

Water stewardship

Governance

We recognize that water is a finite shared resource of significant environmental, social, cultural, and economic value, and caring for it is one way we gain and preserve the trust of the communities where we operate and want to develop our projects. We are committed to effectively managing and preserving water, with the participation of our stakeholders and with full transparency about our performance.

The ESG Committee (see *ESG Governance section*) is responsible for evaluating the organization's water management and stewardship performance. The Tailings Steering Committee seeks out synergies between good engineering practices and operational governance related to tailings and water management. We have performance guidelines that define water management roles and responsibilities for everyone involved—from the executive team to the operational staff.

We also operate a water ESG group and network of representatives from our operations. Their goals are to improve our understanding of stakeholder expectations and identify efficiency and technology opportunities. This working group collaborates in the creation of roadmaps, and committees, working groups, and networks help to strengthen the organization's water stewardship culture.

Strategy

Managing water is one of the most relevant issues for our business and among the most significant for our stakeholders, according to our present and future materiality study (2033).

Strategic implications of water management

The water we consume in our operations comes from surface and groundwater, municipal sources, and wastewater that we treat and reuse. We reduce water consumption through process efficiency and recirculation. Our access to the water we need for our operations, depends on physical availability, water concessions, and the support of our communities. Access to water has the following strategic implications:

The results indicate that 73% of our operations are now located in extremely high water-stress zones, 9% in medium-high water-stress zones, and 18% in low water-stress zones. With regard to water risk, 68% of the business units are in the extremely high category and 18% in the high-risk category.

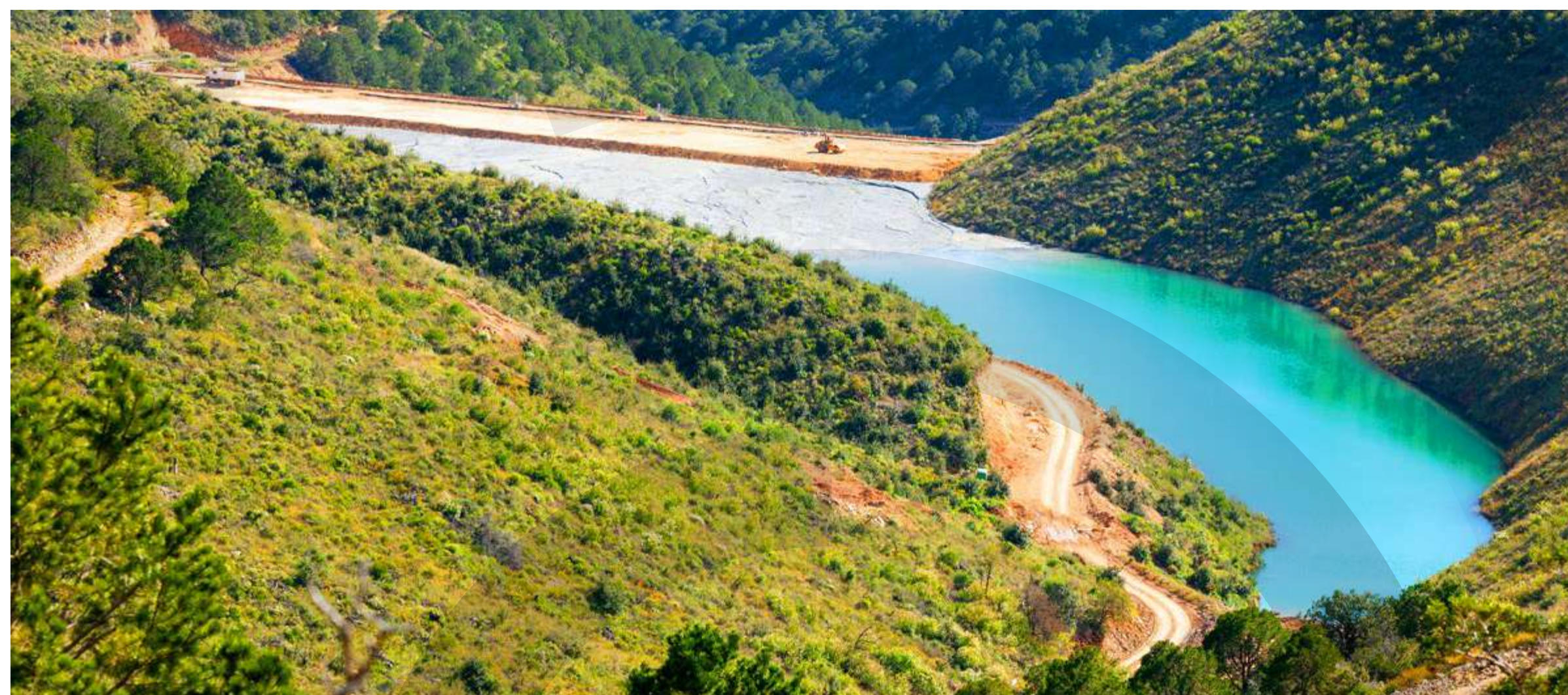
Evolution of the regulatory framework and our stakeholder's expectations

Water regulatory frameworks are expected to evolve everywhere in the world in response to stakeholder expectations and adaptation to climate change. The real value of water will increase as its availability decreases, which could make it more costly in the future. There will be increasing expectations for partnerships between mining companies and other users in the watersheds where they operate, mainly with neighboring communities. Consultation processes with indigenous peoples will raise expectations for projects whose watersheds are located, totally or partially, in indigenous peoples' territories.

Physical water availability: water stress and climate change

Physical availability is imperiled by the threat of water stress in the watersheds where we operate and the severity of the physical impacts of climate change. In Mexico, climate change will raise temperatures, increase evaporation, and reduce annual rainfall. It will also extend the magnitude of extreme rainfall and the duration of droughts. These effects will contribute to water stress in the watersheds where we operate.

In 2023, we updated our identification of our operating units' water stress and risk zones using the [World Resources Institute's](#) online Aqueduct tool, which resulted in a greater than 50% change in the status of our operating units.

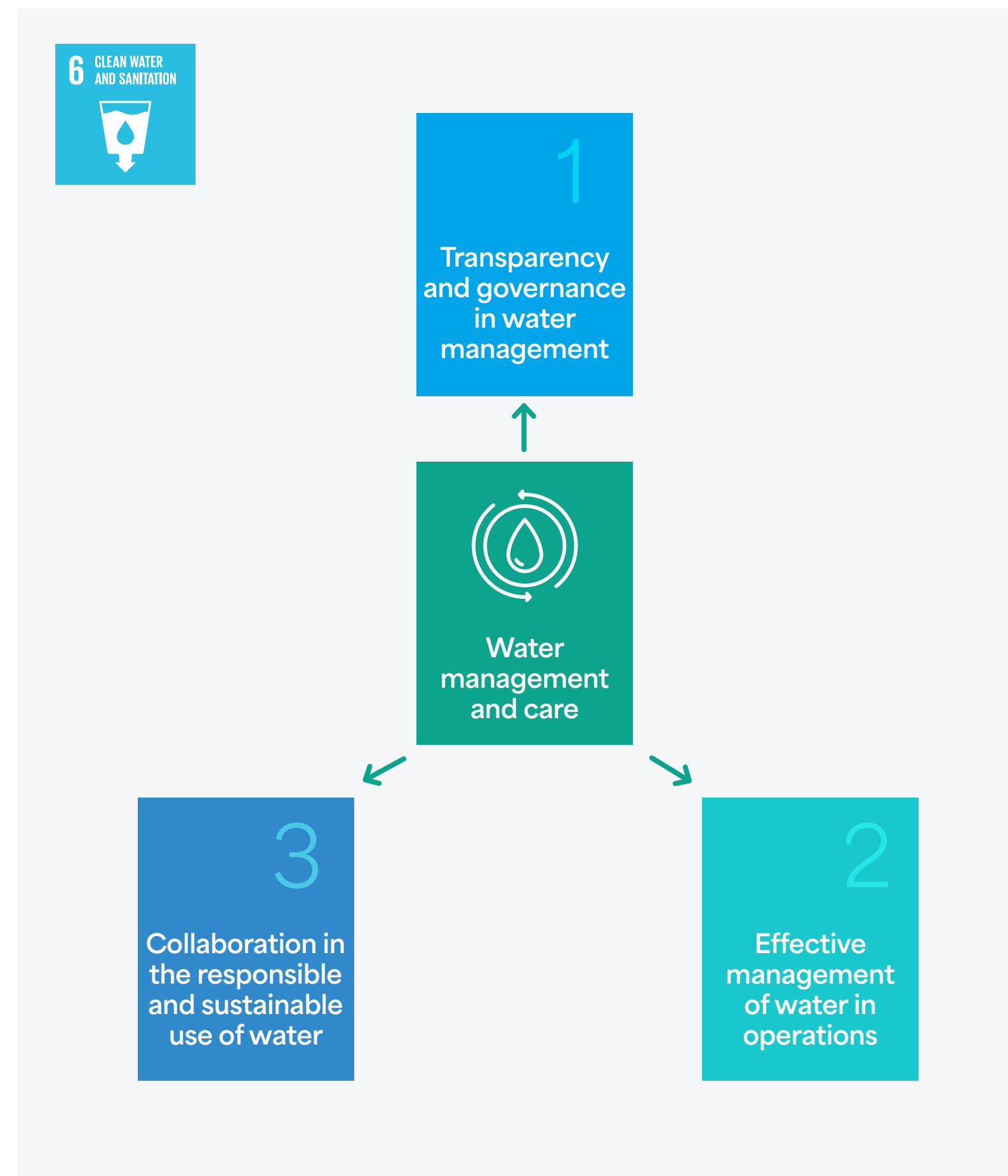


Water stewardship strategy

These strategic implications have the following potential impacts on the business:

- **Limitation on growth**
- **Mine closure**
- **Reduction or interruption of production capacity**
- **Reduced revenues due to lower production**
- **Increased production costs**
- **Initial costs for adopting/ implementing new practices and processes**
- **Increased compliance costs**
- **Reputational damage**
- **Deterioration or loss of social license**
- **Fines and penalties**
- **Litigation**
- **Supply chain disruption**

This strategy is sustained by three basic pillars, which in turn determine goals and programs to improve water security in the regions where we operate. These pillars are aligned with the International Council of Mining and Metals (ICMM) Position Statement on Water Stewardship, and Sustainable Development Goal 6 of the United Nations.



Managing impacts and risks

Our water stewardship strategy has three strategic lines for managing impacts on sustainable development:

- **Transparency and governance in water management:** We improve our water accounting, disclose our performance in accordance with the WAF framework, and design benchmarking standards for our operations.
- **Efficient water management in operations:** We reduce our operations' freshwater consumption by using treated municipal sewage and brackish water. We reuse water through closed circuits that include high-compaction thickeners and water recirculation, without discharging process water. We explore new technologies that enable us to mitigate socio-environmental impacts.
- **Collaboration in the responsible and sustainable use of water:** We manage water in partnership with stakeholders, conduct social and environmental studies, and promote responsible water use.

A key process of our strategy involves understanding and mitigating physical, regulatory, reputational/market, and technological risks in the watersheds where we operate and in our value chain.

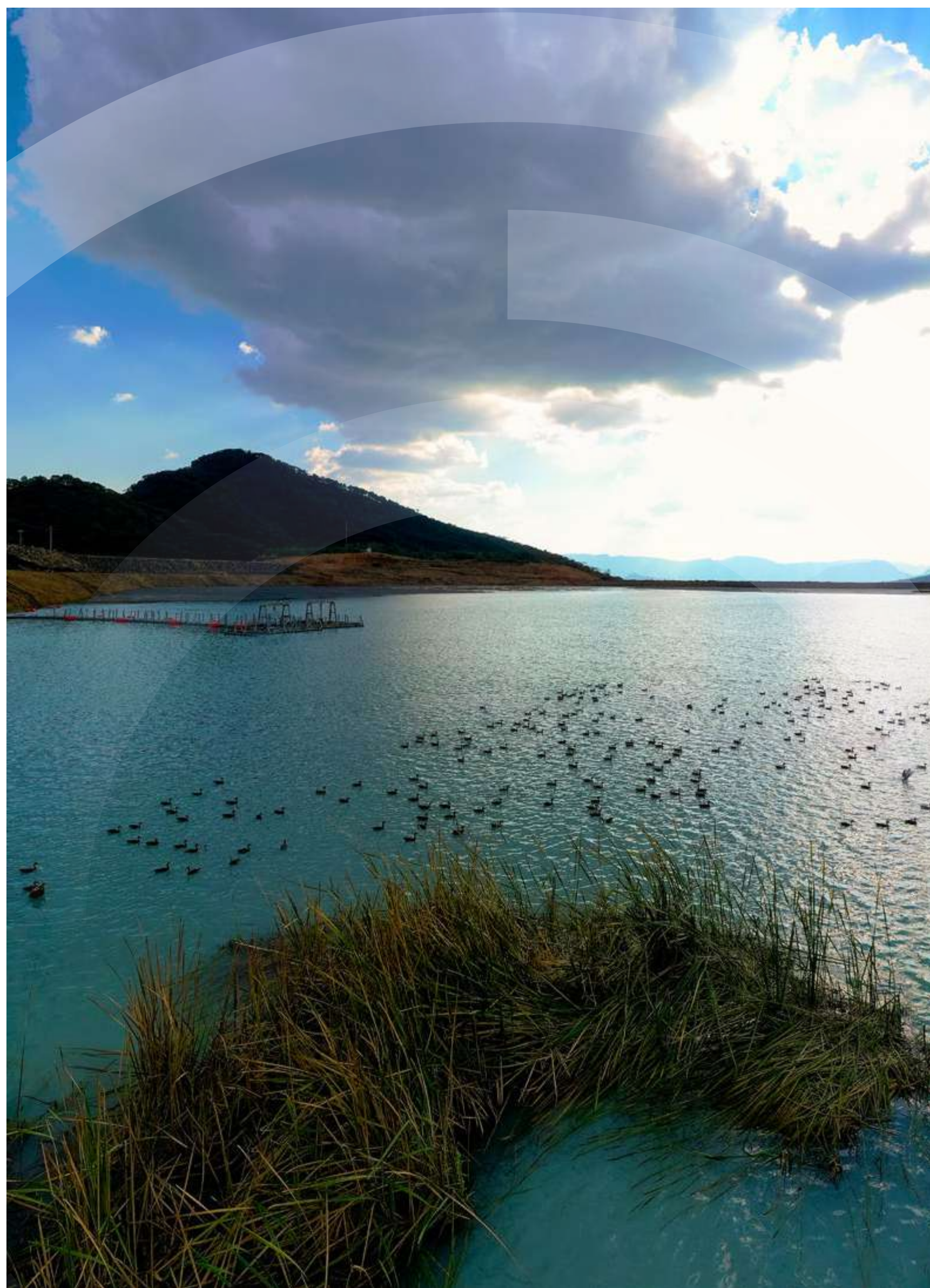
Risk responses (controls):

Definition of functional boundaries and areas of influence, hydrological and hydrogeological studies, regional water balance, social studies, risk assessment, water management plan, social management plan, designs of water reservoirs and conveyance structures, site water balance, water accounting framework, quality standards and quality and quantity monitoring plan.

Type of risk	Potential risks
Chronic physical	Changes in annual precipitation, aquifer depletion, water stress, insufficient infrastructure, ecosystem vulnerability, land use change, soil degradation, and acid drainage
Acute physical	Hurricanes, droughts, extreme precipitation, environmental incidents, tailings storage facilities ruptures and spills
Regulatory	Increased water prices, greater difficulties in obtaining permits, more restrictive regulations, regulatory uncertainty, rationing, and reductions in concession volumes
Reputational/market	Community opposition, concerns and negative reactions from interest groups, litigation on water-related issues, and negative media coverage
Technological	Lack of watershed information, lack of availability of more efficient technologies and processes, and investments in technology without the expected results

Water management in new projects

We identify the risks and impacts associated with water management before starting our projects by conducting technical studies justifying changes in land use, preventive reports or environmental impact studies, which we update every time there is a change in our operations. Based on this information, we decide on ways to prevent risks and potential impacts to water resources and water users, including ecosystems. Each time a modification is made to the original scenario, the risk assessment is updated to adapt it to the new circumstances.



Case study - Orisyvo mining project: Comprehensive, sustainable water management

The Orisyvo mining project is a prime example of our proactive, sustainable approach to water management. It is located in the municipality of Uruachi, in the state of Chihuahua, where we initiated a comprehensive approach to water management beginning with a determination of the hydrological and hydrogeological characterization to establish a solid baseline of the water resource. Through regional monitoring, assessment of the area of direct and indirect influence of the mine areas, future planning, strategic design of facilities and water management based on accurate and representative information, we work in partnership with communities and stakeholders in the regional assessment of its availability to decide on the best alternative for sustainable and responsible withdrawal, and to prepare a predictive water balance of the site.

At Orisyvo, we have conducted detailed analyses to understand precise water needs at all stages of the project. This includes its efficient use in mining processes, as well as consideration of local water needs for the nearby communities. The result is a balanced and sustainable management of water resources.

Bearing in mind the importance of a cordial relationship with local communities, Orisyvo has established a proactive approach to address any water-related concerns. Transparency, civic participation, and active engagement have been crucial for our success at building a positive relationship with local stakeholders.

For all of these reasons, the Orisyvo mining project is poised for long-term success. Comprehensive and sustainable water management, proactive attention to risks, and strong community relationships constitute an exemplary approach to responsible mining.

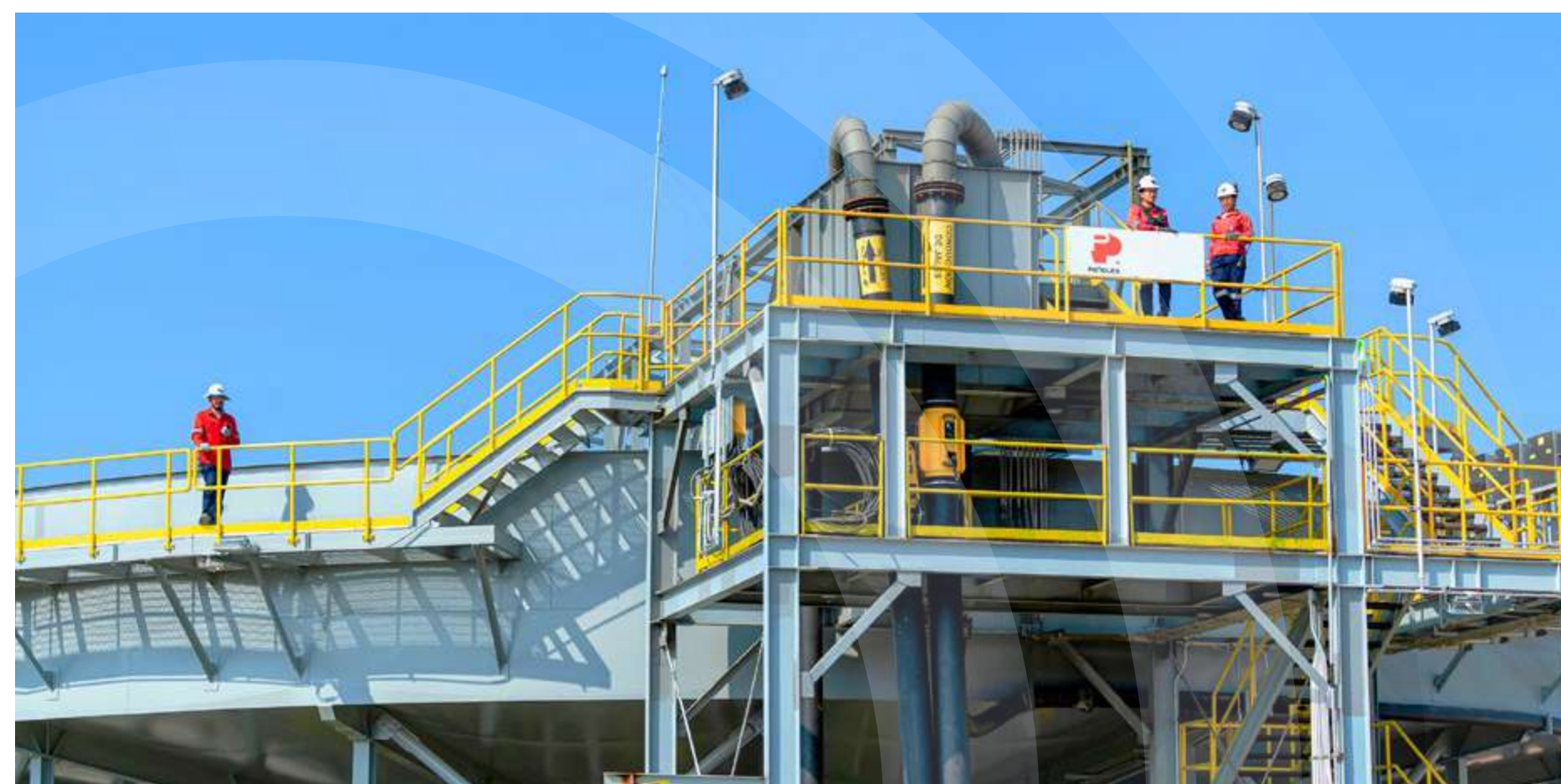
Performance and metrics

The term “**fresh water**” refers to surface and groundwater sources, such as mine workings, wells, and municipal service networks; brackish water is not included due to the quantity of dissolved solids it contains.

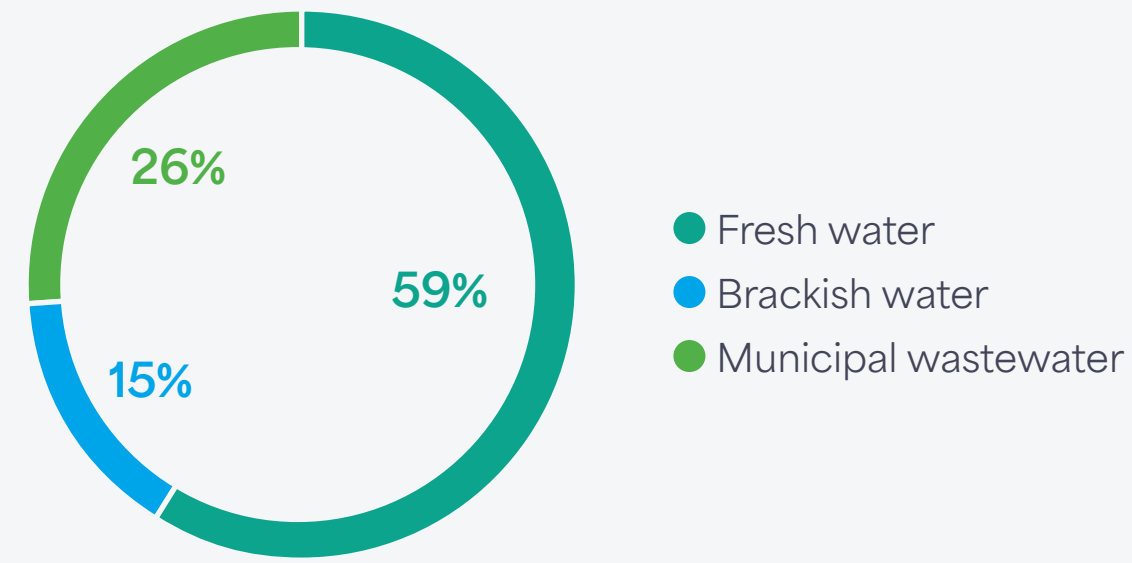
We fully comply with applicable regulations at all levels and preserve the company's reputation by maintaining and adopting best practices in water management, which allow us to reduce operating costs and maximize efficiency in water reuse through recirculation processes and closed circuits in which we recirculate **78% of process and sanitary water**, minimizing freshwater consumption. We implement preventive and predictive maintenance programs to avoid leaks in our systems, and we have metering devices and water treatment plants for recirculating water from internal services.

Water balance (WAF)

Balance (MI)	Category	Element	2019	2020	2021	2022	2023	
Inputs	Fresh water	Surface	232.41	407.80	901.52	823.59	735.57	
		Municipal network	456.17	466.30	438.66	430.95	412.85	
	Brackish water	Ground water	39,295.17	26,314.89	35,092.07	37,297.01	27,587.28	
		Treated water	Municipal wastewater	6,419.49	6,876.72	6,951.38	6,692.46	6,412.31
	Total inputs			46,403.25	34,065.70	43,383.63	45,244.01	38,728.11
Outputs	Fresh water	Ground water	19,632.69	7,494.96	13,921.29	17,179.08	14,500.83	
	Total outputs			19,632.69	7,494.96	13,921.29	17,179.08	14,500.83
Water consumption			26,770.56	26,570.74	29,462.34	28,064.93	24,227.28	
			Peñoles Mines	4,867.97	4,691.91	3,998.45	4,572.73	4,725.33
			Fresnillo plc Mines	12,805.20	13,329.96	16,526.69	14,584.57	12,431.02
			Metals	5,352.63	5,129.64	5,133.89	5,102.71	3,487.94
			Chemicals	3,744.76	3,419.23	3,803.32	3,804.93	3,583.00

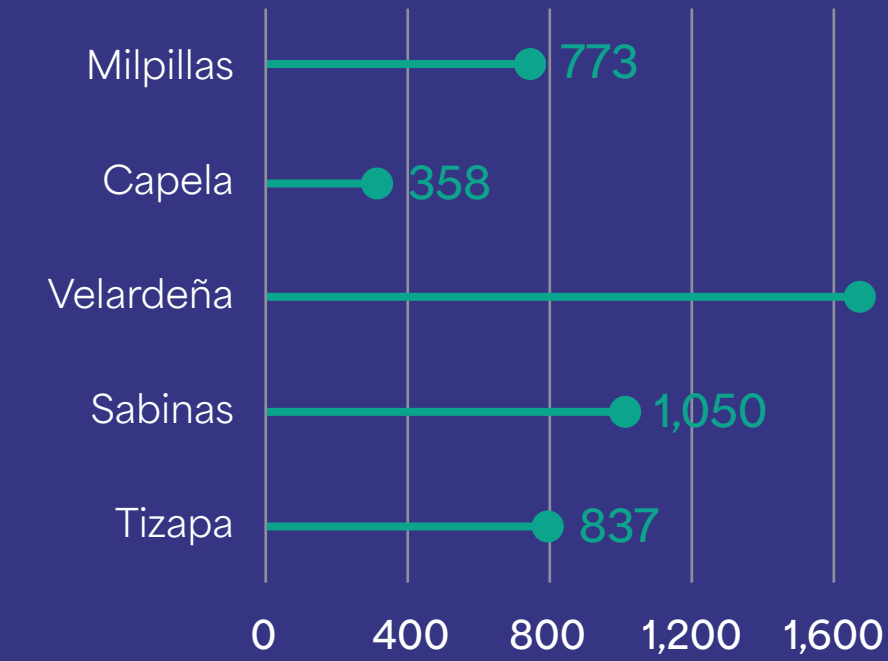


Industrias Peñoles water consumption

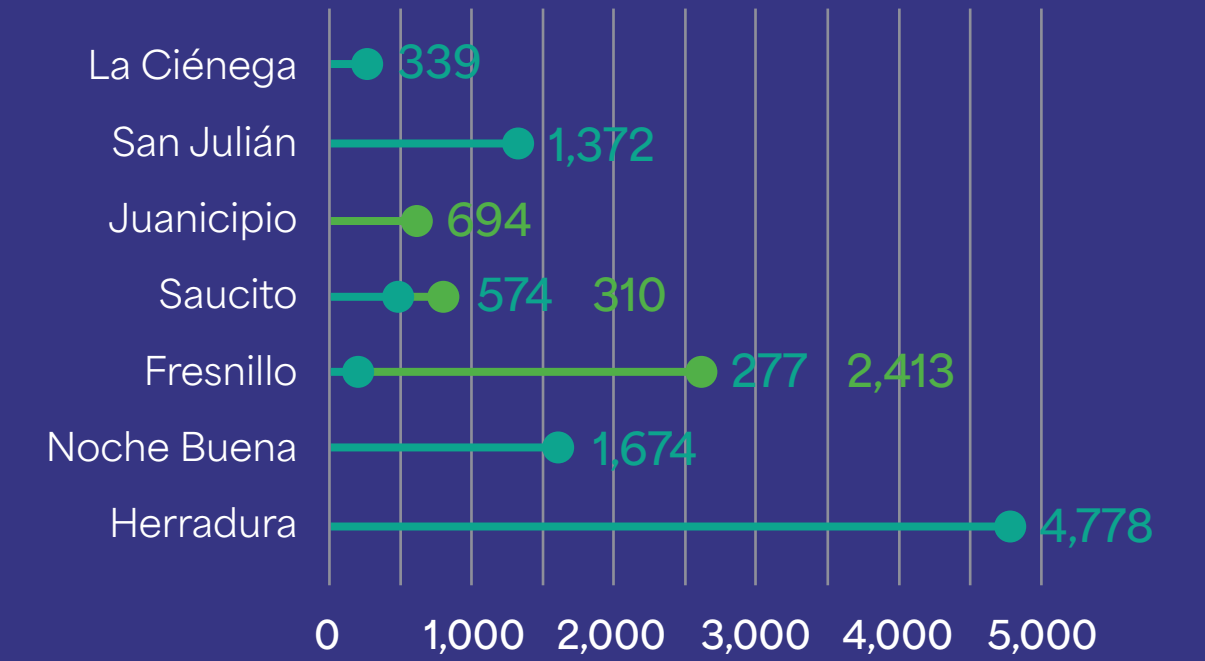


Industrias Peñoles water consumption by business unit

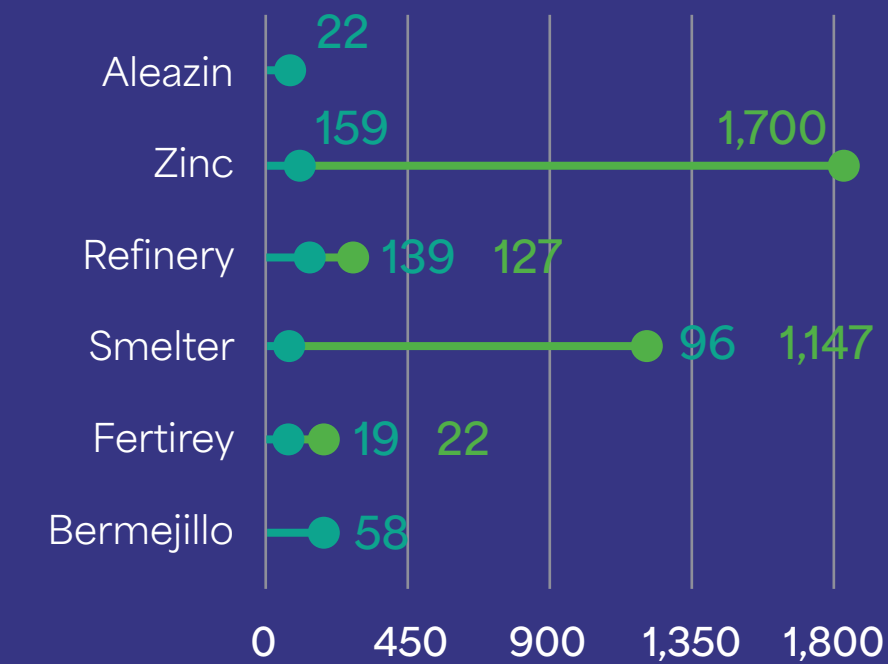
Peñoles Mines (MI of consumption)



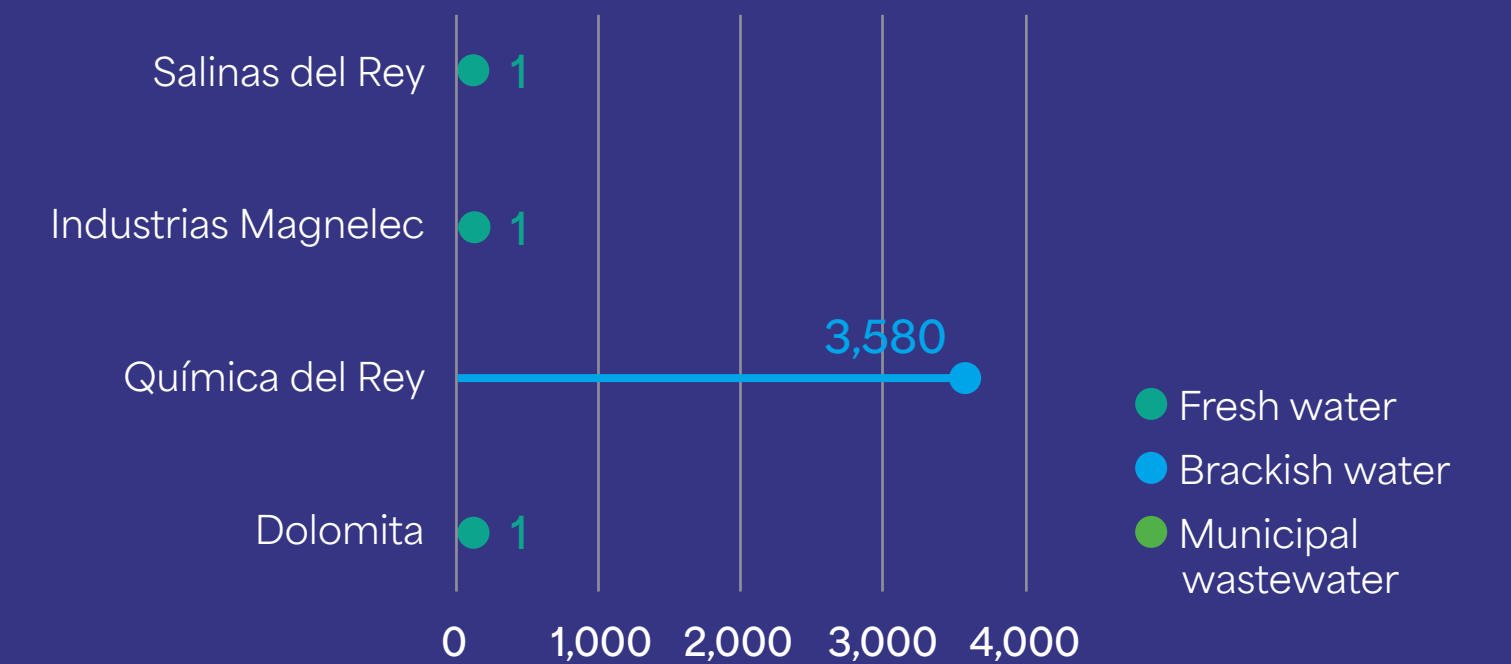
Fresnillo plc Mines (MI of consumption)



Metals (MI of consumption)



Chemicals (MI of consumption)



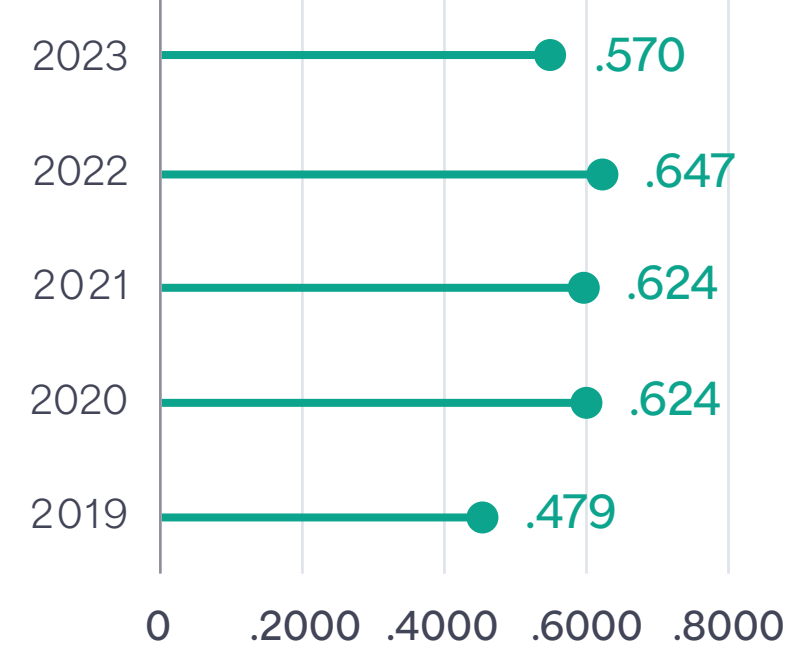
Operating efficiency

Operating efficiency (MI)			2019	2020	2021	2022	2023
Process water			120,080.13	101,433.70	107,993.90	117,083.06	111,958.54
Recirculated water			93,309.57	74,862.96	78,531.56	89,018.12	87,731.26
Recirculated	Process	Operation	92,007.93	73,067.76	78,162.30	88,572.02	87,035.12
	Treatment	Internal services	1,301.64	1,795.20	369.25	446.11	696.14
Reuse efficiency			78%	74%	73%	76%	78%

Consumption Intensity by division

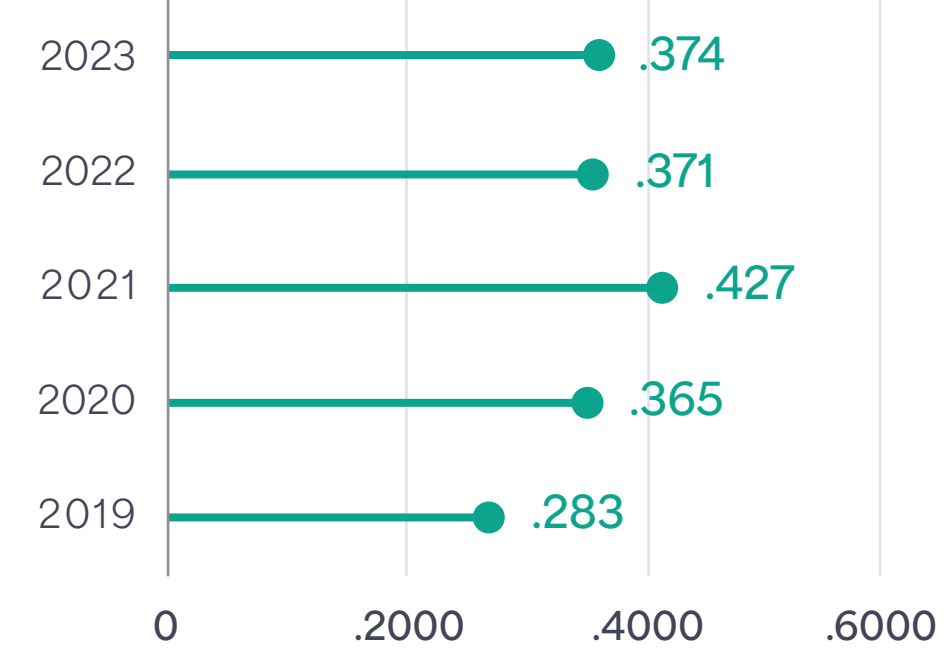
Peñoles Mines

(m³ water consumed/t ore milled)



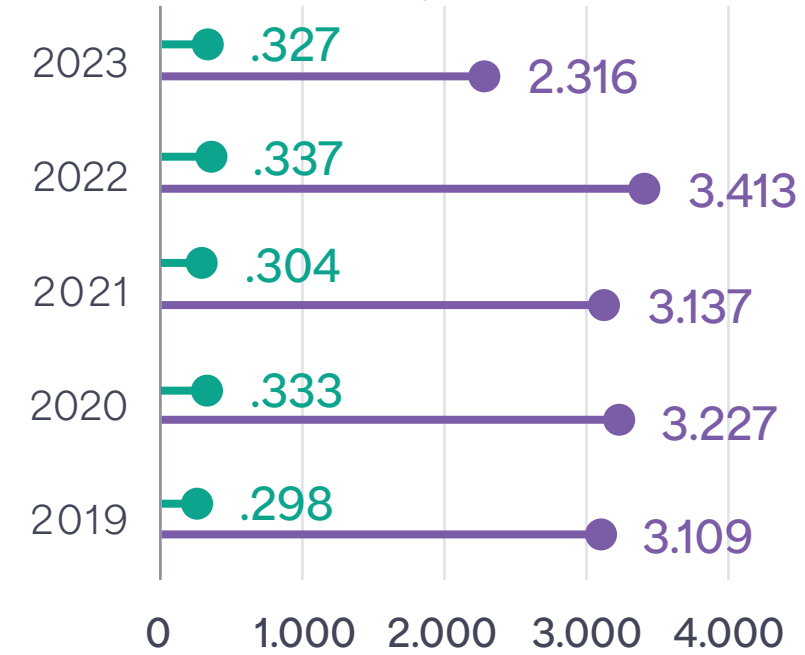
Fresnillo plc Mines

(m³ water consumed/t ore milled)



Metals

(m³ water consumed/t production)



Chemicals

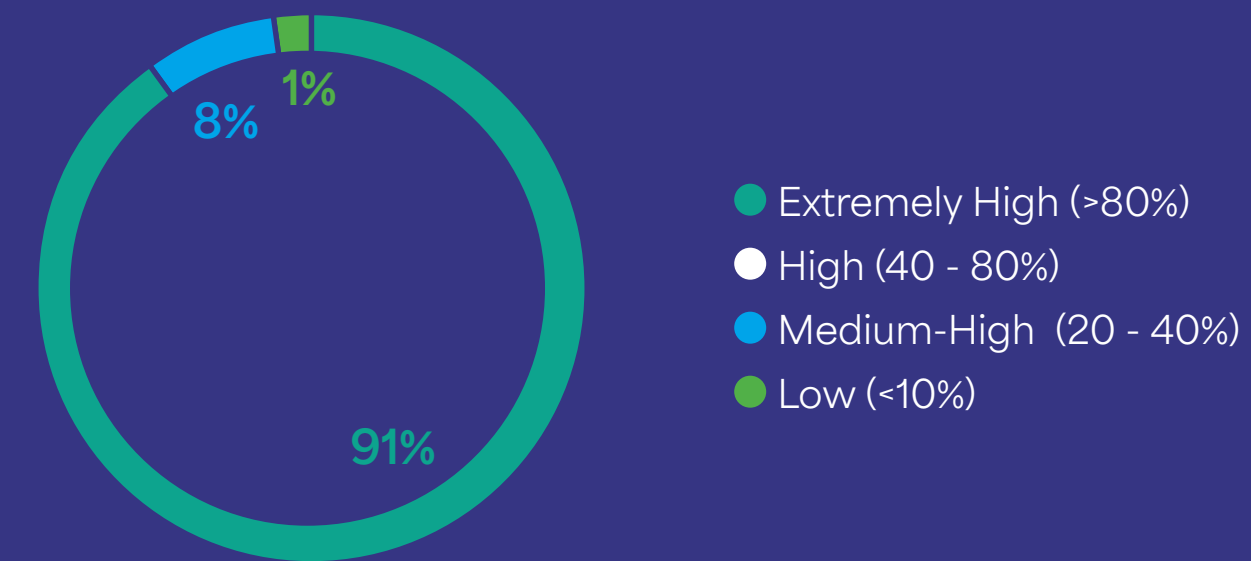
(m³ water consumed/t production)



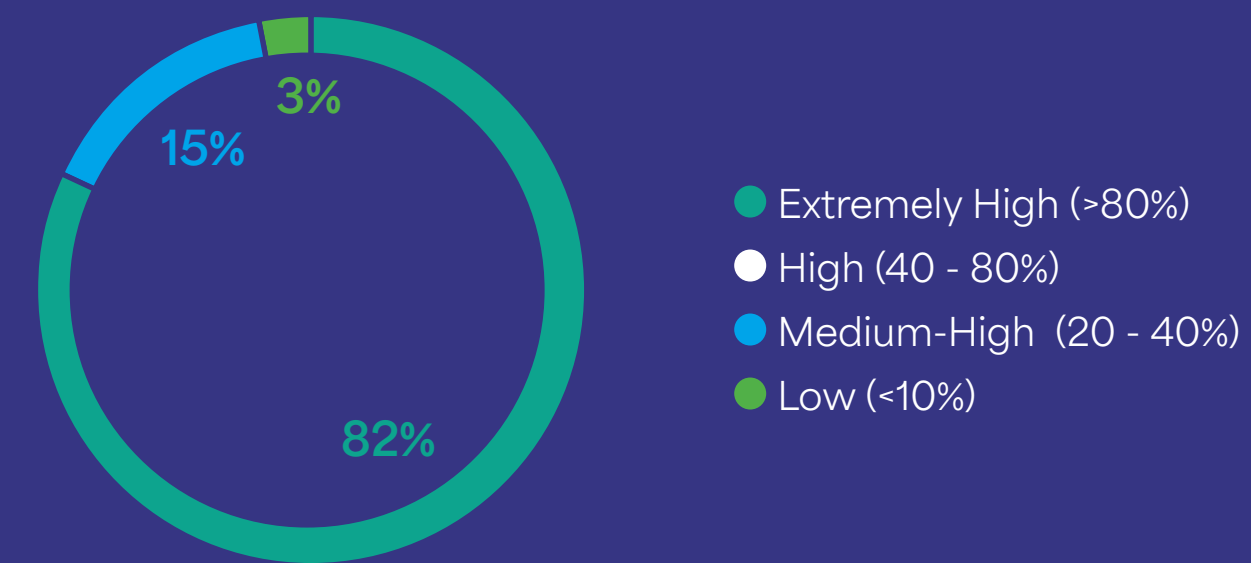
● Freshwater consumption ● Water consumption

Production: Metals and Chemicals divisions include products and byproducts.

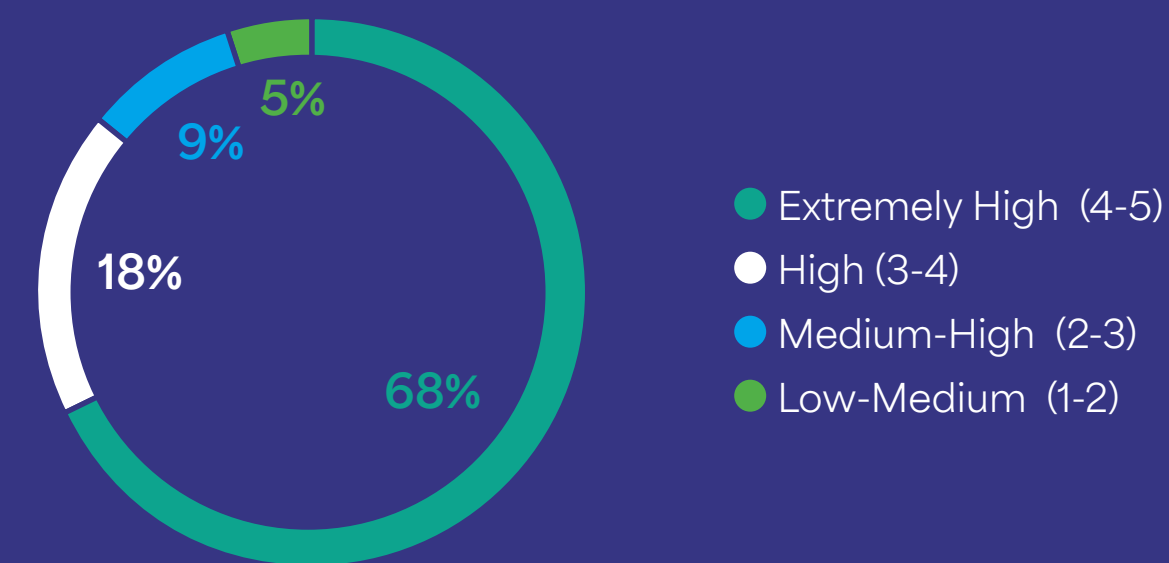
Withdrawal of fresh water by water-stress location



Consumption of fresh water by water-stress location



Business units by risk category



We implemented preventive and predictive maintenance programs to avoid leaks in our systems; we have measuring devices and water treatment plants to recirculate water from internal services.