation and commercialization being mostly internal			
	IF-EU-420a.2	Percentage of electric load served by smart grid technology	Percentage (%) per megawatt hour (MWh)				
	IF-EU-420a.3	Customer electricity savings from efficiency measures, by market	Megawatt hour (MWh)				
Nuclear safety and emergency management	IF-EU-540a.1	Total number of nuclear power units	Number	This topic does not apply because we do not have generation assets with nuclear sources			
	IF-EU-540a.2	Description of efforts to manage nuclear safety and emergency preparedness	n/a				
Grid resiliency	IF-EU-550a.1	Number incidents of non-compliance with physical and/or cybersecurity standards or regulations	Number	This topic does not apply because we are not energy distributors and we do not operate a grid.			
	IF-EU-550a.2	(1) System Average Interruption Duration Index (SAIDI), (2) System Average Interruption Frequency Index (SAIFI), and (3) Customer Average Interruption Duration Index (CAIDI), inclusive of major event days	Minutes / Number				

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7.3 TCFD Indicators Index

7.3 TCFD Indicators Index

Topic	Recommendation	Recommended Disclosure	Code	Section
Governance	TCFD G: Disclose the organization's governance around climate-related risks and opportunities.	a) Describe the Board's oversight of climate-related risks and opportunities.	GOB-A	Corporate Governance
		b) Describe management's role in assessing and managing climate-related risks and opportunities.	GOB-B	Corporate Governance Climate Change
Strategy	TCFD S: Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy and financial planning where such information is material.	a) Describe the climate-related risks and opportunities the organization has identified over the short, medium and long term.	EST-A	Climate Change
		b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy and financial planning.	EST-B	Letter from the Chairman of the Board Sustainable Development Strategy Climate Change
		c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	EST-C	Climate Change
Risk Management	TCFD RM: Disclose how the organization identifies, assesses and manages climate-related risks.	a) Describe the organization's processes for identifying and assessing climate-related risks.	GDR-A	Corporate Governance Climate Change
		b) Describe the organization's processes for managing climate-related risks.	GDR-B	Corporate Governance Climate Change
		c) Describe how processes for identifying, assessing and managing climate-related risks are integrated into the organization's overall risk management.	GDR-C	Climate Change
Metrics and Targets	TCFD M&T: Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.	a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.	MYO-A	Climate Change
		b) Disclose the Scope 1, Scope 2, and if appropriate, Scope 3 greenhouse gas (GHG) emissions, and the related risks.	MYO-B	Climate Change
		c) Describe the targets used by the organization to manage climate-related risks and opportunities and performance against targets.	MYO-C	Sustainable Development Strategy Climate Change

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Acronyms and abbreviations					
AAR	Association of American Railroads	BAU	Business As Usual	CISO	Chief Information Security Officer
ADEX	<i>Asociación de Exportadores</i> (Association of Exporters)	BE	Business ethics	CMIC	<i>Cámara Mexicana de la Industria de la Construcción</i> (Mexican Chamber of the Construction Industry)
AENOR	<i>Asociación Española de Normalización y Certificación</i> (Spanish Association of Standardization and Certification)	BIVA	<i>Bolsa Institucional de Valores</i> (Institutional Securities Exchange)	CNA	<i>Cumplimiento Normativo Ambiental</i>
ALARP	As low as reasonably practical	BMV	<i>Bolsa Mexicana de Valores</i> (Mexican Stock Exchange)	COA	<i>Cédula de Operación Anual</i>
AMA	Arizona Mining Association	BOD	Biological oxygen demand	COD	Chemical oxygen demand
AMC	Americas Mining Corporation	CAIDI	Customer Average Interruption Duration Index	COEPI	<i>Comisión Estatal para los Pueblos Indígenas de Chihuahua</i> (Chihuahua State Commission on Indigenous Peoples)
AMCO	<i>Asociación Mexicana de Comunicadores Organizacionales</i> (Mexican Association of Organizational Communicaters)	CAMIMEX	<i>Cámara Minera México</i> (Mexican Mining Chamber)	CONAGUA	Comisión Nacional del Agua (Mexican National Water Commission)
AMDEE	<i>Asociación Mexicana de Energía Eólica</i> (Mexican Wind Energy Association)	CBD	Convention on Biological Diversity	CONANP	<i>Comisión Nacional de Áreas Naturales Protegidas</i> (National Comission of Natural Protected Areas)
AME	<i>Asociación Mexicana de Energía Eléctrica</i> (Mexican Electricity Association)	CC	Climate change	CONFIEP	<i>Confederación Intersectorial de Empresas Privadas</i> (Intersectoral Confederation of Private Companies)
AMESPAC	<i>Asociación Mexicana de Empresas de Servicios Petroleros</i> (Mexican Association of Oil Service Companies)	CCE	<i>Consejo Coordinador Empresarial</i> (Business Coordinating Council)	CONOCER	Consejo Nacional de Normalización y Certificación de Competencias Laborales
AMEXHI	<i>Asociación Mexicana de Empresas Hidrocarburos</i> (Mexican Association of Hydrocarbon Companies)	CCL	<i>Cámara de Comercio de Lima</i> (<i>Lima Chamber of Commerce</i>)	COP15	United Nations Biodiversity Conference
AMF	<i>Asociación Mexicana de Ferrocarriles</i> (Mexican Railroad Association)	CCS	<i>Community Care Service</i>	COPARMEX	<i>Confederación Patronal de la República Mexicana</i> (Employer ´sConfederation of the Mexican Republic)
AMIVTAC	<i>Asociación Mexicana de Ingeniería de vías Terrestres</i> (Mexican Association of Road Engineering)	CD	Community Development	COSO	Committee of Sponsoring Organizations of the Treadway Commission
AMSAC	<i>Asociación de Mineros de Sonora</i> (Sonora Miners Association)	CDA	Canadian Dam Association	COVID 19	Coronavirus
AMTI	<i>Asociación Mexicana de Transporte Intermodal</i> (Mexican Association of Intermodal Transportation)	CDP	Carbon Disclosure Project	CP	Closure plans
ANA	<i>Autoridad Nacional del Agua</i> (Peruvian National Water Authority)	CEC	Clean energy certificate	CSA	Corporate Sustainability Assessment
ANIPAC	<i>Asociación Nacional del Plástico</i> (National Plastics Association)	CEPAA	<i>Consejo de Prioridades Económicas</i> (Council on Economic Priorities)	CTPAT	Customs Trade Partnership Against Terrorism
ANIQ	<i>Asociación Nacional de la Industria Química</i> (National Association of the Chemical Industry)	CESPEDES	<i>Comisión de Estudios del Sector Privado para el Desarrollo Sustentable</i> (Private Sector Commission for Sustainable Development)	DBR	Design-based research
APP	Aquifer Protection Permit	CFO	Chief Financial Officer	DEI	Diversity, Equity and Inclusion
APPAMEX	<i>Asociación de Proveedores de Productos Agropecuarios</i> (Association of Agricultural Retailers in Mexico)	CFR	Code of Federal Regulations	DEMAS	<i>Dirección de Medio Ambiente y Aprovechamiento Sustentable</i> (Department of the Environment and Sustainable Usage)
AQ	Air quality	CG	Corporate Governance	DJSI	Dow Jones Sustainability Index
ASARCO	American Smelting and Refining Company	CHRB	Corporate Human Rights Benchmark	DSR	Dam Safety Review

7.4 Glossary and Acronyms

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Acronyms and abbreviations					
EBITDA	Earnings before interest, taxes, depreciation and amortization	IAASB	International Auditing and Assurance Standards Board	Kg	Kilogram
EITI	Extractive Industries Transparency Initiative	ICA	International Copper Association	KPI	Key Performance Indicator
ELSSA	<i>Entornos Laborales Seguros y Saludables</i> (Safe and Healthy Workplaces program)	ICCPR	International Covenant on Civil and Political Rights	L/s	Liters per second
EMA	<i>Entidad Mexicana de Acreditación</i> (Mexican Accreditation Entity)	ICESR	International Covenant on Economic, Social and Cultural Rights	LRAM	Land Rehabilitation and Maintenance
EP	Economic Performance	ICMM	International Council on Metals and Mining	LTIFR	Lost time injury frequency rate
EPA	Environmental Protection Agency	ICOLD	International Commission on Large Dams	m³	Cubic meter
EQS	Environmental Quality Standard	IRGC	International Risk Governance Council	m³/hr	Cubic meter per hour
ERM	Enterprise Risk Management	IDB	Inter-American Development Bank	MAPFRE	<i>Mutualidad de la Agrupación de Propietarios de Fincas Rústicas de España</i> (Mutual Society of the Group of Owners of Rustic Farms of Spain)
ESA	US Endangered Species Act	IE	Indirect economic impacts	MARPOL	International Convention for the Prevention of Pollution from Ships
ESG	Environmental, Social and Governance	IIMP	<i>Instituto de Ingenieros de Minas del Perú</i> (Peruvian Institute of Mine Engineers)	MDP	México Proyectos y Desarrollos
FCPA	Foreign Corrupt Practices Act	ILO	International Labor Organization	MEM	Mercado Mayorista de México (Mexican Wholesale Electricity Market)
FEC	Florida East Coast Railway	ILOC	International Labor Organization Conventions	METCO	Sonora Metallurgical Complex, Mexico
FGM	<i>Fundación Grupo México</i> (Grupo México Foundation)	IMNC	<i>Instituto Mexicano de Normalización y Certificación</i> (Mexican Institute of Standardization and Certification)	MGA	México Generadora de Energía
FR	Fatality Rate	IMOA	International Molybdenum Association	MILA	Mercado Integrado Latinoamericano (Latin American Integrated Market)
FRA	Federal Railroad Administration	IMSSA	Institute of Mine Surveyors of Southern Africa	MIN DIV	Mining Division
FTSE	Financial Times Stock Exchange Group	INF DIV	Infrastructure Division	ML	Megaliters
GBF	Kunming-Montreal Global Biodiversity Framework	INSAR	Interferometric synthetic aperture radar	mm³	Cubic millimeters
GHG	Greenhouse gases	IPCC	Intergovernmental Panel on Climate Change	MMBTU	Millions BTU
GJ	Gigajoules	IPERC	<i>Identificación de Peligros y la Evaluación de Riesgos y Controles</i> (Hazard Identification and Risk Assesment and Controls)	MP	Market presence
GMXT	Grupo México Transportes	ISAE	International Standard on Assurance Engagements	MPL	Maximum Permissible Level
GRI	Global Reporting Initiative			MSHA	Mine Safety and Health Administration
Ha	Hectare	ISO	International Organization for Standardization	MTCC	Metropolitan Tuscon Chamber of Commerce
Hg	Mercury	ISS	Institutional Shareholder Services	MtCO ₂ e	Metric ton of carbon dioxide equivalent
HIPAA	Health Insurance Portability and Accountability Act	IT	Information technologies	MW	Megawatt
HR	Human Rights	IUCN	International Union for Conservation of Nature	MWh	Megawatt hour

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Acronyms and abbreviations					
NAMC	North American Metals Council	RMI	Responsible Mining Index	SNMPE	<i>Sociedad Nacional de Minería, Petróleo y Energía del Perú</i> (National Society of Mining, Petroleum and Energy of Peru)
NDC	Nationally determined contributions	RTM	Revenue Ton Mile	SOC	Security Operations Center
NMFR	Near miss frequency rate	S&P	Standard & Poor’s	SOPEP	Shipboard Oil Pollution Emergency Plan
NMX	<i>Norma Mexicana de Responsabilidad Social</i> (Mexican Standard on Social Responsibility)	SAAMI	Andean Mining Cluster	S&P	Stadard & Poors
NOM	<i>Norma Oficial Mexicana</i> (Official Mexican Standard)	SAIDI	System Average Interruption Duration Index	SPCC	Southern Peru Copper Corporation
NOM-001 SEMARNAT-1996	Official Mexican Standard that sets the maximum permissible levels of contaminants in discharges of wastewater and federal waters and assets	SAIFI	System Average Interruption Frequency Index	STEM	Science, Technology, Engineering, Mathematics
OEFA	<i>Organismo de Evaluación y Fiscalización Ambiental</i> (Peruvian Agency for Environmental Assessment and Enforcement)	SARS CoV-2	Severe Acute Respiratory Syndrome Coronavirus 2	STPS	Secretaría del Trabajo y Previsión Social (Ministry of Labor and Social Welfare)
OHS	Occupational Health and Safety	SASB	Sustainability Accounting Standards Board	TACD	<i>Taller Ambulante de Cine Documental</i> (Mobile Documentary Filmmaking Workshop)
OHSAS	Occupational Health and Safety Assessment Series	SAST	Static Application Security Testing	TAMA	Tuscon Active Management Area
OMINSA	Operadora de Minas e Instalaciones Mineras	SBC	Safety-based conduct	TCFD	Task Force on Climate-Related Financial Disclosures
OMS Manual	Operations maintenance surveillance manual	SBT	Science-based targets	TIPS	Threaten, Interrogate, Promise, Surveil
OP	Our People	SCC	Southern Copper Corporation	TMS	Tetramethylsilane
PASST	<i>Programa de Autogestión en Seguridad y Salud en el Trabajo</i> (Workplace Health and Safety Self-Management Program)	SDG	Sustainable Development Goals	TPCT	Community of Tumilaca, Pocata, Coscore and Tala
Pb	Lead	SEC	Securities and Exchange Commission	TRA DIV	Transportation Division
PET	Polyethylene terephthalate	SEMARNAT	<i>Secretaría de Medio Ambiente y Recursos Naturales</i> (Ministry of the Environment and Natural Resources)	TRACE	Anti-Bribery Compliance Solutions
PM10	Particulate matter	SENACE	<i>Servicio Nacional de Certificación Ambiental</i> (National Environmental Certification Service)	TRIR	Total Recordable Incident Rate
PPE	Personal protective equipment	SINIA	<i>Sistema Nacional de Información Ambiental</i> (Peruvian Environmental Information System)	UDHR	Universal Declaration on Human Rights
PRAE	<i>Planes de Respuesta y Atención de Emergencias</i> (Emergency Response Plans)	SISSEI	<i>Sistema de Información Salud y Seguridad Integral</i> (Comprehensive Health and Safety Information System)	UIC	Underground Injection Control
PROFEPA	<i>Procuraduría Federal de Protección al Ambiente</i> (Mexican Environmental Protection Agency)	SJA	Safe Job Analysis	UICN	International Union for Conservation of Nature
RailTEC	Rail Transportation and Engineering Center	SLP	San Luis Potosi	UMA	<i>Unidad de Manejo Ambiental</i> (Wildlife Conservation Management Center)
REINFO	<i>Registro Integral de Formalización Minera</i> (Integral Registry of Mining Formalization)	SME	Society for Mining Metallurgy and Exploration	UNACAR	<i>Universidad Autónoma del Carmen</i>
RENE	<i>Registro Nacional de Emisiones</i> (Mexican Emissions Registry)	SMM	<i>Sociedad Minera de México</i> (Mexican Mining Society)	UNSA	<i>Universidad Nacional de San Agustín, Perú</i>

Acronyms and abbreviations					
USA	United States of America	WARN	Worker Adjustment and Retraining Notification Act	WHC	Wildlife Habitat Council
USEPA	United States Environmental Protection Agency	WCI	Western Climate Initiative	WTP	Wastewater Treatment Plant
VC	Value Chain	WEF	World Economic Forum		

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2.3 Sustainable Development Investments

Investments and operating costs – Workplace Health & Safety (2018 – 2022)

US\$ millions

	Workplace Health and Safety										
	2018	2019	2020			2021			2022		
	Total	Total	Operating Costs	Capex	Total	Operating Costs	Capex	Total	Operating Costs	Capex	Total
MIN DIV	116.1	156.2	53.2	3.8	57	72.3	9.5	81.8	28.4	80.6	109
SCC			50.1	0.6	50.7	66.5	3.4	69.9	23.5	80.4	103.9
MM (Mexico)			48.2	0.6	48.8	59.9	0	59.9	16.4	68.8	85.2
SPCC (Peru)			1.9	0	1.9	6.6	3.4	10	7.1	11.6	18.7
ASARCO (USA)			3.1	3.2	6.3	5.7	6.1	11.8	4.9	0.2	5.1
TRA DIV	-	1.5	13.7	0	13.7	0.6	2.6	3.2	2.8	3.3	6.1
INF DIV	-	0.2	3	7	10	2.1	0	2.1	2.4	2.6	5
GM	116.1	157.9	69.9	10.8	80.7	75	12.1	87.1	33.6	86.5	120.1

Investments and operating costs – Environment (2018 – 2022)

US\$ millions

	Environment										
	2018	2019	2020			2021			2022		
	Total	Total	Operating Costs	Capex	Total	Operating Costs	Capex	Total	Operating Costs	Capex	Total
MIN DIV	263.5	221	104.3	59.2	163.5	95.6	108.1	203.7	174.6	59.3	233.9
SCC			92.3	52.1	144.4	87.9	90.5	178.4	157.6	56.2	213.8
MM (Mexico)			89.7	41.1	130.8	81.4	62.3	143.7	125	51	176
SPCC (Peru)			2.6	11	13.6	6.5	28.2	34.7	32.6	5.2	37.8
ASARCO (USA)			12	7.1	19.1	7.7	17.6	25.3	17	3.1	20.1
TRA DIV	-	28.8	0.1	0.3	0.4	1.1	23.5	24.6	0.6	19	19.6
INF DIV	-	45	3.9	127.8	131.7	1.2	65.2	66.4	2	12.7	14.7
GM	263.5	294.8	108.3	187.2	295.6	97.9	196.8	294.7	177.2	91	268.2

Investments and operating costs – Community Development (2018 – 2022)

US\$ millions

	Community Development																	
	2018			2019			2020				2021				2022			
	Operating Costs	Capex	Total	Operating Costs	Capex	Total	Operating Costs	Admin costs	Capex	Total	Operating Costs	Admin costs	Capex	Total	Operating Costs	Admin costs	Capex	Total
MIN DIV	31.1	26.4	57.5	29	11.2	40.2	22.6	1.4	11.4	35.4	20.1	4.1	41.9	66.1	25	3.6	42.1	70.7
SCC				28.9	11.2	40.1	22.4	1.4	11.4	35.2	20.1	3.9	41.9	65.9	24.9	3.4	42.1	70.4
MM (Mexico)				13.1	1.1	14.2	8.1	0.8	1	9.9	7.4	1.7	3.2	12.3	9.6	1.8	1.3	12.7
SPCC (Peru)				15.8	10.1	25.9	14.3	0.6	10.4	25.3	12.7	2.2	38.7	53.6	15.3	1.5	40.8	57.6
ASARCO (USA)				0.1	0	0.1	0.2	0	0	0.2	0	0.2	0	0.2	0.1	0.2	0	0.3
TRA DIV	3.8	-	3.8	-	-	-	0	0	3.1	3.1	0.9	0	0.4	1.3	0	0	72.5	72.5
INF DIV	0.7	-	0.7	-	-	-	0.3	0	0	0.3	0.3	0	0	0.3	0.2	0.2	0	0.4
GM	35.6	26.4	62	29	11.2	40.2	22.9	1.4	14.5	38.8	21.3	4.1	42.3	67.7	25.2	3.8	114.6	143.6

Community and philanthropic investments, by area and item, according to CSA indicators

US\$ millions

Area	Item	MIN DIV	SCC	MM (Mexico)	SPCC (Peru)	ASARCO (USA)	TRA DIV	INF DIV	FGM	Total GM
Donations	Services (donations)	0.75	0.7	0.3	0.4	-	0.25	-	-	1
	GM Foundation programs	-	-	-	-	-	-	-	9.5	9.5
Subtotal		0.75	0.7	0.3	0.4	-	0.25	-	9.5	10.5
Community Investments	Community programs	4.8	4.8	2.8	2	-	-	0.2	-	5
	Admin / Management costs	3.6	3.4	1.9	1.5	0.2	-	0.2	-	3.8
	SCC Schools operating costs	6.2	6.2	2	4.2	-	-	-	-	6.2
	Infrastructure in communities	41	40.9	1.3	39.6	0.1	72.5	-	-	113.5
	Infrastructure for SCC Schools	0.9	0.9	-	0.9	-	-	-	-	0.9
	Infrastructure (donations)	1	1	1	-	-	-	-	-	1
Subtotal		57.6	57.3	9	48.2	0.3	72.5	0.4	-	130.5
Commercial Initiatives	SCC neighborhoods operating costs	13.8	13.8	4.8	9	-	-	-	-	13.8
	Infrastructure in SCC neighborhoods	0.3	0.3	-	0.3	-	-	-	-	0.3
	Railroad crossing signaling program	-	-	-	-	-	3.3	-	-	3.3
Subtotal		14.1	14.1	4.8	9.3	-	3.3	-	-	17.4

2.4 Contributions to the Sustainable Development Goals

Community Materiality Topic Areas (Community Development department)

GRI	Community Materiality Topic Area	SDG	Related topics for our community programs
Environment	Environmental transformation	15. Life on land	Land restoration and reforestation
			Sustainability of terrestrial ecosystems
			Environmental culture
		14. Life below water	Protection of coastlines and marine areas
		13. Climate action	Mitigation, adaptation and reduction of the effects of climate change
	Sustainable water management	6. Clean water and sanitation	Comprehensive management of water resources
			Preservation of the ecosystems (water-related)
			Community participation in water management
			Supply, treatment and access to clean water
	Energy management	7. Affordable and clean energy	Clean and renewable energies
Social	Educational competencies	4. Quality education	Educational programs, aligned with performance, reading and basic competencies
			Competencies in information and communication technologies
			Certification of academic and professional competencies
			Competencies in reading and mathematics
			Functional competencies in literacy and basic mathematics, youth and adults
			Adult literacy
			Elementary, middle school, high school and college education
	Social wellbeing and quality of life	1. No poverty	Household income and financial assets
		11. Sustainable cities and communities	Basic services in GM neighborhoods
			Living conditions and expenses
		9. Industry, innovation and infrastructure	Resilient, sustainable and quality infrastructures
		10. Reduced inequalities	Vulnerable groups
			Indigenous communities
			Human and artistic development

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GRI	Community Materiality Topic Area	SDG	Related topics for our community programs
Social	Social wellbeing and quality of life	10. Reduced inequalities	Quality community support
			Work-life balance
	Prevention of health risks and road safety	2. Zero hunger	Food security
			Food insecurity and malnutrition
		3. Good health and wellbeing	Health, addiction prevention, and reproductive health
			Cardiovascular diseases, cancer, diabetes and chronic respiratory diseases
			Sports
			Abuse of addictive substances
			Road safety
			Traffic accidents
			Sexual and reproductive health services (family planning)
	Gender equality and empowerment	5. Gender equality	Gender parity in our community services offerings
			Women empowerment
	Citizenship and sustainable development	11. Sustainable cities and communities	Participation in public policy, institutional programs or management plans for development
			Community structures supported by the company (committees)
			Reduction and management of social risks
			Intentional public spaces
			Emergency/contingency response plans for our operations
			Community resilience to the effects of climate change
		12. Responsible consumption and production	Urban solid waste management
			Environmental protection and remediation (related to waste from our operations and the facilities where this waste is managed)
			Culture of recycling
		16. Peace, justice and strong institutions	Justice and human rights
			Participation of the civil society, public institutions and groups
	Quality education (applicable only to our SCC Schools)	4. Quality education	Competencies in reading and mathematics
			Competencies in information and communication technologies
			Equal access for men and women, rural and urban areas, levels of wealth and vulnerable groups
			Literacy and basic mathematics

GRI	Community Materiality Topic Area	SDG	Related topics for our community programs
Social	Quality education (applicable only to our SCC Schools))	4. Quality education	Access to internet and computers for educational purposes; infrastructure and materials adapted for students with disabilities
			Organized teacher training
			Achievements and recognitions for the study plans, teacher training and student education at Grupo México schools
		12. Responsible consumption and production	Citizenship, sustainable development, gender equality and human rights, in study plans, teacher training and student assessments
		13. Climate action	Mitigation, adaptation and reduction of the effects of climate change
Economy	Training in productive skills	2. Zero hunger	Sustainable farming and fishing
		14. Life under water	Increased income for producers, fishermen, farmers
		8. Decent work and economic growth	Job skills training
	Entrepreneurship and economic incentives		
	Unemployment		
	Employment linkage		
	Hiring labor or suppliers		
Monitoring and Evaluation	Impact and transformation	10. Reduced inequalities	Mechanism for concerns and grievances
			Dialogues and informational processes with stakeholders
		17. Partnerships for the goals	Public policies on sustainable development for the industry
			Indicator frameworks to measure impact and transformation
			Events, forums, publications, scientific communities, sector chambers, etc.
			Statistical information

Contributions by type of association

US\$

	Mexico	Peru	USA	Description of the participation / relationship
Mining Division	1,929,264	1,547,169	50,000	
SCC	1,929,264	1,547,169	-	
International mining associations	1,883,535	1,398,935		Annual participation in mining associations that seek to promote the benefits of mining products, such as copper, molybdenum, zinc, etc. Also, initiatives that help drive ongoing improvement in internal processes.
Mining associations and chambers	45,729	77,903	50,000	Support for initiatives of mining assocaitions and/or chambers of commerce in the jurisdictions where we have active operations.
General trade associations / chambers		70,331		Support for initiatives of general trade associations and/or chambers of commerce in the jurisdictions where we have active operations.
Transportation Division	487,588		170,584	
Railway industry associations	480,502	-	170,584	Support for initiatives of railway industry associations and/or chambers in the jurisdictions where we have active operations.
Other industry associations / chambers of commerce	7,086	-		Annual participation in industry associations and/or chambers related to the materials and products we transport.
Infrastructure Division	90,573			
General trade associations / chambers	2,367	-	-	Support for initiatives of national and international trade associations and/or chambers of commerce.
Oil and hydrocarbon associations / chambers	39,902	-	-	Coordination and execution of activities in support of associations and chambers related to oil and hydrocarbons.
Energy associations / chambers	48,304	-	-	Support for initiatives of associations and/or chambers related to the energy sector.

Annexes for Governance

4.1 Corporate Governance

Grupo México Board of Directors

Board of Directors															
#	Member	Position	Independence	Gender	Age	Nationality	Country of Residence	Service (years)	Board Committees	% attendance (average)	Experience by sector	Background / Specialization	Current additional service	Other Boards	Other Corporate Governance Roles
1	Germán Larrea Mota Velasco	Chairman	Executive	Male	69	Mexico	Mexico	42	Executive (Chairman)	100%	Commodities, Industrial	Business Administration	-	Chairman of the Boards of: SCC/ Grupo México/Mining Division / Transportation Division / Infrastructure Division / AMC/ / Empresarios Industriales de México.	CEO Grupo México/ Industriales de México
2	Xavier García de Quevedo Topete	Vice- President	Executive	Male	75	Mexico	Mexico	40	-	100%	Commodities, Industrial, Finance	Chemical Engineering, Business Administration, Finance	-	Vice-Chairman Grupo México Board, Member of the Boards Asarco/ SCC/ Infrastructure Division / Transportation Division / Mining Division	Vice-President Grupo México/AMC. President Infrastructure Division
3	Alfredo de Jesús Casar Pérez	Board Member	Executive	Male	68	Mexico	Mexico	27	-	100%	Commodities, Industrial, Finance	Economics	-	Member of the Boards of Grupo México/GFM/ SCC. Transportation Division	President Transportation Division
4	Luis Castelazo Morales	Board Member	Executive	Male	66	Mexico	Mexico	7	-	100%	Commodities, Industrial, Finance	Civil Engineering	-	Member of the Boards of Grupo México/SCC/ Empresarios Industriales de México	CEO Empresarios Industriales de México
5	Oscar González Rocha	Board Member	Executive	Male	84	Mexico	Mexico / Peru	42	-	100%	Commodities, Industrial, Finance	Civil Engineering	-	Member of the Boards of Grupo México/MM/ SCC	President SCC/ Asarco/ AMC
6	Antonio del Valle Ruiz	Board Member	Independent	Male	85	Mexico	Mexico	7	-	100%	Commodities, Industrial, Finance	Accounting	4 or more	Member of the Boards of Grupo México/ Mexichem/ Telmex,/EBC/Club de Industriales/ others	Lifetime Honorary President of Grupo Kaluz, Orbia, Elementia, BX+, etc.
7	Emilio Carrillo Gamboa	Board Member	Independent	Male	84	Mexico	Mexico	20	A&CP*	100%	Energy, Commodities, Industrial, Finance, Communications Services	Law	4 or more	Member of the Boards of Grupo México / Grupo Modelo/ Grupo Nacional Provincial/ / Grupo Profuturo/ Kimberly-Clark/ The México Fund	Founding Partner of the Law Firm Carrillo Gamboa

*Audit and Company Practices Committee.

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SASB Indicators Index

TCFD Indicators Index

Glossary and Acronyms

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External Verification Letter

#	Miembro	Position	Independence	Gender	Age	Nationality	Country of Residence	Service (years)	Board Committees	% attendance (average)	Experience by sector	Background / Specialization	Current additional service	Other Boards	Other Corporate Governance Roles
8	Antonio Madero Bracho	Board Member	Independent	Male	86	Mexico	Mexico	22	Executive	100%	Commodities, Finance	Mine Engineering and Metallurgy, Business Administration	1	Chairman of the Board of Rassini, Member of the Executive Committee of the Harvard University "University Resources Committee", Founder and Member of the Advisory Board of the David Rockefeller Center for Latin American Studies at Harvard University	Member of the Trilateral Commission
9	Carlos Prieto Sierra	Board Member	Independent	Male	69	Mexico	Mexico	7	-	100%	Finance, Information Technology	Business Administration	4 or more	Member of the Boards of Grupo México/ BX+/ Hermes Corporativo/ R202/ CityExpress/ RUF/ Editorial Banca y Comercio	Dean of the Escuela Bancaria y Comercial
10	Carlos Rojas Mota Velasco	Board Member	Independent	Male	69	Mexico	Mexico	7	-	75%	Commodities	Business Administration	4 or more	Chairman of the Board of Grupo Rotoplas/ FUNED; Member of the Boards of Grupo México/ Scribe/ Nasoft/ Universidad Centro/ Grupo Lar	President/CEO Grupo Rotoplas
11	Claudio X. González Laporte	Board Member	Independent	Male	88	Mexico	Mexico	33	Executive	100%	Finance, Consumer staples	Chemical Engineering	4 or more	Chairman of the Board of Kimberly-Clark; Member of the Board of Fondo México/ Grupo Alfa/ Grupo Carso/ The Baker Institute for Public Policy (Houston, Texas)/ The Salzburg Global Seminar (Washington D.C. and Salzburg, Austria)/ The New York Philharmonic; Board Member Emeritus General Electric	
12	Fernando Ruiz Sahagún	Board Member	Independent	Male	79	Mexico	Mexico	19	A&CP	100%	Finance	Accounting / Law	4 or more	Member of the Boards of Grupo México /Banco Santander/ Grupo Bolsa Mexicana de Valores/ Grupo Cementos de Chihuahua/ Fresnillo Ltd/ Grupo Palacio de Hierro/ GNP/ Rassini/ Arcelor Mittal de México	Founder and Managing Partner of the Law Firm Chevez, Ruiz, Zamarripa
13	Rolando Vega Sáenz	Board Member	Independent	Male	74	Mexico	Mexico	13	A&CP	100%	Finance	Public Accountant	4 or more	President of the Atlas Insurance Council. Chairman of the Atlas Bonds and Surety Council/ Corporación Financiera Atlas, S.A./ Agroservicios Financieros Atlas, S.A./ Cremería Americana/ Acasa Perinorte/ Atradius Seguros de Crédito. Director of Grupo México/ Mexican Business Council, A.C./ Business Coordinating Council/ Mexican Association of Insurance Institutions. Member of the Board of Directors of Industrial, Commercial and Financial Sector Companies.	General Director Seguros Atlas. President of the Surveillance Committee of the Bankers Club of Mexico / Trustee / Alberto and Dolores Andrade Foundation I.A.P., Concepción Beistegui Foundation for the Elderly, I.A.P., Francisca Campero de Pasquel Foundation, I.A.P.
14	Fernando López Guerra Larrea	Board Member	Executive	Male	40	Mexico	Mexico	3	-	100%	Commodities, Industrial	Business Administration, Finance	-	Member of the Board of GMXT	CEO Transportation Division

Board members average service	21 years
Percentage of women on the Board ¹⁰	0%
Board members	14

Percentage of independent board members	57%
Average attendance at Board meetings ¹¹	98%
Required independence on the Board	25% (minimum required by law)

Mining Division Executive Leadership

Mining Division Executive Leadership		
Germán Larrea Mota Velasco Chairman of the Board of Directors	Oscar González Rocha Executive President	Xavier Garcia de Quevedo Executive Vice-President
Vidal Muhech Dip Chairman Management Committee	Daniel Chávez Carreón COO	Leonardo Contreras Lerdo de Tejada Vice-President Sales and CEO ASARCO
Oscar González Barrón Vice-President Admininstration and Finance	Manuel Hallivis Pérez Lead Counsel and Chief Compliance Officer	Federico Poo Mantecón Vice-President Human Resources AMC
Jorge Lazalde Psihas Lead Counsel	Francisco López Guerra Larrea Vice-President Sustainable Development	Ernesto Ríos Patrón Vice-President Engineering and Construction
Raquel Tobar Sáiz Vice-President New Business and Finance	José Ramón González García Chief IT Officer	Rafael Ríos García Chief Safety Officer
Raúl Jacob Ruisanchez Vice-President Administration and Finance Southern Perú	Jorge Meza Viveros COO Southern Perú	Francisco Domenech Fernández Corporate Commercial Director
		Martín Ugarteche Crosby Supply Chain Director

Southern Copper Corporation Corporate Governance

Southern Copper Corporation is an indirect subsidiary of Grupo México S.A.B. de C.V. ("Grupo México", majority shareholder). As of December 31, 2022, Grupo México, through its wholly owned subsidiary Americas Mining Corporation ("AMC"), holds 88.9% of SCC's common stock.

As a subsidiary that trades on the New York Stock Exchange (NYSE), Southern Copper Corporation is required to comply, and is in compliance with, the corporate governance directives set by the U.S. Securities and Exchange Commission, including establishing a Board of Directors charged with maximizing value for shareholders, in strict compliance with the laws of the jurisdictions where the company operates and in adherence of stringent ethical standards.



Southern Copper Corporation Governing Bodies

2021 Board of Directors																
#	Member	Position	Independence	Gender (M/F)	Age (years)	Nationality	Country of Residence	Year joined	Service (years)	Board Committees	% attendance	Experience by sector ¹²	Background / Specialization	Current additional service	Other Boards	Other Corporate Governance Roles
1	Germán Larrea Mota Velasco	Chairman	Executive	M	69	Mexico	Mexico	1999	23	Chairman of the Board EC ¹³ , CC ¹⁴ , GNC ¹⁵	100%	Commodities, Industrial	Business Administration	-	Chairman of the Boards of: Grupo México / Grupo Ferroviario Mexicano / Empresarios Industriales de México / Fondo Inmobiliario	President and CEO of: Grupo México / Grupo Ferroviario Mexicano / Empresarios Industriales de México / Fondo Inmobiliario
2	Oscar González Rocha	Board Member	Executive	M	84	Mexico	Mexico	1999	23	Executive President EC, CC, GNC, ADC ⁷	100%	Commodities, Industrial, Finance	Civil Engineering	-	Member of the Board of: Grupo México	President and CEO of Southern Copper Corporation (SCC) and Americas Mining Corporation (AMC) / CEO of Asarco LLC
3	Vicente Ariztegui Andreve	Board Member	Independent	M	68	Mexico	Mexico	2018	4	EC, AC ⁸	100%	Finance, Commodities, Industrial	Business Administration,	4	Administrative Vice-President and President of Aonia Holding / Director de: InverCap Holding / Reim and Alvamex	Director of the Club Universitario en México / Member of the Audit Committee
4	Leonardo Contreras Lerdo de Tejada	Board Member	Executive	M	36	Mexico	Mexico	2021	1	-	100%	Finance, Industrial	Industrial Engineering	-	-	President of ASARCO/ AMC Sales and Supply Chain Vice-President / President of IMMSA / Founder of Murano Capital (September 2015), private investment firm
5	Enrique Castillo Sánchez Mejorada	Board Member	Independent	M	65	Mexico	Mexico	2010	12	AC, CC	100%	Finance, Consumer Staples, Healthcare	Business Administration	More than 4	Chairman of the Board of Banco Nacional de México (Citibanamex); Independent director of: Grupo Herdez / Alfa / Médica Sur / Laboratorios Sanfer	Senior Advisor to General Atlantic in México.
6	Xavier García de Quevedo Topete	Board Member	Executive	M	75	Mexico	Mexico	1999	23	EC, CC, SNC ⁹	100%	Commodities, Industrial, Finance	Chemical Engineering, Finance	-	Vice-President of Grupo México/ Director of Grupo México	President of the Grupo México Infrastructure Division
7	Luis Miguel Palomino Bonilla	Board Member	Independent	M	62	Peru	Peru	2004	18	EC, AC, SNC	100%	Finance, Healthcare	Economics, Finance	3	Director of Laboratorios Portugal/ Summa Capital S.A. / Mall Aventura, S.A. "Audit Committee financial expert", as defined by the SEC.	Director of the Master's in Finance program at the Universidad del Pacífico in Lima, Peru

#	Member	Position	Independence	Gender (M/F)	Age (years)	Nationality	Country of Residence	Year joined	Service (years)	Board Committees	% attendance	Experience by sector ¹²	Background / Specialization	Current additional service	Other Boards	Other Corporate Governance Roles
8	Gilberto Perezalonso Cifuentes	Board Member	Independent	M	79	Mexico	Mexico	2002	20	-	75%	Finance	Law, Business Administration, Finance	2	Board member of: Gigante S.A. de C.V. (retail and property	National Vice-President of the Mexican Red Cross / Vice-President of Blasky (hotel chain in Baja California, Mexico)
9	Carlos Ruiz Sacristán	Board Member	Independent	M	72	Mexico	Mexico	2004	18	AC, CC	75%	Finance, Industrial	Business Administration	3	Member of the Boards of: Constructora / Banco Ve por Mas, S.A.	Owner and managing partner of Proyectos Estratégicos Integrales.

Board members average service	15.7 años
Percentage of women on the board ¹⁰	0%
Board members	9

Percentage of independent board members	56%
Average Board attendance ¹¹	97%
Required Independence on the Board	At least three members of the Board must be independents

Transportation Division Board of Directors

The corporate governance structure of Grupo México Transportes is defined according to the guidelines set in the company bylaws.

Grupo México Transportes applies the same mechanisms for appointing members of the Board of Directors and the members of the Executive Committee and the Audit and Company Practices Committee as Grupo México.

100%

Attendance by GMXT Board Members.

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Members of the GMXT Board of Directors.

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Transportation Division Board of Directors					
#	Member	Position	Year appointed	Years in service	Gender
1	Germán Larrea Mota Velasco	Chairman	2014	8	Male
2	Alfredo Casar Pérez	Board Member	2014	8	Male
3	Fernando López Guerra Larrea	Board Member	2017	5	Male
4	Xavier García de Quevedo Topete	Board Member	2017	5	Male
5	Carlos Noriega Arias	Independent	2017	5	Male
6	Jaime Corredor Esnaola	Independent	2017	5	Male
7	Roberto Slim Seade	Board Member	2014	8	Male
8	Arturo Elías Ayub	Board Member	2016	6	Male
9	Luis Roberto Frías Humphrey	Alternate	2017	5	Male
10	Daniel Hajj Slim	Alternate	2017	5	Male
11	Eduardo Joaquín Gallástegui Armella	Independent	2017	5	Male
12	Hugo Rafael Gómez Díaz	Board Member	2017	5	Male
13	Isaac Franklin Unkind	Board Member	2021	2	Male
14	Christian Lippert Helguera*	Secretary (non-member)	2017	5	Male

Infrastructure Division Executive Leadership

Funcionarios de la Alta Dirección de la División Infraestructura	
Germán Larrea Mota Velasco Chairman of the Board of Directors	Xavier García de Quevedo Executive President
Francisco Zinser González CEO	Mario Fernando Chávez Galas Vice-President Administration and Finance
Ricardo Arce Castellanos Vice-President Oil, Construction and Engineering	Javier Gómez Aguilar Lead Counsel and Chief Compliance Officer
Julio Francisco Larrea Mena Vice-President Constructora México	Gustavo Ortega Gómez Vice-President Energy
Héctor Raúl Huerta Avendaño Vice-President Engineering Services	José Olaya Hernández Vice-President Highways

Annexes for Social

5.1 Workplace Health & Safety

Mining Division

a. Historic safety performance

Indicator	AMC					SCC				
	2018	2019	2020	2021	2022	2018	2019	2020	2021	2022
Fatalities	1	4	0	3	4	1	4	0	3	4
LTIFR - Employees ¹	3.59	4.16	2.38	4.84	2.53	4.74	4.11	2.44	4.85	2.49
LTIFR - Contractors	2.27	2.99	2.11	1.94	1.56	2.33	2.96	2.14	1.96	1.58
TRIFR - Employees ²	4.83	5.33	3.23	5.56	4.06	6.47	5.35	3.35	5.61	3.86
TRIFR - Contractors	2.30	3.02	2.11	1.94	1.71	2.37	2.99	2.14	1.96	1.75
Safety process events ³	0	1	0	1	1	0	1	0	1	1
Safety process events rate (employees) ⁴	0.0	0.03	0.0	0.03	0.03	0.0	0.03	0.0	0.03	0.03
Safety process events rate (employees + contractors)	0.0	0.01	0.0	0.01	0.01	0.0	0.02	0.0	0.02	0.01

¹Lost Time Injury Frequency Rate (LIFTR): Number of injuries resulting in time lost per 1,000,000 man hours worked.
²Total Recordable Injury Frequency Rate (TRIFR): Total number of recordable injuries per 1,000,000 man hours worked.
³Incidents that involve an unforeseen containment failure in a pipe system or process that could result in a leak of hazardous substances, fire or explosion.
⁴Number of Safety Process Events per 1,000,000 man hours worked.

b. Safety performance

Indicador		AMC		SCC		Mexico	Peru	USA
		Total	Rate	Total	Rate	Total	Total	Total
I. Fatalities	a) Employees	2	0.05	2	0.05	2	0	0
	b) Contractors	2	0.06	2	0.06	2	0	0
	a + b	4	0.06	4	0.06	4	0	0
II. Permanent incapacitating injury	a) Employees	0	0	0	0	0	0	0
	b) Contractors	0	0	0	0	0	0	0
	a + b	0	0	0	0	0	0	0
III. Temporary incapacitating injury	a) Employees	101	0.51	93	0.50	79	14	8
	b) Contractors	50	0.31	49	0.32	30	19	1
	a + b	151	0.42	142	0.42	109	33	9
IV. Man hours	a) Employees	39,885,762	N/A	37,298,068	N/A	24,010,114	13,291,216	2,587,694
	b) Contractors	32,144,049		30,935,883		15,710,554	15,225,329	1,208,166
	a + b	72,029,811		68,233,951		39,720,667	28,516,545	3,795,860
V. Man hours worked	a) Employees	21,537	N/A	21,201	N/A	20,113	1,088	336
	b) Contractors	14,354		14,330		13,268	1,062	24
	a + b	35,891		35,531		33,381	2,150	360

5.2 Our People

Annexes

Labor Practices

Workforce by Nationality

Workforce by Nationality ¹	Mining Division									Transportation Division						Infrastructure Division		Grupo México	
	Total MIN DIV		SCC		Minera México (Mexico)		SPCC (Peru)		ASARCO (USA)	Total TRA DIV		Mexico		USA		Total INF DIV		Total	
Total	14,997	%	14,952	%	10,050	%	4,947	%	N/A	10,677	%	9,820	%	857	%	2,526	%	28,200	%
Mexico	10,040	66.9%	10,001	66.9%	10,030	99.8%	10	0.2%	-	9,820	92%	9,820	100%	-	0%	2,521	99.8%	22,381	79.4%
Peru	4,941	32.9%	4,936	33%	5	0.05%	4,936	99.8%	-	-	0%	-	0%	-	0%	-	0%	4,941	17.5%
USA	4	0.03%	4	0%	4	0.04%	-	0%	-	857	8%	-	0%	857	100.0%	-	0%	861	3.1%
Other Nationalities	12	0.1%	11	0.1%	11	0.11%	1	0.02%	-	-	0%	-	0%	-	0%	5	0.2%	17	0.1%

¹The Mining Division operations in the United States are not included in the total employees detailed by nationalities due to data privacy policies at these sites.

Human Capital Development

Average Employee Training Hours

404-1

The following tables summarize the employee training hours by gender, category and age group.

Average training hours per year	Mining Division										Transportation Division						Infrastructure Division		Grupo México		
	Total MIN DIV		SCC		Minera México (Mexico)		SPCC (Peru)		ASARCO (USA)		Total TRA DIV		Mexico		USA		Total INF DIV		Total		
Category*	W	M	W	M	W	M	W	M	W	M	W	M	W	M	W	M	W	M	W	M	Total
Directors	7.9	13.2	N/A	26.7	5.3	10.3	N / A	20.9	10.5	17	0	0.8	0	0	0	16	N / A	2.5	9.6	8	8.2
Deputy Directors and Managers	17.6	24.1	19.4	28.4	15.2	18.8	28.2	42.6	17.4	10.5	24.7	5.3	24.9	4.9	16	40	31.1	16.5	22.8	17	17.9
Middle Management	42.6	38	44.5	39.6	48.7	41.4	29.5	33.8	14.2	17.3	4.4	24.3	4.4	24.3	0	21.3	59.8	29.9	37.5	34.4	34.9
Administrative / Operational	26.8	33.4	28	35	30.2	34.2	21.3	36.2	12.6	15.9	7.4	61.4	7.3	62.6	16	13.8	14.5	22.7	19.4	41.4	35.2
Unionized	20.8	23.6	21.4	24.4	32.7	28.4	11.9	16.6	19	14.2	73.2	51.8	73.2	51.8	0	0	11.3	10.6	20.7	33.6	33.3
Average training hours by gender	27.9	26.1	29.6	27.2	33.9	30.4	19.2	20.5	16.1	14.5	10.3	50.5	10.2	50.7	16	16	23.6	18	23.2	34.1	33.3
Average training hours by region	26.3		27.3		30.6		20.4		14.7		48.7		48.8		16		18.9				

* The category of Directors is made up of all Directors of the entire organization. The category of Deputy Directors and Managers is made up of the Deputy Directors, Superintendents and Managers of the entire organization. The category of Middle Management is made up of the Assistant Managers, Heads and Supervisors from the entire organization. The category of Administrative and Operational is made up of all non-union employees who do not belong to the previous categories in the entire organization. The category of unionized is made up of all Unionized personnel.

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Average training hours per year	Mining Division										Transportation Division					
	Total MIN DIV		SCC		Minera México (Mexico)		SPCC (Peru)		ASARCO (USA)		Total TRA DIV		Mexico		USA	
Age group	W	M	W	M	W	M	W	M	W	M	W	M	W	M	W	M
18 - 25 years	34.1	37.5	34.9	39.9	34.7	40.6	37.2	23.5	22.5	19.7	18.6	117	18.6	117	0	0
26 - 40 years	34.4	29.1	35.6	30.1	38.7	32.8	22.9	22.8	18	14.9	10.1	61.5	10.1	61.7	0	16
41 - 50 years	21.5	23.8	22.6	24.7	24.5	27.6	19.5	20.2	17.8	13.7	7.7	46.7	7.6	46.8	16	16
> 51 years	14.1	19	14.8	19.9	15.4	21.4	14	17.9	12.6	13	11	19.5	10.9	19.5	16	16
Average training hours by gender	27.9	26.1	29.6	27.2	33.9	30.4	19.2	20.5	16.1	14.5	10.3	50.5	10.2	50.7	16	16

Programs for upgrading employee skills and transition assistance programs

404-2

Mining Division	
Minera México (Mexico) Training	
Programs for upgrading employee skills 610 participants	Programs for upgrading employee skills 2,312 participants
<p>Management skills diploma course - 150 participants</p> <p>Upper and Middle Management personnel develop leadership and business management skills</p>	<p>Corporate training calendar - 1,800 participants</p> <p>Ongoing institutional competencies development program for all non-union personnel.</p>
<p>Professionals in development - 70 participants</p> <p>Project development program for recent graduates to develop leadership, technical and managerial skills to prepare them for middle management positions.</p>	<p>Individual development plan - 500 participants</p> <p>Program to strengthen skills and competencies for employees to take on new roles and responsibilities within the organization, informed by succession plans.</p>
<p>Impulsa - 300 participants</p> <p>Understanding the operation and maintenance of our equipment and machinery is key, as well as understanding our policies, procedures and regulations. The <i>Impulsa</i> program focuses on ensuring our people complete at least their elementary and middle school education.</p>	<p>Scholarships for bachelor's and master's degrees - 12 participants</p> <p>The company supports the professionalization of our employees.</p>
<p>English classes - 90 participants</p> <p>We are a transnational company with customers, suppliers and other related third parties with whom communications are in English, therefore competency in English is essential, particularly for certain operational and administrative positions. Also, maintenance personnel must be able to read and understand operating manuals that are in English.</p>	

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SPCC (Peru) Training	
Programs for upgrading employee skills 1,763 participants	Programs for upgrading employee skills 5,810 participants
Coaching leadership - 905 participants Program to develop skills in self-leadership, emotional intelligence, and intra and interpersonal relationships to become an agent of change.	Mining / industrial health & safety training (ds 0.24) - 4,825 participants To strengthen the culture of preventive safety among all company personnel and to comply with current regulations.
Skills development online - 273 participants For supervisors to develop the soft skills they need to best manage the personnel under their charge.	Environmental training - 426 participants Compliance with current environmental regulations - OSHA HAZWOPER Certification Level IV / Hazardous Materials Specialist.
Supervisor ABC - 381 participants For supervisors to develop the skills and techniques they need to best manage their personnel to strengthen the workplace climate.	Interpretation and implementation of ISO 9001, ISO 14001, ISO 45001 - 198 participants
Young professionals - 164 participants Engineer Trainer Program (33 supervisors), Internship Program (109 university graduates) and Technical Professionals Program (22 graduates from technical colleges); prepares people to join the company in the future.	New hire orientation - 361 participants To ensure new hires are familiar with the corporate codes of conduct and ethics.
English classes - 40 participants Strengthen English language skills for designated supervisor positions.	
ASARCO (USA) Training	
Programs for upgrading employee skills 104 participants	Programs for upgrading employee skills 714 participants
Leadership training - 39 participants Training to develop the leadership and technical skills a supervisor needs to best manage the personnel under their charge and to strengthen the workplace climate.	HIPAA (Health Insurance Portability and Accountability Act) training - 12 participants
New supervisor training - 30 participants Training in leadership skills, conflict resolution and required skills for new mine safety and operational supervisors.	New Miner / MSHA training - 127 participants
Tips training - 35 participants Employees learn about TIPS (Threaten, Interrogate, Promise, Surveil).	Code of conduct / Ethics training - 288 participants
	Conflict of interest training - 287 participants

Infrastructure Division	
Programs for upgrading employee skills 1,476 participants	Programs for upgrading employee skills 632 participants
Upskilling training - 763 participants Program that teaches employees new skills and competencies to optimize their development.	High specialization techniques (in country and abroad) - 20 participants
Reskilling training - 198 participants Employee training for a new role in the company.	Health & safety regulations - 612 participants
Ideal leadership - 255 participants Training in good management practices.	
Improving management skills – Management - 260 participants	

Transportation Division
Programs for upgrading employee skills 2,041 participants
First aid - 1,125 participants Employees are trained to provide first aid in the event of an emergency situation.
Selection & use of PPE - 105 participants Employees are trained in the proper use of personal protective equipment.
Working at height safety - 154 participants Course provided to employees who perform tasks 5’ (1.5m) from ground or floor level to prevent falls and injuries.
Company transportation code refresher training (ATV and SCTT) and CMV train control system - 1,005 participants
Yard / Freight brakeman supplier assistant training - 100 participants

Percentage of Employees Participating in Performance Appraisal

404-3

The percentages of employees that participated in a performance appraisal in 2022 are summarized following, by category:

% Employees participating in performance appraisal	Mining Division										Transportation Division						Infrastructure Division		Grupo México		
	Total MIN DIV		SCC		Minera México (Mexico)		SPCC (Peru)		ASARCO (USA)		Total TRA DIV		Mexico		USA		Total INF DIV		Total		
Category	W	M	W	M	W	M	W	M	W	M	W	M	W	M	W	M	W	M	W	M	Total
Directors	50%	90%	N/A	100%	100%	100%	N/A	100%	0%	0%	100%	96%	100%	100%	100%	83.3%	100%	100%	77.8%	94.4%	92.9%
Deputy Directors and Managers	80.4%	79.2%	88.6%	95%	93.9%	98.6%	66.7%	90%	28.6%	3.9%	93.2%	97%	95.3%	100%	0%	50%	100%	100%	89.2%	88.9%	88.9%
Middle Management	90.3%	92.9%	94.4%	98.3%	100%	100%	80.4%	93.7%	38.5%	28.9%	100%	100%	100%	100%	100%	100%	89.4%	87.7%	93%	93.7%	93.7%
Administrative / Operational	84.8%	89.9%	92.4%	96.2%	97.9%	98.5%	78.9%	92.6%	21.3%	35.6%	85.6%	90.2%	88.1%	99.6%	71.9%	45.3%	78.6%	87.6%	83.6%	89.5%	87.9%
Total	89.5%		96.4%		99.2%		90.5%		25.7%		92.6%		98.1%		61.9%		87.4%		86.2%	91.2%	90.2%

The following review is conducted at the Grupo México level:

Performance Appraisal

The performance appraisal covers goals and competencies, while also reviewing completion of training, and compliance with company policies and ethical guidelines. All non-union personnel participate in these reviews, which are not applied to union personnel, temporary or project personnel, or personnel joining the company after July 31 each year.

The Mining Division, Southern Copper Corporation (SCC) and the Infrastructure Division conduct the following type of review:

360° Evaluation

The information gathered from this performance review process to develop technical competencies (a separate exercise from the annual goal-based review) is used to identify gaps in the development of potential successors, defining in turn individual development plans to meet the needs of our staffing tables. The immediate supervisor, a couple of subordinates, peers and, sometimes, external experts participate in this review. Not all personnel

participate in this review as it is focused on personnel identified for succession to strategic positions. In 2022, 27.4% of Mining Division and SCC personnel participated and 5.8% of Infrastructure Division personnel.

Lastly for the Mining Division⁴ and SCC:

Performance Calibration - 15 boxes

In this talent calibration process, each person is mapped on a performance and potential chart. All non-union employees participate and each year, the results are reviewed in our talent management system. Human Resources, together with the department heads, calibrates the potential and performance of each employee annually to plan employee development and identify those with high potential. At the end of the exercise, we have a talent map for the team, which we use to compare employee performance in each quadrant of the chart. This exercise helps our strategic planning in terms of talent.

⁴ Does not include the United States (ASARCO).

Talent Recruitment and Retention

New Hires

401-1

The following tables summarize our new hires by age group, gender and category.

New Hires	Mining Division										Transportation Division						Infrastructure Division		Grupo México		
	Total MIN DIV		SCC		Minera México (Mexico)		SPCC (Peru)		ASARCO (USA)		Total TRA DIV		Mexico		USA		Total INF DIV		Total		
Age group	W	M	W	M	W	M	W	M	W	M	W	M	W	M	W	M	W	M	W	M	Total
18 - 25 years	92	483	84	364	80	355	4	9	8	119	32	294	29	271	3	23	28	178	152	955	1,107
26 - 40 years	184	755	160	619	140	444	20	175	24	136	80	671	68	598	12	73	123	554	387	1,980	2,367
41 - 50 years	28	151	17	100	13	58	4	42	11	51	15	95	5	70	10	25	30	221	73	467	540
≥ 51 years	17	92	4	36	1	8	3	28	13	56	5	30	-	16	5	14	7	187	29	309	338
Total new hires	321	1,481	265	1,119	234	865	31	254	56	362	132	1,090	102	955	30	135	188	1,140	641	3,711	4,352
Total new hires rate	17.8%	82.2%	76.8%		61%		15.8%		23.2%		10.8%	89.2%	86.5%		13.5%		14.2%	85.8%	14.7%	85.3%	100%

New Hires by Category	Mining Division					Transportation Division			Infrastructure Division		Grupo México	
	Total MIN DIV	SCC	Minera México (Mexico)	SPCC (Peru)	ASARCO (USA)	Total TRA DIV	Mexico	USA	Total INF DIV		Total	%
Directors	-	-	-	-	-	2	1	1	1		3	0.1%
Deputy Directors and Managers	45	40	21	19	5	3	3	-	23		71	1.6%
Middle Management	216	197	148	49	19	41	30	11	145		402	9.2%
Administrative / Operational	373	328	264	64	45	368	285	83	328		1,069	24.6%
Unionized	1,168	819	666	153	349	808	738	70	831		2,807	64.5%
Total	1,802	1,384	1,099	285	418	1,222	1,057	165	1,328		4,352	100%

Inhouse Promotions

	Mining Division					Transportation Division			Infrastructure Division	Grupo México
	Total MIN DIV	SCC	Minera México (Mexico)	SPCC (Peru)	ASARCO (USA)	Total TRA DIV	Mexico	USA	Total INF DIV	Total
Total	1,408	1,352	1,198	158	52	1,153	1,132	21	97	2,658
% Vacancies filled by inhouse candidates (inhouse promotions)	78.1%	97.7%	109.0%	55.4%	12.4%	94.4%	107.1%	12.7%	7.3%	61.1%

Employee Turnover

The following tables summarize our employee turnover by gender, age group, category, voluntary and involuntary.

Turnover	Mining Division										Transportation Division						Infrastructure Division		Grupo México	
	Total MIN DIV		SCC		Minera México (Mexico)		SPCC (Peru)		ASARCO (USA)		Total TRA DIV		Mexico		USA		Total INF DIV		Total	
Age group	W	M	W	M	W	M	W	M	W	M	W	M	W	M	W	M	W	M	W	M
18 - 25 years	21	179	17	111	17	106	-	5	4	68	10	91	8	77	2	14	20	136	51	406
26 - 40 years	91	669	77	541	58	387	20	154	13	128	78	478	56	380	22	98	89	539	258	1,686
41 - 50 years	28	194	13	132	12	91	2	41	14	62	25	182	6	114	19	68	26	211	79	587
≥ 51 years	39	461	27	350	17	191	10	162	12	108	8	367	2	315	6	52	8	205	55	1,033
Total turnover	179	1,503	1,268		879		394		409		121	1,118	958		281		143	1,091	443	3,712
Tasa turnover rate	14.4%	10%	8.5%		8.7%		8%		31%		22.5%	11%	9.8%		32.8%		32.5%	52.3%	20%	13.6%

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Turnover	Mining Division					Transportation Division			Infrastructure Division	Grupo México
	Total MIN DIV	SCC	Minera México (Mexico)	SPCC (Peru)	ASARCO (USA)	Total TRA DIV	Mexico	USA	Total INF DIV	% Total
Directors	13.2%	4.8%	13.9%	0%	28.6%	7.1%	9.1%	0%	0%	9%
Deputy Directors and Managers	11.8%	10.9%	11.6%	8.2%	18.6%	10.6%	9.5%	30.8%	20.8%	12.9%
Middle Management	12.3%	11.3%	12.7%	6.7%	25.9%	30.5%	7.3%	179.5%	34.3%	19.2%
Administrative / Operational	11.3%	9.9%	11.8%	6.4%	27%	16.3%	16.6%	14.4%	32.6%	17.6%
Unionized	9.8%	7.7%	7.4%	8.4%	33.2%	9.1%	8.7%	16.8%	74.6%	12.6%
Total	10.3%	8.5%	8.7%	8.0%	31.0%	11.6%	9.8%	32.8%	48.9%	14.1%

Turnover	Mining Division					Transportation Division			Infrastructure Division	Grupo México
	Total MIN DIV	SCC	Minera México (Mexico)	SPCC (Peru)	ASARCO (USA)	Total TRA DIV	Mexico	USA	Total INF DIV	Total
Voluntary Turnover	7%	5.8%	7.6%	2.3%	20%	7.5%	6.2%	22.3%	12.9%	7.7%
Women	10.1%	9.1%	11.7%	3.9%	15.9%	17.7%	13.2%	42.2%	18%	13.5%
Men	6.8%	5.6%	7.3%	2.2%	20.5%	7%	5.9%	20.2%	11.8%	7.2%
Involuntary Turnover	3.3%	2.6%	1.1%	5.7%	11%	4.1%	3.5%	10.5%	35.9%	6.4%
Women	4.4%	3.1%	2%	5.7%	13.8%	4.8%	2.6%	16.9%	14.5%	6.5%
Men	3.2%	2.6%	1%	5.7%	10.6%	4.1%	3.6%	9.8%	40.5%	6.4%
Total	10.3%	8.4%	8.7%	8%	31%	11.6%	9.8%	32.8%	48.9%	14.1%

Parental Leave

401-3

Summarized in the tables following:

Parental leave	Mining Division										Transportation Division						Infrastructure Division		Grupo México	
	Total MIN DIV		SCC		Minera México (Mexico)		SPCC (Peru)		ASARCO (USA)		Total TRA DIV		Mexico		USA		Total INF DIV		Total	
	W	M	W	M	W	M	W	M	W	M	W	M	W	M	W	M	W	M	W	M
Total employees (entitled to parental leave)	1,239	15,077	1094	13,903	763	9,287	331	4,616	145	1,174	538	10,139	455	9,365	83	774	440	2,086	2,217	27,302
Employees that took parental leave	31	483	29	469	20	325	9	144	2	14	16	233	15	227	1	6	9	24	56	740
Employees that returned to work after parental leave	28	483	28	469	19	325	9	144	-	14	13	231	12	225	1	6	9	24	50	738
Employees continuing on payroll at 2022 close	28	478	28	464	19	323	9	141	-	14	13	231	12	225	1	6	9	24	50	733
Return to work rate (%)	90%	100%	96.6%	100%	95%	100%	100%	100%	0%	100%	81%	99%	80%	99.1%	100%	100%	100%	100%	89.3%	100%
Employee retention rate (%)	100%	99%	100%	98.9%	100%	99.4%	100%	97.9%	0%	100%	100%	100%	100%	100%	100%	100%	100%	100%	100%	99.3%

Trend of Employee Engagement

We use the same methodology and instrument across the three countries where we operate (Mexico, Peru and the United States) to obtain a valid comparison, which is reviewed and designed in conjunction with our Human Resources departments. The instrument or survey measures employee perceptions to then identify actions to strengthen their commitment. We measure 18 factors in Loyalty and Satisfaction, and in 2021, an additional factor was included: COVID, for a total of 87 questions, using a “Likert” scale from 1 to 5. All employees are invited to participate in the online survey, which is managed by a third party with extensive experience in social and statistical measuring, which also serves to guarantee impartiality and confidentiality in the responses. Each factor is analyzed in detail and the results are shared with each company site to then prepare a Response Plan to address the needs identified.

As of 2021, the ECO survey measures diversity factors like age and gender, among other identity markers, to gain a greater understanding of the different groups in our company and their level of satisfaction.

In 2021, 783 women (80.6%) and 10,653 men (76.3%) participated in the survey, representing a 78% total participation by the initial sample group. This reflects a high level of voluntary participation by our people, given that the 2021 goal was 60%, which the Mining Division surpassed.

Mexico reported that 88% of employees are actively committed to or satisfied with the company, while Peru reported 61% and the United States 70%. Women gave higher scores than men for each factor, and their commitment level was 78%.

On a scale of 1 to 5, employee commitment averaged a score of 4.09, an improvement over the 3.75 score in 2019.

Results for the Mining Division - “ECO” Employee Survey

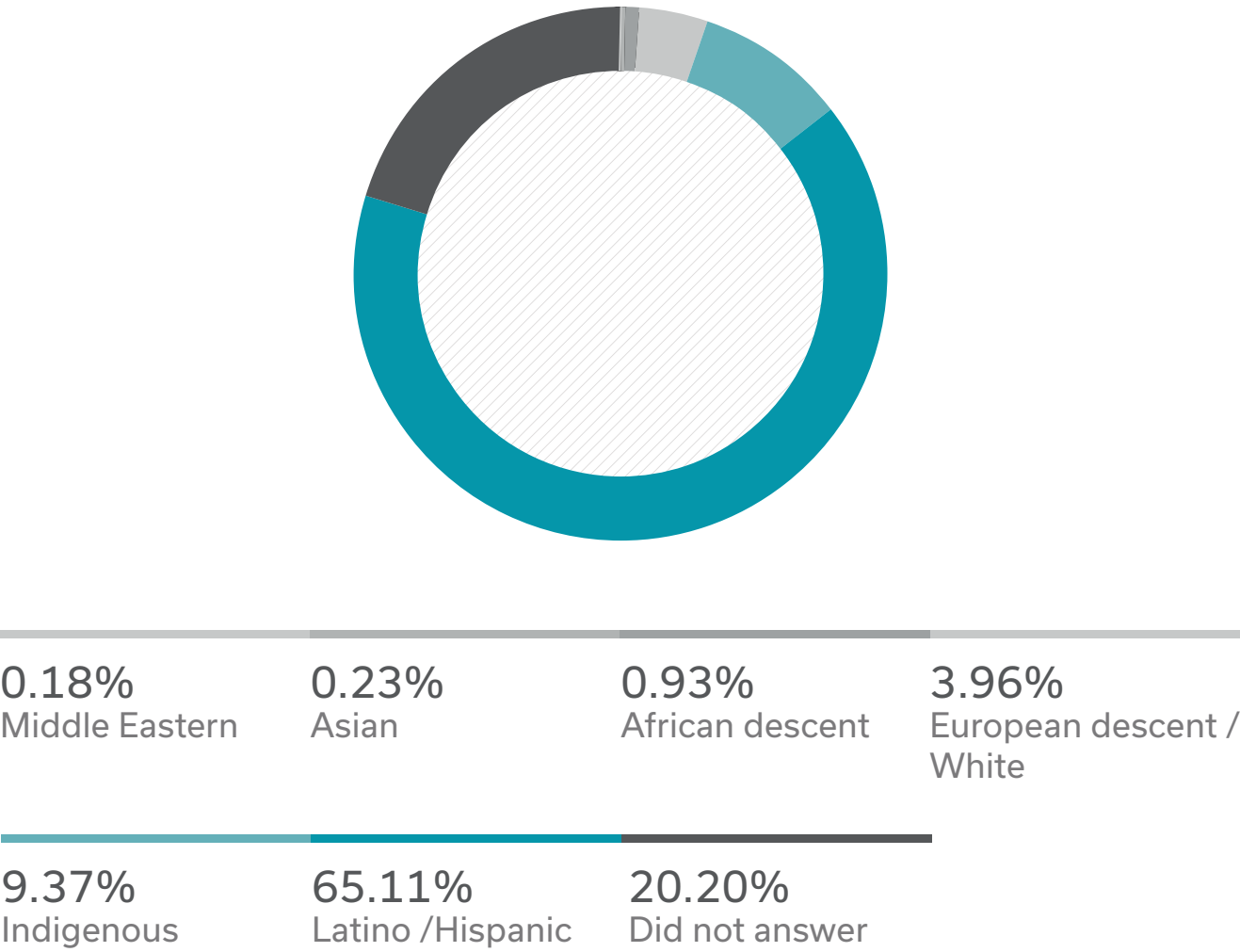
ECO Results	Total Mining Division		SCC		Minera México (Mexico)		SPCC (Peru)		ASARCO (USA)	
	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men
% Employees actively committed to or satisfied with the company	88%	85%	90%	85%	93%	91%	82%	72%	67%	58%
2021 Goal	60%		60%		60%		60%		60%	

Employees Interviewed	Total Mining Division		SCC		Minera México (Mexico)		SPCC (Peru)		ASARCO (USA)	
Type of employee and gender	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men
Non-Union	651	2,740	602	2,542	476	1,829	126	713	49	198
Union	128	7,913	128	7,913	53	5,720	75	2,193	0	0
Total	779	10,653	730	10,455	529	7,549	201	2,906	49	198

7.5 Annexes

Employees Interviewed	Total Mining Division		SCC		Minera México (Mexico)		SPCC (Peru)		ASARCO (USA)	
Age group and gender	Women	Men	Women	Men	Women	Men	Women	Men	Women	Men
18 - 24 years	37	677	37	674	28	598	9	76	0	3
25 - 40 years	419	5,357	405	5,305	328	4,032	77	1,273	14	52
41 - 57 years	223	3,519	198	3,428	132	2,417	66	1,011	25	91
≥ 58 years	100	1100	90	1048	41	502	49	546	10	52
Total	779	10,653	730	10,455	529	7,549	201	2,906	49	198

Ethnic identity



12.22%

of respondents identify as having one of the following disabilities:

- Visual
- Mobility
- Hearing
- Intellectual
- Psychosocial

A specific survey on diversity and inclusivity was conducted in 2021 with a sample group of employees. In the Mining Division, 2% of respondents identified as members of the LGBTQIA+ community.

Living Wage at Grupo México

At Grupo México, we are committed to offering all company personnel a living wage that supports them to cover their basic needs and those of their families.⁵ In this regard, we have developed a methodology to compare the salaries of our employees against the living wage for where they live, as defined by internationally recognized independent sources ([Wage Indicator Foundation](#) and the [Massachusetts Institute of Technology](#)), and if our salaries are below this threshold, we make the corresponding adjustments. The company is committed to conducting this analysis annually to ensure our employees are earning a living wage.

The first step in this methodology is to identify the lowest base salary at our sites in the three countries where the Mining Division operates and for the companies of both the Infrastructure and Transportation divisions. The Grupo México base salary represents only a portion of employee income. In addition to the base salary, all employees receive monthly benefits above those required by law (including grocery vouchers, savings fund, etc.). Also, employees receive variable compensation through profit sharing, which can represent a high percentage of an employee’s annual income. Last year, for example, employees with the lowest salaries in the Mining Division in Mexico received profit sharing amounting to 8-56 times their monthly base salary. It is important to note that our analysis to determine living wage does not consider these other benefits above the base salary.

After identifying these base salaries, we compared them against the living wage (calculated by recognized third parties) at the state level for the Mining and Infrastructure divisions, and the US operations of the Transportation Division. For the Transportation Division companies operating in Mexico, given the geographic coverage, we compared the base salaries against the national average living wage.⁶

We applied this methodology for:

- 18 Mining Division operations and 6 corporate offices (10 sites and 3 offices in Mexico, 3 sites and 3 offices in Peru, and 5 sites in the United States).
- 6 companies in the Infrastructure Division and 1 corporate office, all in Mexico.
- 3 Transportation Division companies in Mexico.

This represents 99% of total AMC personnel, 100% of Infrastructure Division personnel, and 92% of Transportation Division personnel.

Additionally, this year we included in the study for the first time, the lowest salaries of our Minera México and Peru contractors, comparing these against the national living wage. We analyzed 412 of the 450 Minera México contractors (93%), and in Peru, we analyzed 127 of the 179 permanent contractors (71%), as the remaining 29% receive variable compensation.

This methodology identifies cases where the base salary for an employee or contractor is below the living wage for where they live, to then take the corresponding actions.

⁵ According to the Global Living Wage Coalition, an internationally recognized source on this topic, basic needs include (but not limited to) food, clothing, housing, health care and education.

⁶ For the United States, we used as a reference the living wage for a single adult with no children for the state level and for a two-parent family with 2 children and 2 earners for the national level, provided by MIT. For Mexico, we used as a reference the living wage for a two-parent family with 2.2 children and 1.6 earners, and for Peru, we used as the reference, the living wage for a two-parent family with 2.3 children and 1.7 earners, provided by the Wage Indicator Foundation.

5.3 Diversity and Inclusion

Employee Diversity by Category

405-1

The breakdown of our workforce by category and gender is summarized in the following table:

	Mining Division												Transportation Division								Infrastructure Division				Grupo México				
	Total MIN DIV				SCC		Minera México (Mexico)		SPCC (Peru)		ASARCO (USA)		Total TRA DIV				Mexico		USA		Total INF DIV				Total				
Category	%W	Total	%M	Total	W	M	W	M	W	M	W	M	%W	Total	%M	Total	W	M	W	M	%W	Total	%M	Total	%W	Total	%M	Total	
Directors	0.3%	4	0.3%	49	0%	0.2%	0.3%	0.4%	0%	0%	1.4%	0.4%	0.6%	3	0.2%	25	0.7%	0.2%	0%	0.8%	0%	0	0.9%	19	0.3%	7	0.3%	93	0.3%
Deputy Directors and Managers	4%	50	2.1%	323	3.6%	1.8%	4.6%	1.9%	2.4%	1.9%	4.8%	4.4%	8.2%	44	2%	201	9.5%	2%	1.2%	1.6%	4.8%	21	5.0%	104	5.2%	115	2.3%	628	2.5%
Middle Management	18.7%	232	11.7%	1,765	20%	11.8%	22.3%	13.4%	14.5%	8.6%	9.7%	10.6%	21%	113	5.3%	540	20.4%	5%	24.1%	8.8%	19.3%	85	15.9%	332	19.4%	430	10%	2,637	10.4%
Administrative / Operational	52.9%	656	8.3%	1,251	55.7%	8.3%	59.5%	7.4%	45.9%	10%	34.5%	8.7%	66.9%	360	13.4%	1,363	66.6%	12.1%	68.7%	30.2%	58.4%	257	33.5%	699	57.4%	1,273	12.1%	3,313	15.5%
Unionized	24%	297	77.5%	11,689	20.7%	77.9%	13.4%	76.9%	37.2%	79.3%	49.7%	75.8%	3.3%	18	79%	8,010	2.9%	80.7%	6%	58.7%	17.5%	77	44.7%	932	17.7%	392	75.6%	20,631	71.2%

Women in Management Positions

Women in Management Positions CSA	Mining Division					Transportation Division			Infrastructure Division	Grupo México
	Total MIN DIV	SCC	Minera México (Mexico)	SPCC (Peru)	ASARCO (USA)	Total TRA DIV	Mexico	USA	Total INF DIV	Total
Top Management	9.3%	N/A	5.6%	N/A	28.6%	13.6%	13.6%	N/A	N/A	10.8%
All Management Positions	11.8%	11.8%	12.4%	10.1%	11.2%	17.3%	17%	19.6%	18.9%	14.1%
Junior Management Positions	11.6%	11.7%	12.0%	10.8%	10.1%	17.3%	16.5%	22.7%	20.4%	14%
Income-Generating Management Positions ⁷	36%	30.8%	34.3%	N/A	85.7%	29.5%	27.9%	100%	4.8%	27.8%

⁷ Percentage calculated from the total women in the category Management.

Distribution of our workforce by age group and gender

Diversity by age group	Mining Division										Transportation Division						Infrastructure Division		Grupo México	
	Total MIN DIV		SCC		Minera México (Mexico)		SPCC (Peru)		ASARCO (USA)		Total TRA DIV		Mexico		USA		Total INF DIV		Total	
Age Group	%W	%M	W	M	W	M	W	M	W	M	%W	%M	W	M	W	M	%W	%M	%W	%M
18 - 25 years	9.4%	7.3%	9.9%	7%	12.8%	9.9%	3%	0.9%	5.5%	11%	6.9%	5.3%	7.5%	5.3%	3.6%	5.3%	7%	8.2%	8.3%	6.6%
26 - 40 years	52.8%	45.3%	55.9%	46.3%	64.1%	49.9%	36%	38.9%	31.7%	33.7%	52.2%	46.5%	55.4%	47%	34.9%	39.5%	68.9%	48%	55.8%	45.9%
41 - 50 years	16.5%	24.5%	15.3%	24.6%	12.1%	22.1%	23.6%	29.7%	24.1%	23%	24.9%	22.5%	23.5%	22.7%	32.5%	21.1%	17.3%	22.9%	18.7%	23.6%
≥ 51 years	21.3%	23%	18.8%	22.1%	11%	18.1%	37.5%	30.5%	38.6%	32.3%	16.0%	25.7%	13.6%	25%	28.9%	34.1%	6.8%	20.9%	17.1%	23.8%

Diversity by age group	Mining Division						Transportation Division				Infrastructure Division		Grupo México	
	Total MIN DIV		SCC	Minera México (Mexico)	SPCC (Peru)	ASARCO (USA)	Total TRA DIV		Mexico	USA	Total INF DIV		Total	
Age group	%	Total					%	Total			%	Total	%	%Total
< 30 years	17.8%	2,910	17.8%	23.5%	6%	18.9%	15.1%	1,611	15.2%	13.8%	21.1%	533	17.1%	5,054
30 - 50 years	59.3%	9,674	60.3%	58.9%	63%	48.1%	59.7%	6,372	60.3%	52.6%	60.5%	1,528	59.5%	17,574
> 50 years	22.9%	3,732	21.9%	17.5%	31%	33%	25.2%	2,694	24.5%	33.6%	18.4%	465	23.3%	6,891

Women in STEM positions

Women in STEM positions ⁸	Mining Division					Transportation Division			Infrastructure Division	Grupo México
	Total MIN DIV	SCC	Minera México (Mexico)	SPCC (Peru)	ASARCO (USA)	Total TRA DIV	Mexico	USA	Total INF DIV	Total
	Total	401	387	289	98	14	169	120	49	678
%	32.4%	35.6%	37.9%	29.6%	9.7%	31.4%	26.4%	59%	24.5%	30.6%










⁸ The percentage is calculated from the total women at the Grupo México level and for each subsidiary and region.

5.4 Human Rights













Human rights risks identified through participative diagnostics/CCS and prevention/mitigation actions

Participative diagnostics





The following table summarizes the principal human rights-related risks that we identified proactively through the participative diagnostics. Of note is that in many cases, the risks are not directly associated with our operations, however they could impact our communities. In response, we implement mitigation plans to address these risks, in collaboration with the different levels of government in Mexico and Peru.

Participative diagnostics			
Division	Operation	Principal human rights-related risks perceived by the communities through the participative diagnostics	Preventive / mitigation / remediation actions taken
Southern Peru	Toquepala	<div> Access to water (location in the Atacama desert) ***</div> <div> Access to decent work (lack of technical skills training) **</div>	<ul style="list-style-type: none">Locumba River water studies and water infrastructure projects (dams, canals, steppe recovery and technical studies to improve the supply of drinking water)<i>Forjando Futuro</i> program (job skills training)
	Ilo	<div> Environment (air and water) **</div>	<ul style="list-style-type: none">Ilo smelter upgrade (2006) and environmental monitoringConstruction of the Ilo wastewater treatment plant (2022-2024)
	Cuajone	<div> Environment (Air)*</div>	<ul style="list-style-type: none">Dust capturing and monitoring program and farming support programs
	Los Chancas	<div> Limited economic development Access to healthcare ***</div>	<ul style="list-style-type: none"><i>Forjando Futuro</i> program (job skills training), temporary employment program and community wellbeing program (health campaigns)
	Tia Maria	<div> Access to water (location near farmlands) **</div> <div> Access to decent work (lack of sources of employment)***</div>	<ul style="list-style-type: none">Mine designed with desalinated water; comprehensive drinking water project studies for the province of Islay<i>Forjando Futuro</i> program (job skills training)
	Michiquillay	<div> Limited economic development ***</div>	<ul style="list-style-type: none"><i>Forjando Futuro</i> program (job skills training) and temporary employment program

* Risks related to our operations
** Risks partially related to our operations
*** Risks in the community unrelated to our operations

Participative diagnostics			
Division	Operation	Principal human rights-related risks perceived by the communities through the participative diagnostics	Preventive / mitigation / remediation actions taken
Minera México	La Caridad	  Environment (liabilities of other mining companies) Access to water ***	<ul style="list-style-type: none">Minera Moctezuma tailings remediation programTechnical consulting program and investment in water management projects
	Esqueda	 Free Transit and Safety (Railroad crossings)**	<ul style="list-style-type: none">Urban improvement project for spaces near the rail lines and safe railroad crossings 2022-2023
	Cananea	 Access to water ***	<ul style="list-style-type: none">Comprehensive Plan for Cananea, with the federal, state and municipal governments, to ensure water availability for the community
	El Arco	 Access to decent work (lack of sources of employment)***	<ul style="list-style-type: none"><i>Forjando Futuro</i> program (job skills training)
	Santa Barbara	  Environment Safe and healthy workplace (illegal mining)**	<ul style="list-style-type: none">Community environmental brigade, Prosperous Santa Barbara program (job skills training, sports schools, and improvements to public spaces)
	Nueva Rosita	 Environment (Operation in closure stage)**	<ul style="list-style-type: none">We have been working on remediation, providing maintenance for Chimenea Park and reforestation in the area.
	Charcas	 Job security (contractors)*	<ul style="list-style-type: none"><i>Forjando Futuro</i> program (job skills training)
	San Luis Potosi	 Environment (Air and soil) *	<ul style="list-style-type: none">Bicentennial Park, tree nursery, educational nursery
	San Martin	 Environment (Tailings dust)*	<ul style="list-style-type: none">Plan de mitigación de polvos por parte de áreas operativas, así como campañas periódicas de limpieza en arroyos y en la comunidad.
	Angangueo (project)	 Environment (former tailings dam)*	<ul style="list-style-type: none">Dust mitigation plan for the operational areas, and also regular campaigns to cleaning streams and the community.

* Risks related to our operations
** Risks partially related to our operations
*** Risks in the community unrelated to our operations

Participative diagnostics			
Division	Operation	Principal human rights-related risks perceived by the communities through the participative diagnostics	Preventive / mitigation / remediation actions taken
Infrastructure Division	Highways	 Gender equality ***	<ul style="list-style-type: none">Culture of peace and healthy coexistence, and linkage with the Human Rights Agency in the state of Guanajuato.
	El Retiro	 Protections for the Zapotec culture (indigenous communities)**	<ul style="list-style-type: none">Preservation of the Zapotec culture with Zapotec language courses, Zapotec photographic exhibitions and cultural events.Community Care Service in Zapotec.
	Fenicias	 Not identified	<ul style="list-style-type: none">We are working on linkage with the municipality of General Gravo and municipal social services to strengthen the education offerings in the area.
	Drilling	 Environment (water and marine life)**	<ul style="list-style-type: none">Grant funds to develop projects in environmental preservation and conservation .

Community Care Service (CCS)

As with the participative diagnostics, the Community Care Service (CCS) provides a tool for identifying and addressing human rights-related risks in our communities. Of the 70 reports received in 2022 through the CCS, 77% were classified into 4 categories: suppliers and contractors, workplace health and safety, the environment, and community relations. The 17 reports involving suppliers and contractors had to do with delayed payments to providers, delayed payments by contractors to third parties (where we corroborated that we had no debt pending), and problems caused by contractors on private property. To address these cases, we provided information to support the user in identifying the reason for the delay and supported the processing of these payments. We also held meetings with strategic areas, like Procurement, to consider this information in the supplier review process, recommending a [Code of Conduct for Business Partners](#) with commitments on setting responsibilities and expectations in regard to commercial, ethical and social practices.

We received nine reports involving environment-related issues. In all cases, we verified the situation and where necessary, we implemented actions in accordance with our Environmental Management System, such as operating plans to reduce the release of dust at dams and installing backup systems. We received grievances involving road safety, which led to measures that included working with local governments to improve access roads, install signage, and conduct employee road safety campaigns.

The remaining 33% of the reports received involved perceived impacts on neighboring lands and properties, in response to which we carried out corrective cleaning and maintenance actions. There were also grievances reported involving contractor employees being denied access to our operations, in response to which we provided information about the human resources requirements to be permitted entry.

* Risks related to our operations
** Risks partially related to our operations
*** Risks in the community unrelated to our operations

Annexes for Environment

6.1 Climate Change

2022 Scope 2 Emissions (tCO₂e)

Division / Subsidiary	Market-Based				Location-Based			
	2022	2021	2020	2019	2022	2021	2020	2019
Total MIN DIV	1,023,193	810,686	1,111,191	1,272,934	1,976,503	1,139,331	1,279,967	1,501,644
SCC	610,324	430,507	607,377	604,965	1,644,120	810,382	887,733	934,376
Total TRA DIV	11,157	16,100	10,864	15,497	15,793	20,373	18,516	20,639
Total INF DIV	1,497	924	928	483	1,497	924	928	984
Total Grupo México	1,035,847	827,710	1,122,983	1,288,914	1,993,793	1,160,628	1,299,411	1,523,267

2022 Scope 3 Emissions (tCO₂e)

Category	Mining Division					Transportation Division			Infrastructure Division	Grupo México	
	Total	SCC	Mexico	Peru	USA	Total	Mexico	USA	Total	Total	%
1. Purchased goods and services	1,944,016	1,596,520	910,666	685,854	347,496	1,077,252	1,077,252	-	124,719	3,145,988	35%
2. Capital goods	634,426	554,784	279,494	275,290	79,642	48,945	48,945	-	33,998	717,369	8%
3. Fuel and energy usage (WTT)	974,756	847,996	571,304	276,691	126,760	306,467	282,759	23,708	237,991	1,519,213	17%
4. Upstream transportation and distribution	822,677	191,274	189,391	1,883	631,404	-	-	-	6,146	828,824	9%
5. Waste	65,513	65,324	64,308	1,016	189	662	568	93	3,443	69,617	1%
6. Business travel (flights)	1,472	1,446	325	1,122	26	1,158	1,158	-	931	3,560	0%
7. Employee commuting	8,189	146	146	-	8,044	4,686	4,636	50	975	13,850	0%
9. Downstream transportation and distribution	398,419	374,328	321,443	52,885	24,092	-	-	-	0	398,419	4%
10. Processing of products sold	2,247,418	1,896,669	1,278,697	617,972	350,749	-	-	-	0	2,247,418	25%
11. Downstream leased assets	-	-	-	-	-	-	-	-	55,311	55,311	1%
Total	7,096,887	5,528,486	3,615,774	1,912,712	1,568,400	1,439,169	1,415,317	23,851	463,514	8,999,569	0%

Southern Copper Corporation (SCC) Emissions Reduction Targets

Term	SCC Targets*	Principal initiatives to achieve the target
2027	8%	<ul style="list-style-type: none">• Operate the Fenicias Wind Farm in Mexico• Develop energy efficiency projects in Peru
2035	40%	<ul style="list-style-type: none">• Increase the consumption of renewable energy in Peru• Favor renewable electricity for new mine projects• Start the electrification of mine trucks• Continue developing energy efficiency projects at our operations
2050	Zero net emissions	<ul style="list-style-type: none">• All mine trucks electrically-powered or using clean fuels• Favor renewable electricity for all SCC mine projects

2022 NOx and SOx Emissions – Mining Division

	NOx Emissions (metric tons)	SOx Emissions (metric tons)
DMIN	23,475	38,105
SCC	23,432	38,100
MM	11,486	10,519
SPCC	11,946	27,581
ASARCO	43	5

*All reduction targets are in terms of "business as usual" emissions, with 2018 as the base year.

Grupo México Historic Water Consumption

		Total Grupo México					Mining Division															Transportation Division															Infrastructure Division						
							SCC					Mexico					Peru					Total TRA DIV					Mexico					USA					Total INF DIV						
		2022	2021	2020	2019	2018	2022	2021	2020	2019	2018	2022	2021	2020	2019	2018	2022	2021	2020	2019	2018	2022	2021	2020	2019	2018	2022	2021	2020	2019	2018	2022	2021	2020	2019	2018							
GRI 303-3 Fresh water withdrawn in Megaliters (ML)	Surface water	33,270	36,499	37,454	34,064	39,687	33,240	36,494	37,348	33,982	39,630	18,836	21,099	21,537	18,408	24,414	14,404	15,395	15,810	15,574	15,216	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	30	5	106	82	57		
	Groundwater	75,116	79,582	79,559	79,272	80,806	71,794	75,780	75,405	75,129	76,483	38,057	39,008	39,409	38,648	39,978	33,737	36,772	35,996	36,481	36,506	156	164	220	226	151	156	164	209	215	151	0	0	11	11	0	3,165	3,637	3,932	3,917	4,172		
	Sea water	112	99	105	168	58	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	112	99	105	168	58		
	Water produced	1,615	942	691	627	843	1,615	942	691	627	843	822	168	0	0	0	793	774	691	627	843	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0				
	From third parties	208	171	678	1,908	774	65	65	67	1,494	23	16	16	24	15	12	49	49	43	10	10	143	106	109	183	53	78	99	108	181	53	65	7	1	2	0	0	0	418	231	698		
	Total water withdrawn in ML	110,321	117,293	118,487	116,039	122,168	106,715	113,281	113,511	111,232	116,979	57,732	60,291	60,970	57,071	64,404	48,983	52,990	52,540	52,692	52,575	299	270	329	409	204	234	263	317	396	204	65	7	12	13	0	3,307	3,741	4,561	4,398	4,985		
GRI 303-4 Water discharged in Megaliters (ML)	Surface water	506	587	613	840	699	227	50	40	59	0	227	50	40	59	0	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	506	537	573	781	699
	Groundwater	0	166	156	141	0	0	166	156	141	0	0	166	156	141	0	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	0	0	0	0
	Sea water	1,303	1,556	1,030	1,506	61	1,263	1,510	983	1,368	0	0	0	0	0	0	1,263	1,510	983	1,368	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	40	46	47	138	61
	From third parties	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0	0	0	0	0
	Total water discharged in ML	2,036	2,309	1,799	2,487	760	1,490	1,726	1,179	1,568	0	227	216	196	200	0	1,263	1,510	983	1,368	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	546	583	620	919	760	
Consumption of recycled or reused water in Megaliters (ML)		307,316	328,661	322,583	312,282	263,077	307,267	328,646	322,583	312,282	263,077	188,880	201,536	197,576	191,170	164,997	118,387	127,110	125,007	121,113	98,080	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	49	15	0	0	0
GRI 303-5 Total water consumption in Megaliters (ML)		415,601	443,645	439,271	425,834	384,485	412,492	440,201	434,915	421,946	380,056	246,384	261,611	258,350	249,510	229,401	166,107	178,590	176,564	172,437	150,655	299	270	329	409	204	234	263	317	396	204	65	7	12	13	0	2,810	3,173	3,942	3,479	4,225		

Total water consumption is equal to water withdrawn plus recycled minus discharged.

2022 Water consumption (water stress sources)

	Grupo México		Mining Division (MIN DIV)						Transportation Division (TRA DIV)						Infrastructure Division (INF DIV)	
	Total Grupo México		SCC		Mexico		Peru		Total TRA DIV		Mexico		USA		Total INF DIV	
	All zones	Water stress zones	All zones	Water stress zones	All zones	Water stress zones	All zones	Water stress zones	All zones	Water stress zones	All zones	Water stress zones	All zones	Water stress zones	All zones	Water stress zones
GRI 303-3 Fresh water withdrawn in Megaliters (ML)																
Surface water	33,270	33,209	33,240	33,209	18,836	18,805	14,404	14,404	0	0	0	0	0	0	30	0
Groundwater	75,116	70,229	71,795	70,229	38,057	36,491	33,737	33,737	156	0	156	0	0	0	3,165	0
Sea water	112	0	0	0	0	0	0	0	0	0	0	0	0	0	112	0
Water produced	1,615	793	1,615	793	822	0	793	793	0	0	0	0	0	0	0	0
From third parties	208	65	62	65	16	16	49	49	143	0	78	0	65	0	0	0
Total water withdrawn in ML	110,321	104,295	106,715	104,295	57,732	55,312	48,983	48,983	299	0	234	0	0	0	3,307	0
GRI 303-4 Water discharged in Megaliters (ML)																
Surface water	733	36	227	36	227	36	0	0	0	0	0	0	0	0	506	0
Groundwater	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sea water	79	1,263	1,263	1,263	0	0	1,263	1,263	0	0	0	0	0	0	40	0
From third parties	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total water discharged in ML	2,036	1,299	1,490	1,299	227	36	1,263	1,263	0	0	0	0	0	0	546	0
Consumption of recycled or reused water in Megaliters (ML)	307,316		307,267		188,880		118,387		0		0		0		49	
GRI 303-5 Total water consumption in Megaliters (ML)	415,601		412,492		246,385		166,107		299		234		0		2,810	

6.3 Biodiversity

Annex

IUCN red list threatened species and national conservation list species with habitats in areas affected by operations
(GRI 304-4)

Mexico

Ariocarpus retusus, Brahea berlandieri, Coryphanta villarensis, Coryphatha delicata, Dasylirion acrotriche, Echinocactus platyacanthus, Ferocactus histrix, Ferocactus pilosus, Mammillaria bocasana, Mammillaria haageana, Mammillaria longiflora, Mammillaria miegiana, Mammillaria moelleriana, Pinus cembroides, Accipiter cooperi, Accipiter Gentilis, Accipiter striatus, Aquila chrysaetos, Aimophila ruficeps, Ambystoma rosaceum, Amphispiza bilineata, Anas diazi, Aquila chrysaetos, Aspidoscelis communis, Boa constrictor, Bubo virginianus, Buteo albonotatus, Buteo jamaicensis, Buteo regalis, Buteo swainsoni, Buteogallus anthracinus, Calidris mauri, Cardinalis, Carduelis pinus, Carpodacus mexicanus , Cnemidophorus tigris, Colaptes auratus, Colaptes chrysoides, Coleonyx variegatus, Coluber flagellum, Columbina passerina, Contopus sordidulus, Crotalus aquilus, Crotalus atrox, crotalus molossus, Crotalus willardi, Crotalus basiliscus, Crotalus lepidus, Crotalus molossus, Crotalus scutulatus, Crotalus tigris, Crotalus willardi, Crotaphytus collaris, Ctenosaura hemilopha , Cynanthus latirostris, Cyrtonyx montezumae, Dendroica coronata, Elgaria kingii, Empidonax difficilis, Empidonax traillii, Falco mexicanus, Falco peregrinus, Gastrophryne olivacea, Geothlypis tolmiei, Glaucidium gnoma, Gopherus agassizii, Haliaeetus leucocephalus, Heloderma suspectum, Heterodon nasicus, Holbrookia maculata, Hyla eximia , Hypsiglena chlorophaea, Hypsiglena jani, Hypsiglena torquata, Icterus pustulatus, Ictinia mississippiensis, Junco hyemalis, Junco phaeonotus, Kinosternon integrum, Kinosternon sonoriense, Lampropeltis getula, Lampropeltis pyromelana, Lampropeltis triangulum, Leptonycteris nivalis, Leptotila verreauxi, Lepus californicus, Lithobates berlandieri, Lithobates montezumae, Lithobates pustulosus, Masticophis flagellum, Megascops asio, Melanerpes formicivorus, Melospiza melodia, Micrathene whitneyi, Micruroides euryxanthus, Nasua narica, Notiosorex crawfordi , Oporornis tolmiei, Parabuteo unicinctus, Passerina ciris, Patagioenas fasciata, Phrynosoma orbiculare, Picoides stricklandi, Pipilo maculatus, Pituophis deppei, Quiscalus mexicanus, Regulus calendula, Salpinctes obsoletus, Salvadoria bairdi, Sceloporus goldmani, Sceloporus grammicus, Sciurus arizonensis, Spilogale putorius, Spizella wortheni, Strix occidentalis, Tachybaptus dominicus, Taxidea taxus, Terrapene ornata, Terrapene ornata, Thamnophis cyrtopsis, Thamnophis eques, Thryomanes bewickii, Toxostoma bendirei, Trachemys scripta, Trachemys yaquia, Trimorphodon biscutatus , Trimorphodon wilkinsonii, Troglodytes aedon, Uma notata, Ursus americanus, Uta stansburiana, Vireo bellii, Vireo cassinii, Vireo gilvus y Vireo huttoni.

Peru

Azorella compacta, Azorella diapensioides, Junellia arequipense, Kageneckia lanceolata, Kageneckia lanceolata Ruiz & Pav., Lobivia pampana Britton & Rose, Opuntia sphaerica, Parastrephia lepidophylla, Polylepis besseri, Senecio nutans Sch. Bip, Arctocephalus australis, Ctenomys peruanus, Lama guanicoe, Larosterna inca, Leopardus jacobitus, Liolaemus tacnae, Lontra felina, Microlophus quadrivittatus, Otaria flavescens, Pelecanus thagus, Phalacrocorax gaimardi, Platalina genovensium, Procellaria aequinoctialis, Procellaria aequinoctialis, Rhea pennata, Rhea pennata, Sula variegata, Telmatobius peruvianus, Telmatobius peruvianus, Theristicus melanopis, Vultur gryphus, Vultur gryphus, Xenospingus concolor y Xenospingus concolor.

USA

Southwestern Willow Flycatcher, Yellow Bill Cuckoo y Pima Pineapple Cactus.

6.4 Waste

Annexes

	Grupo México		Mining Division (MIN DIV)										Transportation Division (TRA DIV)						Infrastructure Division (INF DIV)	
	Total Grupo México		Total MIN DIV		SCC		Mexico		Peru		USA		Total TRA DIV		Mexico		USA		Total INF DIV	
	Non-hazardous	Hazardous	Non-hazardous	Hazardous	Non-hazardous	Hazardous	Non-hazardous	Hazardous	Non-hazardous	Hazardous	Non-hazardous	Hazardous	Non-hazardous	Hazardous	Non-hazardous	Hazardous	Non-hazardous	Hazardous	Non-hazardous	Hazardous
GRI 306-4 Waste diverted from disposal (Tons)																				
Waste sent for recovery																				
Reuse	4,020	453	3,989	453	3,969	453	3,969	54	0	399	20	0	0	0	0	0	0	0	31	0
Recycling	118,942	12,331	117,890	11,544	109,543	11,544	109,375	9,395	168	2,149	8,347	0	0	0	0	0	0	0	1,052	393
Composting	7,246	0	1,634	0	1,634	0	1,342	0	292	0	0	0	0	0	0	0	0	0	5,612	0
Repurposing or restoration	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Sale	38,818	782	38,818	782	38,818	782	23,273	69	15,545	713	0	0	0	0	0	0	0	0	0	0
Other* (Co-processing, leaching heaps)	5,450	380	5,450	380	5,450	380	5,450	380	0	0	0	0	0	0	0	0	0	0	0	0
Total waste for recovery (Ton)	174,476	13,553	167,781	13,160	159,414	13,160	143,409	9,898	16,006	3,262	8,367	0	0	0	0	0	0	0	6,695	393
GRI 306-5 Waste directed for disposal (Tons)																				
Waste sent for final disposal																				
Incineration with energy recovery	0	2,223	0	2,059	0	2,058	0	2,058	0	0	0	1	0	0	0	0	0	0	0	164
Incineration without energy recovery	17	25	17	25	0	25	0	10	0	15	17	0	0	0	0	0	0	0	0	0
Sent to disposal sites or impoundments	2,808	5,984	2,772	3,529	2,772	3,515	562	1,336	2,210	2,179	0	13	0	2,436	0	1,203	0	1,233	36	19
Sent to controlled landfills	18,829	5	18,829	5	18,394	4	12,161	4	6,234	0	435	1	0	0	0	0	0	0	0	0
Well injection	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other (disposal en situ, uncontrolled landfills)	7,670	42,572	7,670	42,572	3,678	42,572	90	42,566	3,589	6	3,992	0	0	0	0	0	0	0	0	0
Total generación de residuos a disposición final	29,324	50,809	29,288	48,190	24,844	48,175	12,812	45,974	12,032	2,200	4,444	15	0	2,436	0	1,203	0	1,233	36	183
Total generación de residuos (Toneladas)	203,800	64,362	197,068	61,350	184,258	61,334"	156,221	55,872	28,038	5,462	12,810	15	0	2,436	0	1,203	0	1,233	6,731	576

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7.6 External Verification Letter



KPMG Cárdenas Dosal, S.C.
Blvd. Manuel Ávila Camacho 176 P1,
Reforma Social, Miguel Hidalgo, C.P. 11650,
Ciudad de México.
Teléfono: +01 (55) 5246 8300
kpmg.com.mx

Independent Limited Assurance Report on Key Indicators of Sustainability Performance (Non-Financial Information)

To the Board of Directors and Shareholders of Grupo México, S.A.B. de C.V.:

We were engaged by the Management of Grupo México, S.A.B. de C.V. (hereinafter "the Company") to report on sustainability performance Contents, prepared and presented by the Management of the Company in the 2022 Sustainable Development Report for the period from January 1 to December 31, 2022 (“the Report”), that are detailed in Annex A attached to this report (the "Contents"), in the form of an independent conclusion of limited assurance, regarding whether, based on the procedures performed and the evidence obtained, nothing has come to our attention that causes us to believe that the Contents are not prepared in all material respects, in accordance with the criteria established in the Global Reporting Initiative (GRI) Standards (the “Criteria”).

Management responsibilities

The Management of the Company, through its Sustainability Direction, is responsible for the preparation and presentation of the information subject to our review and the information and statements contained within it.

he Management of the Company, through its Sustainability Direction, is responsible for designing, implementing, and maintaining the relevant internal control for the preparation and presentation of the information subject to our review, which is free from material errors, whether due to fraud or error.

he Management of the Company, is also responsible for ensuring that the personnel involved in the preparation of the Contents are adequately trained, the information systems are duly updated and that any change in the presentation of data and/or in the form of reporting, include all significant reporting units.

Our responsibilities

Our responsibility is to carry out a limited assurance engagement on the information concerning the Contents included in the Report and to express an independent conclusion of limited assurance based on the evidence obtained. We carry out our work based on the International Standard on Assurance Engagements (ISAE) 3000 (Revised), "Assurance Engagements Other than Audits or Reviews of Historical Financial Information", issued by the International Auditing and Assurance Standards Board, that standard requires that we plan and perform the engagement to obtain limited assurance about whether, based on our work and the evidence obtained, nothing has come to our attention that causes us to believe that the Contents included in the Report for the period from January 1 to December 31, 2022, are not prepared in all material respects, in accordance with the criteria established in the Global Reporting Initiative (GRI) Standards.

KPMG CARDENAS DOSAL, S.C. (the “Firm”) applies International Standard on Quality Management 1 and accordingly maintains a comprehensive system of quality management, including documented policies and procedures regarding compliance with ethical requirements, professional standards, and applicable legal and regulatory requirements.

GRI Indicators Index

SASB Indicators Index



KPMG Cárdenas Dosal, S.C.
Blvd. Manuel Ávila Camacho 176 P1,
Reforma Social, Miguel Hidalgo, C.P. 11650,
Ciudad de México.
Teléfono: +01 (55) 5246 8300
kpmg.com.mx

We have complied with the requirements of the International Ethics Standards Boards for Accountants (including international independence standards), which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality, and professional behavior.

The procedures selected depend on our knowledge and experience of the Contents presented in the Company’ Report and other circumstances of the work, and our consideration of the areas in which material errors may occur.

When obtaining an understanding of the Contents included in the Company’s Report, and other work circumstances, we have considered the processes used to prepare the Contents, in order to design assurance procedures that are appropriate in the circumstances, but not for the purpose of expressing a conclusion as to the effectiveness of the Company's internal control over the preparation and presentation of the Contents included in the Company’s Report.

Our engagement also included assessing the appropriateness of the main subject, the suitability of the criteria used by the Company in the preparation of the Contents, assessing the appropriateness of the methods, policies and procedures, as well as models used.

The procedures performed in a limited assurance engagement vary in nature and timing from, and are less in extent than for, a reasonable assurance engagement, and consequently the level of assurance obtained in a limited assurance engagement is substantially lower than the assurance that would have been obtained has a reasonable assurance engagement been performed.

Criteria

The criteria on which the preparation of the Contents has been evaluated refer to the established requirements and in accordance with the criteria established in the Global Reporting Initiative (GRI) Standards, detailed in Annex A.

Inherent limitations

Due to the inherent limitations of any internal control structure, it is possible that errors or irregularities in the information presented in the Report may occur and not be detected. Our engagement is not designed to detect all weaknesses in the internal controls over the preparation and presentation of the Report, as the engagement has not been performed continuously throughout the period and the procedures performed were undertaken on a test basis.

Conclusion

Our conclusion has been formed based on, and is subject to, the matters outlined in this report.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusions.

Based on the procedures performed and the evidence obtained, as described above, nothing has come to our attention that causes us to believe that the Contents detailed in Annex A attached to this assurance report, prepared by the Management of the Company and included in the Report for the period from January 1 to December 31, 2022, are not prepared in all material aspects, in accordance with the criteria established in Global Reporting Initiative (GRI) Standards.

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KPMG Cárdenas Dosal, S.C.
Blvd. Manuel Ávila Camacho 176 P1,
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Ciudad de México.
Teléfono: +01 (55) 5246 8300
kpmg.com.mx

Restriction of use of our report

Our report should not be regarded as suitable to be used or relied on by any party to acquire rights against us other than the Management of the Company, for any purpose or in any other context. Any party other than the Management of the Company who obtains access to our report or a copy thereof and chooses to rely on our report (or any part thereof) will do so at its own risk.

To the fullest extent permitted by law, we accept or assume no responsibility and deny any liability to any party other than the Company for our work, for this independent limited assurance report, or for the conclusions we have reached.

Our report is released to the Company, on the basis that it shall not be copied, referred to or disclosed, in whole or in part, without our prior written consent.

KPMG CARDENAS DOSAL S.C.



Alberto Dosal Montero
Partner

Monterrey, Nuevo León, May 30th, 2023.

7.6 External Verification Letter



KPMG Cárdenas Dosal, S.C.
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Reforma Social, Miguel Hidalgo, C.P. 11650,
Ciudad de México.
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Reforma Social, Miguel Hidalgo, C.P. 11650,
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Teléfono: +01 (55) 5246 8300
kpmg.com.mx

Annex A

Description of the Contents object of the limited assurance engagement.

Content	Description	Mining	Infrastructure	Transportation
GRI 2-26 (2021)	Mechanisms for seeking advice and raising concerns	✓	✓	✓
GRI 2-30 (2021)	Collective bargaining agreements	✓	✓	✓
GRI 204-1 (2016)	Proportion of spending on local suppliers	✓	✓	✓
GRI 205-2 (2016)	Communication and training about anti-corruption policies and procedures	✓	✓	—
GRI 205-3 (2016)	Confirmed incidents of corruption and actions taken	✓	✓	✓
GRI 3-1 (2021)	Process to determine material topics	✓	✓	✓
GRI 301-1 (2016)	Materials used by weight or volume	✓	✓	—
GRI 302-1 (2016)	Energy consumption within the organization	✓	✓	✓
GRI 303-1 (2018)	Interactions with water as a shared resource	✓	✓	✓
GRI 303-2 (2018)	Management of water discharge-related impacts	✓	✓	✓
GRI 303-3 (2018)	Water withdrawal*	✓	✓	✓
GRI 303-4 (2018)	Water discharge*	✓	✓	✓
GRI 303-5 (2018)	Water consumption*	✓	✓	✓
GRI 304-1 (2016)	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas	✓	✓	—
GRI 304-2 (2016)	Significant impacts of activities, products and services on biodiversity	✓	✓	—
GRI 304-3 (2016)	Habitats protected or restored	✓	✓	—
GRI 305-1 (2016)	Direct (Scope 1) GHG emissions	✓	✓	✓
GRI 305-2 (2016)	Energy indirect (Scope 2) GHG emissions	✓	✓	✓
GRI 305-3 (2016)	Other indirect (Scope 3) GHG emissions	✓	✓	✓
GRI 305-5 (2016)	Reduction of GHG emissions	✓	✓	✓
GRI 305-7 (2016)	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions	✓	✓	✓
GRI 306-3 (2020)	Waste generated	✓	✓	✓

Content	Description	Mining	Infrastructure	Transportation
GRI 306-4 (2020)	Waste diverted from disposal	✓	✓	✓
GRI 306-5 (2020)	Waste directed to disposal	✓	✓	✓
GRI 306-3 (2016)	Significant spills	✓	✓	✓
GRI 401-1 (2016)	New employee hires and employee turnover	✓	✓	✓
GRI 403-2 (2016)	Hazard identification, risk assessment, and incident investigation	✓	✓	✓
GRI 403-4 (2016)	Worker participation, consultation, and communication on occupational health and safety	✓	✓	✓
GRI 403-9 (2016)	Work-related injuries	✓	✓	✓
GRI 403-10 (2016)	Work-related ill health	✓	✓	—
GRI 404-1 (2016)	Average hours of training per year per employee	✓	✓	✓
GRI 405-2 (2016)	Ratio of basic salary and remuneration of women to men	✓	✓	✓
GRI 412-2 (2016)	Employee training on human rights policies or procedures	✓	✓	—
GRI 413-1 (2016)	Operations with local community engagement, impact assessments, and development programs	✓	✓	✓
GRI G4 MM3	Total amounts of overburden, rock, tailings, and sludges and their associated risks	✓	—	—
GRI G4 MM4	Number of strikes and lock-outs exceeding one week's duration, by Country	✓	—	—
GRI G4 MM5	Total number of operations taking place in or adjacent to indigenous peoples' territories, and number and percentage of operations or sites where there are formal agreements with indigenous peoples' communities	✓	—	—
GRI G4 MM6	Number and description of significant disputes relating to land use, customary rights of local communities and indigenous peoples	✓	—	—

The ASARCO operations in the United States are excluded from the scope of this assurance for the Contents marked with (*).