# How Is Labor Inclusion Progressing in the Mining Industry?

Companies have policies and plans in place to comply with the law, but the issue is still recognized as a challenging process, where technological advancements could help create new job opportunities.

## EL MERCURIO DE SANTIAGO ESPECIAL MINERÍA Y COMUNIDAD MARTES 21 DE ENERO

"The contribution that Martín, Juan, and Matías have made to our company is incredible; today, we are a better company and continue to grow, motivated by these achievements. I encourage everyone to follow this rewarding path, which at times seems difficult but leads to great satisfaction. Keep in mind that more than 50% of people with disabilities do not even seek employment."

Philippe Hemmerdinger, CEO of Tecnología en Transporte de Minerales TTM & Autopartner, shared this statement on LinkedIn regarding the experience of his son Martín, who has an intellectual disability and has been participating in the company's inclusion program for two years, alongside two other young people.

In Chile, the Third National Disability Study (III Endisc) revealed that 17.6% of the population aged 18 and over has a disability. Of this percentage, 11.4% have severe disabilities, while 6.2% have mild to moderate disabilities. This represents a significant segment of individuals with skills, knowledge, and the desire to contribute to society through work, which also has positive effects on their self-esteem and provides them with tools to become more autonomous.

On February 10, 2010, Law 20.422 came into effect, establishing regulations on equal opportunities and social inclusion for people with disabilities (PwD). Under this framework, the National Disability Service was created, and it was mandated that public organizations with an annual workforce of 100 or more employees must have at least 1% of their staff composed of PwD or recipients of a disability pension. This requirement was later extended to the private sector through Law 21.275, which took effect on November 1, 2022.

## **Positive Outlook**

Fifteen years after the law was enacted, "we have observed significant progress in the industry regarding compliance with regulations. Beyond merely meeting a quota, the ultimate goal of the law is to value diversity and recognize individuals for their talents," Aurora Williams, Minister of Mining, told \*El Mercurio\*.

She added that, according to the "Large-Scale Mining Workforce Study" conducted by CCM Eleva, 95% of surveyed companies have specific policies and goals for including people with disabilities.

However, there is limited data on how these actions translate into practice, as the issue is still considered "emerging" in the sector. "True inclusion is extremely difficult and expensive. The problem is the excess supply of inclusion programs versus a limited demand for specific profiles that are easier to integrate. Some sectors facilitate inclusion more than others, mostly in support roles. Due to industrial safety concerns, employing people with disabilities is more complex in certain areas," Hemmerdinger explained to \*EI Mercurio\*.

"But there are great opportunities with the integration of technology, particularly for people with motor disabilities, in remote control centers," he added.

Indeed, the Minister of Mining highlighted that "automation in the mining sector has become a great opportunity for inclusion and diversity. The creation of new jobs derived from this technology has helped eliminate traditional barriers in mining, generating employment opportunities for professionals and workers who might not have otherwise considered mining as an option."

## **Building a Culture**

Another key aspect of the law is training and education within companies to effectively integrate people with disabilities. Hemmerdinger acknowledged that implementing inclusive policies is not an easy task, but he noted that the presence of PwD within organizations fosters greater awareness and discussion on the topic. "Bringing my son into the company changed our lives; it disrupted our routine and opened up a human factor that encouraged people to share their experiences, talk, and learn about the issue."

"I never imagined returning to the mining industry," said Carolina García, a civil engineer who was building a promising career in the sector until 2006, when a car accident while traveling to Antofagasta for work left her quadriplegic.

Her recovery and acceptance process was long and painful. She pursued coaching and later founded a consulting firm for small businesses. "I thought people with disabilities had no place in this industry," she said. That was until 2019, when she received a call from BHP, which hired her as a training specialist at the Integrated Operations Center, where mines are managed remotely.

She acknowledges that the process has been "slow but steady" and emphasizes that, in her view, mining companies are not integrating PwD "because of the law, but because they genuinely want to be part of the inclusion movement."

To achieve this, companies undertake various initiatives. BHP highlights its "communication and awareness initiatives on disability," which include commemorating specific dates such as World Autism Awareness Day, International Sign Language Day, and the International Day of Persons with Disabilities. They also conduct "specific talks for teams with PwD members, providing recommendations for better integration."

Marcela Bucarey, Talent and Organizational Development Manager at Anglo American, stated that they carry out "campaigns, awareness efforts, and engagement with key stakeholders such as the Health and Safety team, labor unions (with whom they have a working group), and joint safety committees." Additionally, she noted that "we also support our employees with disabilities by making reasonable accommodations when needed, ensuring fair treatment and equal opportunities for career development based on merit."

#### **Driving Change**

The industry acknowledges the law as "a necessary step" to raise awareness and better understand the significance of equal opportunities and social inclusion for people with disabilities.

In compliance with the regulation, BHP currently has an Inclusion and Diversity Council that promotes inclusive policy development and a worker group called "Amber," whose mission is "to make the company increasingly accessible and drive cultural change regarding disability."

Additionally, the company reviews all job application processes to determine whether "reasonable accommodations are needed in recruitment and selection in accordance with the law."

#### Award-Winning Initiative

At Anglo American, Marcela Bucarey mentioned the creation of "Colleague Groups," which bring together employees with shared life experiences and conduct awareness initiatives in various areas. Among them, the "Breaking Barriers" program focuses on disability awareness and promoting a positive perspective. This group won first place in the inaugural "Best Inclusion Practices in the Mining Industry (2023-2024)" competition in the "Inclusion of People with Disabilities" category.

The Ministry of Mining stated that "Breaking Barriers" has "significantly contributed to the company's inclusion percentages. In 2023, among other initiatives, it helped achieve an 82% inclusion and diversity index and a 77% psychological safety index."

To achieve these results, the program developed various activities, including four workshops on disability awareness through mindfulness practices in schools, involving both students and teachers; workshops such as "Put Yourself in My Shoes" and "Let's Talk About Inclusion" to create understanding through practical activities; webinars featuring successful PwD professionals; and autism awareness initiatives. Additionally, they organized early childhood stimulation workshops and mental health awareness programs, as well as workplace massage breaks provided by visually impaired massage therapists.

#### **National Landscape**

The general private-sector outlook is reflected in the 2024 Business Labor Inclusion Measurement (MILE) conducted by the Inclusive Business Network (ReIN), the Chilean Federation of Industry (Sofofa), and the International Labour Organization (ILO).

The survey reported a 1.2% hiring rate of PwD among a sample of 72 companies, representing a total of 3,534 workers with disabilities. While hiring remained stable compared to 2023, the number of participating companies and represented workers increased.

Analyzing the 29 companies that have participated in MILE between 2020 and 2024, there has been a 23% increase in hired PwD, rising from 1% to 1.2%.

"The MILE data and the gap between employed men and women with disabilities highlight the significant challenge we face as a society," said Rosario Navarro, President of Sofofa.

Although no specific survey measures progress in the mining industry, Bucarey affirmed that Anglo American "meets and exceeds the 1% PwD requirement across all its business units, reaching a total of 1.6%."

#### **Changes in Fines**

Regarding enforcement mechanisms, the Minister of Mining reminded that "the Labor Directorate is responsible for overseeing and sanctioning compliance with this regulation."

She also highlighted an important point: "Under the recent Law 21.690, changes will be introduced this year in how fines are calculated for certain violations, so we urge companies to plan their compliance accordingly," Williams concluded.

# Copper Production in Chile Reaches Historic Monthly Record in December and Closes 2024 with a 5% Increase

The final month of the year recorded an 11.5% increase compared to the same period in 2023. Álvaro Merino, executive director of Núcleo Minero, analyzed the data and projected 2025 along with the challenges for the sector.

#### df.cl Friday, January 31 By: Patricia Marchetti

Copper production in December 2024 reached 567,000 tons, the highest monthly level on record, according to an analysis by Álvaro Merino, executive director and founder of consulting firm Núcleo Minero. He referenced recent data published by the National Institute of Statistics (INE) in its Mining Production Index.

According to the data released this Friday, Codelco contributed 165,000 tons, while the private sector accounted for 402,000 tons. Compared to December 2023, the index increased by 11.5%, with copper production growing by 14.3%, molybdenum by 14.8%, and silver by 1.1%.

At the end of 2024, total copper production reached 5,539,000 tons, compared to 5,273,000 tons in 2023, marking a 5% increase, equivalent to 266,000 additional tons. This growth was mainly driven by the private sector, particularly by the production from Quebrada Blanca II and Minera Escondida, noted Merino. Meanwhile, Codelco closed the year with a production of 1.328 million tons, slightly above the 1.325 million tons recorded in 2023, an increase of 3,000 tons.

Regarding Codelco's figures, the mining expert commented that "the production levels in 2023 and 2024 are the lowest for Codelco since 1998. Today, Codelco produces 128,000 tons more than in 1990, when it reached 1.2 million tons. It is worth noting that Codelco's objective is to produce 1,700,000 tons of copper by the end of the decade, the same level recorded in 2004."

Nonetheless, he highlighted that "the mining sector's performance, particularly copper and lithium production in 2024, boosted the mining sector GDP by over 5%, making it one of the fastest-growing economic sectors in 2024."

## 2025 Forecasts and Challenges

For this year, copper production is expected to reach approximately 5.7 million tons. Considering other mining products, the sector's GDP is projected to grow by around 4%, according to Merino.

"The increase in copper production during 2025 will be primarily driven by Quebrada Blanca II, Minera Los Pelambres, Manto Verde, Minera Escondida, and Codelco, which will increase its production, particularly in the El Teniente and Salvador divisions," the mining expert explained.

However, he cautioned that "we are witnessing a recovery in copper production. In 2018, production reached 5.8 million tons, but it declined annually from that point onward, reaching 5.25 million tons in 2023, the lowest production level in the last two decades."

"The major challenge for the mining industry is to increase copper and lithium production to capitalize on growing demand, particularly in the latter half of the decade, due to electromobility and the development of clean energy," Merino stated.

To achieve this growth, he emphasized that "a strong push for investment is necessary, which naturally requires clearing uncertainties and expediting the permitting process while providing greater certainty in this regard. If we successfully address this task, the mining industry will continue to contribute to the country's growth and development."

# Pension Agreement Boosts Business Confidence but Fails to Reverse Pessimistic Expectations

Despite the increase in the January indicator, projections remain negative. Inflation remains a major concern, with expectations of a 4.4% rise over the next 12 months.

#### MERCURIO DE SANTIAGO By Catalina Muñoz-Kappes

Although the agreement reached on pension reform boosted business confidence, the political consensus was not enough to push the indicator out of negative territory. In January, the Monthly Business Confidence Indicator (IMCE), produced by Icare and the UAI, reached 46.52 points, remaining below the neutral threshold of 50 points. However, this represents an increase of 4.75 points from the previous month and 2.81 points compared to January 2024.

All sub-indices saw increases compared to December. Business confidence in the mining sector grew by 19.54 points, while commerce and industry increased by 2.22 and 1.22 points, respectively. Meanwhile, the construction sector recorded a rise of 0.22 points. Despite these increases, only the mining sector has optimistic expectations. Commerce remained in neutral territory, while industry and construction continue to have pessimistic projections.

With January's figure, business confidence has remained in negative territory for 35 months, since March 2022. However, Adolfo Cuenca, CEO of NTT DATA Chile and a member of Icare's Circle of Economy and Finance, highlights that "although overall business expectations remain pessimistic, this outlook is improving compared to previous months, marking the highest level since April 2022."

Carolina Simonetti, general manager of the Chilean Association of Airline Lines (Achila), attributes the increase to the agreement reached between the Government and Chile Vamos on pension reform, which led to the bill being passed into law last week.

"Even though business confidence remains in negative territory, the increase in the indicator may be based on the fact that the business sector values the efforts of most of Congress and the Executive Branch to reach an agreement on pension reform. This factor, which has been discussed for several weeks, could be the trigger for an incipient improvement in business confidence," Simonetti commented.

Regarding the airline sector, she highlighted that the latest statistics confirm that passenger traffic and tourism activity over the past year have exceeded 2019 indicators. "Air transport is a derivative of economic activity, so these figures also indicate a slow but steady recovery," she noted. Inflation

However, inflation remains a key concern for business leaders. Last week, the Central Bank unanimously decided to maintain the monetary policy rate (TPM) at 5%, stating that "risks to inflation have increased, reinforcing the need for caution."

Business leaders expect inflation to reach 4.4% over the next 12 months. Pablo Pincheira Brown, associate professor at the UAI Business School, points out that "these expectations have shown little variation over the past 12 months, fluctuating between 4.1% and 4.5%. This reflects high persistence in the local inflationary scenario and keeps the inflation projection above the tolerance range set by the Central Bank."

In this regard, he notes that inflation is weighing on business confidence. "Although the January IMCE registered a slight improvement compared to the previous month, it continues to reflect a pessimistic outlook, consistent with weak growth prospects and relatively high inflation expectations for 2025," Pincheira affirms.

**46.52 POINTS** Business confidence reached this level in January, remaining below the neutral threshold of 50 points.

# Salar de Atacama: Prosecutor's Office Conducts Investigations at SQM and Albemarle Operations Over Environmental Damage Claims

The Investigative Police (PDI) inspected Albemarle's facilities in the Salar de Atacama on January 29 as part of an investigation led by the Calama Prosecutor's Office following allegations of potential environmental violations. A similar inspection was conducted at SQM's operations in December. "Our extraction activities are carried out in strict compliance with environmental permits," SQM responded.

## PULSO

## By Leonardo Cárdenas

On November 19, shortly after noon, the commissioner of the PDI's Environmental and Cultural Heritage Crime Investigation Brigade (Bidema), Tomás Silva Luengo, sent an official notice to Albemarle to coordinate an inspection visit to its facilities in the Salar de Atacama.

This action is part of an investigation led by prosecutor Eduardo Peña Martínez of the Calama Prosecutor's Office, following two complaints questioning the compliance of Albemarle and SQM with Environmental Qualification Resolutions (RCA) in the brine deposits of the Salar de Atacama. The complaints argue that monitoring stations have shown significant environmental impacts in areas surrounding the projects. Given this background, the commissioner requested that Albemarle arrange a date for the inspection and provide relevant information for the investigation. The required documents include technical inspection reports, maps of affected areas and facilities, photographs of impacted flora and fauna, and records or agreements with Atacameño communities. Additionally, information on brine extraction and lithium production was sought to advance the inquiry.

Following discussions with Bidema, the inspection at Albemarle's facilities began on Wednesday, January 29, 2025. A similar procedure was carried out at SQM's operation on December 15, 2024.

This investigation stems from two criminal complaints filed with the Antofagasta Regional Prosecutor's Office—one by Congresswoman Yovana Ahumada (PSC) and another by an environmental lawyer whose identity remains undisclosed. These complaints were submitted after Albemarle requested the Environmental Assessment Service (SEA) to review RCA No. 21/2016, linked to the "Modifications and Improvement of the Solar Evaporation Pond System in the Salar de Atacama" project, and RCA No. 226/2006, associated with SQM Salar's "Operational Changes and Improvements in the Salar de Atacama" project.

The company based its request on Article 25 quinquies (25Q) of Law 19.300 and the Environmental Impact Assessment System Regulations, which allow for a resolution review when the evaluated variables have significantly changed or have not been verified, affecting environmental protection objectives.

Congresswoman Yovana Ahumada explained to Pulso: "I have great confidence in the processes and actions being taken in this investigation because it is necessary to understand the real impact. I believe it exists, not only because Albemarle itself has raised concerns—which is why I filed this complaint—but also because investigations have shown subsidence in the salar, depletion of underground aquifers, and effects reported by local communities."

She continued: "I consider progress in this matter crucial and trust that a thorough job will be done to determine the real impact and take appropriate measures. The salar is a living ecosystem, and any intervention has consequences. The goal is to minimize these impacts and strictly adhere to granted authorizations. Additionally, it is known that the salar cannot sustain more than two operators, so adding another entity should not be an option."

Albemarle denied any wrongdoing. "More than eight months ago, Albemarle proactively requested the environmental authority to open a procedure to review the environmental authorizations for operations in the Salar, activating the mechanism established in Article 25Q of Law 19.300. This request does not imply any criminal offense, violation of environmental obligations, or environmental damage. Instead, it seeks to preemptively determine effective actions if necessary," the company stated in a written declaration.

"Since other operators are active in the Salar, our request suggests industry-wide collaboration to conduct additional studies to better understand the contributing factors. We trust that environmental institutions will accept our request and that, through collaborative efforts with all competent authorities and communities, the situation we have identified will be properly addressed," the company added. Albemarle is receiving legal counsel in this matter from attorney Cristián Muga, a partner at Ortiz & Cia.

For its part, SQM told Pulso: "We will not comment on ongoing legal proceedings. However, it is important to highlight that there is no evidence indicating damage or impact on the ecosystems surrounding the core of the Salar de Atacama due to brine pumping. Our extraction activities are carried out in strict compliance with environmental permits."

They also noted that brine and water extraction trends have decreased in recent years in line with the company's voluntary commitment to reduce extraction volumes by 50%. Within this framework, SQM submitted its "Plan for the Reduction of Extractions in the Salar de Atacama," which is currently under environmental review. "SQM Salar has a robust environmental monitoring system—available online to the public—that allows for historical analysis and proactive responses to any alerts. Based on these studies, there is no evidence supporting the criminal complaint," the company asserted.

SQM also emphasized its transparency policy, stating that it has made environmental monitoring information publicly available on its website and has collaborated with authorities in providing requested data.

"Since 2020, as part of our sustainability policy, we have voluntarily reduced water and brine extraction at our Salar de Atacama operations," they added.

This environmental commitment is under evaluation in the "Plan for the Reduction of Extractions in the Salar de Atacama," with the goal of making it legally binding. The plan includes an immediate 50% reduction in industrial water extraction and a phased reduction in brine extraction to achieve the same percentage by 2028.

# Salares Altoandinos Emerging as Second Largest Lithium Project, Enami Expands Exploration

Recent test results from the brines of La Isla and Aguilar—still unofficial—report lithium levels significantly exceeding initial estimates.

## Diario Financiero – February 3, 2025 By Patricia Marchetti

With the indigenous consultation concluded and the imminent issuance of the Special Lithium Operation Contract (CEOL), Empresa Nacional de Minería (Enami)'s Salares Altoandinos lithium project is progressing in defining its strategic partner, testing direct lithium extraction (DLE) technologies, and certifying its latest brine results, which indicate lithium concentrations higher than those of the Maricunga Salt Flat.

Sources familiar with the process informed Diario Financiero that the latest samples from Aguilar and La Isla—currently being analyzed in international laboratories—contain "very promising" lithium levels, surpassing previous estimates. Considering the concentration and resource size of La Isla, Aguilar, and Grande, Salares Altoandinos is positioned as a lithium project of equal or greater scale than Maricunga, second only to the Salar de Atacama.

"We received a sample of the Altoandinos brine, and its high lithium concentration immediately caught our attention," a source stated. Another expert involved in the drilling efforts added, "In Aguilar, we are seeing the potential to double the concentration levels."

Based on Enami's publicly disclosed exploration data, lithium concentrations in Aguilar and La Isla range between 740 and 921 mg/L on average, while Maricunga has reported an average of approximately 1,100 mg/L, according to Codelco.

Enami confirmed to Diario Financiero that its board of directors approved the continuation of the exploration campaign in December, allocating an additional US\$12 million to the project, supplementing the initial US\$10.5 million investment. The ongoing process aims to enhance geological data through drilling and hydrochemical sampling between January and June 2025.

Meanwhile, the state-owned company is developing a project profile that integrates results from DLE technology tests conducted by eight selected companies out of 30 applicants: Adionics (France), CADL–Lanshen (China), Eramet (France), Lilac Solutions (USA), Rio Tinto (Australia), SLB (USA), Summit Nanotech (Canada), and WaterCycle Technologies (UK).

Although lithium concentration is a crucial factor, other considerations include impurity levels, porosity, and resource size to determine the extractable lithium volume. Experts regard the Salar La Isla as "the crown jewel" of Altoandinos due to its substantial size and high lithium concentration.

Drilling in Aguilar has reportedly reached depths of 450 meters "without yet hitting the bottom," according to a source familiar with the testing.

## Imminent CEOL Issuance

Enami is in the process of selecting a private partner to develop the project through a public-private alliance, with the financing partner expected to be announced in May. Before that, the company, led by Iván Mlynarz, awaits the issuance of the CEOL, which grants the right to extract lithium.

Aurora Williams, Minister of Mining, responsible for authorizing the CEOL, confirmed to Diario Financiero that last Thursday, "the Supreme Decree regulating the requirements and conditions for granting the CEOL to Enami's subsidiary was submitted to the Office of the Comptroller General. Once it receives approval, the contract can be signed."

The anticipated issuance follows the completion of an indigenous consultation process conducted by the ministry with local communities, a prerequisite for finalizing the contract.

"After nine months of dialogue, we successfully concluded the process in December, signing 13 agreements on contractual clauses regarding land use, benefits, and contractor obligations," Williams explained. "In January, the Official Gazette published the Resolution of Consultation Closure, marking the first such process in the institutional history of the Ministry of Mining."

#### **Strategic Partner Selection**

Of the 12 companies interested in partnering with Enami, the state-owned company is narrowing its selection to four potential partners and financiers: BYD (China), Eramet (France), Posco (South Korea), and Rio Tinto (UK-Australia).

Additionally, Chinese firm CNGR and South Korea's LG Energy Solution are being considered as financial backers rather than operational partners.

Industry insiders suggest that Eramet, a subsidiary of mining giant Eramine, has an advantage due to its significant land holdings—owning 100% of the Salar La Isla and 97% of the Salar Aguilar.

Regarding lithium concentration levels in the area, Eramet stated that it is "conducting an extensive geophysical survey in its mining concessions, which will provide valuable information" to assess the project's business potential.

The Salares Altoandinos project involves an investment exceeding US\$1.5 billion, with estimated resources of 1.6 million tons of lithium and potential production surpassing 60,000 tons per year.

"The Supreme Decree regulating the requirements and conditions for granting the CEOL to Enami was submitted to the Comptroller's Office last Thursday," confirmed Minister Williams to Diario Financiero.

# Tariffs: U.S. Copper Producers Association Sends Letter to Trump

The organization emphasizes the importance of 'continuing to rely on our trusted trade partners, such as Chile, Peru, Canada, and Mexico.'

#### PULSO By Rodrigo Cárdenas

Amid U.S. President Donald Trump's announcements to impose additional tariffs on Mexico, Canada, China, and a list of products, the Copper Development Association (CDA) sent a letter to the president outlining the potential issues that additional import taxes on copper could cause for the country.

The letter, signed by CDA President and CEO Adam Estelle, begins by stating their hope to "collaborate to achieve our common goals: making the United States the world's leading energy producer, transforming the country into a manufacturing powerhouse with products proudly made in America, and revitalizing our cities to make them safe, clean, and prosperous places."

Following this, the association—which also includes Codelco as a member—emphasizes that "the U.S. copper industry is a strong driver of the country's economic and national security. Copper supports over 395,000 jobs and contributes more than \$160 billion to U.S. economic output. Copper is essential to a comprehensive national energy strategy. From the power grid to oil, gas, LNG, and renewable energy, copper is fundamental. Copper will also be crucial for the adoption and development of AI and data center capabilities."

The letter also reminds Trump that "copper ensures safe and reliable drinking water infrastructure and plays an indispensable role in modernizing and strengthening our armed forces, ensuring they remain the most powerful and capable in the world. With demand projected to double by 2035, we need a secure and strong domestic copper industry."

In this context, the CDA warns that while "fortunately, the United States has abundant copper reserves and strong global alliances, domestic mining and refining face significant delays. New mines take an average of 29 years to become operational, one of the longest timelines in the world. Refining is also limited, with only two primary smelters operating nationwide, forcing the U.S. to export 341,000 metric tons of copper ore and concentrate in 2023 for refining abroad."

For these reasons, the CDA argues that beyond increasing extraction and refining, improving recycling, and keeping copper scrap within U.S. borders, "continuing to rely on our trusted trade partners, such as Chile, Peru, Canada, and Mexico, are essential measures, but none alone are sufficient. The United States must also adopt a global strategy to secure its copper supply. This includes increasing extraction, refining, and recycling." Moreover, they add that "if no action is taken, import dependency could exceed 60% by 2035, and more than half of the world's refined copper would be produced by adversarial countries: China, Russia, and Iran."

The Copper Development Association Inc. is the copper industry's branch dedicated to market development, engineering, and information services. Its objective, according to the organization, is to improve and expand the markets for copper and its alloys in North America. CDA membership is open to copper producers worldwide as well as manufacturers of brass, wire, and copper foundries with production facilities in the United States. Besides Codelco, members include BHP, Rio Tinto, Freeport-McMoRan, and others.