GrupoMéxico

WATER:
SUSTAINABILITY ACTIONS 2024

Sustainability Actions 2024: Water[1]

Programs for Efficient Water Management

In Grupo Mexico's Mining Division[1], "Water Balances" are prepared for mining units and metallurgical plants on a daily, monthly, and quarterly basis, depending on the operation, to monitor and manage the use of the resource in operations. These balances include volumes of fresh-water extraction by source (groundwater, surface water, and seawater), indicators of fresh-water use (m^3/TMS of milled material), and water recovery in concentrators (recovered water/total water), as well as recovery volumes in thickeners, clarifiers, dams, and tailings deposits.

For example, in Peru, as part of our Quality Management System (ISO 9001), continuous monitoring (Evaluation and Control) is conducted by managing loss indicators between what is produced (wells) and what is received (reservoirs) on a monthly basis. Additionally, at the operational level, consumption indices are based on the projected declared volumes for each area, compared with the actual monthly volumes.

Actions to reduce freshwater consumption

The consumption of first use (fresh) water in the operations of the Mining Division is reduced through actions such as:

- Making processes more efficient to decrease the amount of water required in production.
- Optimizing water recovery in thickeners and tailings dams with the implementation of tailings filters, high-efficiency thickeners, flocculant additives, and cyclone systems.
- Using sanitary or domestic wastewater in metallurgical processes. This is already being carried out at the Zinc Refinery in San Luis Potosi, the Copper Metallurgical Plant, and Buenavista del Cobre (BVC) in Sonora, Mexico. In the latter, there is also a project to incorporate 7 million cubic meters annually of domestic / sanitary wastewater from the city of Agua Prieta through an aqueduct. This water will not require prior treatment as its quality does not affect the metallurgical processes.
- Using desalinated seawater in metallurgical processes. This is currently being successfully implemented at the ILO Refinery of SPCC (Peru), where approximately 95% of the total volume of water used in the plant is of marine origin, having undergone a desalination process. The remaining 5% is first-use water.
- In Peru, we have the Contingency Plan for Maximizing Availability, Reliability, Maintainability, and Safety of Water Infrastructure, which includes identifying vulnerable areas in the transmission line to address them in the shortest possible time. This allows us to save water lost during transmission.

[1] The actions described in this document are fully applicable to our subsidiary Southern Copper Corporation.

Actions to Improve the quality of Wastewater/Effluents

In our mining operations, we aim to avoid generating wastewater discharges (effluents) and to recirculate all process water.

Currently, wastewater discharges from the process, as well as sanitary and domestic use, are reincorporated into the process. Additionally, a minimal volume is used for irrigation of plants and gardens within the company, with its quality being periodically monitored through physicochemical analyses.

The use of wastewater in operations does not require modification of its chemical or biological characteristics.

A particular case is the Ilo Refinery in Peru, where 95% of the water used in the process is desalinated seawater. The brine, which is the reject water from the desalination process, is discharged into the sea without treatment, as the results of physicochemical analyses ensure that its quality does not pose a risk of contamination.

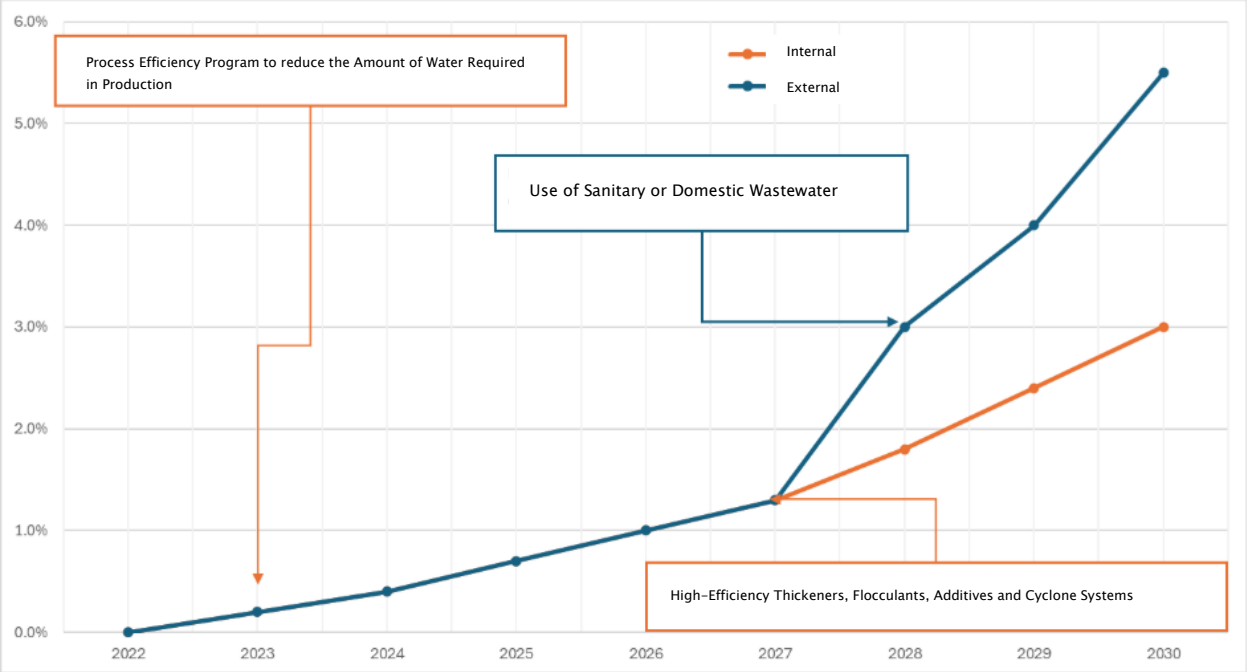
Water use reduction targets

The projects and measures that will enable us to achieve our goals can be classified into two groups: internal and external actions. The internal actions are executed by the company and do not depend on external factors. These actions aim to reduce the use of first-use water per dry milled ton (m^3/TMS) by 3% by 2030:

- Making processes more efficient to decrease the amount of water required in production.
- Optimizing water recovery in thickeners and tailings dams through the implementation of tailings filters, high-efficiency thickeners, flocculant additives, and cyclone systems.

Other external actions, which have a high impact, could reduce the use of first-use water per dry milled ton by up to 5% in the same period. However, these actions depend on external factors such as permits, collaboration agreements, and negotiations with society and government, as well as medium-term execution timelines (3 to 5 years) from the time all permits are obtained:

- Using sanitary or domestic wastewater in metallurgical processes.
- Using desalinated seawater in metallurgical processes.



Freshwater consumption targets per production unit per year

According to the World Resources Institute Aqueduct: Water Risk Tool, 74% of our mines are situated in high water stress zones. However, water withdrawn in water stress zones (as percentage of total water withdrawn) amounts to 95% in the case of Grupo Mexico, and 98% in the case of Southern Copper Corporation.

Actions to achieve the current percentage of Water Recycling

As part of the recently implemented or developing actions and measures to increase the percentage of recycled or recovered water in the Mining Division, new equipment acquisition and process engineering design modifications are described below. The favorable results from these evaluations may allow their application in other units of the division to promote the recovery and reuse of industrial wastewater and reduce the extraction and consumption of fresh or first-use water:

a) Utilization of High-Efficiency Tailings Thickeners in Concentrator II (3 units) and the Zinc Plant (1 unit) at BVC, which allow for up to 60% water recovery, 5% more than conventional thickeners. They also have a central rake lift to release the current thickener in case of operational issues, reducing downtime.
b) b) Utilization of an Amphibious Excavator that can enter the tailings dam at BVC to redirect the tailings as needed for the operation. This ensures a continuous water flow towards the New Tailings Dam wall, increasing water recovery and preventing tailings from reaching the permissible operational limits in the area. Implemented on October 5, 2023, it has significantly improved water recovery and reduced the risk of water shortages in processes.
c) c) Design and construction of Clarifying Dikes at New Tailings Dam and Tailings Dam No.3 in BVC to improve the tailings decantation process and increase the recovery of reusable water.

d) d) A project in development during 2024, involving the installation of a double-effect Hydrocyclone with a capacity of 50 tons/day and an Enduro high-frequency Screen, to increase water recovery from tailings at the concentrator's output, reducing solids content to 20%. Upon successful trial completion, the installation of such equipment with a capacity of 10,000 tons per day will be evaluated.

Programs and workshops to enhance employee awareness regarding the efficient water management

At BVC (Mexico), a weekly water usage monitoring program has been implemented, involving managers and operational staff responsible for water management in the copper and zinc concentrators, as well as in leaching. The program aims to monitor water usage, develop optimization strategies, and foster coordinated work.

In the Mining Division, and through the Water Resources Department, there is an ongoing project to design and implement a water awareness and efficient use course for employees. This course will be integrated into the training programs offered at various units, disseminated through different media, and aligned with the Integrated Management System.

The course content will include topics such as: the origin and characteristics of water, types of water, the water cycle, global water distribution, freshwater extraction, the importance and uses of freshwater worldwide, freshwater use and consumption in Mexico, the legal framework for water in Mexico, water footprint, sources of waste and contamination, and actions for water care, preservation, and saving.

Programs for managing water-related risks

- **Water-related risks associated with dependencies are considered within risk management**.
  Risks related to dependencies focus on obtaining permits and renewing water use concessions. Management focuses on keeping track of all our concessions, meeting all requirements and requests from the authorities in a timely manner, and maintaining an open and cordial relationship with various government agencies.
- **Future availability assessments of water quantity**.
  To ensure long-term water availability, periodic studies are conducted to update the availability in the aquifers where we have concessions.
- **Future risk assessments on water quality.**
  As part of ongoing monitoring programs at our units, water quality in bodies of water in areas surrounding our operations is regularly tracked.
- **Assessments of impacts on local stakeholders**.
  In all our operations, constant and ongoing communication with nearby communities is maintained. Regarding water use, efforts are made to support communities with actions and projects that enhance access to potable water through collaboration agreements with local authorities.
- **Assessments of potential future regulatory changes at the local level**.
  The company participates in basin councils, mining associations, or similar groups to stay informed of potential regulatory changes and to participate in and provide feedback on laws that may affect water use in operations.

- In Peru, we maintain the "ISO 9001-2015 Certification" for Water Resource Management in the extraction, capture, transmission, storage, and distribution of water resources. This certification allows us to meet the requirements of our users and other stakeholders by ensuring comprehensive water resource management, which involves:
    - Integrated Water Resources Management o Planning, control, operation, and maintenance
    - Capture and extraction according to the current licenses granted
    - Transmission and storage up to the distribution to the mine's operational areas

  Additionally, we are addressing the integration of the three international standards that commit to continuous improvement and excellence in service quality management, hazard and risk mitigation associated with the activities performed, and the treatment of environmental aspects generated, along with environmental care:

    - ISO 9001:2015 Quality Management System
    - ISO 14001:2015 Environmental Management System
    - ISO 45001:2018 Risk and Safety Management System

Water metrics

Water Consumption

The following table presents a comparative overview of water consumption data for Grupo México and Southern Copper Corporation from FY2021 to FY2024. The figures reported include water withdrawal and discharge (excluding saltwater), as well as total net freshwater consumption. All data has 100% third-party verification coverage, ensuring its reliability and alignment with industry reporting standards.

Grupo México	Unit	2021	2022	2023	2024
A. Water withdrawal (excluding saltwater and wastewater)	Million cubic meters	117.194	110.627	115.600	122.755
B. Water discharge (excluding saltwater)	Million cubic meters	1.023	0.836	1.113	1.362
Total net freshwater consumption (A-B)	Million cubic meters	116.171	109.791	114.488	121.393
Data coverage	Percentage of group data	100	100	100	100

Southern Copper Corporation	Unit	2021	2022	2023	2024
A. Water withdrawal (excluding saltwater and wastewater)	Million cubic meters	113.281	106.715	112.305	118.241
B. Water discharge (excluding saltwater)	Million cubic meters	0.216	0.227	0.243	0.214
Total net freshwater consumption (A-B)	Million cubic meters	113.065	106.488	112.062	118.027
Data coverage	Percentage of mining operations	100	100	100	100

Water Consumption in Water-Stressed Areas

Grupo México	Unit	2021	2022	2023	2024
A. Water withdrawal (excluding saltwater and wastewater)	Million cubic meters	111.213	104.295	111.168	118.166
B. Water discharge (excluding saltwater)	Million cubic meters	0.050	0.036	0.017	0.214
Total net freshwater consumption (A-B)	Million cubic meters	111.163	104.259	111.151	117.952
Data coverage	Percentage of operations	100	100	100	100

Southern Copper Corporation	Unit	2021	2022	2023	2024
A. Water withdrawal (excluding saltwater and wastewater)	Million cubic meters	111.213	104.295	111.168	118.166
B. Water discharge (excluding saltwater)	Million cubic meters	0.050	0.036	0.017	0.214
Total net freshwater consumption (A-B)	Million cubic meters	111.163	104.259	111.151	117.952
Data coverage	Percentage of mining operations	100	100	100	100

The data presented in the tables above has been extracted from the organization's annual Sustainability Reports, which include independent verifications that support their accuracy based on GRI standards.

For more information, please refer to the organization's sustainability reports through the following links:

		Grupo México		SCC	
		Pages	Source	Pages	Source
2021	Water and Effluents	273	SDR21	273	SDR21
	External Verification Letter	374		374	
2022	Water and Effluents	425	SDR22	425	SDR22
	External Verification Letter	432		432	
2023	Water and Effluents	463	SDR23	463	SDR23
	External Verification Letter	470		470	
2024	Water and Effluents	326	SDR24	258	SCC24
	External Verification Letter	505		389	