Climate change

In 2022, we reported for the first time on our performance, risks, and opportunities related to climate change, following TCFD recommendations. In 2024, we began the transition to IFRS S2.

Climate change

Peñoles is committed to responsibly managing the risks, impacts, and opportunities posed by climate change, recognizing our role in producing essential resources that support people's well-being. We align with national and international efforts to advance the transition to a low-carbon economy and help mitigate the worst impacts of climate change.

As a pioneer in wind energy generation within the Mexican mining sector, Peñoles has long been proactive in addressing climate challenges. Our objective is to source 100% of our electricity from clean energy by 2028, to the extent permitted by national policies.

We developed a decarbonization roadmap that identifies viable emission-reduction strategies based on technological maturity, emissions-reduction potential, cost-effectiveness, and operational feasibility. This business case–level analysis confirms that our business model is compatible with carbon neutrality ambitions, while also highlighting the operational and financial discipline required to meet these goals.

We have now launched a second phase of the project to validate the decarbonization levers at the site level and to reinforce the governance of the roadmap, ensuring targets are grounded in rigorous planning and accountability.

The global transition to a low-carbon economy presents not only challenges, but also strategic opportunities. Minerals and metals are essential to enabling clean technologies. Copper, for example, is critical to electrification and forms a core focus of our exploration strategy. Forecasts from institutions such as the World Bank and the International Energy Agency underscore the vital role of mining and metallurgy in meeting future demand for critical materials.

In 2022, Peñoles disclosed its climate-related risks, performance, and opportunities for the first time, aligned with the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD). We are currently preparing for alignment with the IFRS S2 standard on Climate-related disclosures issued by the International Sustainability Standards Board (ISSB). Our climate reporting provides transparency into our governance, strategy, risk management, and climate-related targets and metrics.

Governance

At Peñoles, climate change is embedded in our Board of Directors strategic decision-making processes. The ESG Committee reviewed the decarbonization roadmap with the support of the most experienced board members on the topic. These efforts led to the presentation of the progress of our climate change strategy to the Board of Directors.

Governance bodies

> Board of Directors

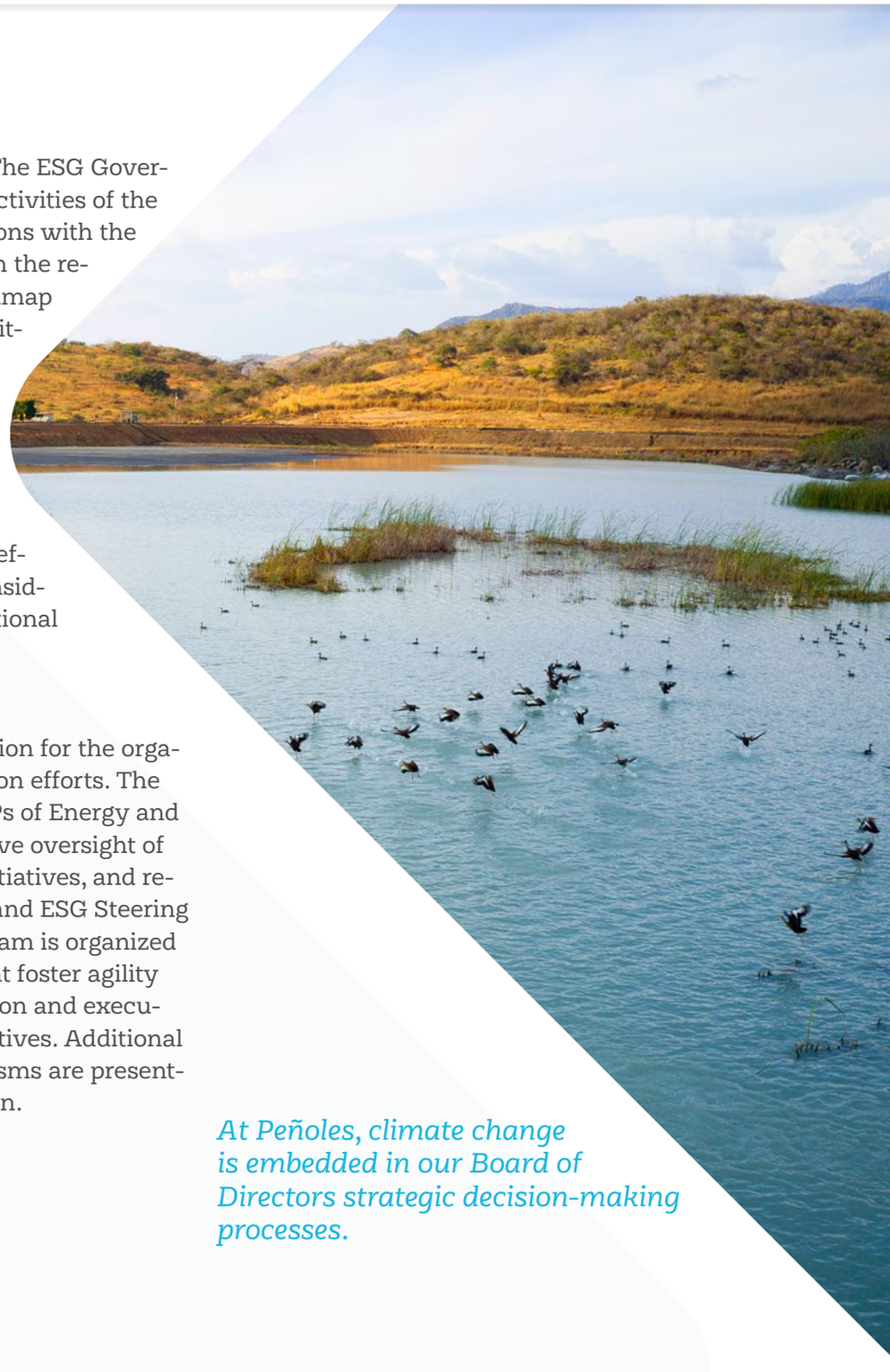
The Board provides oversight of key risks, ensuring that climate-related policies and actions defined by the senior executives align with the company's overall strategy and risk appetite. As part of the oversight of climate-change risks, in 2024, the Board reviewed the outcomes of the decarbonization roadmap project. Directors Arturo Manuel Fernández Pérez and Jaime Lomelín Guillén bring deep expertise in climate-related matters across the energy, mining, metals, and chemicals sectors. The CEO's performance evaluation includes progress on climate strategy as a key assessment criterion.

> ESG committee

The ESG Steering Committee—chaired by the CEO—oversees material sustainability topics, including climate-related risks and opportunities. The committee meets at least twice a year to report progress to the Board. The ESG Governance section outlines the key activities of the ESG Committee and its interactions with the Board of Directors, particularly in the review of the decarbonization roadmap results. The ESG Steering Committee is comprised of senior executives who possess extensive experience in the implications of climate change for operations, energy sourcing, investment decisions, and stakeholder expectations. Their roles enable effective integration of climate considerations into strategic and operational planning.

> Management team

The CEO sets the strategic direction for the organization and leads decarbonization efforts. The CFO—supported by Assistant VPs of Energy and Sustainability—provides executive oversight of the decarbonization roadmap initiatives, and reports on its progress to the CEO and ESG Steering Committee. The management team is organized into networks and work cells that foster agility and multidisciplinary collaboration and execution of the decarbonization initiatives. Additional details on coordination mechanisms are presented in the ESG Governance section.



At Peñoles, climate change is embedded in our Board of Directors strategic decision-making processes.

Risk and opportunity reviews and capacity building

We view capacity building as a fundamental part of effective governance for evaluating climate-related risks and opportunities. The ESG Steering Committee's review of the decarbonization roadmap has served as a platform to build understanding of Transition Risks, covering carbon pricing, scenario analysis, sensitivity analysis, clean technologies, and carbon offset strategies. Similarly, the Tailings Committee has reviewed climate modelling methodologies and assessments to better understanding Physical Risks.

Context and strategic considerations

Climate-related risks and opportunities

We categorize climate-related risks as either physical or transitional and assess their potential impact and timeframe across the value chain. These risks are evaluated qualitatively based on the scope of adaptation or mitigation efforts required. Climate-related risks are linked to two critical risks in our Enterprise Risk Management (ERM) framework: "Physical risks of climate change may compromise our performance and operational continuity"; and "Transition risks with a low-carbon economy may compromise our viability and profitability".

Due to the nature of our business activities—and particularly the mining life cycle—we are using a 10-year timeframe for our strategic plans and take 2050 as the benchmark for carbon neutrality considerations.

Parameters used to characterize the risks and opportunities of climate change

Type or risk/opportunity	Segment of the value chain	Time interval	Impact
1. Physical 2. Transition	1. Suppliers 2. Operations 3. Clients	1. Short term (< 3 years) 2. Medium term (> 3 y < 10 years) 3. Long term > 10 years	1. Low 2. Medium 3. High


Transition risks
Market
Regulatory
Reputational
Technological
Compromise our viability and profitability due to the risks associated with the transition to a low-carbon economy.
6 Volatility in energy prices (fuel and electricity)
7 Shortage of critical supplies
8 Increase in cost of water
9 Increase in insurance premiums
10 Loss of access to funding sources that require emission reduction and ESG targets
11 Taxes on the carbon footprint of the products we export
12 Taxes, markets, and other pricing mechanisms associated with carbon emissions
13 New regulations caused by water stress
14 Further restrictions on changes in land use (zoning)
15 Regulatory obstacles to renewable energy
16 Increased community expectations of company cooperation in adapting to climate change
17 Loss of stakeholder trust due to lack of decarbonization commitments and targets
18 Loss of shareholders due to low ESG ratings
19 Lack of technology for decarbonizing key processes
20 Poor selection of decarbonization technology
Risk issues (subcategories)
Business risks (ERM)
Process risks

Climate Change Risks and Opportunities

	Risk/Opportunity		Description	Scope of the value chain	Time horizon			Potential impact		
	Category	Subcategory			Short	Medium	Long	Low	Medium	High
Risks	Physical	Acute	Extreme water and temperature events, and forest fires	• Supply chain • Operations						
		Chronic	Increase of water stress and expansion of the heat wave season	• Supply chain • Operations						
	Transition	Market	Volatility in energy prices, shortages of critical supplies, rising insurance premiums, and loss of access to financing sources	• Supply chain • Operations • Clients						
		Regulatory	Energy sector regulations, taxes, markets, tariffs, and other carbon pricing mechanisms, emerging water and land-use regulations	• Operations • Clients						
		Reputational	Loss of our stakeholders' trust	• Operations • Clientes						
		Technological	Technology availability, poor selection or adoption	• Supply chain • Operations						
Opportunities		Market	Increased copper production and carbon offsets	• Operations • Clients						
		Technological	Renewable electricity, electrification, fuel replacement, process efficiency, circularity of mining and metallurgical waste, conservation and biodiversity	• Supply chain • Operations						

Business model and value chain

For the relevant risks, we have identified the implications for the various value creation levers.

More information about our business model see our Business Model section.

Business model

	Risk/Opportunity		Description	Impact on the value creation levers	Business Model						
	Category	Subcategory			Metals	Mining	Chemicals	Energy	Construction	Exploration	Sales of metals and chemicals
Risks	Physical	Acute	Extreme water and temperature events, and forest fires	• Reduction in revenue • Increase in production costs • Investments (CapEx)							
		Chronic	Increase of water stress and expansion of the heat wave season	• Reduction in revenue • Increase in production costs • Investments (CapEx)							
	Transition	Market	Volatility in energy prices, shortages of critical supplies, rising insurance premiums, and loss of access to financing sources	• Reduction in revenue • Increase in production costs • Access to capital and financing							
		Regulatory	Energy sector regulations, taxes, markets, tariffs, and other carbon pricing mechanisms, emerging water and land-use regulations	• Reduction in revenue • Increase in production costs • Investments (CapEx) • Reduction of profits							
		Reputational	Loss of our stakeholders' trust	• Reduction in revenue • Access to capital and financing • Increase in production costs							
		Technological	Technology availability, poor selection or adoption	• Increase in production costs • Reduction of profits • Access to capital and financing							
Opportunities		Market	Increased copper production and carbon offsets	• Increase in revenue • Investments (CapEx) • Access to capital and financing • Reduction in carbon offsets							
		Technological	Renewable electricity, electrification, fuel replacement, process efficiency, circularity of mining and metallurgical waste, conservation and biodiversity	• Reduction of production cost (operation and maintenance and cost of fuels) • Investments (CapEx) • Lower exposure to regulations • Access to capital and financing							

Response of the company to climate change

	Risk/Opportunity		Climate Action Plans
	Category	Subcategory	
Risks	Physical	Acute	Adaptation plans
		Chronic	
	Transition	Market	Transition plans: Decarbonization roadmap
		Regulatory	
		Reputational	
		Technological	
Opportunities		Technological	
		Market	Exploration strategy

Strategy and decision-making

Our climate change strategy goes beyond resilience by focusing on both decarbonizing our operations and adapting to the physical impacts of climate change. Mitigation efforts reduce our exposure to transition risks, while adaptation helps protect our people, infrastructure, and communities from physical climate risks.

*We reduced our GHG emissions by **11.7%** compared to 2023 and by **24.2%** with respect to our 2022 baseline.*

Decarbonization roadmap

Renewable electricity has been our main decarbonization lever, and we aim to maximize our supply from renewable sources by the end of this decade. However, decarbonizing mining, metals, and chemicals is particularly challenging due to limitations in technological maturity, reliability, and cost. As a result, decarbonization is a complex issue that requires a multi-lever approach, carefully evaluating each option's emissions reduction potential, technological readiness, and economic feasibility. To guide Peñoles' transition strategy, we launched the decarbonization roadmap Project.

Penmont, the lead smelter, and Química del Rey were selected as pilot sites due to their significant emissions and the complexity of decarbonizing their energy sources and process-related emissions. Additionally, two underground operations with smaller carbon footprints were included in the pilot because of their strategic importance in our business model.

Results of the project

The project identified the highest-emitting processes and analyzed alternative decarbonization levers, considering emissions reduction potential, technological maturity, cost-benefit, and operational feasibility. This enabled the development of alternative roadmaps with emissions trajectory estimates, using scenario modeling and sensitivity analysis.

The evaluation highlighted three levers with the greatest potential—subject to site-level feasibility: increased use of renewable electricity, electrification of vehicles and mining equipment, and fuel substitution using options such as biomethane, biocoke, or green hydrogen. The business-case-level analysis confirmed that our business model aligns with carbon neutrality ambitions, while also underscoring the financial and operational discipline required to seize these opportunities.

Next Steps

We are launching the second phase of the project, focused on validating decarbonization levers at the site level and enhancing governance of the roadmap. The goal is to ensure that our targets and objectives are robust and grounded in site-specific realities.

Decarbonization levers

Category of lever	Levers	Challenges
Renewable energy	• Supply of renewable energy connected to the electrical grid • Onsite generation disconnected from the electrical grid	Regulatory framework in Mexico
Open pit mining	• Electrification of trucks • Electrification of other mining equipment • Electrification of light vehicles and worker buses	Maturity and reliability of these technologies Life of mine of the current open pit operations
Underground mining	• Electrification of scooptrams • Electrification of trucks • Electrification of other mining equipment	Maturity and reliability of these technologies and electric infrastructure
Furnaces (high temperature)	• Biomethane and hydrogen	Supply of green fuels and accounting rules for emission reductions
Generation of steam	• Biomethane and hydrogen • Solar thermal • Electrification of boilers • Cogeneration	The electrification of boilers requires renewable energy, and cogeneration can limit the potential for emission reductions.
Carbon capture and reducing agents	• Carbon capture • Biomass and/or biocoke in blast furnaces • New technologies for direct reduction in lead smelters	Technological maturity of the levers and CO_2 storage
Carbon offsets	• Purchase of carbon offsets	Price volatility, accounting rules, restrictions for accounting and supply

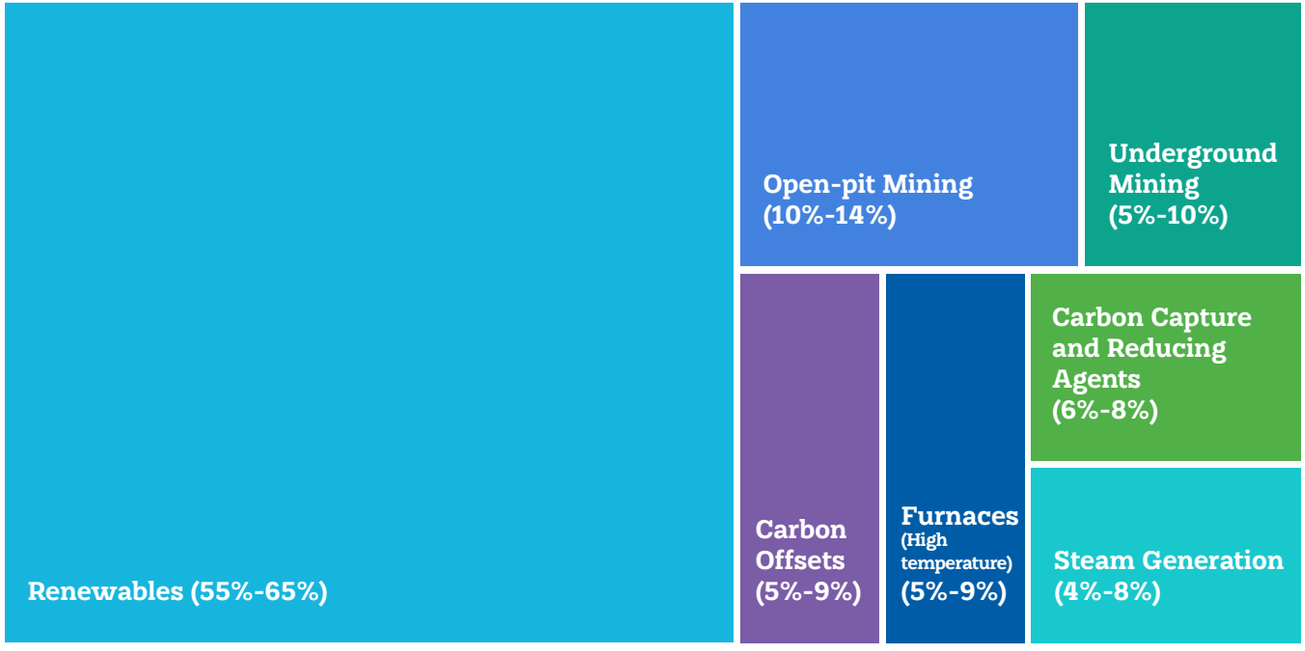
Decarbonization levers in time

Description	Potential contribution to carbon neutrality	Time Horizon		
		Short	Medium	Long
Renewables	55 - 65			
Open-pit Mining	10 - 14			
Underground Mining	5 - 9			
Furnaces (High temperature)	5 - 9			
Steam Generation	4 - 8			
Carbon Capture and Reducing Agents	6 - 8			
Carbon Offsets	5 - 10			

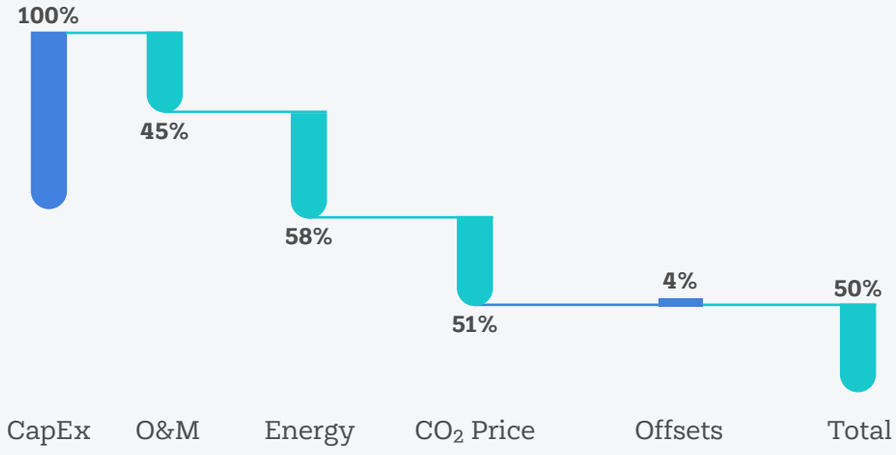
Time Horizon	
Short	< 2030
Medium	>2030 y < 2040
Long	> 2040

The business-case-level analysis confirmed that our business model aligns with carbon neutrality ambitions.

Decarbonization potential of the levers towards carbon neutrality



Descarbonization - Business Case



Estimates as percentage of CapEx

Business case for decarbonization

The decarbonization roadmap presents opportunities to expand our renewable energy supply while improving electricity cost efficiency. Some technologies, particularly those related to electrification, may involve higher capital expenditures (CapEx), but these can be offset by savings in operations and maintenance (O&M) and reduced fuel costs. In addition, decarbonization levers help mitigate the regulatory risks associated with carbon pricing. Peñoles' business model remains flexible and resilient within the context of a transition to a low-emissions economy.

It is important to note that these roadmaps are long-term strategic exercises toward carbon neutrality and are subject to significant uncertainties—particularly around the future cost and maturity of key technologies, clean fuel prices, and the availability and cost of carbon offsets.

> Progress on renewable electric power

Electric power supply is one of the primary levers for decarbonization. Our electricity strategy is central to our goal of sourcing 100% of our operational electricity from renewable sources by 2028, as permitted by national regulations. We have continued efforts to increase renewable electricity from both self-supply sources and the Wholesale Electricity Market (MEM), with the dual objective of reducing costs and our carbon footprint. As a result, the share of renewable energy in our consumption rose from 35% in 2023 to 48% in 2024, accompanied by a 17.1% reduction in cost per kilowatt-hour (kWh).

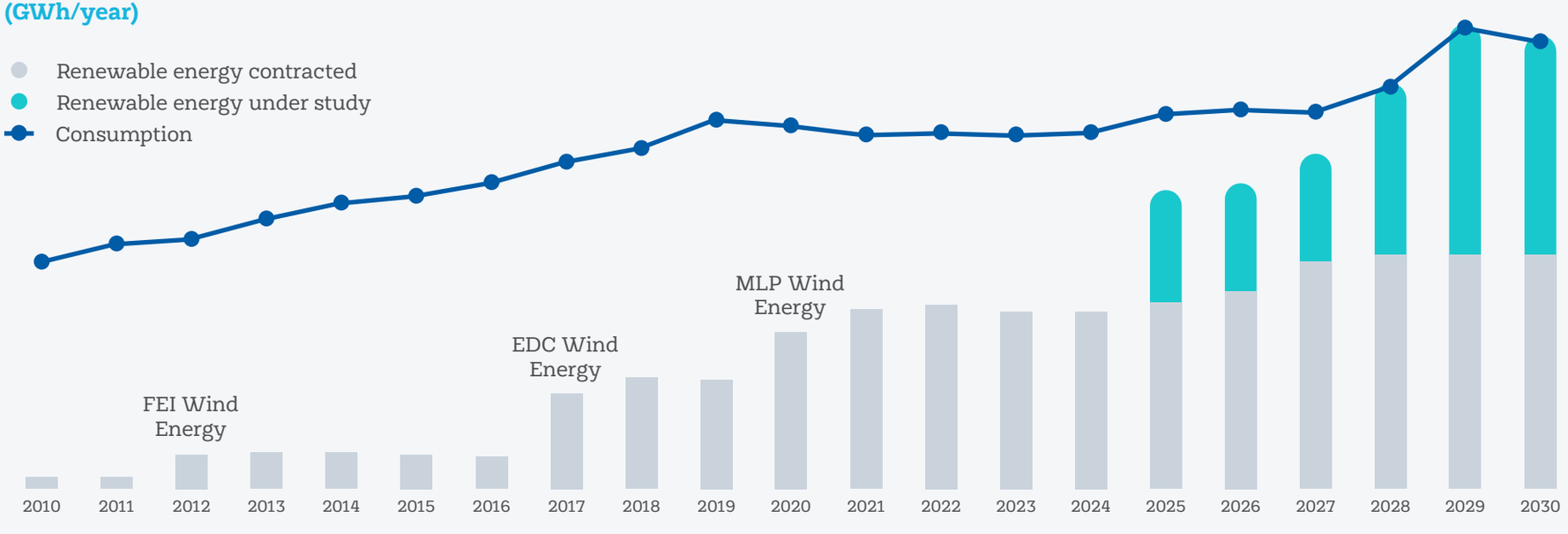
Beyond our current renewable energy targets, our electricity strategy serves as a medium- and long-term enabler for other decarbonization levers, such as the electrification of mining equipment and steam generation systems. We anticipate growing electricity demand as these initiatives expand. To address this, we are launching a competitive process to identify new electricity sources aligned with our long-term goals of decarbonization and cost efficiency.

Peñoles actively participates in industry associations and trade unions that foster constructive dialogue with authorities. We believe a more stable and predictable regulatory framework in the electricity sector is essential to enable the development of new energy sources and to meet the shared decarbonization and competitiveness goals of both government and industry.

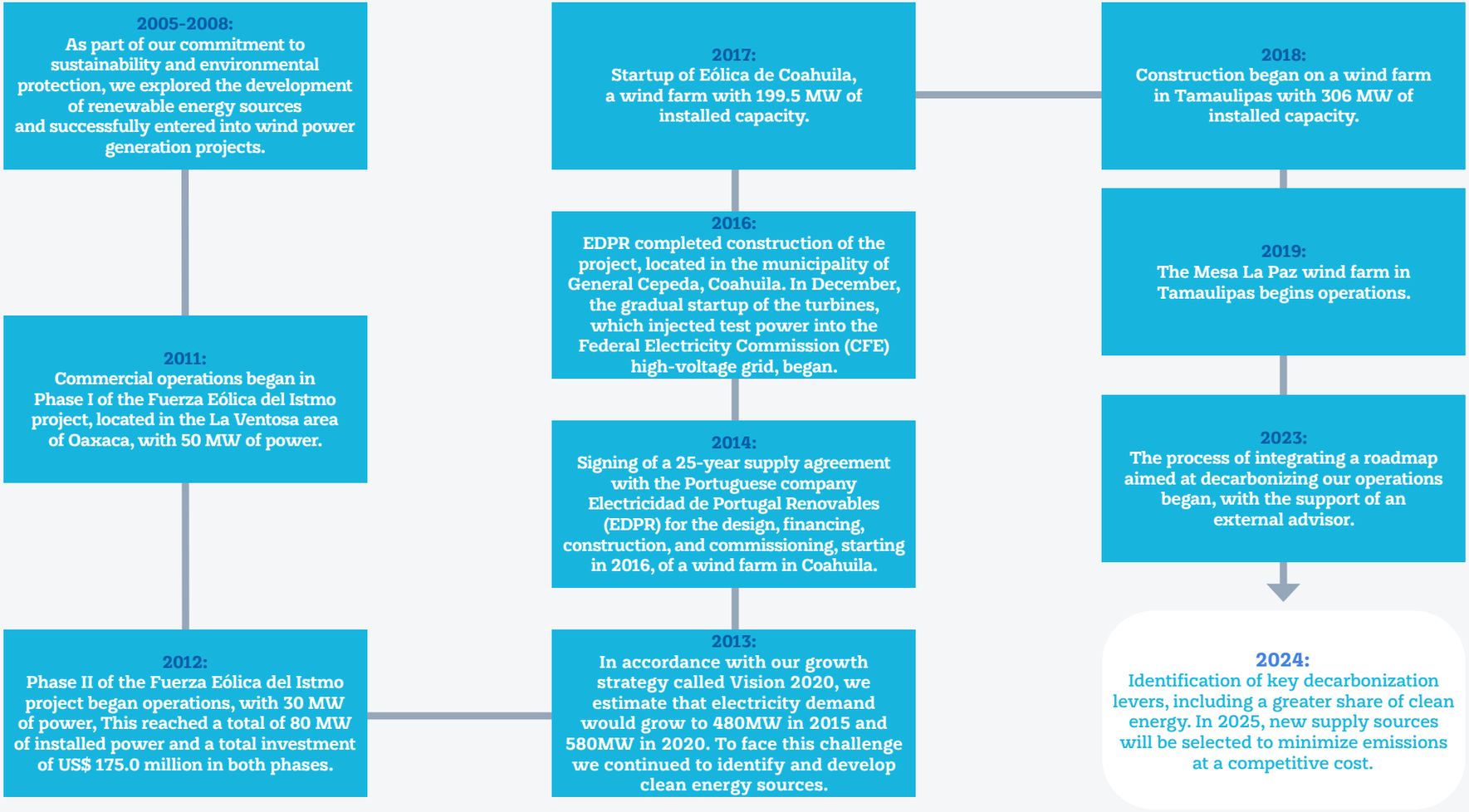
Renewable Electric Power Sources

Wind Farm	Description
Eólica de Coahuila (EDC)	Located in General Cepeda, Coah., with a capacity of 199.5 MW, operated by a third party; the supply is carried out under a contract expiring in 2042.
Eólica Mesa La Paz (MLP)	Located in Llera de Canales, Tamps., with a capacity of 306 MW, operated by a third party; the supply is carried out under a contract expiring in 2045.
Fuerza Eólica del Istmo (FEI)	Located in El Espinal, Oax., operated by Peñoles, with a capacity of 80 MW.

Renewable energy supply forecast for electricity needs (GWh/year)



Peñoles' journey as a pioneer in renewable electric power in Mexico



> Activities on other decarbonization levers

We evaluated alternative projects for solar thermal generation and cogeneration and reviewed the performance of the electric scooptram and truck acquired three years ago for testing in underground mines. We also joined a value chain partner's initiative to monitor electric truck technology for open-pit mining and explored mineral processing technologies that offer energy savings in crushing and grinding operations.

In addition, we continuously monitor emerging emission-free technologies—such as hydrogen and green ammonia—as well as substitutes for conventional fuels, including biogas and other biofuels. These technologies are expected to improve economically in the coming years, potentially making them viable decarbonization options.

In partnership with the University of Arizona, we developed a climate modeling project for Fresnillo plc's operations and projects.

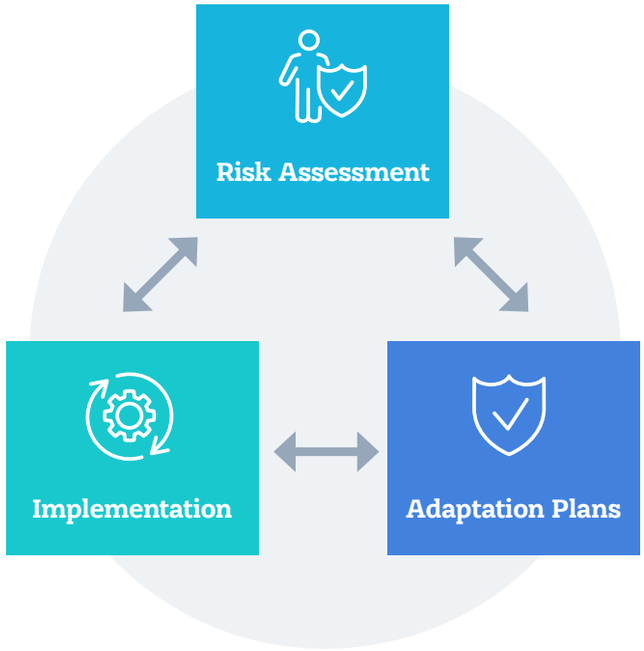
> Carbon offsets

In our decarbonization roadmap, we prioritize direct emissions reductions over carbon offsets. Offsets are considered only after all technologically and economically viable reduction options have been exhausted. Nonetheless, we recognize that certain offset initiatives can offer broader benefits, including enhanced aquifer recharge, biodiversity conservation, and community development—making them valuable contributions to our sustainability objectives.

> Climate change adaptation

Adaptation to climate change is an emerging area in our industry. Our approach is informed by the Mining Association of Canada's Climate Change Adaptation Guide. A robust adaptation plan begins with climate projections and risk assessments tailored to the specific infrastructure and operational processes of each site. We are currently in the early stages of capacity building in this area and recognize the complexity of operationalizing this scientifically and technically demanding field.

In partnership with the University of Arizona, we developed a climate modeling project for Fresnillo plc's operations and projects. This



methodology utilizes global climate models (IPCC CMIP5 and CMIP6), dynamically downscaled with regional physical models and integrated with a stochastic climate ensemble generator trained using weather station data. In addition to providing projections, this project builds internal capacity for understanding physical climate impacts and serves as a foundation for future academic collaborations.

Financial position, financial performance, and cash flows

We are enhancing the capabilities of our accounting, finance, and sustainability teams to quantify the impacts of climate risks and opportunities on our financial position, performance, and cash flows. With the support of Deloitte, we conducted a training workshop aimed at improving the teams' understanding of the financial implications of climate-related issues.

Climate resilience

Very low and low-to-moderate emissions scenarios may lead to significant carbon pricing, which could materially affect our strategy and business model without appropriate mitigation measures. The transition plan outlined in the decarbonization roadmap is critical to reducing emissions and mitigating transition risks. These scenarios also create significant opportunities for our exploration portfolio, particularly with rising copper demand driven by electrification and other low-emission technologies.

Among the decarbonization levers, renewable energy holds the highest emissions reduction potential and the greatest technological maturity compared to the other levers. The renewable energy supply will continue to play a critical role across the short-, medium-, and long-term in reducing the carbon footprint of electricity. This lever is sensitive to electricity sector regulations. Renewable energy supply solutions—both connected and disconnected to the national electricity grid—also open opportunities for the electrification of steam generation and the adoption of electric open-pit and underground mining equipment, whose technological maturity makes it suitable for medium- and long-term solutions. The replacement of green fuels is a medium- and long-term solution, while carbon capture and new direct reduction processes in smelting are considered long-term solutions due to their technological maturity.

High-emission scenarios present significantly greater physical risks compared to low-to-moderate and very low emission scenarios. These include more frequent and intense temperature extremes, prolonged droughts, reduced annual precipitation, and increased evaporation—conditions that would exacerbate water stress in key regions of Mexico. Additionally, more severe and frequent extreme precipitation events will require adjustments in our operational practices to protect people's health and safety during extreme temperature events and may influence water stewardship strategies, as well as the planning and design of new projects and closures.

> Scenarios

We use scenario planning to explore plausible climate futures and corresponding societal responses to mitigate and adapt to climate change impacts. These scenarios integrate Representative Concentration Pathways (RCPs) to evaluate physical climate risks and Shared Socioeconomic Pathways (SSPs) to assess transition risks. Developed by the Intergovernmental Panel on Climate Change (IPCC), these scenarios provide a globally recognized framework for climate impact analysis and policymaking. It is important to note that they are not forecasts—neither from the IPCC nor from Peñoles.

1. Low-to-moderate emissions scenario: In this scenario, CO_2 emissions begin to decline around 2045 and fall to roughly half of 2050 levels by 2100. Global temperature rise is likely limited to between 2 and 3 °C. Social, economic, and technologial developments follow historical patterns, with continued environmental degradation, moderate global economic growth, persistent income inequality, and sustained vulnerability to social and environmental changes.

Low-to-moderate emissions scenario		
IPCC climate scenario **RCP 4.5**	Complementary socioeconomic pathway **SSP 2**	GHG emissions in 2050 [$MtCO_2e$] **56,000** **(+13% compared to 2015)**
Global average temperature increase by 2050* **2.0 ± 0.3 °C**	Global average temperature increase by 2100* **2.4 ± 0.5 °C**	**Temperature anomaly with respect to the reference period of 1850-1900*

2. Very low emissions scenario: This scenario aligns with the goals of the Paris Agreement, aiming to limit global warming to below 2 °C. It envisions a global economy reaching net-zero emissions in the second half of the century, which will require carbon removal from the atmosphere. Under this pathway, society moves toward greater sustainability, respecting perceived environmental limits. Economic growth is reoriented to prioritize human well-being, inequality is reduced, and consumption shifts to lower material intensity and reduced resource use.

Very low emissions scenario		
IPCC climate scenario **RCP 2.6**	Complementary socioeconomic pathway **SSP 1**	GHG emissions in 2050 [$MtCO_2e$] **25,000** **(-50% compared to 2015)**
Global average temperature increase by 2050* **1.6 ± 0.3 °C**	Global average temperature increase by 2100* **1.6 ± 0.4 °C**	**Temperature anomaly with respect to the reference period of 1850-1900*

3. Very high emissions scenario: This worst-case scenario assumes that current climate and energy policies fail, leading to a significant increase in global GHG emissions and exacerbating physical climate risks. While competitive markets drive rapid technological progress and development, this is accompanied by widespread fossil fuel use and energy- and resource-intensive lifestyles. Social and ecological systems are managed primarily through technology, often with a “by any means necessary” approach, increasing the complexity and severity of environmental impacts.

Very high emissions scenario		
IPCC climate scenario **RCP 8.5**	Complementary socioeconomic pathway **SSP 5**	GHG emissions in 2050 [$MtCO_2e$] **103,000** **(+109% compared to 2015)**
Global average temperature increase by 2050* **2.6 ± 0.4 °C**	Global average temperature increase by 2100* **4.3 ± 0.7 °C**	**Temperature anomaly with respect to the reference period of 1850-1900*

> National and international regulatory framework

Mexico's regulatory landscape on carbon pricing is currently fragmented, setting the carbon price simultaneously at national and state levels: (i) a (federal) Emissions Trading System for operations with annual CO_2 emissions above 100,000 tonnes; (ii) a clean energy requirement for generators in the electricity market with a market for clean energy certificates (CEC); (iii) a generally applicable federal carbon tax (excise tax on fuels) based on the percentage of carbon and taking natural gas as base 0; (iv) various state carbon taxes in place, being evaluated or challenged.

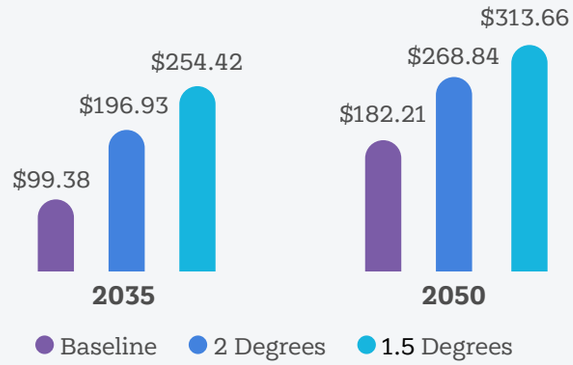
Mexico's energy policy underwent significant transformations with the change of administration. One of the most significant changes was a constitutional reform that reconfigured the Federal Electricity Commission (CFE), changing its status from a State Productive Company to a State Strategic Company, removing its obligation to operate under competitive market principles. However, the new energy policy framework includes provisions for reopening private participation in the electricity sector. Specific rules and mechanisms for this participation will be outlined in secondary legislation, expected to be discussed and approved during the first quarter of 2025.

Internationally, carbon-based import tariffs—most notably the European Union's Carbon Border Adjustment Mechanism (CBAM)—currently apply to imports of iron and steel, cement, fertilizers, aluminum, electricity, and hydrogen. This mechanism may expand to include additional products, which could impact future trade dynamics.

> Transition risks

To assess transition risks quantitatively, we utilize international carbon price projections, which incorporate expectations of future regulatory developments, market behavior, and other influencing factors. These projections are used to model potential financial and operational impacts in the absence of mitigation measures, providing a baseline against which the effectiveness of our transition plans is evaluated.

Potential future impact of transition risks in US$ million, without mitigating measures



The business-as-usual (BAU) impacts correspond to the low to moderate emissions scenario, while the 2- and 1.5-degree impacts correspond to the very low emissions scenario.

Carbon prices in US$

Scenario	2035	2050
Baseline	$ 42.51	$ 77.94
2 Degrees	$ 84.24	$ 115.00
1.5 Degrees	$ 108.83	$ 134.17

To assess transition risks quantitatively, we utilize international carbon price projections, which incorporate expectations of future regulatory developments.

> Chronic physical risks

Chronic climate hazards are typically assessed using climate atlases developed by universities and government agencies. These atlases are generally based on Global Circulation Models (GCMs) with spatial resolutions between 250 and 600 km. While coarse, they provide valuable insights—for example, on rising average temperatures. In Mexico, average annual temperatures are projected to rise between 1.5 °C and 5 °C under low (RCP 1.5) and high (RCP 4.5) emissions scenarios, respectively, with the most pronounced increases expected in northern Mexico during July, August, and September.

Precipitation is also expected to decline, consistent with trends shown in the IPCC's global models. The most significant decreases are projected for southern and central Mexico, largely due to reduced warm-season precipitation and an extended mid-summer drought. Since water availability is critical to both our operations and our stakeholder relationships, we rely on the World Resources Institute's (WRI) Aqueduct tool to evaluate climate-related water stress (for more information, see the Responsible Water Use section).

> Acute physical risks

Standard global circulation models, as used in climate atlases, are limited in resolution and therefore insufficient for capturing extreme precipitation events, particularly in complex terrains such as northwestern Mexico. To better manage the effects of acute climate hazards—including extreme heat, heavy rainfall on infrastructure, and people's health and safety—we depend on regionally scaled global models that improve the accuracy of projections at the local level.

To enhance our climate modeling capabilities, we have strengthened partnerships with academic institutions such as the University of Arizona, enabling us to generate tailored climate projection sheets for Fresnillo plc, one of our subsidiaries. These projections are key to planning infrastructure resilience and ensuring the health and safety of our workforce.

Managing impacts, risks, and opportunities

An effective climate-related risk management methodology is essential to our long-term strategy. We integrate climate risks into the Peñoles enterprise risk management (ERM) framework for more details see the Management of ESG Impacts and Risks section.

We use various quantitative and qualitative methodologies to estimate the probability and impact of risks.

Risk identification and assessment process

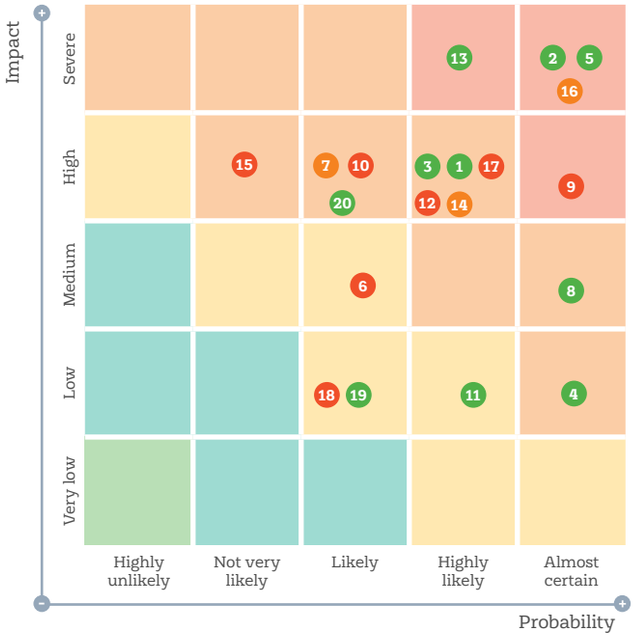
These inputs are then contextualized through workshops with multidisciplinary teams that consider our business model, corporate strategy, and site-specific operations.

In these workshops, we update our risk catalog and build a shared understanding of relevant threats and opportunities. Each identified risk is assessed based on its probability and current impact to reach a shared vision. This qualitative evaluation also considers the impacts to operational processes, efficiency, budget, regulatory compliance, health and safety, environmental stewardship, and stakeholder relationships. Future evaluations will align these probability and impact criteria with our broader ERM standards. This process currently covers 100% of our operations.

We use various quantitative and qualitative methodologies to estimate the probability and impact of risks. Scenarios serve as our analytical foundation, with the very high emissions scenario being the most demanding for understanding acute and chronic physical risks, and the very low emissions scenario being appropriate for understanding transition risks related to markets, regulations, reputation, and technology.

To deepen our analysis of transition risks, we evaluate the implications of existing and emerging public policies—both national and international—alongside market dynamics and evolving stakeholder expectations. Since these variables interact in complex ways, we assess their combined effect on carbon prices under multiple scenarios. For physical risk analysis, we integrate outputs from global and regional climate models to understand acute and chronic risks and from specialized sources such as the World Resources Institute's (WRI) Aqueduct to understand water stress.

Identification and assesment of climate change risks

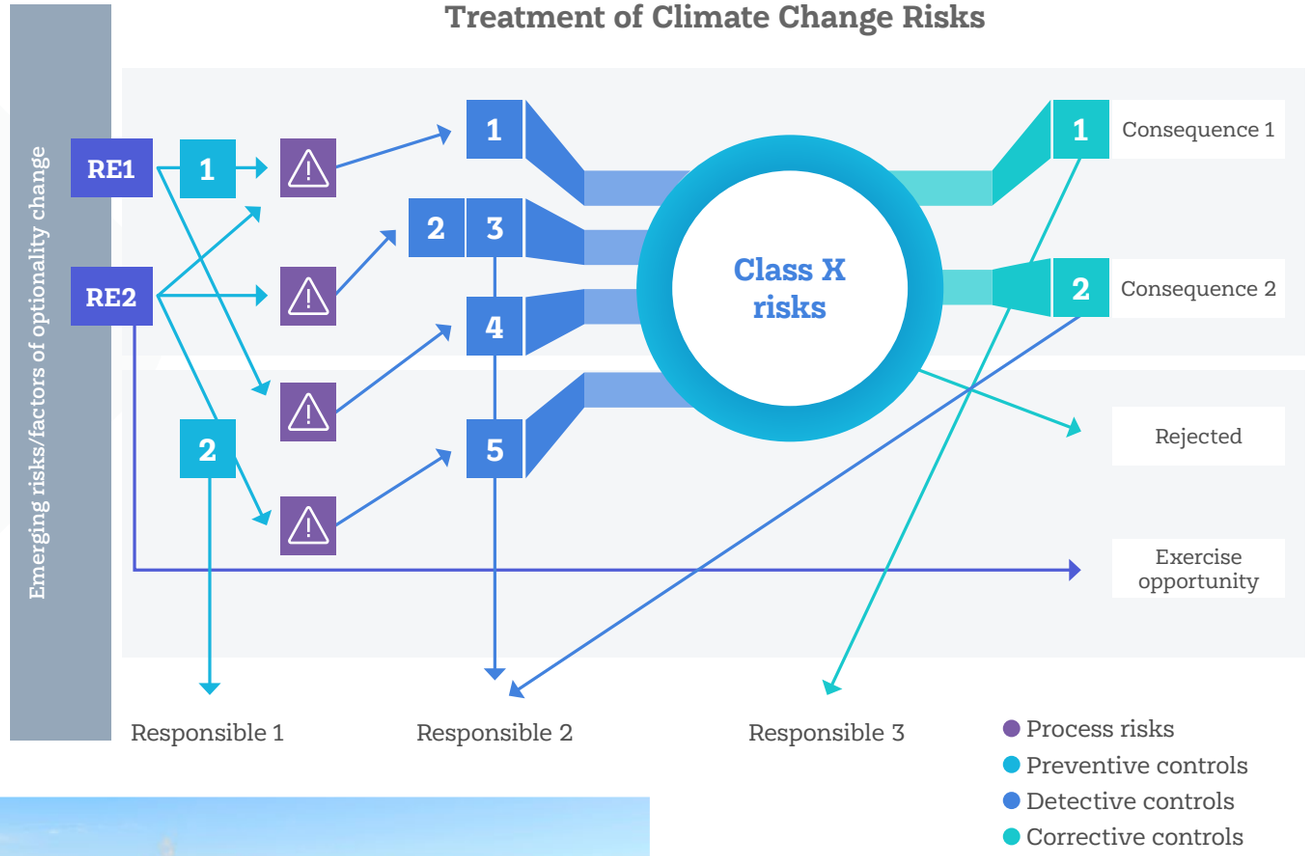


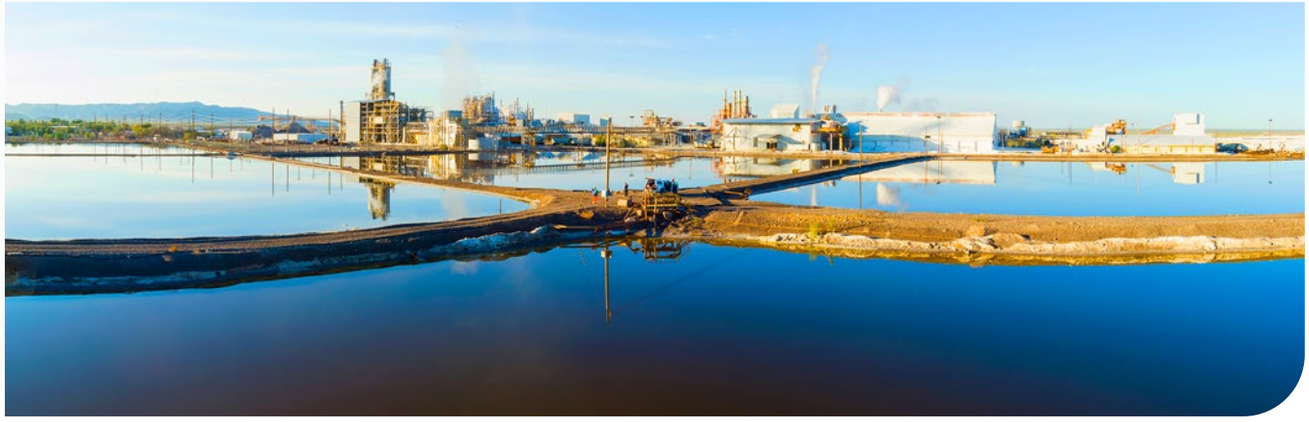
Five top risks

2. Extreme water events (rainfall, storms, cyclones, droughts, and hurricanes)
5. Water stress
16. Increased community expectations of company cooperation in adapting to climate change
13. New regulations caused by water stress
9. Increase in insurance premiums

Treatment, tracking, and monitoring

For risk management, we use the bow-tie method, which allows us to relate risks to their consequences in order to define whether they are preventive (PC), detective (DC), and corrective (CC). We are currently in the control implementation phase, and as part of the strategy's development, we will be incorporating their monitoring and follow-up.





We are currently in the control implementation phase, and as part of the strategy's development, we will be incorporating their monitoring and follow-up.

Treatment of the Top Five Climate Risks

Risks	Consequences	Controls to be deployed
R-2. Extreme water events (rainfall, storms, cyclones, droughts, and hurricanes)	• Overflow of tailings deposits • Breakage of tailings dams • Damage to public and private infrastructure • Increased CapEx for infrastructure reinforcement • Increased CapEx related to water management and storage infrastructure • Disruption of power supply • Loss of biodiversity • Fewer water resources, at greater depth or further away	• CP-1 Climate projections • CP-2 Establishment of baselines for climate projections • CP-3 Vulnerability assessment • CP-10 Water balance models • CD-1 Weather stations • CD-2 Monitoring of water volumes • CC-1 Emergency response plans • CC-2 Increase in infrastructure resilience
R-5. Water stress	• Increase in operating or production costs • Decrease in sales due to damage to roads and operating infrastructure • Increased CapEx related to water management and storage infrastructure • Decrease in power supply • Loss of biodiversity • Fewer water resources, at greater depth or further away	• CP-6 Water stress projections • CP-7 Reuse, water recirculation, and discharge management • CP-8 Hydrogeological models • CP-10 Water balance models • CD-2 Monitoring of water volumes • CC-3 Water rationing
R-16. Increased community expectations of company cooperation in adapting to climate change	• Increased conflict with communities over access to water • Increased difficulty in obtaining environmental permits and water concessions	• CP-14 Social investment in own water or in collaboration with governments • CP-15 Collective water monitoring
R-13. New regulations caused by water stress	• Increased difficulty in obtaining environmental permits and water concessions • Increased conflict with communities over access to water	• CP-6 Water stress projections • CP-7 Reuse, water recirculation, and discharge management • CP-8 Hydrogeological models • CP-9 Water volumes under concession • CP-10 Water balance models • CD-2 Monitoring of water volumes • CC-3 Water rationing
R-9. Increase in insurance premiums	• Increase in OpEx • Difficulty in accessing financing or unfavorable financing costs	• CC-3 Water rationing

Integration with our ERM

Our Enterprise Risk Management includes climate-related risks into two categories:

1. The physical risks of climate change may compromise our performance and operational continuity.
2. The risks of transition to a low-carbon economy may compromise our viability and profitability.

Performance and metrics

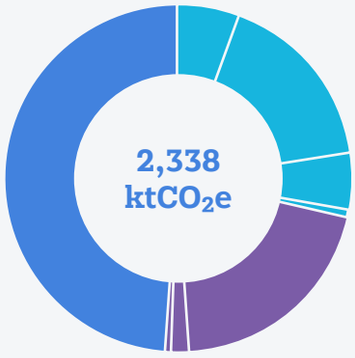
Global GHG emissions

GHG emissions (tonnes) | **Energy (MWhe)**

Global GHG emissions for the period from January 1 to December 31, 2024	Reporting year				Previous year	Base year	Reporting year	Previous year	Base year
	2024								
	CO_2e	CO_2	CH_4	N_2O	2023	2022	**2024**	2023	2022
Scope 1 (direct emissions): Combustion of fuels (fixed and mobile sources) and process emissions	**1,196,135**	1,183,637	116	35	1,216,142	1,347,660	**4,347,492**	4,394,808	4,918,702
Scope 2 (indirect emissions): Electricity purchased from the national grid (CFE), Eólica Peñoles (FEISA, Mesa La Paz, and EDC), and Termoeléctrica Peñoles (TEP)	**1,141,629**	1,139,883	22	4	1,429,896	1,735,378	**3,238,360**	3,092,940	3,199,665
TOTAL	**2,337,763**	**2,323,520**	**137**	**39**	**2,646,038**	**3,083,038**	**7,585,852**	**7,487,748**	**8,118,367**

The consolidation of emissions is presented according to the financial control approach, based on methodologies established by the Greenhouse Gas Protocol in A Corporate Accounting and Reporting Standard published by the World Business Council for Sustainable Development (WBCSD) and the World Resources Institute (WRI), and a 100-year horizon in Global Warming Potential (GWP) for equivalences of methane (CH4) and nitrous oxide (N2O). It also incorporates information published by the Intergovernmental Panel on Climate Change (IPCC) and Mexican regulations issued on the matter.
Scope 1: Direct emissions
Scope 2: Market-based indirect emissions

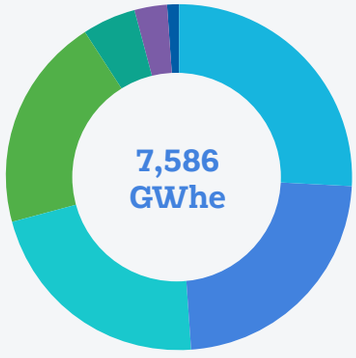
GHG Emissions - Scope 1 and 2 by source



- 5.7% Metallurgical coke
- 16.9% Natural gas
- 5.3% Chemical process reaction
- 0.8% Other fuels or sources
- 20.2% Diesel
- 1.9% Liquefied natural gas
- 0.4% Other fuels or sources
- 48.8% Electricity from conventional sources

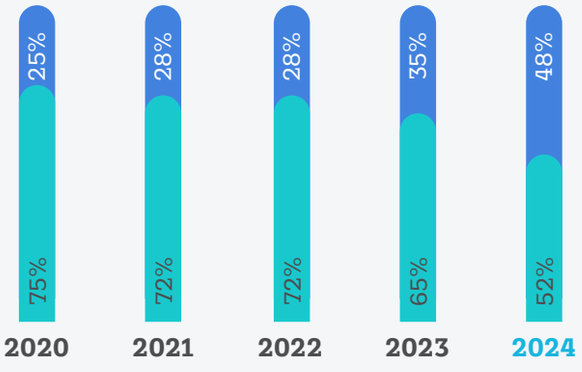
- Scope 1, fixed sources
- Scope 1, mobile sources
- Scope 2, electricity

Energy consumption by type

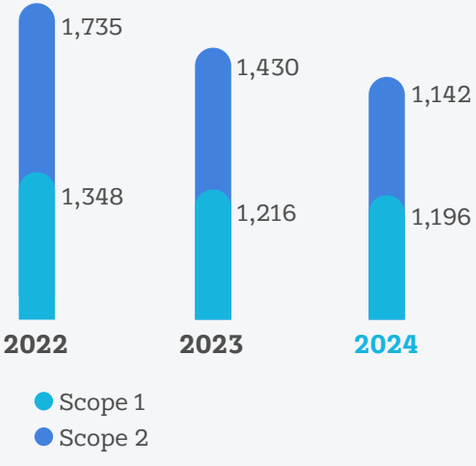


- 26% Natural gas
- 23% Diesel
- 22% Conventional electricity
- 20% Clean electricity
- 5% Metallurgical coke
- 3% Liquefied natural gas
- 1% Other fuels or sources

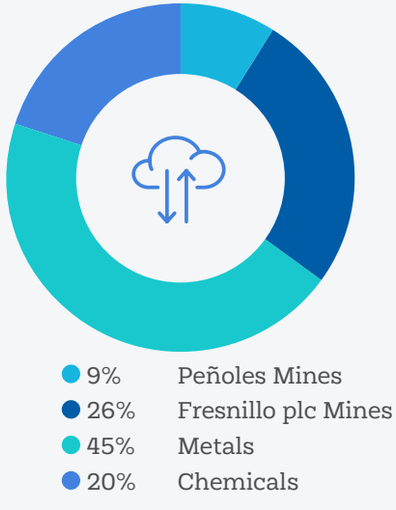
Energy supply



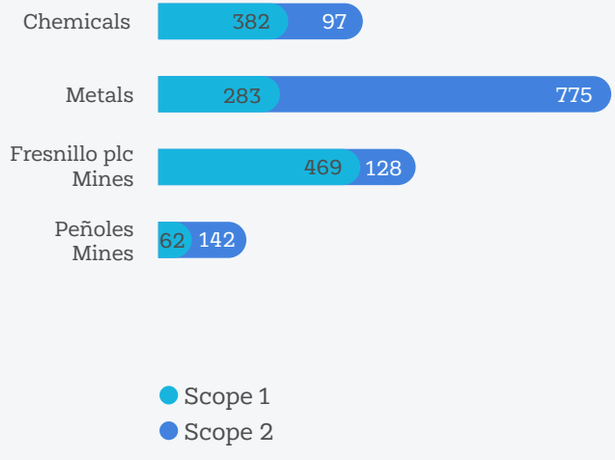
GHG emissions ($ktCO_2e$)



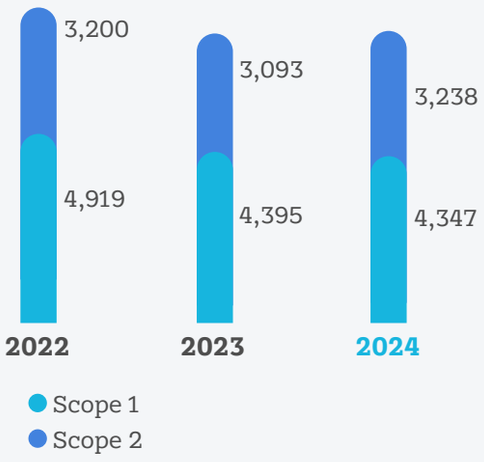
GHG emissions by division



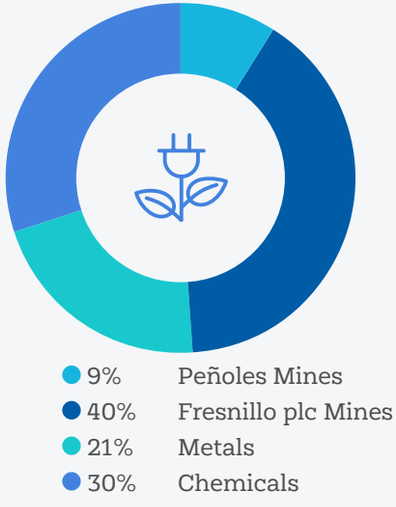
GHG by division ($ktCO_2e$)



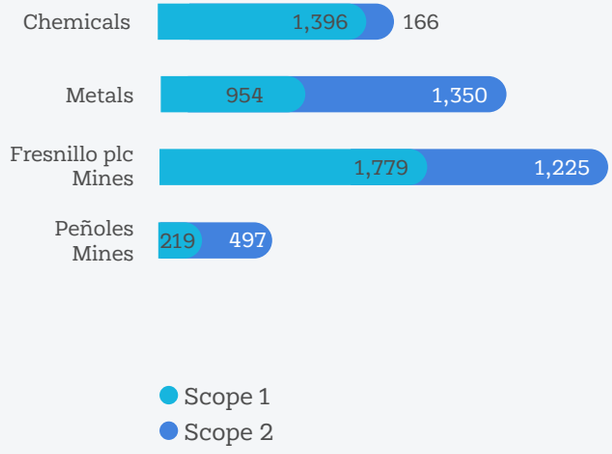
Energy (GWhe)



Energy distribution by division

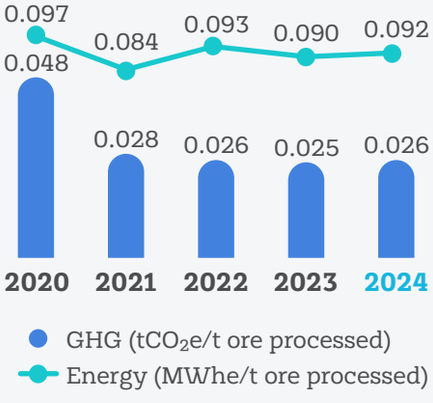


Energy by division (GWhe)



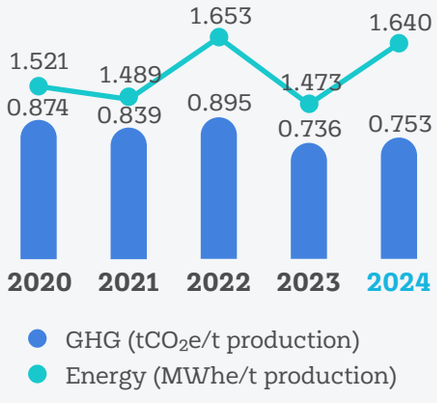
Emissions and Energy Intensity by division

Intensities - Peñoles Mines



Intensities - Fresnillo plc Mines

Intensities - Metals



Intensities - Chemicals