

4.1 SUSTAINABLE PRODUCTION

Our strategy undertakes to strengthen the sustainable development of the Chilean mining industry, with defined goals and deadlines. Our corporate commitments to 2030 in this area, to which we have incorporated new challenges in 2022, also represent a contribution to the Sustainable Development Goals contained in the 2030 Agenda of the United Nations, which highlights the value of sustainability and responsible production in the mining business. Along with providing resources that contribute to the quality of life of Chileans, our desire at Codelco is to contribute to the energy transition in the face of the climate crisis, with a sustainably produced copper, environmental protection and development within the territories and communities where our operations are located.

The planet needs copper to make a carbon-neutral society a reality and we, as the world's leading copper producer, have set out as a living example and play a role as part of the solution to climate change.







4.2 INTRODUCTION

This year, for the first time, the sustainable production chapter incorporates detailed sustainability indicators. These were previously reported in the Sustainability Report.

In this section we include material topics for Codelco, delving into new challenges such as climate change and responsible production, from an environmental and social point of view. This responds to the new requirements of the general character standard NCG 461 of the Financial Market Commission of Chile ("FMC"), as well as indicators issued by the Global Reporting Initiative (GRI), Sustainability Accounting Standards Board (SASB) and International Council for Mining and Metals (ICMM), in addition to Codelco's own requirements.

This section highlights the main advances and achievements of Codelco's six sustainability commitments for 2030, the emphasis and ramp up to 2026 and the new challenges posed by the current board or directors.



Codelco is committed to reducing MP10 emissions by **25%** for 2030

4.3 GENERAL PROGRESS IN SUSTAINABILITY 2022

1. MP10 - NEW SUSTAINABILITY COMMITMENT FOR 2030

In 2022 we announced our sixth 2030 Sustainable Development Commitment, in which we committed to reduce by 25% the emissions of MP10 particulate matter. Approved by the board of directors, the new goal adds to the other five initiatives assumed in December 2020. Key among these goals is the circular economy and development of territories with social value.

2. SUSTAINABILITY TACTICAL IMPLEMENTATION PLAN

In line with our aspiration to incorporate economic, environmental and social value in 2022, we applied operational excellence methodology to challenge processes through the identification of technical limitations, continuous improvement, closing gaps to obtain

optimal results and to promote the 2030 commitments through the design of tactical implementation plans (TIPs) for sustainability in our key divisional goals.

3. STRENGTHENING OF SUSTAINABILITY POLICY COMMITMENTS

To meet the action plan associated with these important challenges, in 2022 we updated our commitments associated with the Sustainability Policy (2021), reinforcing issues of human rights due diligence, responsible production and supply chain, and biodiversity. Additionally, the governance system was shaped to allow us to drive our strategy and monitor its progress. The system has five levels of responsibility, each with specific functions, processes and challenges to achieve breakthroughs in all of Codelco's workplaces and at the highest level, through the board's Sustainability Committee.





4.4 CLIMATE CHANGE: MITIGATION AND ADAPTATION

Climate change is one of the most important challenges ever to confront humanity. The impacts of climate change are already observed throughout the world and in our country. Therefore, appropriately incorporating climate-related risk and opportunity management into our company is key to properly addressing its causes and consequences.

Our board recognizes the importance of working on this matter early, and that is why the board decided to adopt a Climate Change Strategy that can anticipate the effects of climate change and reduce the generation of greenhouse gases (GHG).

We all have a responsibility to contribute to tackling the climate crisis, both collectively and individually. Codelco's commitment involves taking responsibility for our GHG emissions and the risks to which both our operations and the surrounding communities and workers are exposed.

Through our strategy, we identify and plan actions that address drastic changes in the environment and their consequences, through the Codelco Comprehensive Risk Management Model.

For its part, the Climate Change Strategy Management Model includes three critical areas to boost sustainability commitments for 2030, in line with climate action, which will allow us to establish more resilient processes and territories.

These commitments have short, medium and long-term goals that consider the following mitigation and adaptation activities:

- Decrease in the carbon footprint of Codelco and its suppliers
- Reduction of inland water (freshwater) use
- Incorporation of the circular economy and strengthening of territories

This year we have made progress in establishing oversight, in addition to defining and implementing a roadmap and an action plan, both of which allows us to achieve our sustainable development commitments and incorporate a climate action agenda in Codelco to face the current challenges of producing copper in a sustainable and responsible way.

4.5 URGENCY OF CLIMATE ACTION

At Codelco we are aware of the consequences of climate change. Therefore, our long-term responsibility considers both the impact of our gas emissions and the risks to which we are exposed.

Through our strategy, we identify and plan actions to address the dramatic impacts on the environment caused by climate change which is embodied in the Comprehensive Risk and Control Management System (SIGRC in Spanish). We take measures to reduce GHG in processes and promote these measures in our suppliers and supply chain.

In 2022, Codelco's chairman and senior executives traveled to Europe to discuss the role of the global copper industry in decarbonizing the planet and



CONTENTS 125

positioning our 2030 sustainable development commitments, especially concerning the reduction of our emissions by 70% by that date.

The main conclusion reached is that copper is essential for the future of the planet; the demand for this metal will grow to levels never seen before and our clients now demand increasingly high environmental, social and corporate governance standards.

In addition, our suppliers, clients, competitors, partners and financial analysts agree that the most important risk they face is the future supply of copper.

The energy transition and decarbonization require greater quantities of copper, given that copper is the most efficient electrical conductor and the structural compound for unconventional clean energies. The world is focused on this energy transition, and it is not possible without this mineral.

Codelco is committed to bringing the maximum feasible technological solutions to achieve carbon-neutrality and conduct long-term mining that is responsible and with environmental protection guidelines that contribute to solving the climate crisis





4.5.1 OUR CLIMATE CHANGE STRATEGY

CODELCO

Since 2022, the development of climate change management in Codelco has a strategy based on mitigation and adaptation actions and is based on the following five pillars:

- Governance: we regularly meet on the Corporate Climate Change Committee
- Guidelines: we work permanently to generate corporate guidelines for the management of climate change within our corporation
- Risks and opportunities: We analyze the risks of climate change on the mining business and divisional plans, and climate change opportunities in line with the recommendations of the Task Force on Climate-related Financial Disclosure (TCFD)
- Mitigation and carbon-neutrality: Development to draw up decarbonization roadmaps and carbon-neutrality plans for 2050; in addition to a CO_2 footprint calculator for mining suppliers and emission measurements
- Adaptation and resilience: Incorporation of adaptation variables throughout the design stages of critical infrastructure, water supply and tailings projects

4.5.2 TCFD AND CLIMATE REPORT

In 2022 Codelco began a diagnostic process, identifying gaps and building the roadmap for our first climate report. This document will describe how we are incorporating climate-related considerations into our operations

and aligning with the recommendations of the TCFD (Task Force on Climate-related Financial Disclosures). The purpose is to provide transparent and timely information for all our stakeholders on the risks we face and the ways in which we strive to mitigate them. Our report will address the

four core elements of the TCFD recommendations: governance, strategy, risk management, and metrics and objectives. Through this first TCFD report Codelco will be taking a big step towards aligning with the TCFD guidelines, to strengthen our path towards better climate practices and actions, as well as to improve our disclosure on commitments and performance on these issues, thereby enriching our corporate sustainability strategy.

4.5.3 CORPORATE GOVERNANCE COMMITTEE ON CLIMATE CHANGE

Our commitment was deployed in 2022 through the Corporate Committee on Climate Change, as a key element to properly address its causes and consequences. The purpose of the group is to promote the management of climate action within Codelco, deliver the priority focuses and goals, and monitor progress at the work centers to implement the strategy defined in this area

4.5.4 CARBON NEUTRALITY 2050

During 2022 we advanced on our path towards carbon neutrality through progress in the energy transition towards decarbonization - with the boost to electromobility. Since 2012, with the construction of the first solar industrial plant in South America and the startup of Pampa Elvira, we have taken a path of accelerated transition towards electromobility in mining equipment. During 2018 to 2022 we implemented the first fleet of large mining electrical equipment in the North District, developing electric trucks for the mine, incorporating operations equipment such as the electric mixer, LHDs and personnel transport fleets. Moreover, we are designing a pilot for *trolley*-type CAEX ore transport equipment.

Achieving carbon neutrality by 2050 will involve not only meeting our 2030 Commitments targets but will also make steady progress on equipment scalability and the energy transition of fleets and other processes at our smelters and refineries.



4.6 SIX SUSTAINABILITY COMMITMENTS FOR 2030

[ICMM 2]

Carbon footprint reduction:

We will reduce our GHG emissions by 70%)

We will implement a 100% clean energy matrix. We will also innovate to replace all underground mine production and logistics equipment with electrical equipment and actively participate in the search for new clean energy sources such as green hydrogen.

Water footprint reduction

We will reduce unit inland water consumption by 60%

We will reduce the use of inland water by means of a more efficient process. Codelco will incorporate a desalination plant for the North District and, through innovative solutions, reuse water from our reservoirs.

We will recycle 100% of mine truck tires and ramp up reuse efforts for primary, nonhazardous solid industrial waste from our operations and projects such as steel, wood, packaging materials, organic waste and scrap metal.

Circular economy:

We will recycle 65% of non-

hazardous industrial waste

4

Sustainable tailings facilities:

100% of our TSFs will employ world-class sustainability and safety measures

Using cutting-edge systems, Codelco will conduct in-line monitoring of physical and chemical stability of the tailings facilities and implement seepage control systems.



Territorial development with social value.

We will increase goods and services supplied by local suppliers by 60% and increasing local labor participation

Codelco is implementing a new territory integration strategy with a focus on generating social value, through the promotion of local labor. strengthening mining education and increasing sustainability.

Reduction of emissions:

0

We will reduce emissions of MP10 particulate matter by 25%

We will reduce MP10 emissions in our North District by 20%; increase dust capture efficiency in our open pit mines through dust suppression technologies and emission forecasting and prevention systems. We also undertake to reduce MP10 emissions from locations neighboring our operations







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4.7 CARBON FOOTPRINT REDUCTION

[SASB EM-MM-110a2]

Reducing the carbon footprint in copper mining is essential to mitigate the negative impacts of climate change.

The mining industry requires a large amount of energy that is directly related to GHG emissions. While this represents a major challenge, it also represents an opportunity to implement different mechanisms that allow the reduction of our corporate carbon footprint, such as, for example, implementing new cleaner and more efficient technologies, using renewable energy sources and optimizing processes.

We are committed to being a carbon-neutral company by 2050, by adhering to the goal proposed by the International Council on Mining and Metals (ICMM), of which we are a part. In addition, we have established a Macro Target for 2030 with four strategic actions:

CO2

MACRO TARGET: Reduce carbon emissions by 70%

STRATEGIC	STRATEGIC	STRATEGIC	STRATEGIC
ACTION 1	ACTION 2	ACTION 3	ACTION 4
100% clean energy matrix	100% electromobility in underground mines	10% reduction in emissions in extraction trucks (CAEX)	Participation in local industrial development and local green hydrogen capabilities in mining

4.7.1 KEY MILESTONES

PROGRESS TOWARDS A CLEAN ENERGY MATRIX

The decarbonization of the energy matrix is one of the key steps to reduce GHG emissions to the atmosphere. Therefore, we decided to deepen the use of clean energy, its efficient use and the promotion of commercially available technologies that accelerate the energy transition at Codelco This involves the renegotiation of electrical supply contracts, the efficient management of energy consumption in operations, and the implementation of initiatives and alliances with third parties.

During 2022, Codelco signed major electrical contract modifications with two of its major suppliers. Accordingly, since 2018 Codelco has administrated the elimination of coal and other fossil fuels as an energy source through the renegotiation of contracts with clean energy suppliers Engie and Colbún.

The change already guarantees that Codelco will receive 70% of its energy from renewable energy sources from 2026 onwards. It also allows progress to be made gradually towards the goal of completing our 100% clean electricity matrix.

LARGEST FLEET OF ELECTRIC BUSES IN MINING

Meanwhile, Codelco rolled out largest fleet of electric buses in mining in Chile, which commenced operation during the second half of 2022. These are 155 machines, more than 100 manufactured nationally, that generate zero direct emissions and transport workers from our Chuquicamata, Andina and El Teniente divisions.

FIRST ELECTRIC LHD EQUIPMENT IN UNDERGROUND MINING IN CHILE

In November we launched the mining industry's first 100% electric underground LHD loader, a first in South America, which began its pilot test in the El Teniente Division. Developed by the company Epiroc, this equipment can load up to 14 tons of material without generating direct GHG emissions into the atmosphere.



4.7.2 DIRECT & INDIRECT EMISSIONS

[GRI 305-1, 305-2] [SASB EM-MM 110a.1, 120 a.1]

In 2022, direct emissions reached 1,907,554 tons of carbon dioxide equivalent (t CO_2 equivalent), representing 47% of the total. Meanwhile, indirect emissions reached 2,159,642 t CO_2 eq, corresponding to 53% of the total.

Emissions recorded during this year decreased by around 12% compared to 2021, mainly due to the decarbonization of the energy matrix.

TOTAL EMISSIONS BY DIVISION IN METRIC TONS OF CO_2EQ

[GRI 305-7] [SASB EM-MM 120a.1]

DIVISION	2021	2022
Chuquicamata	1,157,992	1,003,029
Radomiro Tomic	808,781	790,104
Ministro Hales	508,471	456,280
Gabriela Mistral	267,497	251,945
Salvador	331,425	256,393
Andina	421,403	371,515
Ventanas	220,171	179,994
El Teniente	921,707	757,936



* Gases included in the calculation are carbon dioxide (CO_2), methane (CH_4) and nitrous oxide (N_2O). Codelco's direct emissions are not considered biogenic CO_2 emissions



GHG SCOPE 1 AND 2 FOR TOTAL CO₂ EQUIVALENT PER YEAR



DIRECT AND INDIRECT GHG EMISSIONS (kT CO, EQ.)



METHODOLOGY APPLIED IN THE CALCULATION OF EMISSIONSS

Operational control of actual fuel consumption is used in operations for Scope 1 and electrical power consumption from the grid for Scope 2. International emission factors from the Intergovernmental Panel on Climate Change (IPCC) are used for the quantification of emissions and are based on the average monthly emission factors of the National Electric System from the Electrical Coordinator.

Sources of emission factors and global warming potential (GWP) rates used are:

- Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories
- Emission factor of the electrical grid of the National Electricity System from the Electricity Coordinator published by the Ministry of Energy at www.energiaabierta.cl
- Methane (CH₄): 21 Carbon Dioxide Equivalent (CO₂eq)
- Nitrous Oxide (N₂O): 310 Carbon Dioxide Equivalent (CO₂eq)

The consolidation approach corresponds to the operational control of real consumption for Scope 2.

The methodologies and standards used correspond to the quantification of Scope 1 emissions under international emission factors established by the Intergovernmental Panel on Climate Change (IPCC). The emissions generated by the consumption of electrical energy were prepared monthly using the average monthly emission factor established by the National

We measure the direct emissions from the use of fuel at all our operations. Indirect emissions identified and monitored are those that originate from power generation systems that provide electricity to our divisions.



Codelco seeks to reduce 70% of their carnbon emissions by 2030

INTENSITY OF GHG EMISSIONS

[GRI 305-4] [ICM M 6]

	2021	2022
Total emissions (millions of tCO ₂ eq)	4,6	4
Energy intensity (millions of tCO ₂ eq/ million fmt)	2,9	2,8

SMELTER EMISSIONS

Emissions Standard DS No, 28 regulates the annual limit of these particles generated from the smelters at Chuquicamata, Potrerillos, Ventanas and Caletones, Our Vice Presidency of Smelters and Refineries is the entity in charge of proper management of these operations, reporting directly to the Executive Presidency,

4,7,3 SCOPE 3 INDIRECT EMISSIONS

[GRI 305-3]

The Scope 3 emissions footprint refers to indirect emissions that are not under the operational control of the mining company but are generated because of its activities, These emissions include, for example, those GHG related to the acquisition of materials and equipment used in mining operations, the emission of

GHG in the transport of supplies, products and emissions arising from the use and final disposal of mineral products, among others,

For 2022, 1,276,714 $\rm CO_2$ eq were quantified and corresponding to the procurement of the most significant categories, as reflected in the following table,

SCOPE 3 EMISSIONS IN METRIC TONS OF CO₂EQ

SCOPE 3 CATEGORIES	2022
Procured goods and services	790,346
Fuel and energy	308,292
Upstream transport and distribution	23,408
Management of waste generated	143,913
Mobilization of workers	10,756
Total emissions Scope 3	1,276,714

2021 Scope 3 emissions were not reported because they began to be measured in 2022.

The year 2022 only considers the critical supplies for grinding balls, explosives, tires, lime and diesel. Worker mobilization only considers bus and taxi services.









Codelco presenta: Primera calculadora de huella de carbono para proveedores de la minería



LAUNCH OF CARBON FOOTPRINT CALCULATOR FOR SUPPLIERS

In December 2022 Codelco made progress on decarbonization by developing, together with mining suppliers, a calculator to measure, manage and reduce the carbon footprint of the inputs and products it receives. The tool is free and open to all mining stakeholders, so that their GHG reduction efforts are objectively considered as a new decision for future tender or purchasing processes with Codelco and the entire mining sector.

Likewise, at the end of the year, a collaboration agreement was signed between Codelco, the AltaLey corporation and the Ministry of the Environment to annex this tool in the HuellaChile Platform. This seeks to strengthen the agreement's scope by formalizing it as a public instrument, ensuring the verification of information and allowing suppliers to opt for seals of recognition when quantifying or reducing their emissions.



4.7.4 ENERGY MANAGEMENT

[GRI 302-1, 302-3, SASB MM130a.1]

Additionally, in order to comply with the Energy Efficiency Law, we initiated the implementation of the Corporate Energy Management System and formalized the divisional teams whose focus will be 'placed on the efficient use and identification of energy management opportunities.



ENERGY CONSUMPTION (PJ)

[GRI 302-1, 302-3, 302-4]

	2021	2022
Direct consumption Oil and its derivatives, natural gas and coal	26.05	26.00
Indirect consumption Electricity from Chile's Interconnected System (does not include self-generation)	26.24	25.86
Consumption of renewable sources	0.24	0.24
Total gigajoule per fine metric ton (GJ/fmt)	52.29	51.87
Energy use intensity (petajoules per million fine metric ton / RJ/million fmt)	32.31	35.88



4.8 WATER FOOTPRINT REDUCTION

[GRI 303-1] [ICMM 6]

Codelco is managing a reduction in inland water consumption per ton of processed ore by **60%** for 2030

In the global context of declining water availability, Codelco is committed to efficiently managing water to meet future scenarios and challenges. Therefore, we seek to reduce use and consumption in operations, with the aim of reducing Codelco's water footprint and contribute to the restoration of environmental water services in water basins.



Codelco operates within territories declared by the Ministry of Public Works as water stressed areas. Therefore, it is key to deploy all our capabilities towards a reduction in water consumption while using it efficiently.

This is why we urgently and responsibly manage the commitment to reduce consumption of inland (make-up) water per ton of processed ore by 60% for 2030. Moreover, we defined a new Water Resources Strategy that will lead us to only use natural brackish water sourced inland and from water found within our mining activity (known as mining water) by 2035.

MACRO TARGET:



Reduce inland water consumption by 60% for treated ore

At Codelco we undertake, through our strategy, to optimize the consumption of fresh inland water with three initial actions included in our commitment for 2030, as provided in the following table.

STRATEGIC	STRATEGIC	STRATEGIC
ACTION	ACTION	ACTION
5	6	7
Decrease in inland make-up water through process efficiency	Decrease inland make-up water through incorporation of desalinated seawater	Decrease in inland make-up water through the use of water from TSF dams



4.8.1. KEY MILESTONE BOARD APPROVES THE CONSTRUCTION OF A DESALINATION PLANT FOR CALAMA OPERATIONS

In 2022 Codelco awarded the construction of a desalination plant located to the south of Tocopilla (in the Caleta Viuda sector) to provide desalinated water to the Chuquicamata, Ministro Hales and Radomiro Tomic divisions of the Northern District. The project will be a state-of-the-art, sustainable technology solution that will operate by reverse osmosis, with an initial capacity of 840 liters per second, which is due to be launched by 2026. It will have the potential to expand to a maximum capacity of 1,956 liters per second.

SIGNING OF THE RURAL POTABLE WATER IMPROVEMENT AGREEMENT

In 2022, an agreement was signed with the Regional Government of Antofagasta for the improvement of the drinking water and sewerage system (Alto el Loa, rural Calama, Río Grande and coastal inlets of Tocopilla). This involves support in prefeasibility, feasibility and design (as appropriate) for each location.

Additionally, during 2022 a project was developed for the locality of Huertos Familiares (municipal district of Til Til) with the purpose of providing water storage services that will impact 1,000 homes.

The Together we Develop Local Water program undertakes to strengthen public-private actions for the management of drinking water in localities neighboring our work sites. This will be done by:

- Optimizing existing projects and designing new projects in order to apply for public funds
- Seeking new technologies and innovation for the collection, storage, operation and monitoring of potable water
- Developing new infrastructure for those localities that will not be prioritized for public funding (for example, isolated or dispersed areas that are not prioritized for the Rural Potable Water (locally known as "APR") program by the Ministry of Public Works)

Also, during 2022, 15 diagnoses were made in localities where there are problems in the delivery of continuous drinking water services for its inhabitants. Action plans were designed by exploring new uptake sources or by providing treatment systems to improve the quality of drinking water for the localities.



Codelco will build a desalination plant with a capacity of **1,956**

4.8.2 WATER OVERSIGHT, STRATEGY AND RESOURCE PLANS

In 2021 we created the Corporate Water Management department under the Vice Presidency of Mining Resources Management and Development, with the aim of contextualizing and aligning water management in a strategic manner throughout our corporation.

We generated a new water resources strategy that seeks to drastically reduce and compensate for water use in our aquifers by 2035. To achieve this objective, Strategic Water Resources Plans have been prepared at Codelco's divisions. These plans include short, medium and long-term initiatives, and multiple workshops and communication and training actions have been carried out to instill a water culture aimed at promoting resource efficiency.

4.8.3 WATER USE AND DISCHARGE

[GRI 303-2] [ICMM 6]

The waters we use at all divisions come mainly from surface or underground sources. Of these sources, the most critical are those in areas with desert climates or those experiencing water stress conditions. This is why we are focusing our efforts on maintaining high levels of recirculation.

Among Codelco's strategic risks is the possible drop in the water supply to our operations as a result of climate change and the prolonged drought that is now affecting much of Chile. Therefore, strict controls and action plans are in place that consider the optimal use of the resource, recirculation, reuse of all our effluents and innovation.

The legal framework that governs us in Chile regulates the identification and mitigation of impacts on water sources and bodies. This framework also protects the proper use of water, giving priority to human consumption, self-sustainability and environmental preservation. It

also regulates third-party water rights in productive sectors. Furthermore, the Environmental Qualification Rulings (known nationally as RCAs), instructions established in environmental permits and restrictions on industrial discharge complement the aforementioned regulations and controls.

Codelco only discharges into surface waters, with monitoring resolutions at the Salvador, Andina, Ventanas and El Teniente divisions. These activities comply with the parameters and restrictions established by the competent authority. However, we work to develop systems more that are more efficient continuously expand our monitoring systems to minimize risks

WATER EXTRACTION AND CONSUMPTION

[GRI 303-3, 303-5] [SASB EM-MM-140a1]

In thousands of m³

TYPE OF EXTRACTION SOURCE	2021	2022	
Surface water	96,186	99,887	
Groundwater	51,074	50,404	
Mine waters	17,894	13,855	
Reservoirs (accumulated / discharge)	917	-845	
Total own water captured	166,070	163,301	
Water purchased from third parties	17,001	16,591	
Municipal water	7	8	
Total water captured	183,078	179,900	
Waters received from another division	0	0	
Total water received	183,078	179,900	



[GRI 303-4]

WATER DISCHARGE (THOUSANDS OF M ³) 2022		ANDINA	VENTANAS	EL TENIENTE	TOTAL
Water discharge by destination	Surface water	3,028	0	20,622	23,650
	Underground water	0	0	0	0
	Water to the sea	0	103,6	0	103,6
	Total own water discharged	3,028	103,6	20,622	23,754
	Water from third parties	0	0	0	0





LIQUID INDUSTRIAL WASTE DISCHARGE

[GRI 303-4]

DIVISION	NO. OF DISCHARGE POINTS WITH MONITORING PROGRAMS (SISS/ DIRECTEMAR)	DISCHARGE POINTS	DISCHARGE VOLUME (THOUSANDS OF M ³)	DESTINATION TYPE	
		Potrerillos smelter plant	0	Surface water.	
Salvador	3	Quebrada Norte Potrerillos	0	Quebrada Norte Potrerillos	
		Pampa Austral dam	0		
		Mixed process effluent	3,028		
Andina	4	Los Leones Dren 14	0	Surface water,	
Anuna	7	Thickener reclaim water	0	Rio Blanco	
		Ovejería dam	0		
Ventanas	1	Liquid industrial waste treatment plant	104	Bahia Quintero seawater	
El Teniente	1	Carén reservoir	20,622	Alhué estuary surface water	
Total	9		23,734		

Of the nine points with a monitoring resolution, only three have effective discharge to surface waters.

CODELCO LAUNCHES PANEL OF WATER EXPERTS

In mid-June 2022, a panel of water experts was constituted with a focus on water efficiency, new water sources and maintenance of water infrastructure. Its mission is to generate a diagnosis, an action plan and to implement this plan in the organization.

During the diagnosis, a thorough review of the facilities and respective information was conducted. Also, *benchmarking* was carried out with other large companies with intensive water or mining use, and regulations and



management gaps were analyzed in the divisions in terms of standards and corporate governance.

During 2023, Codelco will generate and execute action plans to close said all gaps over time, which will contain roadmaps for water supply and efficiency initiatives with a special focus on innovation. This panel supported the work of the Corporate Water Department to ensure that Codelco's hydric activities are carried out under high standards of safety and sustainability.



4.8.4 WATER EXTRACTION IN WATER STRESSED AREAS

[SASB EM-MM-140a.1]

A high-water stress situation is defined for a hydrological basin if any of the following conditions are met:

- Hydrological basin declared by the General Directorate of Water as "depleted" of its surface waters
- **2)** Source aquifer declared as restricted or prohibited from granting new underground water use rights
- Frequent declarations of scarcity decreed over recent years. In Codelco we monitor the extraction and availability of water in areas

of water stress, assisting neighboring communities and farmers to mitigate the effects of drought. Therefore, we are aware that sources under such conditions are currently located in the Upper Loa River (Calama cluster), Mariposas aquifer (Gabriela Mistral Division), Pedernales aquifer (Salvador Division) and the Aconcagua River (Andean Division).

Importantly, mining as a whole consumes only about 4% of the country's water from inland sources. However, it is projected that for the next decade the largest source of water for mining will come from the sea.

WATER EXTRACTION IN M³

[GRI 303-3]

CATEGORY	2022
Total extracted water	179,900,134
Total water extracted in water-stressed areas	120,979,070
Proportion of water extracted in water-stressed areas relative to total water extracted	67%
Proportion of water consumed in water-stressed areas relative to total water extracted	97%



In October 2022, the use of floating barrier balls on leach ponds was implemented in the Gabriela Mistral Division. These wind-resistant recycled plastic spheres reduce the evaporation of water resources by 80%, which will allow the retention of 90,000 cubic meters of water per year, equivalent to 2.87 liters per second.

Another benefit of these spheres is the rise in temperature of the solution from 20.4°C to 23.8°C, which increases the chemical reaction rate of copper and thus improving operational conditions. This initiative is aligned with the protection of biodiversity, since it camouflages water reflection that previously shone light in the leaching pond, preventing the entry of birds and animals into the area. During November and December the practice was replicated at four other ponds, which is estimated to have recovered the equivalent of 1.7 liters per second

Concentradora de **Chuquicamata reduce** en 4% la utilización de agua fresca

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See article in magazine Somos Codelco

CONCENTRATOR PERFORMANCE

In 2022 Codelco continued significant investment to improve the performance of the concentrators, mainly at the Ministro Hales, Salvador and Andina divisions. The results of these efforts will be reflected from 2023 given that Ministro Hales and Andina will finalize concentrator interventions that same year. Salvador's concentrator depends on Rajo Inca.

The recycled plastic spheres reduce the water evaporation rate by 80%





4.9 CIRCULAR ECONOMY

[SASB EM-MM 150a.10] [ICMM 8]

At Codelco one of the cornerstones of environmental management is to streamline a management focus on minimizing the generation and disposal of industrial solid waste from our work sites. To achieve this we involve our suppliers, prioritizing the installation of a circular economy, recover waste through reuse, recycling or recovery, and we apply innovation.

Since 2022, our new Environmental Management System has included a corporate procedure for solid industrial waste management. This procedure establishes the basic activities and guidelines to be met at each stage of management, with an emphasis on segregation and minimization at the source.

MACRO TARGET: Recycle 65% of the waste

A circular economy is an approach that seeks to maximize value and utility of resources by minimizing waste generation and the extraction of new resources. For Codelco, the circular economy is essential to address the challenges of sustainability and efficiency in the extraction and use of resources. This economy involves not only the recycling of materials, but also the design of products and processes that maximize the useful life of resources and the reuse of recovered materials.

We involve our suppliers in the promotion of **circular economy**

By adopting a circular economy approach, it is possible to reduce the environmental impact of resource extraction and minimize the need for energy and water in production, while improving efficiency and profitability in the long run. This directly reduces the amount of greenhouse gas emissions and consumption of natural resources by making the most of available materials and resources. In addition, it encourages innovation to seek more efficient and sustainable solutions in the use of resources.

Therefore, the circular economy in mining can create new business opportunities around the recovery and use of secondary materials, which in turn contributes to job creation and sustainable economic development.

STRATEGIC	STRATEGIC
ACTION	ACTION
8	9
100% of our mining tires recycled and 30% inventory reduction	65% recycling of non-hazardous waste



4.9.1 KEY MILESTONES 2022

COMPREHENSIVE REPORT 2022

EL TENIENTE CIRCULAR MODEL: STEEL AND BIOMASS

CODFLCO

To prevent the generation of waste from the grinding process, the El Teniente Division operates under a circular model that allows us to recover the grinding balls that are used in ball mills. This allows us to separate the material and reincorporate balls that meet certain requirements, extending the useful life of over 50% of this material. *Scrap* grinding balls are recovered and recycled.

SUSTAINABILITY

Moreover, the division providing value to the wood waste that is produced, converting it into an input to generate electricity that is used to manufacture recycled paper and to feed the consumption of 2,239 houses in the district of San Francisco de Mostazal for one year.

VENTANTAS CIRCULAR MODEL: RECOVERY OF HAZARDOUS WASTE

During 2022, 39,270 tons of electrolyte were sent to copper recovery at the Ventanas Division, which corresponds to approximately 90% of its hazardous waste generation.

The electrolyte is a solution composed mainly of copper sulfate (45 g/l) and sulfuric acid (180 g/l) that is generated in the electrolytic cells in the copper refining process. The electrolyte is the means of transport for copper ions that are deposited on the cathode. This solution must be discarded constantly. Therefore, instead of disposing of it, it is recovered at the El Teniente Division and other mines where it is re-entered into the copper leaching process. This makes it possible to generate pregnant leach solution (PLS) and obtain new cathodes by means of copper electrowinning.

4.9.2 CIRCULAR ECONOMY CORPORATE OVERSIGHT AND WORK GROUP

During 2022, corporate oversight was established for the circular economy and a corporate circular economy work group was implemented which involves the participation of the Service and Sustainability areas of the divisions together with the Corporate Sustainability, Supply, Maintenance and Innovation departments. The objective of this work group is to integrate a circular economy model into the Corporation, based on four strategic foci: 1) traceability and reportability 2) circular purchases 3) extending the life cycle of assets 4) and recycling and recovery of waste. This work group team has identified initiatives and procedures with sourcing and maintenance areas to reduce waste generation and increase asset life. In addition, during the year a strategy was developed with each division to share and replicate good circular economy practices and thus achieve the corporate goal for 2030.

4.9.3 WASTE MANAGEMENT

NON-HAZARDOUS WASTE MANAGEMENT

In 2022 we generated 138.1 thousand tons of non-hazardous solid industrial waste. The shipment of waste for recovery (reuse, recycling or energy recovery), including historical waste, was 45,403 tons. This represents 32.9% of our annual waste generation.

At Codelco one of the mainstays of environmental management is the consolidation of a process focused on minimizing the generation and disposal of industrial solid waste from our worksites. We also undertake to involve our suppliers, prioritize the installation of a circular economy and the recovery of waste through reuse, recycling or recovery and innovation. To this end, our new Environmental Management System has had in place a Corporate Waste Management Procedure since 2022.



WASTE MANAGEMENT

[GRI 306-2, 306-4] [SASB EM-MM 150a.4 /a.5/a.6/a.7/a.8]

NON-HAZARDOUS WASTE	TONS 2021	DESTINATION* 2021	TONS 2022	DESTINATION* 2022
Not segregated	34,122	DF	28,576	DF
Steel and other metals	43,364	RR	42,542	RR
Debris	17,849	DT	38,603	DT
Similar to domestic	15,001	DF	14,267	DF
Tires and rubber	5,235	RR/DT	8,424	RR/DT
Wood	3,405	RE/RR	4,374	RE/RR
Plastics	262	RR	813	RR
Sludge and organic material	377	RR/DF	474	RR/DF
Other	1,197	DF/DT	198	DF/DT
Total, non-hazardous	120,812		138,271	

* Main destinations: RR (reuse / recycle); ER (energy recovery); TD (temporary disposal) and FD (final disposal).

HAZARDOUS WASTE	TONS 2021	DESTINATION* 2021	TONS 2022	DESTINATION* 2022
Electrolyte	37,972	RR	39,270	RR
Arsenic waste	71,750	RR/DF	78,821	RR/DF
Metallurgical dust	35,329	DF/RR	35,462	DF/RR
Oils, fats and hydrocarbons	4,102	RE/RR	6,386	RE/RR
Hazardous waste	10,684	DF	11,270	DF
Batteries	61	RR	184	RR
Anodic, acidic and other sludge	238	DF	759	DF
Lead waste	1,771	DF	749	DF
Flavin adenine dinucleotide cell solids	1,304	DF	790	DF
Vanadic pentoxide	65	DF	378	DF
Other	2,197	DF	1,895	DF
Total, hazardous	165,473		175,963	

*Main destinations: RR (reuse / recycle); ER (energy recovery); TD (temporary disposal) and FD (final disposal).



4.9.4 INTERNAL DEVELOPMENT

During 2022 we managed to establish the circular economy in different areas of out corporation, with a focus on both the reduction of waste generation and recovery and recycling these by means of circular models. The Supply and Maintenance departments are incorporating the circular economy model in new tenders and working together with the sustainability areas to identify, from the start of the chain, elements that may lead to a lower generation of subsequent waste.

Moreover, a strong link between the divisions has been developed to share best practices and address difficulties in a collaborative manner, seeking innovative solutions to the particular situations presented by each division. Areas of innovation have been key in the search for solutions. Innovation tools such as Open Codelco allow us to make visible the technological developments of the ecosystem and activate new opportunities for innovation with issues concerning circular economy.

4.9.5 EXTERNAL ENGAGEMENT

We participate in the Committee on Circular Economy for Mining, an instance of SofofaHub (a collaborative ecosystem of the Sociedad de Fomento Fabril), in alliance with the Center for Copper and Mining Studies (Cesco), the Ministry of Mining, AltaLey corporation and the companies Teck, Antofagasta Minerals, Collahuasi, AngloAmerican, Glencore, and Ecometales.

This public-private grouping aligns with Scale 360° methodology, a global acceleration project that has the support of the World Economic Forum and aims to generate a hub for companies interested in promoting the circular economy from their respective sector.









NEW CIRCULAR ECONOMY UNIT

A Circular Economy Unit was created at the El Teniente Division in October 2022, whose objective is to contribute to the corporate goal of waste reduction through innovation, technological development and alliance generation. After only a few months it was possible to recycle more than 60 thousand tons of ferrous scrap that the company AZA transforms into steel and reused 5,550 plastic drums as a raw material to build garbage containers. In collaboration of the company Energía Pacífico, El Teniente managed to have its wood waste recycled to make paper and transformed into biomass that generates electricity for the annual consumption of 2,239 houses in San Francisco de Mostazal.



4.10 SUSTAINABLE TAILINGS FACILITIES

[SASB EM-MM 150 a.2]



MACRO TARGET:

100% of tailings dumps (TSF) with new sustainability standardd

STRATEGIC	STRATEGIC
ACTION	ACTION
10	11
Online monitoring of physical and chemical stability in 100% of our active TSFs.	Infiltration control systems in 100% of our TSFs

4.10.1 KEY MILESTONE

PILOT PROJECT TO MITIGATE AND REDUCE SULPHATES IN EFFLUENTS

Within the framework of the Carén Tailings Dump Development Project, engineering is being carried out to find a comprehensive solution to break down, reduce and mitigate the sulphate concentration in liquid industrial waste. In this context, pilot tests were developed on innovative technologies to break down sulfates present in the liquid industrial wastes to dispose this element in a more sustainable way. The tests included installing a pilot plant at the Carén TSF with interesting results that will provide a benchmark for further engineering studies being developed.





Codelco seeks to monitor

assets online

4.10.2 TAILINGS MANAGEMENT MODEL

[SASB EM-MM-540a.2]

The main objective of our tailings management model is to avoid catastrophic failures. To this end, tailings management oversight contains roles, functions, responsibilities and relationships that concern administration, and involve activities of planning, development, operation, control and performance verification of tailings systems. The foregoing seeks to ensure an adequate integration of the technical and management aspects of tailings systems (i.e., procedures, best practices, policies and standards) so that TSFs are managed effectively and efficiently under a framework of continuous improvement.

In addition, the model considers the detection and comprehensive evaluation of physical and chemical risks associated with a tailings facility, as well as the potential impacts on people's health and safety, environment, as well as social, business, economic and regulatory aspects.

It also includes the implementation of appropriate controls to effectively manage such risks.

Our company seeks to implement the best practices and technologies available and applicable, as well as the new *Global Industry Standard on Tailings Management (GISTM).* In this framework, the main actions taken were as follows:

• During 2022, and in line with what began the previous year, we conducted two compliance checks within the respective scope and according to the implementation program committed to each division

- We developed activities to ensure the involvement of the *Accountable Executive*. (AE) according to GISTM, a role undertaken by the general managers of the divisions. This is accomplished through meetings with AEs and Registered Engineers. In these meetings, responsibilities for Senior Executive-held information were formalized with the CEO and the board.
- We published and updated in our Single Standards Library different documents that facilitate the implementation of the requirements of the international tailings standard, including:
 - » Standard for preparing the Operation, Maintenance and Surveillance Manual
 - » Standard for preparing the Emergency Preparedness Manual for Tailings Storage Facilities
 - » Standard for drawing up the filling plan for TSFs
 - » Standard Criteria for the development of a Dam Break Analysis
 - » Instructions for the application of a Dam Safety Review

In 2023, the different documents that facilitate implementation and others that are required by the GISTM will be published and updated.



CONTENTS 147



Starting from the international standard, several mechanisms related to the basis of design for all phases of a TSF life cycle were incorporated. These mechanisms include the development of construction log reports, training of personnel that participate in the tailings management system, preparation of responsibility reports for deviations, monitoring and performance reviews, among other aspects.

The following gatherings were held during the year related to internal collaboration and reviews of best practices:

- TSF Hydrogeology Committee
- TSF Geotechnical Committee
- Divisional and Corporate Tailings Committees

During 2022, both supervisors and operators related to tailings activities and personnel from other areas were trained in each division on the ICMM best practice guide and, especially on the key roles established by the GISTM. In turn, these training sessions were captured and will be incorporated into the UCodelco courses.

Additionally, progress was made with respect to the plans defined for each division regarding the implementation of the TSF emergency preparedness



TAILINGS LOCATION BY CATEGORY

[SASB EM-MM-540a.1]

TAILINGS	DISTRICT	CLASSIFICATION ACCORDING TO NATIONAL REGULATIONS *	TOTAL TAILINGS STORED (MTONS) AS OF DECEMBER 2022	NEARBY COMMUNITIES (YES OR NO)
Talabre	Calama	Туре С	2.102	Yes
Pampa Austral	Diego de Almagro	Туре С	339	Yes
Potrerillos I	Diego de Almagro	Туре С	1,9	No
Potrerillos II	Diego de Almagro	Туре С	0,7	No
Ovejería	Til Til	Туре С	584	Yes
Los Leones	Los Andes	Туре С	187	Yes
Piuquenes	Los Andes	Туре С	33	Yes
Carén	Alhué	Туре С	1.545	Yes
Barahona	Machalí	Туре С	64	Yes
Cauquenes	Requínoa	Туре С	228	Yes
Colihues	Requínoa	Туре С	227	Yes

* Supreme Decree No. 50 of the General Directorate of Water. Category C (large): maximum wall height of 30 m or more, or with a capacity of 60,000,000 m³ or more





COMMUNITY INFORMATION AND READINESS

[SASB EM-MM-540a.3]

Our divisions have groups in place with the municipalities of Calama, Diego de Almagro, Chañaral, Til Til and Alhué, in which Carabineros, Firefighters and the National Office of Emergencies (Onemi) participate. We also have work groups in place with the community. These are made up mainly of neighborhood boards from sectors that could potentially be most affected by an emergency or other issues of interest to the communities.

At Codelco we have Emergency Readiness Plans for our tailings deposits and Community Emergency Plans. These plans contain the identification of the affected groups and maps of geographical records. Agreements have been signed with firefighters and safety officers of the National Forestry Corporation (CONAF) for plan implementation.

Many of the divisions work with specialized consultants to update our community emergency plans. Special emphasis has been placed on convening different regional actors to share knowledge on how to face potential emergencies.

In 2022, the international consults ENACT, together with Vincular, carried out a human rights due diligence process through a visit to the Talabre TSF and the communities of Chiu Chiu and Lasana. The activity aimed to expose gaps with respect to the ICMM standard in the field of tailings deposits.

In 2023, this initiative is expected to be implemented throughout all divisions with tailings facilities.

In addition, we have planned the first simulations with the communities. These will be led by the municipalities and the National Service for Disaster Prevention and Response ("Senapred"), in which Codelco will have a key role.



4.11 VALUE TO TERRITORIES

[SASB EM-MM-210b.1] [ICMM 9]

The strategy for Territorial Development with Social Value is the corporate guideline for each division so that they may respond to the needs of those living in its surrounding areas with an integrated approach. This approach ensures compliance with our sustainability objectives and community expectations on our social performance.

The strategy provides each division with a guideline to align community investment initiatives with the sustainability objectives of our corporation, integrating community expectations with our social performance and capturing collaboration opportunities that enhance our vision of sustainable development. Including local actors in the value chain of our business is our priority and a keystone to build mutually beneficial relationships with our neighboring communities.

MACRO TARGET:

Increase by 60% the goods and services provided by local suppliers and the deployment of a new strategy for territorial development with social value.

STRATEGIC	STRATEGIC	STRATEGIC
ACTION 12	ACTION 13	ACTION 14
Local supplier attraction and development program	Sourcing platform for local suppliers	Development of a new territorial development with social value strategy

4.11.1 KEY MILESTONE

UPTICK IN LOCAL PURCHASING

istoric purchases by Codelco for \$248 million from local micro, small and medium enterprise (MSMEs) suppliers and 574 local suppliers registered in the Business Network of the portal of the Chamber of Commerce of Santiago





4.11.2 GOVERNANCE: COMMUNITY MANAGEMENT SYSTEM

Our commitment to the development of the territories is framed within Codelco's sustainability governance. To facilitate the comprehensive management of the activities deployed at our divisions, Codelco has a digital platform for community management ("GECO").

Efforts on these matters is detailed in Corporate Standard NCC 39, which establishes the stages, tools and mechanisms to comply with the Sustainability Policy, achieving the operational continuity of the divisions and the viability of our business plans.

The following bodies provide governance to the community management system:



Codelco's community management system ensures a comprehensive approach to the social environment of our operations through a sequence of analysis, planning, execution and evaluation, actions that are updated on an annual basis. During 2022, the consistency of the divisional community plans with the existing opportunities in the territories and the areas of work established in the Territorial Development with Social Value Strategy was reinforced with our teams.

MACRO TARGET FOCUS 1: LOCAL ECONOMY

A. LOCAL SUPPLIERS

[GRI 204-1]

The local economy and the entrepreneurial ecosystem are gravitating elements in our sustainable development commitments. During the year we changed the internal regulations, simplifying the supply requirements and trained 60 local suppliers through the Local Entrepreneurship Program. Both these lines of work seek to contribute to the goal set by the board of directors to increase purchases from local suppliers by 60% by 2030 and to reach 3.4% of materials and services purchased by Codelco at the local level. Likewise, we seek to populate the 74 defined categories (with special weighting for local MSME suppliers) and increase their registration in the Red Negocios portal. To accomplish this, we have conducted several communication activities in coordination with the divisions and our head office. Activities include six webinars and four face-to-face business meetings in Tocopilla, Calama, Valparaíso and Rancagua. The steps taken include the following:

• Attract CLP \$75 million in public resources from CORFO for the North District and the Salvador Division, to strengthen the entrepreneurial ecosystem through the programmatic line "REDES"



In 2022, the largest purchase by Codelco from local suppliers was registered, reaching **USS**

million

- Develop a content structure to disseminate the procurement program on the Codelco website. By entering www.codelco.com and clicking on the "Proveedores" link, three options are displayed, among which is "Proveedores MiPymes locales". This tab contains information about the program and a series of guidelines for local suppliers who wish to approach Codelco.
- Support from divisional and district sourcing teams to enable tenders in which local suppliers can participate
- Together with divisional sourcing teams, drive greater engagement and business process development with local suppliers

As of December 2022, purchases of US\$248 million were recorded from local MSME suppliers, representing 2.7% of the total. In addition, 574 local MSME suppliers registered to the Red de Negocios portal of the Chamber of Commerce of Santiago. These figures account for the largest local MiPyme purchase Codelco has on record.

In the year we opened tenders for laundry services, taxis, transfers and movers, media management, Christmas fairs and service framework contracts to cover basic services. We also made purchases for US\$1.561 billion from 963 local companies, beyond their status as MSMEs.

Likewise, we seek to populate the 74 defined categories (with special weighting for local MSME suppliers) and increase their registration in the Red Negocios portal. To do this, we carry out several communication activities in coordination with the divisions and Head Office, including six webinars and four face-to-face business meetings in Tocopilla, Calama, Valparaíso and Rancagua.

B. EXPANSION OF THE LOCAL SUPPLIERS PROGRAM

The Salvador Division joined the "Startup Local Together" program in August. A territorial diagnosis was made on 180 companies according to the division's hiring plan. 25 companies were finally selected that will be trained by the Social Management consortium and Simón de Cirene with the support of Corfo. The 4-month training session seeks to close business management gaps according to Codelco's segmentation criteria.

On the other hand, after the announcement of the closure of the Ventanas smelter, we strengthened the support of this division to suppliers to redefine their commercial strategy and/or relocate their services. This is a different exercise than the rest of the program, since it does not focus on attracting

odelco made US\$1,561 million in purchases from 963 local companies,
beyond their status as MSME



C. LOCAL LABOR

The macro target in this area is to increase local hire workers by 10%

During 2022 we contributed to generate employment for local people for the Andina, El Teniente and North District divisions by means of identification, developing their job skills and linking them with job opportunities in companies within the Codelco value chain.

The "Together We Bet on Local" program allowed Codelco to maintain the average percentage of local workers within collaborating companies at 56%. This is equivalent to 35,382 people (3,986 more than in 2021).

At Codelco we strive to identify and strengthen opportunities for economic inclusion in the territories in which we operate, with special emphasis on the employability of people residing within our areas of influence. According to our materiality analysis, boosting local employment is a key expectation of neighboring communities. We understand "local" as the "people who live with their families in the areas of influence, so that they can return



of their working day and spend the night at home, without moving to other geographical areas. Domicile is documented with a certificate issued by a legally recognized neighborhood board."

Through the "Together We Bet on Local" program, this year we organized labor fairs where we invite the main suppliers of Codelco to participate. Recruitment was carried out at the regional level and through field campaigns in certain areas important to Codelco such as along the locality of Camino Internacional (Region V) and Calama (Region II). Moreover, to attract staff on a constant basis, the program provides consolidated link with the Municipal Labor Intermediation Offices ("OMIL").

The traceability of hired personnel considering variables of ethnicity, locality of origin and gender, is automated under the Workmate platform.

This year we continue to promote a 10% local hire minimum in our new investment projects, explicitly establishing this preference in the primary associated contracts.

Finally, together with the Vice Presidency of Human Resources, we conducted field campaigns in five divisions to invite young women and/or housewives to participate in the Apprentices Program, which aims to provide training for later integration into Codelco's staff. The program has become a significant method of attracting personnel for operational roles in several divisions, with one prime example being the invitation to female applicants this year in the Andina division to cover 100 positions.

he Local Supplier Development program attracted public resources from Corfo for the North District and the Salvador Division for an amount of CLP \$75 million to strengthen the entrepreneurial ecosystem



MACRO TARGET FOCUS 2: EDUCATION AND SOCIAL CAPITAL, BETTING ON THE QUALITY OF EDUCATION

In 2022 we expanded upon our work with twelve establishments within our areas of influence through the "Together We Learn Local" program, which seeks to improve the academic results of its students. This program is led by the Enseña Chile Foundation and its purpose is to build skills and deliver tools to managers and teachers to improve their pedagogical roles. Under this program, the divisions took over sponsorship of high schools to hold lectures and masters classes, made visits and incorporated professional internship programs (among other initiatives) to prepare future professionals to face the challenges of the mining industry.

Along these same lines, we strengthen transverse technical skills so that people who have a certain level of work experience can be included in the category

MACRO TARGET FOCUS 3: ENVIRONMENTAL SUSTAINABILITY

Chile is among the 30 countries with the highest levels of water stress in the world, while three out of five of our divisions are located in areas that have been decreed as having a water scarcity.

4.11.3 RURAL POTABLE WATER AGREEMENT SIGNATURE MILESTONE

Sovernment of Antofagasta to improve the potable water and sewerage system, aimed at different rural and urban localities in the territory





4.11.4 COMMUNITY INVESTMENT

[GRI 413-1][ICMM 9]

During 2022 we executed 170 community investment agreements, in the different areas of influence of our operations.

Total community investment reached CLPS \$8,170,695,922 (equivalent to US\$ \$9,367,164). Of this amount, 38% corresponded to the execution of voluntary agreements.



We deliver tools to local suppliers for their incorporation into our value chain, guiding them in the bidding

We encourage local labor hiring in our contractor companies

We strengthen local education and participate in the training of future workers in the mining industry.

Through collaborative efforts, we facilitate access to safe drinking water in critical rural sectors.

We highlight the volunteering of workers in several initiatives specific to each territory.

POTABLE WATER FOR LOS ANDES AND CACHAPOAL, DROUGHT SUPPORT

Within the drought context facing the central valley of Chile, the Andina and El Teniente divisions provided technical advice, support in making improvements to infrastructure and water trucks to ensure the supply of potable water in the provinces of Los Andes and Cachapoal.

For the fires that affected the municipality of Viña del Mar in December 2022, the Ventanas Division mobilized equipment to support the efforts to aid damaged sectors. Additionally our workers and collaborators collected support for the fire victims.

TERRITORIAL STRATEGY WITH SOCIAL VALUE PROGRAMS	FUCUS	2022 AMOUNT (CLP)	2022 AMOUNT (USD)
Together We Startup Local	1	\$394,766,714	\$452,574
Together We Bet on Local	1	\$104,565,546	\$119,877
Together We Learn Local	2	\$278,796,666	\$319,622
Together We Develop Local Water	3	\$242,768,245	\$278,318
New Community Engagement Model	4	\$174,409,514	\$199,949
Total		\$1,195,306,685	\$1,370,340



Total voluntary community investment, associated with environmental qualification ruling and territory strategy US\$ 9,367,164

TOTAL VOLUNTARY COMMUNITY INVESTMENT AGREEMENTS 2022

DIVISION	N°. OF COMMUNITY INVESTMENT AGREEMENTS	2022 AMOUNT (CLP)	2022 AMOUNT (USD)
North District	57	\$1,326,353,429	\$1,520,577
Salvador	13	\$41,512,687	\$47,592
Andina	24	\$940,919,824	\$1,078,702
Ventanas	21	\$257,622,565	\$295,347
El Teniente	22	\$517,730,265	\$593,544
General total	137	\$3,084,138,770	\$3,535,762

TOTAL COMMUNITY INVESTMENT AGREEMENTS ASSOCIATED WITH ENVIRONMENTAL QUALIFICATION RESOLUTIONSL

DIVISION	N°. OF COMMUNITY INVESTMENT AGREEMENTS	2022 AMOUNT (CLP)	2022 AMOUNT (USD)
North District	18	\$2,391,517,675	\$2,741,717
Salvador	0*	\$626,959,018	\$718,767
Andina	13	\$712,100,828	\$816,377
Ventanas	0	\$0	\$0
El Teniente	2	\$160,672,946	\$184,201
General total	33	\$3,891,250,467	\$4,461,062

* Expenditure associated with community commitments of Environmental Qualification Ruling No. 19-2020 of the Rajo Inca project, which were executed without agreement


KEY INITIATIVES

DIVISION	INITIATIVE	DESCRIPTION	DIVISION	INITIATIVE	DESCRIPTION	
	Together for Health	Codelco, together with the Acrux Foundation and in alliance with the Antofagasta Health Service, the Dr. Carlos Cisternas de Calama Hospital and the Health Directorate of the Municipal Social Development Corporation of Calama (COMDES), executed 9 medical operations with more than 6,200 medical treatments that benefited residents of Calama and Alto Loa. The initiative contributed to reducing the waiting lists in the Antofagasta Region and provided care from specialized professionals	Andina	Camino Internacional Scholarship Programs	Within the framework of the Environmental Impact Study "Adaptation of Andina Mining Works for Current Operational Continuity" of environmental qualification ruling No. 1066 of the year 2019, specifically - the Voluntary Environmental Commitment CAV 07: Professional technical development for young people, 50 young men and women from the localities of the Camino Internacional are supported through professional technical education scholarships.	
North	Potable water for rural communities	Codelco and the Regional Government of Antofagasta (GORE) signed an agreement in which Codelco will contribute more than \$3.6 billion for the engineering development of 33 rural drinking water solution projects. For its part, GORE will execute future respective construction works. The beneficiary communities		Rural potable water improvement works	Support for different rural potable water committees located in the Andina Division's area of influence, to ensure supply to neighbors and build capabilities for the efficient use of this vital element	
		correspond to the town of Quiligua, towns of Alto Loa, Calama Rural and Caletas de Tocopilla, among others		Illuminating the streets of the La Chocota community	Implementation of a solar powered lighting system in sectors encompassed by the committees for the advancement of La	
	Purchase of products from	The four divisions of the North District acquired more than 15,000 products from local artisans and suppliers that were destined for	Ventanas	Ventanas		Chocota and skills building through renewable energy workshops
	artisans and local suppliers	the traditional gifts given to miners' families during Christmas. More than 33 organizations and groups of entrepreneurs were benefited, in addition triggering production and employmen		Support for the Quintero fire department	Modernization and digitization of an alarm communication system at the Quintero Fire Department to provide a better response to the emergencies that occur in the municipality of Quintero	
	Technical and professional internships	Within the framework of the environmental qualification ruling No. 19/2020 for the Rajo Inca project, and to contribute to the training and development of young people, CAV 11.3.5: Professional Technical Practices for secondary students from the Municipality of Diego de Almagro and Chañaral was implemented. This meant that eight young students underwent their internship in the facilities of		Promotion and strengthening of the use of clean technologies as a source of home heating in the	Initiative to comply with the social commitment of environmental qualification ruling 209/2018 for the "Adjustments to constructive aspects in the Peraltacion Embalse Carén project, phase seven", which stipulates the replacement of 192 wood-fired home heating	
Salvador		the Rajo Inca project at the Vice Presidency of Projects and two young people interned at the Port of Barquito	El Teniente	Metropolitan Region of Santiago	units for less polluting alternatives	
	Together We Learn Local	This program undertakes to strengthen education by promoting the development of leadership skills in the management teams at high schools in the province of Chañaral		Empowering digital spaces to strengthen education in Coya schools, in times of the pandemic	Contribution to the strengthening of the educational process of the community in Coya schools, through a program of technological equipment and educational reinforcement, which enhances areas of learning affected by the Covid-19 Pandemic	



NON-TECHNICAL CONFLICTS AND DELAYS

[SASB EM-MM-210b.2]

In 2022 there were no delays due to protests and resistance to projects by the community. However, the following mediumintensity conflicts were recorded:

On April 16, about 100 families in the sector illegally seized land belonging to the El Teniente Division located in the vicinity of the town of Coya. The activation of a process of dialogue that pursued allowed practically all the people who participated in the action to peacefully leave the site after six months.

On June 22 and 23, the Federation of Copper Workers led a demonstration against the announcement of the future cessation of operations at the Ventanas smelter. The actual shutdown of operations was for less than 24 hours.





4.12 SKILLS DEVELOPMENT THROUGH SURPLUS TRAINING

To enhance the development of local human capital, in line with the employment opportunity targets for each territory, during 2022 we promoted a complete community training plan with a total investment of CLPS \$1,427,614,000, which included the participation of contractors and benefited 1,509 people.

Contributions were focused on two areas: mining trades and community development tools. Surplus from the National Training and Employment Service (Sence) was distributed to these programs through Technical Training Agencies (OTICs) specialized in certain areas and as established by Law No. 19.5188.

DIVISION / DISTRICT	AMOUNT (CLP)	N° COURSES	BENEFICIARIES
Andina	\$193,414,000	6	126
Salvador	\$224,560,000	23	410
El Teniente	\$304,206,000	9	179
Ventanas	198,594,000	8	182
North Dist. / Marks of Success Program	\$105,780,000	20	380
D. Norte / Together We Bet on Local Program (sustainability funds)	\$248,914,000	7	136
North Dist. / Together We Bet on Local (third-party funds)	\$152,146,000	5	96
	\$1,427,614,000	78	1,509

The training plan for communities deployed by Codelco in2022 impacted **1,509** people

4.13 ACKNOWLEDGMENT AND RESPECT FOR INDIGENOUS PEOPLES

[ICMM 3] [MM5]

Recognizing the indigenous peoples located near our operations is a priority, and therefore we promote dialogue, respect for their ways of life, customs and worldviews. We engage with Aymara, Atacameña, Quechua and Collas communities. We meet on a regular basis with their representatives through work meetings, visits, training workshops and the implementation of participatory and associative social projects.

DIVISION	ADJACENT INDIGENOUS COMMUNITIES OR TERRITORY	FORMAL AGREEMENTS ESTABLISHED
Salvador	Community of Colla Geoxcultuxial Colla Chiyagua Indigenous Community of Quebrada El Jardín and its tributaries Colla Runa Urka Indigenous Community	Agreements associated with the RCA No.19/2020 Rajo Inca and Indigenous Consultation Process of the Rajo Inca project.
	Colla Indigenous Community municipal district of Diego de Almagro	Community investment agreement

DIVISION	ADJACENT INDIGENOUS COMMUNITIES OR TERRITORY	ACUERDOS FORMALES ESTABLECIDOS
	Atacameña Indigenous Community of Toconce Atacameña Indigenous Community of Lasana Valley Atacameña Indigenous Community of Coyo Atacameña Indigenous Community of Socaire Atacameña Indigenous Community of Machuca Hortiloa Women's Association of Toconce Ninchies Lickau-Cota Atacameña Association of Irrigators and Farmers of Celeste Association Eco-Etno Turismo Pozo 3 Atacameña Indigenous Community of Quota Association Hijos de Chela	Competative funds
North District	Indigenous Community Atacameña de Toconce Community Atacameña de Caspana Chunchuri Indigenous Association of Cultivators, Artisans and Tourism Ruraq Maki Community Atacameña of Ayquina Turi Pueblo de San Pedro Atacameña Community of Quota Indigenous Community of the People of San Pedro Aymara Community of Quillagua Indigenous Community Atacameña Taira Indigenous Community Atacameña de Toconce Women's Association of Toconce Ninchies Lickau-Cota	Community investment agreement
	Indigenous Community Atacameña of Lasana Valley Neighborhood Association No. 24 of Chiu-Chiu Asociación Indígena de Agricultores y Regantes de Chiu-Chiu (ASACHI)	Community investment agreements for the implementation of commitments incorporated in Protocols for the Indigenous Consultation Agreement within the framework of the RT Sulfides Project approved by environmental qualification ruling RCA 022/2016



Total complaints received during 2022:: **30**

MINING RESERVES IN INDIGENOUS ZONES

[EM-MM-210a.2] [SASB EM-MM-210 a.2]

Codelco currently has no copper mining reserves on indigenous land.

SOCIO-ENVIRONMENTAL COMPLAINTS AND SUGGESTIONS LINE

Through this channel our neighbors within our areas of influence can send their doubts, suggestions and complaints regarding the social and environmental performance of our operations.

In 2022 we received 48 digital and telephone requests, of which 18 were suggestions and queries; while 30 were complaints related to Codelco operations or mining projects.

EMAIL: contactosocioambiental@codelco.cl

TOLL FREE HOTLINE: 800 222 600



4.14 REDUCTION OF PARTICULATE MATTER EMISSIONS

In 2022, Codelco's sixth sustainable development commitment related to particulate matter emissions was published. This goal includes concrete actions to mitigate emissions in our operations and thus contribute to better air quality in the localities neighboring our divisions. This sixth commitment considers three strategic initiatives in order to achieve the proposed target:

MACRO TARGET:

Decrease emissions of MP10 particulate matter by 25% by 2027

STRATEGIC ACTION	STRATEGIC ACTION	STRATEGIC ACTION
15	16	17
20% reduction in MP10 emissions in the North District	90% efficiency in emission control on mine pit roads	100% of air quality stations in latency condition as an annual average of MP10 (40 µg/m ³) in the Codelco area of influence

4.14.1 KEY MILESTONE

In 2022 we began the search for solutions and industrial pilots for the control of emissions when loading and dumping material, blasting and stockpiling activities. We also started piloting technology to suppress dust on the mine pit roads of in the northern area of Chile and standardized the management of air quality in the territories where our operations are located.

4.14.2 GOVERNANCE

We established a corporate work group on particulate matter and air quality. This group brings together corporate and divisional managers in order to track compliance with the sixth sustainable development commitment for MP10 reductions, in addition to several other initiatives associated with air quality management in our operations.

SMELTER EMISSIONS (THOUSANDS OF TONS)

[GRI 305-7] [SASB EM-MM-120a.1]

SMELTER	EMISSION TYPE	2021	2022	ANNUAL LIMIT *
Chuquicamata	Sulfur dioxide (SO2)	14.1	17.8	49.7
(Chuquicamata Division)	As (ARSENIC)	0.13	0.22	0.476
Potrerillos	Sulfur dioxide (SO ₂)	8.5	10.3	24.4
(Salvador Division)	As (ARSENIC)	0.065	0.02	0.16
Ventanas	Sulfur dioxide (SO ₂)	9.21	4.8	9.52
(Ventanas Division)	As (ARSENIC)	0.03	0.02	0.05
Caletones	Sulfur dioxide (SO ₂)	28.87	24.8	47.68
(El Teniente Division)	As (ARSENIC)	0.10	0.10	0.13
Tatal	Sulfur dioxide (SO2)	60.68	57.62	
Total	As (ARSENIC)	0.33	0.36	

* Limits according to Supreme Decree No. 28 of the Ministry of Environment for SO₂ and As. For SO ₂ emissions at Ventanas Division, limits established in Supreme Decree No. 105/2018 are more demanding than previously mentioned decree 28



EMISSION CAPTURE (%)

	2021		2022		
SMELTER	ARSENIC	SULPHUR	ARSENIC	SULPHUR	
Chuquicamata (Chuquicamata Division)	95.3	95.9	96.5	96	
Potrerillos (Salvador Division)	95.9	98.3	97.2	95.1	
Ventanas (Ventanas Division)	96.4	96.8	96.1	96.8	
Caletones (El Teniente Division)	95.1	95.7	95.1	96.2	
Average	95.7	96.7	96.2	96.0	
DS 28 Regulatory compliance	95	95	95	95	

4.15 BIODIVERSITY PROTECTION

[GRI 304-2] [ICMM 7] [SASB EM-MM 160.a.1]

For Codelco, biodiversity conservation is a value that permeates our Sustainability Policy.

Together with other important players in the global industry, we are active members of the ICMM's work group on nature. During 2022 we worked to lay the foundations for developing a corporate strategy for the protection of biodiversity throughout our operations and we expect to publish a sustainable development commitment on biodiversity during 2023. We will define indicators that allow us to evaluate our performance in terms of biodiversity. We will explore science-based and natural solutions (SBTi) solutions to climate change and evaluate alternatives to reverse impacts on biodiversity and drive ecosystem recovery.

In our Corporate Sustainability Policy, we declare the commitment to contribute to the care and protection of the environment through preventive management of air, water and soil pollution, which minimizes

the impact on biodiversity, among other aspects. In 2022, specific commitments were established for this policy's implementation, among which is the commitment "to contribute to the conservation of biodiversity and protection of ecosystems through respective risk management, using all opportunities that arise to prevent, minimize and/or mitigate possible environmental impacts in our areas of influence of our projects, operations and explorations, respecting legally protected areas."



In 2022 we established specific commitments to implement our Corporate Sustainability Policy Our Model for Biodiversity Impact Management is articulated in lines of action focused mainly on the following:

- Assessment and management of risks and impacts on biodiversity elements and ecosystem services
- Assessment of alternatives to reverse impacts on biodiversity and boost ecosystem recovery
- Avoid adverse impacts to critical habitats or endangered species
- Improve the protection of biodiversity by assessing and considering its environmental benefits and aspects of land use in investment, operation and closure activities



EL TENIENTE DIVISION HELPS MONITORING OF FAUNA IN THE REGION OF O'HIGGINSS

In 2022, the Regional Wildlife Monitoring System continued which is executed in conjunction with O'Higgins University and the Agricultural and Livestock Service (SAG). The El Teniente Division has facilitated the installation of 40 trail cameras equipped with infrared motion sensors, making it possible to diagnose and monitor the presence of wild species such as foxes, guinea cats, guanacos, pumas and vizcachas, among others. The data and information collected through this initiative are used to generate protection and conservation strategies that contribute to the care of the natural heritage of the O'Higgins Region.





4.15.1 BIODIVERSITY IMPACT

[MM2] [SASB EM-MM-160a.3] [GRI 304-1, 304-3] [ICMM 7]

The work centers that operate near areas rich in biodiversity are Andina and El Teniente, which have comprehensive management plans that are updated according to the needs of the territories. Meanwhile, the Ventanas and Salvador divisions, as well as the North District, actively participate in the management of the Campiche wetland, the Pedernales salt flats and the Ojo de Apache ravine nature sanctuary, respectively.

Salvador Division

In the Atacama Region, the Salvador Division made important commitments to the State to protect the water and vegetation resources of the Pedernales salt flats, located 40 km from the mine camp and not owned by Codelco. The salt flats are located at 3,370 meters above sea level and extend through a 466 km² area. For its conservation, Codelco is guided by a plan to recover the ecosystem characteristics of 60 hectares of high Andean plains and provide value to 175 hectares that include the freshwater azonal vegetation systems of the Pedernales, Piedra Parada and Laguna salt flats, some surrounding ravines and the southern headwaters of the La Ola River.

Andian Division

In the Valparaíso Region, this division manages the Río Blanco National Reserve, an ecosystem protected by the State with and encompassing an area of 10 km².

Codelco owns approximately one fifth of that territory. The operation is located at its border area, covering 0.137 km².

Similarly, the Andina Division manages the Huechún Rinconada property, also protected. Although it is not a recognized protected area, there is a conservation area of approximately 26 km², which is part of a plan for the management and conservation of natural resources committed to the authority. In that territory, our operational area reaches 7.3 km².

Surrounding our operations are the Castro and Barriga areas, which are owned by Codelco. While these areas are not recognized as protected areas, they are under a management and conservation plan committed to with public authorities. Another area is the Juncal Andean Park, owned by the Kenrick Lyon family, where Codelco has no operations. Given its status as a Ramsar site (a wetland of international importance under the Ramsar Convention), Codelco is committed to implementing a management and conservation plan.

El Teniente Division

El Teniente is in the proximity of the Roblería del Cobre de Loncha National Reserve, an area protected by the State and lent in commodatum for 30 years

(1996-2026) by the El Teniente Division to the National Forestry Corporation (CONAF). The extension of this biodiverse area is 5,870 hectares. The division did not identify impacts affecting species in the reserve.

Ventanas Division

This division owns a 0.73 km² area of urban wetland, located in the municipal district of Puchuncaví, an area adjacent to the location of a slag dump.

The work center participates in the environmental management of the Campiche wetland, a protected area in the Valparaíso Region. Although this wetland does not belong to Codelco, it is subject to monitoring plans developed by Ventanas that detail the state of the coastal line and are periodically reported to the General Directorate of the Maritime Territory and







Merchant Marine (Directemar). The Ventanas Division reviews the behavior of the wetland in order to define a plan for its integral management.

North District

The North District, with divisions in Calama and Sierra Gorda, worked with the Municipality of Calama and the Ministry of the Environment to create the "Ojo de Opache Ravine" nature sanctuary, approved by the Council of Ministers for Sustainability in December 2021. The protection of 351 hectares, which are not owned by Codelco, are of immense value in terms of biodiversity, archaeology, paleontology, tourism and landscape.

Two endangered species are preserved at this site: the Loa Frog (Telmatobius dankoi), which lives in this sector due to the conditions that allow its reproduction and the Loa Pejerrey (Basilichthys semotilus), which was previously considered locally extinct.

Furthermore, there is evidence of the activities carried out by the ancient inhabitants of the territory in archaeological and paleontological components, such as the pre-hispanic village with wall paintings and the Jurassic marine outcropping, respectively.

In the Chuquicamata Division, the San Pedro de Inacaliri ravine is within out area of operations and where we have water conveyance lines for the extraction of water. This is not an area recognized as protected but does have a Water Directorate Resolution (No. 87/2006) for protected aquifers that feed wetlands and marshes in Region II. Also nearby is the priority site of Tatio geysers, owned by Codelco, where the Salado and Tonconce pipelines are located. Given its status as a priority site, it is part of the Regional Biodiversity Strategy.

Within the operations of the Ministro Hales Division are the Sapunta wetlands, part of which are located in an area that is owned by Codelco. This is a protected area under Resolution No. 87/2006 of the Water Directorate.

4.16 PRODUCTION RESPONSIBLE PARTY

In 2022, the Codelco board of directors agreed to carry out the cessation of operations of the Ventanas smelter. The purpose of this action was to advance on Codelco's objective of building responsible mining, with environmental protection. The process will be carried out in accordance with valid law, in a manner that is fair to workers, in harmony with the communities of Quintero and Puchuncaví, and with respect for existing contracts with small and medium-sized mining companies. The Ventanas Division's copper refinery will continue to operate.



CLOSURE PROCESS OF THE VENTANAS SMELTER FROM A COMMUNITY PERSPECTIVE

Codelco's decision to commence a closure process its smelter, contingent upon a previous legal authorization, was adopted considering the best interest of Codelco, weighing environmental, labor, financial, legal and reputational factors, with a view to safeguarding the continuity of its business, responsible production and its position in the market as a world-class industry.

The closure of the smelter is a milestone that, from a social perspective, is perceived in an ambivalent way. On the one hand, it represents an improvement in the environmental conditions of an area characterized by a significant concentration of polluting industrial activities. On the other hand, the closure generates uncertainty regarding the economic and social consequences that shutdown of a productive process that directly and indirectly benefits a significant number of people will bring. In this context, the Ventanas Division team, in addition to designing a fair transition plan that addresses the main socio-economic impacts of this decision, has deployed a dissemination plan aimed at neighbors, social leaders and local authorities whose goal is to explain the scope of the process, clarify doubts and install the transformation challenge that the division will face in the coming years.



4.16.1 DUE DILIGENCE IN HUMAN RIGHTS

[SASB EM-MM-210 a.2]

Starting in 2021, the performance of our eight Human Rights Divisions (HRDs) has been evaluated by the Swedish consult Enact and the Associate Center of the Pontificia Universidad Católica de Valparaíso. The goal of these efforts to find gaps in order to improve business behavior across the supply chain. The consultant reports the risks and impacts on HR that could be caused to a third party; these data are obtained both in the observation of field work and through the review of the matrices that the divisions develop under corporate methodology.

The next step is to identify controls and non-covered aspects that must be worked on in a multidisciplinary manner, generating action plans with measurable results for each division.

In line with our commitment to responsible mining, in 2022 we continued with the human rights due diligence process for the North District, where the consultants were received by the different work centers, communities and local authorities. The results were presented to the CEO and the board.

These studies have generated a list of recommendations to be implemented in each division. Such recommendations include developing an approach to remediation through a procedure that ensures the implementation, evaluation and monitoring of actions related to remedies on possible impacts generated a human rights perspective.

We also discussed the socio-environmental commitments contained in the Environmental Qualification Ruling for the RT Sulfuros project at the Radomiro Tomic Division, in the communities of Chiu Chiu, Lasana, Chunchuri and Quillagua, with broad participation of the neighboring communities.

The Salvador Division, for its part, held ongoing work groups with indigenous organizations from its area of influence:

- Colla indigenous community in the municipal district of Diego de Almagro
- Community of Colla Geoxcultuxial
- Colla Chiyagua indigenous community of El Jardín ravine and its tributaries

Within this framework, this work center informed the communities prior to the presentation to the Environmental Assessment System on different projects, whereby the center was able to resolve doubts and make adjustments.

The following projects were presented in 2022:

- Declaration of Environmental Impact (DIA) of the "Construction and adaptation of ponds and warehouses at the Salvador Division" project.
- DIA of the "Closure of ice water drain" project within the framework of the Pedernales salt flats between Codelco and the State Defense Council

As of December 2022, the Environmental Assessment Service stated that the Colla Runa Urka indigenous community should be included in the DIA of the "Closure of ice water drain" project within the framework of the Salar de Pedernales Agreements between Codelco and the State Defense Council, for possible interactions with the temporary construction work of the construction camp, while working on the responsible management of the supply chain including ESG / human rights requirements.

Permanent work groups

Established at the Salvador Division with groups of indigenous peoples in their service area

4.16.2 DUE DILIGENCE IN THE SUPPLY CHAIN

In 2022, Codelco's system was strengthened to identify, assess, and, where appropriate, manage risks associated with the mineral supply chain. This, in accordance with the five-step framework of the Organization for Economic Co-operation and Development (OECD) Due Diligence Guide for the Responsible Management of Mineral Supply Chains from Areas

conflict and high risk. This system improves the traceability of the mineral supply chain and implements international best practices and responsible production in this area.

4.16.3 INTERNATIONAL CERTIFICATION

In the context of transformation and implementation of international standards, during 2022 Codelco certified for all its divisions the Environmental Management System (EMS) under the ISO-14001 standard and the Occupational Health, Safety and Operational Risks Management System under the ISO 45001 standard. This achievement made it possible to standardize and streamline the way in which these issues are managed in each of the divisions and projects in Codelco. The process required considerable effort and involvement of the entire organization in the development, implementation and verification of these management systems, which involved the incorporation of digital platforms, identification of best practices, integration with the rest of the Codelco's strategic instruments, while simplifying the process in general.

he procurement of international ISO certifications is key for our company. From 2023 onwards this certification will be required to trade copper on the London Metals Exchange, and will also be necessary to certify under The Copper Mark initiative

ENVIRONMENTAL MANAGEMENT SYSTEM

- Standardize environmental management in Codelco
- Continuous improvement system
- Focuses work on **four areas**
- Modernize and simplify management with the use of **digital platforms**
- Allows traceability
- Designed to make synergies with **existing systems** and processes







THE COPPER MARK

RESPONSIBLY PRODUCED COPPER

THE 'COPPER MARK' SEAL

In 2022 Codelco began the incorporation of its operations into The Copper Mark, the first and only global system that is copper mining-specific, developed in line with our United Nations

Sustainable Development Goals (SDGs). The Copper Mark seal ensures that copper production is done responsibly within society, neighboring communities, with workers, investors and clients.

For Codelco, responsible copper production is a priority. Hence the importance of being able to obtain this seal delivered by an independent institution, validated by the industry and in line with international standards of responsible production and global efforts to mitigate and adapt to climate change.

El Teniente was the first division to undergo the rigorous external audit process to verify compliance with The Copper Mark's 32 sustainability criteria. These criteria include aspects of governance, transparency and ethics in business, compliance and legality, and issues related to human rights, labor rights, discrimination and gender, as well as climate change and waste treatment and risk management, among others. In 2023 the remainder of Codelco's divisions will undergo the same process to ensure that all our operations have The Copper Mark by the end of the year.



SUSTAINABILITY ACADEMY

In 2022, as part of UCodelco's initiatives and with the aim of providing transversal content to its workers that ensure the required knowledge and skills, the Codelco Sustainability Academy launched three training courses related to the 2030 Commitments. These courses address topics such as climate change, responsible production, the Environmental Management System and community development strategy, and are available online to all Codelco workers.

The innovative and instructive design of the courses is based on the style of a documentary series instructs us on how to continue transforming ourselves in terms of sustainability.



4.17 JOBSITE CLOSURE

[MM-10]

Codelco's closure plans governed under compliance with regulatory frameworks (Law No. 20.551 and its regulations), as well as internal regulations NCC 46 Closure and Post Closure of Mine Sites and Facilities, the SIC – M - 013 Manual for Closure Projects for Mine Sites and Facilities, the Development Guide for Profile Studies for Closure Projects for Mine Sites and IFC No. 098 Provisions for closure of mining sites. The objective of this set of standards is to prevent, control, minimize and mitigate the impacts of the closure of our facilities and / or job sites, and to ensure the costs associated with this process.

In 2022, the closure of Salvador Division's filter, concentrate drying, tire and concentrate line facilities was an important milestone that kicked off Codelco's commitment to carry out a progressive (definitive) closure of installations that will no longer operate during the life of the mine site. Another significant milestone the transfer of closure management to the divisions; this, without prejudice to the fact that the Corporate Site Closure Management of Sustainable Development department performs the technical support and reports to the competent authority. Each work center has a responsible party for the execution and coordination of the activities to be carried out in compliance with the regulations and for the correct development of studies, permits and progressive closures, among other aspects.

4.17.1 GOVERNANCE

In accordance with the best practices of the industry, this governance model aims to comply with our corporate standard to manage the closure and postclosure of works and mining facilities. It applies to both new projects and in the operation of existing projects and has sufficient flexibility to respond each





projects specific needs. To this end, the governance model is based on the corporate regulatory framework, which contains:

- NCC 46 Closure and Post-Closure of Mine Sites and Facilities
- SIC-M-013 Manual for Closure Projects for Mine Sites and Facilities
- Supplementary guide for the development of profile studies for closure projects for mine sites and facilities
- IFC No. 98 Provisions for closure of mine sites
- Closure plans approved

Each closure plan considers the provisions of Law No. 20.551, the objective of which is the integration and execution of all measures and actions aimed at mitigating the impacts derived from the development of the extractive mining industry, in the location where it is carried out, thereby ensuring the physical and chemical stability of the closed site, in accordance with the applicable environmental regulations.

Closure plans also include financial aspects concerning closure, post-closure costs and guarantee tables. Plans are updated whenever an audit requirement is met and have a maximum validity of five years.

The cost of for approved closure plans as of December 31, 2022, is as follows:

	SERNAGEOMIN RESOLUTION	NOMINAL CLOSURE COSTS *		
DIVISION WITH CLOSURE PLAN	SERINAGEOMIN RESULUTION	UF	MUS\$	
Chuquicamata	2327/19	17,936,584	722	
Radomiro Tomic	840/21	15,119,775	609	
Ministro Hales	842/21, replaced by Res. Ex. No. 1848 / 2022	7,837,933	315	
Gabriela Mistral	841/21	4,602,776	185	
Salvador	2080/15	24,938,440	1,004	
Ventanas	2570/19	5,225,689	210	
Andina	169/2022	57,882,284	2,330	
El Teniente	409/21	50,351,330	2,027	
Total		183,894,811	7,402	

* Values as of December 31, 2022: UF: 35,110.98, US\$ at \$872.27



n 2022, the amount of the guarantees constituted for closure plans amounted to US\$2,641 million

DSAL TIRE PLANT CLOSURE

During 2022, with Andina and Salvador, Codelco executed the closure plans of its eight divisions under the general procedure.

Also, the partial closure plans for Chuquicamata, Radomiro Tomic and El Teniente were entered for processing, and the execution of the definitive closure of the Salvador tire plant commenced.



4.17.2 PROJECTS SUBMITTED TO THE ENVIRONMENTAL IMPACT ASSESSMENT SYSTEM (EIAS)

In the Environmental Impact Assessment System (SEIA) we achieved the approval of six Environmental Impact Declarations (EID) submitted by Codelco. The EISs highlighted the "Andina Division Mining Optimization" projects that allow an increase in the mine throughput at the Andina Division between 2025 and 2028 and the "Pacífico Superior Extension Project", which aims to grant operational continuity to the operation at the Pacífico Superior sector part of the EI Teniente Division, extending the life of the original project by 14 semesters. No Environmental Impact Study (EIS) approvals were obtained. In addition, two new projects were entered into the EIAS through an EID, with a total investment in environmental assessments reaching US\$201 million.

4.17.3 MANAGEMENT OF OPERATIONAL INCIDENTS WITH ENVIRONMENTAL CONSEQUENCES

[SASB EM-MM-140.a.2]

This year we improved our operational incident with environmental consequences management system. Each incident and respective investigations were registered. No very series incidents were recorded and there was a systemic decrease in incidents by 21% compared to last year and 68% compared to 2019. However, we regret the occurrence of an incident categorized as serious according to our corporate procedure, which occurred in November while sulfuric acid was being unloaded from a ship to an acid tank at the Puerto Barquito facilities by an external company. As a result of the partial closure of a vent valve, an auxiliary tank was overfilled

and subsequently produced leakage that reached the ocean in the immediate area of the structure the authorities were informed, and the situation was monitored. There was no evidence of variations in water quality or damage to the biological communities of the sector. An in-depth investigation of the situation was conducted under our corporate standards, implementing a new discharge monitoring control system and re-evaluating the risks and controls used.

ACID ROCK DRAINAGE TREATMENT

[SASB EM-MM 160.a.2]

At Andina and El Teniente, acid rock drainage is present and is treated at appropriate facilities to avoid impacts on the environment. Acidic water is treated and then recirculated into the mining process.

MINE ACID DRAINAGE	% OF MINES WHERE ACID DRAINAGE EXISTS		
Foreseeable	0		
Actively mitigated	0		
In treatment	29%		

Within the framework of the "Adaptation of Andina mining works" project (for operational continuity of the Andina Division) the construction of a new highdensity sludge (HDS) technology plant named "HDS No. 2" is considered. The plant will condition contact waters from the Lastre Norte dump and provide a capacity of up to 1,350 l/s. Treated waters will in part be used subsequently in the Andina Division operations and / or returned to the Rio Blanco, according to the water requirements. he total number of operational incidents with environmental consequences was reduced by 21% compared to the previous year. We began with piloting new methodology to avoid operational incidents in our most environmentally sensitive mining processes, in accordance with the C+ Operational Excellence management system and Codelco's critical risk strategy

TABLE OF OPERATIONAL INCIDENTS WITHENVIRONMENTAL CONSEQUENCES 2021-2022

CATEGORIES	2021	2022
Slight	68	56
Serious	9	4
Serious	0	1
Very Serious	0	0
Total	77	61

Reduction of operational incidents by **21%** compared to 2021