



# Mining Market in Chile

## 2015

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# SUMMARY

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Throughout Chile's history, mining has consistently been a leading industry in the country. The 1990s marked the beginning of a boom in Chile's mining industry, especially in copper mining, principally due to FDI in the sector. In this time period, Chile had one of the fastest growing economies in the world and mining accounted for 8.5% of the GDP and 47% of exports. Thanks to continual amendments of the mining industry framework and an investor-friendly environment, the industry is still strong and profitable for investors. Moreover, the ongoing establishment of new technologies, including those aiming to take better care and advantage of Chile's natural resources, promises the mining sector will continue to prosper in years to come, despite the drop in commodities prices given the uncertainty about the future of China's economy and a strengthening US dollar.

## Industry Highlights

- Thanks to significant copper resources, progressive legislation and a healthy investment environment, Chile has become the copper mining capital of the world, producing over one third of the global copper output.
- The primary mining regions comprise the northern deserts and the Andean Cordillera. The "La Escondida" Mine in the northern Atacama Desert is the world's largest open-pit copper mining operation as well as the largest contributor to Chile's copper output.
- Chile's National Copper Corporation, Codelco, is the world's largest copper-producing company. Along with its status as the largest copper producer, Codelco is also known to have the largest copper reserves in the world, amounting to about 77 million metric tons and representing about 20% of total reserves worldwide.
- Codelco, just like the rest of the Chilean mining industry, continually surveys to find more mining opportunities for the future.
- According to government agency COCHILCO, the current mining investment portfolio stands at over US\$104 billion for the period of 2014 to 2023. Mining companies have announced 53 mining projects that are in progress or undergoing review by authorities in Chile.
- The publication, *Business Monitor*, states that "Chile's mining laws are perceived to be more investment friendly and globally aligned than most of its Latin American peers."
- The Chilean government strongly supports foreign investment in the sector and has modified its mining industry laws and regulations to create a favorable investing environment for foreigners.
- Chile is a strategic center of mining production globally, with 33% of the production of copper in the world (1st place worldwide), 15% Molybdenum, (3rd place worldwide), 7% gold (13th place worldwide) and 5% silver (6th place).
- Products demanded in the mining area will reach US\$ 2,475 million approximately by the end of 2015, and services up to US\$3,245 million.

# COUNTRY FACT SHEET

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## OVERVIEW

- Population: 17.4 million (estimated 2012)
- Surface territorial area: 756,950 km<sup>2</sup>
- GDP 2014: US\$264.1 billion
- Mining GDP: 12%

Sources: Central Bank of Chile, National Statistical Institute

Chile is a long and narrow country along South America's southern Pacific Coast and a number of islands in the Pacific (including Easter Island), spanning from the Strait of Magellan which separates South America from Antarctica, to the dry arid north dominated by the Atacama desert. The high, snow-capped Andes mountain range with peaks reaching over 6,000 meters runs the length of Chile, creating a natural 6,691 km border between it and Argentina to the east, as well as a 942km border with Bolivia in the far north-east. Chile also shares a short 168km land border with Peru. Chile's climate ranges from arid desert in the north, temperate agricultural in the central regions, to cold, glacial ice fields in southern Patagonian region. The etymology of the word 'Chile' is subject to many theories, including but not limited to: the name of a bird in a local indigenous language; the name of a local chieftain, 'Tili', which was pronounced 'Chili' by the Inca; or a local word for the 'end of the world'. The Capital of Chile is Santiago.

Chile's 2015 population will be approximately 17.6 million (estimation based on 2014 Census). The main ethnic groups are European (89%) and indigenous (10%). Roman Catholicism is the main religion (67%) with other Christian groups (17%) and no-religion (12%) the main minorities. Spanish is the official language.



## POLITICAL OVERVIEW

Following the successful resistance to the first Spanish invasion of Chile in 1535 by the indigenous Araucanian people, in 1541, Pedro de Valdivia began the final Spanish conquest and founded Santiago. Chile achieved independence from Spain in 1818 after the Spanish were defeated by the Army of the Andes led by Jose de San Martin and Bernardo O'Higgins. The War of the Pacific took place from 1879 to 1883.

Following the election of a left-wing government, headed by Salvador Allende (1970-73), the armed forces, under the leadership of General Augusto Pinochet, seized power on 11 September 1973, suspending the constitution, dissolving congress, imposing strict censorship and banning all political parties. The junta subsequently arrested, executed, tortured or forced into exile thousands of political opponents. After 16 years, Chile again held democratic presidential elections in December 1989, won by the Christian Democrat, Patricio Aylwin. The governments of Aylwin, and all subsequent administrations of the center-left and center-right coalitions have continued the economic liberalization initiated under Pinochet.

Currently, President Michelle Bachelet, of the Nueva Mayoría coalition (comprised mainly of center-left political parties), won the presidential election on 15 December 2013 after heavily defeating rival Evelyn Matthei in a second round run-off election. President Bachelet took office on 11 March 2014. This is her second term, having previously served as president between 2006 and 2010.

President Bachelet's administration has adopted a wide-ranging reform agenda. While Chile has one of the lowest poverty rates in Latin America, inequality remains significant. President Bachelet's election campaign centered on redistributive policies including tax and education reforms, and other measures intended to address income inequality. She has also proposed amendments to the constitution, which, despite many amendments, date back to the era of military leadership under Pinochet.

In September 2014, the government passed a comprehensive tax reform aimed at tackling inequality, structural deficit and raising public funds for an ambitious education reform. A package of bills to reform the education system aimed at strengthening public schools and promoting free access to higher education is being debated in Congress. Two bills limiting profit and arbitrary selection in public schools and ensuring free primary and secondary education have already been enacted and more bills are expected to be passed in 2015. The election of Ms. Bachelet's predecessor, Sebastián Piñera (of the center-right coalition), marked the first transition to center-right government since Chile returned to democracy in 1989 and was the first elected center-right government in more than 40 years. During his term as president, Piñera promoted an economic agenda of structural reform to improve productivity and competitiveness and reformed healthcare, education and the labor market.

## **SYSTEM OF GOVERNMENT**

Under Chile's constitution, the president, as head of state, serves a four-year term and is unable to serve a second consecutive term. In the bicameral congress, Chile's Chamber of Deputies and Senate have 120 and 38 elected members respectively. Deputies sit in office for four years, while Senators are elected to serve an eight-year period.

## **FOREIGN POLICY**

Chile's most important regional partners are Brazil, Argentina and the 'Pacific Alliance' members, Peru, Mexico and Colombia. The Pacific Alliance economic integration process, covering goods, services, people and capital, offers economic opportunities beyond Chile's current bilateral FTAs with these countries. The integration of stock exchanges, for example, will form the second-largest stock exchange in Latin America.

Chile does not have diplomatic relations with Bolivia following a long-term border dispute. Bolivia lost its Pacific coastline during a 19th-century war with Chile. Bolivia has sought to regain access to the sea, including by bringing a claim against Chile before the International Court of Justice (ICJ) in 2014. On 27 January 2014, the ICJ issued its final judgment over a longstanding maritime border dispute between Chile and Peru. Despite requiring Chile to cede territory, both countries have agreed to abide by the ruling in what some see as a cause for optimism regarding bi-lateral relations between the two nations. Chile is an associate member of Mercosur (the Customs Union comprising Argentina, Brazil, Paraguay, Uruguay and Venezuela). It is also an associate member of the Andean Community (comprising Colombia, Ecuador, Peru and Bolivia).

Chile is an active participant in other major international forums, including the United Nations, Organization of American States (OAS), Asia Pacific Economic Cooperation (APEC), Organization for Economic Development and Cooperation (OECD), International Monetary Fund (IMF), World Bank, the World Trade Organization (WTO), Union of South American States (UNASUR) and the Community of Latin American

and Caribbean States (CELAC). Chile served as a non-permanent member of the United Nations Security Council from 1996-97 and 2003-04, and is currently sitting for the period 2014-15.

Chile has strong political, economic and trade relations with the United States (US). Bilateral trade has more than doubled since the US-Chile Free Trade Agreement (FTA) entered into force in 2004. The US is Chile's second-largest goods trading partner overall, and the largest foreign direct investor in Chile.

Chile's trade focus in Asia is supported by a growing list of free-trade and economic agreements, including China, Japan, ROK, Vietnam, Hong Kong, and Malaysia. China is Chile's number one destination for goods exports and number two source of imports after the US. Chile and China upgraded relations to a "strategic partnership" in June 2012. Chile was the first South American country to establish diplomatic ties with China (in 1970), the first country in South America to sign off bilaterally on China's accession to the WTO and the first to conclude an FTA with China.

## **ECONOMIC OVERVIEW**

Chile retains an open economy with a liberal trade regime, including a floating exchange rate, a rules-based counter-cyclical fiscal policy, and inflation-targeting, all geared towards reducing economic volatility. Chile continues to record solid economic growth: GDP reached approximately US\$264.1 billion in 2014 at an estimated real GDP growth of 2.0% (2014). The Chilean government's strong fiscal position has allowed for the repayment of debt and, until recently, placed the government in a net creditor position. In recent years, the strong performance of the mining sector, combined with economic growth and a favorable domestic investment climate contributed to a reduction in unemployment to an estimated 6.0 % in 2013 (from over 10% in 2004).

As a major exporter of copper and other commodities, Chile was significantly affected by the global financial crisis. While the OECD has noted that Chile remains vulnerable to a sharper than expected economic downturn because of the dominance of copper in its exports (approximately 50%), the underlying strengths of the economy, its strong public-sector financial position, flexible exchange rate regime and relatively well-capitalized and well-regulated banking sector put it in a better position than many countries to respond to future financial uncertainty in Europe.

Chile has eliminated most trade distortions and non-tariff barriers. It has a uniform tariff of six percent, although due to its network of FTAs, the average applied tariff is much less. Draft taxation reform issued in April 2012 proposed to remove all tariffs unilaterally by 2015, but this was later removed from the agenda. The Central Bank of Chile maintains an independent monetary policy aimed at maintaining inflation at OECD standards. Privatization over the past two decades has meant that relatively few state-owned enterprises remain. However, CODELCO, the Chilean National Copper Corporation, Chile's largest company, remains state-owned.

Chile's strong push to engage economically with the Asia-Pacific region and to build strategic alliances along the eastern seaboard of South America is reflected in its busy FTA agenda. In October 2014, Chile announced that it had reached agreement on expanding an existing Partial Trade Agreement with India. Chile participates in the Trans-Pacific Partnership negotiations.

Chile strongly supports trade and investment liberalization within APEC. It pursues its market access objectives within the WTO and is a member of both the Cairns Group and the WTO G20 group of devel-

oping countries. Chile's economic success and its liberal economic policies were significant factors in its accession to the Organization for Economic Cooperation and Development (OECD) in January 2010.

## MINING SECTOR OVERVIEW

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The mining industry is the most important driver of the Chilean economy, contributing to 12% of the Gross Domestic Product (GDP).

Chile supplies 33% of the world's copper production and is home to the largest copper mines in the world, which include Escondida (owned by BHP Billiton), Chuquibambilla and El Teniente.

Chile is also a major producer of iodine, rhenium and lithium (Source: *Consejo Minero, Chile País Minero, August 2014*) and growing in importance for its gold, silver and molybdenum processing.

Most of the mining companies' headquarters are located in Santiago, with a majority of the mine operations located in the northern region. The mines where copper deposits are commonly found, Antofagasta, Atacama and Tarapacá are in remote and high altitude areas (+3,000 meters above sea level). Visitors should consider a rigorous health check in an authorized Chilean clinic, as well as travel time from major cities.

Of the 26 mining companies that undertake large scale mining, approximately 10 to 12 companies represent 90% of Chile's copper production. State owned Codelco, produces 10% of the world's copper and almost 30% of Chile's total copper production. (Source: *Consejo Minero, Codelco, August 2014*).

The Chilean mining industry is facing lower ore grades due to heavily exploited open pits and a comparatively low level of green fields' exploration. As a result, Codelco is planning to further develop existing underground mines and take existing open pit mines underground. Together, the El Teniente and Chuquibambilla projects are focused on underground expansions that propose an allocated investment of up to US\$7 billion. (Source: Codelco website, *Proyectos Mineros*)

According to government agency COCHILCO, the current mining investment portfolio stands at over US\$104 billion for the period of 2014 to 2023. Mining companies have announced 53 mining projects that are in progress or undergoing review by authorities in Chile:

- 34 relate to copper
- 10 are silver and gold
- 5 are iron ore
- The remainders are industrial minerals

The Chilean mining industry is facing challenges, such as low grade ores, high energy prices and water scarcity that may impede its development in the future. Mining companies are adapting to legislative changes, including requirements for Convention 169 on Community Consultations and the Mine Closure Law.

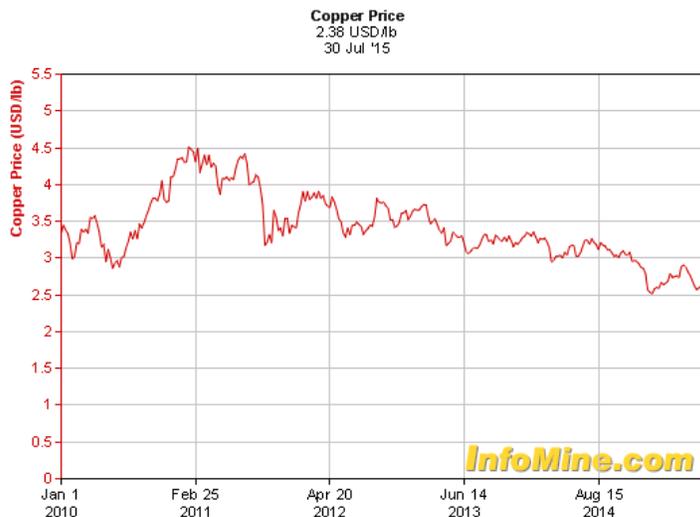
Many in the industry forecast human capital challenges, with a lack of adequately trained personnel in the industry over the next twenty years. There has been plenty of discussion about the productivity levels of Chilean miners relative to their counterparts in other mining countries.

## PRICE CHANGES

### Copper

Copper Price 2.38 USD/lb. (5,241 USD/t – 4,763 EUR/t) 30-Jul 2015 – 52 week low 2.35 USD/lb. 52 week High 3.24 USD/lb.

### 5 Year Copper Prices



Source: [www.infomine.com](http://www.infomine.com)

There is big concern in Chile regarding the drop in the price of copper. In July 2015, the price was located in the minimum registered in six years, dropping to US\$ 2.3678/lb. accumulating a decline of 9%. With this result, the price of this commodity accumulates a drop of 17.9% during the first seven months of 2015.

This situation is mostly given by the uncertainty about the future of China's economy and the strengthening US dollar.

### Gold

Gold Price 1,092.05 USD/ozt (995.51 EUR/ozt) 03 Aug 2015 14:03 UTC - 52 Week Low 1,085.60 USD/ozt 52 Week High 1,313.90 USD/ozt.

## 5 Year Gold Prices

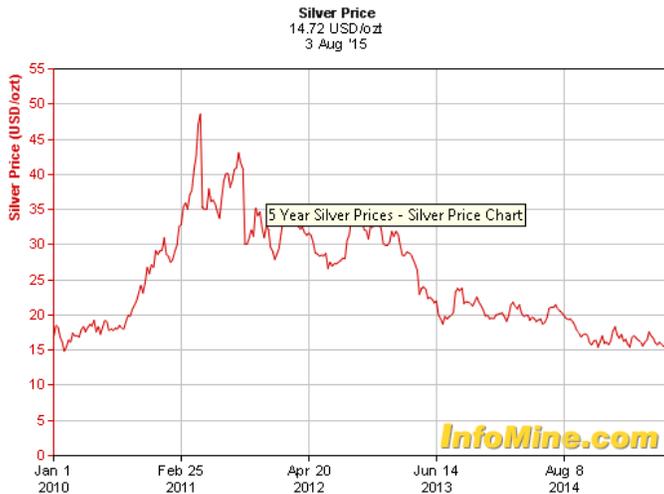


Source: [www.infomine.com](http://www.infomine.com)

## Silver

Silver Price 14.72 USD/ozt (13.43 EUR/ozt) 03 Aug 2015 13:21 UTC - 52 Week Low 14.48 USD/ozt 52 Week High 20.19 USD/ozt.

## 5 Year Silver Prices



Source: [www.infomine.com](http://www.infomine.com)

## Molybdenum

Molybdenum Oxide Price 6.12 USD/lb (13,500 USD/t | 12,300 EUR/t) 31 Jul 2015 - 52 Week Low 4.20 USD/lb 52 Week High 13.38 USD/lb.

### 5 Year Molybdenum Prices



Source: [www.infomine.com](http://www.infomine.com)

## Ruthenium

Ruthenium Price 42.00 USD/ozt (38.26 EUR/ozt) 03 Aug 2015 - 52 Week Low 42.00 USD/ozt 52 Week High 68.00 USD/oz.

### 5 Year Ruthenium Prices



Source: [www.infomine.com](http://www.infomine.com)

## Iron

Iron Ore Fines Price 60.04 USD/t (54.68 EUR/t) 30 Jun 2015 - 52 Week Low 51.80 USD/t 52 Week High 96.20 USD/t

### 5 Year Iron Ore Fines Prices



Source: [www.infomine.com](http://www.infomine.com)

## Lead

Lead Price 0.77 USD/lb (1,688 USD/t | 1,539 EUR/t) 31 Jul 2015 - 52 Week Low 0.77 USD/lb. 52 Week High 1.03 USD/lb.

### 5 Year Lead Prices

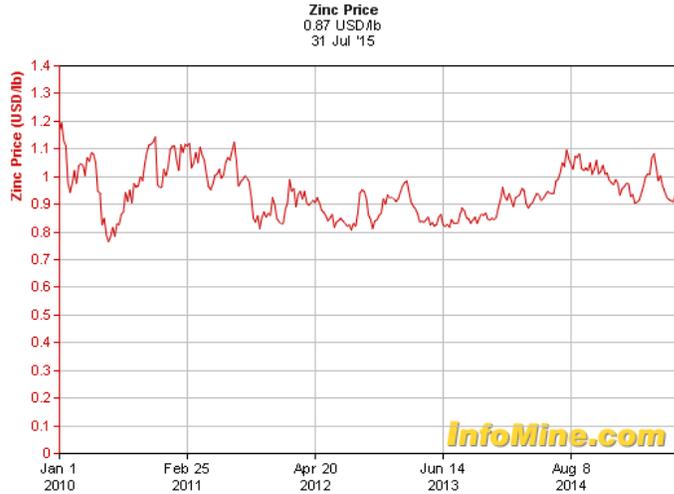


Source: [www.infomine.com](http://www.infomine.com)

## Zinc

Zinc Price 0.87 USD/lb. (1,920 USD/t | 1,752 EUR/t) 31 Jul 2015 - 52 Week Low 0.87 USD/lb. 52 Week High 1.09 USD/lb.

### 5 Year Zinc Prices



Source: [www.infomine.com](http://www.infomine.com)

## Manganese

Manganese Price 1.78 USD/kg (1.62 EUR/kg) 30 Jun 2015 - 52 Week Low 1.78 USD/kg 52 Week High 2.38 USD/kg

### 5 Year Manganese Prices



Source: [www.infomine.com](http://www.infomine.com)

## OPPORTUNITIES

Products demanded in the mining area will reach US\$ 2,475 million approximately by the end of 2015, and services up to US\$ 3,245 million.

Chile's mining industry has demanding environmental and safety requirements, remote locations, energy is expensive and water scarce.

Specific areas where the Chilean mining market needs support include:

- Environmental related products and services (tailing management, water treatment plants, software)
- Renewable energies
- Communities engagement consulting
- Innovation and research and development
- Underground mining and specialty block-caving
- Safety in mining
- Automation and robotics
- Land rehabilitation and mine closure
- Energy Infrastructure
- Education and training for the industry

| Main Mine Projects              |                 |             |      |
|---------------------------------|-----------------|-------------|------|
| Project                         | Company         | Mineral     | Date |
| Los Pelambres Extension         | Antofagasta Min | Copper      | N/A  |
| Antucoya                        | Antofagasta Min | Copper      | 2015 |
| Caspiche                        | Minera Eton     | Copper      | 2017 |
| Cerro Blanco                    | White Mountain  | Rutilio     | 2016 |
| Cerro Casale                    | Barrik          | Gold/Copper | 2020 |
| Cerro Maricunga                 | Atacama Pacific | Copper      | 2017 |
| Copaquire                       | Teck            | Copper      | 2015 |
| Chuquicamata (underground Mine) | Codelco         | Copper      | 2019 |
| Diego de Almagro                | Copec           | Iron        | N/A  |
| Ditrito Centinela               | Antofagasta Min | Copper      | 2017 |
| El Abra Sulfolix                | Freeport McMor  | Copper      | 2018 |
| El Espino                       | Pucobre         | Copper      | 2017 |
| El Morro                        | Goldcorp        | Gold/Copper | 2018 |
| Escalones                       | South American  | Gold/Copper | N/A  |
| Escondida Phase V               | BHP Billiton    | Copper      | 2015 |
| Andina's Extension 244          | Codelco         | Copper      | 2021 |
| Collahuasi's Extension          | N/A             | Copper      | 2019 |
| Jerónimo                        | Yamana Gold     | Gold        | 2015 |
| La Coipa Phase VII              | Kinross         | Gold        | 2015 |
| Lobo Marte                      | SCM Santa Rosa  | Gold        | 2017 |
| Lomas Bayas III                 | Xtrata Copper   | Copper      | 2017 |
| Los Sulfatos                    | Anglo American  | Copper      | N/A  |
| El Teniente New Level           | Codelco         | Copper      | 2017 |
| Pascua                          | Barrik          | Gold        | N/A  |
| Productora                      | Hot Chili Ltda. | Copper      | 2018 |
| Quebrada Blanca Phase II        | Teck            | Copper      | 2019 |
| Radomiro Tomic Phase II         | Codelco         | Copper      | 2017 |
| Relincho                        | Teck            | Copper      | 2019 |
| San Enrique Monolito            | Anglo American  | Copper      | 2019 |
| Santo Domingo                   | Capstone Mining | Copper      | 2017 |
| Tovaku                          | Pucobre         | Copper      | 2018 |
| Volcán                          | Hochschild      | Gold        | 2017 |

## CHILE'S LEGAL FRAMEWORK

### CHILEAN MAIN REGULATIONS RELATED TO MINING



Source: Copper Commission

### MINING PROPERTY CONSTITUTIONAL RIGHTS AND GUARANTEES

- The State is the exclusive owner of all mines, notwithstanding title to surface land by land owner (except surface clays).
- The State grants mining and exploration rights over all concessional substances (except oil, hydrocarbons, lithium, require a SOC or an administrative concession).
- Mining concessions are granted and can only be cancelled by means of a judicial award.
- Duration of mining claims: exploration two years, exploitation indefinite.
- Owner's legal title to concessions is constitutionally protected.
- Expropriation requires law declaring affection of national interest, plus compensation in advance and in cash.
- Surface ownership is subject to obligations and limitations set by laws to facilitate mining activities (exploration, mining and processing).
- Protection of mining concessions requires annual payment; no minimum investment or work commitment.

### TAX ON MINING ACTIVITY

Chile has a two-stage corporate income tax structure. Declared profit is subject to first-stage income tax (FCIT), which stands at 22.5% in 2015. Second-stage corporate income tax is levied on profit distributed to resident individuals or non-resident shareholders or partners. For distribution to non-Chilean resident shareholders, the second stage tax applies at a rate of 35% with an imputation credit for the FCIT paid. Interests, royalties and fees paid to non-Chilean residents are subject to withholding tax at rates as high as 35%.

In addition to the corporate income tax, mining companies also pay a specific income tax on mining activities to the government. This tax is levied on operational income obtained by the mineral exploiter from mining activities. The tax is charged at a progressive rate and varies from 5% to 34.5%, resulting in a 14% effective rate, if the mining company's annual sales exceed over 50,000 tons of fine copper. The rate was increased in October 2010, replacing the previous rate. Mines whose annual sales have an

equivalent value between 12,000 and 50,000 metric of fine copper, are charged a progressive tax rate between 0.5% and 4.5%, while those with annual sales less than 12,000 metric tons of fine copper do not pay the tax.

Large mining companies currently pay a flat 4 or 5% rate under tax stability agreements. Once they expire they will be subject to the mining tax at the rates previously discussed.

#### **Law 20,026**

- This tax is levied on operational income derived from mining activity obtained by a mining operator (individuals or legal entities that extract mineral substances and sell them in any state of production).
- Mining operators with annual sales above the equivalent to 50,000 MFT (Metric tones of fine copper) pay a progressive tax rate that ranges between 5% and 14%.
- Mining operators with annual sales in a range between 12,000 and 50,000 MFT (equivalent) pay a progressive tax rate that ranges between 0.5% and 4.5%.
- Mining operators with annual sales of less than 12,000 MFT are exempt from this tax.

## **ENVIRONMENTAL REGULATION**

The SMA (Superintendence for the Environment), began operating in 2012, with a watchful eye on the local mining industry, which tends to be the target of most of its inspections and fines.

This year, 2015, the mining industry accounted for 35% of total SMA's planned inspections, facing charges or fines against six different miners.

Some cases are:

- In February 2015, SMA fined local mining company Pampa Camarones for "irreparable" damage caused at its Salamanqueja mine and Pampa Camarones cathodes plant in northern Arica region (XV). The fine was worth some US\$3.6mn.
- The regulator found 12 breaches of the project's RCA (environmental permit), including irreparable damage to archeological remains.
- In March it was the turn of one of Chile's newest industry players, Lumina Copper Chile, operators of the Caserones mine in Atacama region (III), which had over 17 breaches of the project's RCA, as well as to the Maintencillo-Caserones 2x220KV power line that powers the mine facilities. The regulator's fine was for approximately US\$12mn, the second largest fine ever imposed by SMA, which the company, backed by a Japanese consortium, agreed to paid days later.
- In May 2015, the regulator took action against two mining companies: Kinross Gold, for its Maricunga gold mine, and Lundin Mining, for its Candelaria mine.
  - Kinross Gold: SMA accused the miner of irreparable damage in the wetlands where Maricunga obtained water to operate. This is the second time SMA has imposed charges against the mine, having done so in February last year. But last June, an environmental court upheld Kinross' challenge.
  - Candelaria: SMA said it violated its RCA in 16 different occasions. The most serious charge is regarding the company's failure to reduce its water consumption. As a result, Candelaria now faces fines of over US\$4.2mn.
- SMA also announced in May that it has permanently shut down an illegal mine in the Maipú municipality, in Santiago's metropolitan region. Carried out in an ecological preserve for four years without a single environmental or administrative permit by Minera Esparta (formerly La Española),

the operation was finally defeated by a group of local residents that took their complaints to the regulator.

One of the most polemical cases is Barrick Gold's Pascua Lama Project.

- In April 2015 SMA took action against Pascua Lama for the second time, having fined the project a record high of US\$16mn in 2013.
- SMA fined Pascua Lama for 10 new RCA breaches it discovered during inspections that took place between 2013 and 2015. One of the infractions was labeled as very serious by the regulator, which could result in a fine of some US\$8.5mn, or even revoking the project's RCA.
- But this is not the only action that Barrick Gold has pending on SMA, as it is currently waiting to hear the final amount of the May 2013 fine, following a December supreme court decision that could push fines up to more than US\$200mn.

## TRADE AND INVESTMENT

In June 2015, President Michelle Bachelet promulgated the **new Framework Law for Foreign Investment in Chile**.

The new law is one of the measures on the Productivity, Innovation and Growth Agenda coordinated by the Economy Ministry and reflects the recommendations of the Presidential Advisory Commission on foreign investment convened as part of the undertakings entered into by the government during the passage of a tax reform last year.

### **Characteristics of the New Law**

Among its key provisions, the new law establishes that the President of the Republic will define Chile's foreign investment promotion strategy, supported directly for this purpose by a Committee of Ministers for the Promotion of Foreign Investment.

The new institutional framework will also include a Foreign Investment Promotion Agency with the mission of implementing the state policy so as to attract all types of foreign capital and investment to the country, being the only body authorized to undertake this task and working in coordination with the country's regional governments.

The law guarantees access to the formal foreign exchange market and the free remittance of capital and earnings as well as the right to freedom from arbitrary discrimination and exemption from sales and service tax on imports of capital goods that comply with certain requirements.

In addition, it regulates the effects of the contracts signed under the DL 600 Foreign Investment Statute and establishes that, during a maximum period of four years, foreign investors will be able to seek authorization for foreign investment under the terms of DL 600, with the rights and duties envisaged under this decree law but with a locked-in tax rate totaling 44.45%.

### **Export Investment regime DL 600**

Decree Law 600 (1974): Foreign Investment Statute – Ruled a contract with the State – Guaranteed tax invariability at a rate of 42% – Fixed for a period of up to 10 years or for up to 20 years for industrial and extractive investments of US\$50 million or more – it was possible to opt out of this special tax regime and pay according to the Chilean tax regime.

## MAIN MINES

| Main Mines Chile               |                   |         |
|--------------------------------|-------------------|---------|
| Mine                           | Production (Tons) | Mineral |
| Amalia                         | 11000             | Copper  |
| Atacama Kozan                  | 11800             | Copper  |
| Atacama Minerals               | 1200              | Yodo    |
| Candelaria                     | 168000            | Copper  |
| Carmen de Andacollo            | 75800             | Copper  |
| Carola                         | 24000             | Copper  |
| Cemin                          | 18000             | Copper  |
| Cerro Colorado                 | 73600             | Copper  |
| Cerro Dominador                | 150000            | Copper  |
| Cerro Negro                    | 7000              | Copper  |
| Coldeco - Andina               | 236700            | Copper  |
| Codelco - El teniente          | 450400            | Copper  |
| Codelco - Gaby                 | 128200            | Copper  |
| Codelco - Salvador             | 54200             | Copper  |
| Codelco Norte - Chuquicamata   | 528000            | Copper  |
| Codelco Norte - Radomiro Tomic | 427000            | Copper  |
| Codelco - Ministro Hales       | 163000            | Copper  |
| Coemin                         | 15000             | Copper  |
| Cosayach - Negreiros           | 770000            | Yodo    |
| Cosayach - Soledad             | 770000            | Yodo    |
| Dayton                         | 35000 (oz)        | Gold    |
| Doña Ines de Collahuasi        | 444500            | Copper  |
| El Abra                        | 156600            | Copper  |
| El Algarrobo (CMP)             | 12000000          | iron    |
| El peñón                       | 317000 (oz)       | Gold    |
| El Soldado                     | 51500             | Copper  |
| El Tesoro                      | 102600            | Copper  |
| El Toqui                       | 41900 (oz)        | Gold    |
| Escondida                      | 1193700           | Copper  |
| Esperanza                      | 177100            | Copper  |
| Florida                        | 89000 (oz)        | Gold    |
| Guanaco                        | 3000 (oz)         | Gold    |
| Las Cenizas                    | 7000              | Copper  |
| Lomas Bayas                    | 74200             | Copper  |
| Los Bronces                    | 416000            | Copper  |
| Los Pelambres                  | 419200            | Copper  |
| Mantos Blancos                 | 54600             | Copper  |
| Mantos de la Luna              | 23000             | Copper  |
| Mantos de Oro                  | 178000 (oz)       | Gold    |
| Mantoverde                     | 56800             | Copper  |
| Michilla                       | 37700             | Copper  |
| Ojos del Salado                | 23600             | Copper  |
| Pimentón                       | 70000 (oz)        | Gold    |
| Pucobre                        | 100000            | Copper  |
| Quebrada Blanca                | 56200             | Copper  |
| Quiborax                       | 36000             | borax   |
| Rayrock                        | 4500              | Copper  |
| San gerónimo                   | 9000              | Copper  |
| Santa fe                       | 1800000           | iron    |
| Sociedad Chilena de Litio      | 41.2 MM Lbs.      | litio   |
| Spence                         | 151600            | Copper  |
| Tres Valles                    | 19000             | Copper  |
| Valle Central                  | 71000             | Copper  |
| Zaldivar                       | 126500            | Copper  |

Source: [www.direcmin.cl](http://www.direcmin.cl) (mining Directory)

The most important mines in Chile are the biggest copper mines, which based on reserves, are:

### **Escondida, Chile**

Escondida copper mine in the Atacama Desert in Northern Chile is currently the world's largest copper mine by reserves. The mine contains more than 32 million tons (Mt) of recoverable copper reserves.

Escondida is also the world's largest copper producing mine, with output standing at 1.1 million tons (Mt), accounting for about five % of global copper production.

BHP-Billiton operates the Escondida mine, holding a 57.5% interest. Other stakeholders include Rio Tinto (30%), a Japanese consortium headed by Mitsubishi (10%) and the International Finance Corporation (2.5%).

The mine has been in operation since late 1990 and is currently one of the 10 deepest open-pit mines in the world. The reserve life of Escondida is estimated to be 54 years.

Copper concentrate is produced from sulphide ore of the mine through floatation. The mine also produces copper cathodes from oxide and sulphide leach ore. Sulphide ore comprises more than 82% of the mine's copper reserves.

### **Collahuasi, Chile**

Collahuasi copper mine, 180 km south-east of the port of Iquique in northern Chile, ranks as the third-largest copper mine in the world. Proven and probable copper reserves of the open-pit mine stood at 25.895Mt. The mine produces approx. 282,096t of copper per year, accounting for 5.1% of Chile's total copper output.

Collahuasi copper mine is owned and operated by Compañía Minera Doña Inés de Collahuasi, a joint venture between Anglo American (44%), Xstrata (44%) and a consortium of Japanese companies led by Mitsui (12%).

The mine produces 245,288t of copper concentrate and 36,808t of copper cathodes. It has been in operation since 1999. It exploits three mineral deposits, namely Rosario, Ujina and Huinquintipa, in the Pica municipal district of Tarapacá Region. The mine life is 70 years.

### **Andina, Chile**

Andina copper mine, located 80km north-east of Santiago in northern Chile, is the fourth biggest copper mine in the world by reserve. The mine is estimated to contain 18.8Mt of fine copper (2,551Mt of ore grading 0.74% copper).

Andina is owned and operated by Chile's state-owned Codelco (Corporacion Nacional del Cobre de Chile), the largest copper producing company in the world. The copper deposit was discovered in 1920 and mining operations began in 1970.

The Andina mining operation consists of Río Blanco underground mine and the Sur Sur open pit mine exploiting the Río Blanco deposit. The mine produces approx. 249,861t of fine copper and molybdenum annually.

### **El Teniente, Chile**

El Teniente copper mine, the world's sixth biggest, is located 80km south of Santiago in the Andes mountain range. It is also the largest underground copper mine in the world. El Teniente is estimated to contain 15.2Mt of fine copper (1,538Mt of ore grading 0.99% copper).

Mining activities at El Teniente started in 1904. Codelco owns and operates the mine. The copper products of El Teniente include fire refined lingots (RAF) and copper cathodes. The mine has its own smelter near the site and produces more than 400,000t of fine copper a year. The production includes fine copper and molybdenum. An expansion project called the New Mine Level project is under development to access the ore located deeper down at El Teniente. The project, expected to be operational in 2017, is hoped to extend the mine life by 50 years.

### **Radomiro Tomic, Chile**

Radomiro Tomic copper mine, located in the Atacama Desert of Northern Chile, is the eighth largest copper mine in the world. The open-pit mine is estimated to contain 12.1Mt of fine copper (2,567Mt of ore reserve grading 0.47% copper).

The porphyry copper deposit was discovered in 1952 and has been operational since 1998. It is the first mine to be developed entirely by the state-owned Codelco.

Construction work for the Radomiro Tomic Copper Sulphide Mine - Phase I was completed in June 2010 with an investment of USD 370m. A crushing system was installed as part of this phase, to haul up to 100,000t of sulphide ore per day from the Radomiro Tomic mine to the concentrator plant located at Chuquicamata.

### **Los Bronces, Chile**

Los Bronces copper mine 65km north-east of Santiago in the Andean Mountains is the ninth largest copper mine in the world. The open-cut mine is estimated to contain 11.13Mt of copper. It produces approx. 365,300t of copper per year.

Anglo American, holding a 50.1% interest, is the operator of Los Bronces. Mitsubishi owns 20.4% of the mine while a joint venture of Codelco and Mitsui holds the remaining 29.5% stake. The mine has been in operation for more than 150 years. The remaining mine life is extendable beyond 30 years.

Los Bronces ramped up to full production in 2012 following the completion of a major expansion project in 2011. The mine produces both copper concentrates and cathodes.

Higher grade ore is milled onsite and sent in slurry form via a 52km pipeline to the Las Tórtolas flotation plant. Low grade ore is processed at the solvent extraction and electro winning (SXEW) facility for the production of cathodes.

### **Chuquicamata, Chile**

Chuquicamata copper mine, situated 1,650km north of Santiago, Chile, is the second deepest open-pit mine in the world.

Chuquicamata, also known as the Chuqui open pit, is 4.3 km long, 3 km wide and more than 850 m deep. Chuquicamata copper mine has been in operation for more than a century. The mine is owned and operated by Codelco. The open-pit mine produces approx. 443,000t of copper annually.

A feasibility study is underway to switch to underground production at Chuquicamata by the end of 2018. The ore reserve under the existing pit is estimated to be 1.7 billion tons grading at 0.7% copper. The underground development project is estimated to cost more than USD 4bn.

| Smelting and Treatment Plants |                   |                    |
|-------------------------------|-------------------|--------------------|
| Plant                         | Production (Tons) | Mineral            |
| Codelco - Ventanas            | 401,000           | Copper             |
| Fundición Alltonorte          | 116,000           | Copper Concentrate |
| Fundición Chagres             | 138,600           | Copper             |
| Enami - Planta Tal Tal        | 2,400             | Copper             |
| Enami - Planta Salado         | 9,600             | Copper             |
| Enami - Planta Matta          | 7,200             | Copper             |
| Enami - Planta Vallenar       | 3,600             | Copper             |
| Enami - Planta Delta          | 4,800             | Copper             |
| Enami - Hernán Videla Lira    | 90,000            | Copper             |

Source: [www.direcmin.cl](http://www.direcmin.cl) (mining Directory)

## IMPORTS-EXPORTS

### Exports

| Year | Mining Exports (Million US\$) |        |       |        |       |                        |                   |      |        |
|------|-------------------------------|--------|-------|--------|-------|------------------------|-------------------|------|--------|
|      | Copper                        |        | Iron  | Silver | Gold  | Molybdenum concentrate | Lithium carbonate | Salt | TOTAL  |
|      | Cathodes                      | Total  |       |        |       |                        |                   |      |        |
| 2013 | 18,842                        | 40,019 | 1,378 | 370    | 1,378 | 173                    | 225               | 119  | 43,776 |
| 2014 | 17,787                        | 37,872 | 1,131 | 261    | 1,010 | 219                    | 229               | 174  | 41,041 |
| 2015 | 36,628                        | 77,891 | 2,509 | 631    | 2,388 | 392                    | 455               | 293  | 84,817 |

Note: 2015 up to May

Source: Central Bank

### Imports

| Metal Mineral Imports |             |
|-----------------------|-------------|
| Year                  | US\$ Cif    |
| 2015                  | 99,452,650  |
| 2014                  | 768,273,455 |
| 2013                  | 798,018,971 |

Note: Search under HTS Chapter 26, which includes: Unroasted Molybdenum ore, concentrate copper ores and other metal mineral products.

Year 2015 up to April

Source: Custom's Statistics

According to Cochilco, most Imports done by the mining industry are related to goods and supplies, which reach approximately US\$ 2 billion annually.

| <b>Top Ten Mining companies and suppliers' most imported goods and supplies</b> |                           |                            |
|---|---------------------------|----------------------------|
| <b>Ranking</b>  | <b>Product</b>            | <b>Annual US\$ Approx.</b> |
| 1   | Mining Trucks             | 285                        |
| 2   | Front Loaders             | 170                        |
| 3   | Buckets and Drillers      | 160                        |
| 4   | Tires                     | 130                        |
| 5   | Steel bars                | 65                         |
| 6   | Truck parts               | 60                         |
| 7   | Gears, Pinions and Others | 60                         |
| 8   | Crushers and Mills        | 55                         |
| 9   | Reagent                   | 50                         |
| 10  | Pumps                     | 40                         |

Source: Cochilco

These Top Ten products represent 63% of the Mining Sector total imports.

Other important goods and supplies in the mining industry are:

- Diesel engines
- Sulphur Acid
- Filters
- Valves and Appliances
- Spare parts and parts of fans and air compressors
- Diesel motor's parts and replacements
- Electric engines
- Driller machines
- Converters, transformers and parts
- Nuts, bolts, pins, and plugs

The main country of origin is the US, representing 55% of all mining goods and supplies imports.

# MINING SUB-SECTOR OVERVIEW

Chile is recognized worldwide as a mining country, since its territory is rich in metal deposits, mainly of:

- Copper
- Gold
- Silver
- Molybdenum
- Rhenium
- Iron
- Lead
- Zinc
- Manganese

## Mineral reserves and production

2013 shares and ranking

|                                   | Share of world reserves % | Share of world production % | World production ranking |
|-----------------------------------|---------------------------|-----------------------------|--------------------------|
| <b><u>Metals</u></b>              |                           |                             |                          |
| Copper (MT)                       | 28                        | 32                          | 1°                       |
| Molybdenum (MT)                   | 21                        | 14                          | 3°                       |
| Rhenium (MT)                      | 52                        | 52                          | 1°                       |
| Silver (MT)                       | 14                        | 5                           | 8°                       |
| Gold (MT)                         | 8                         | 2                           | 14°                      |
| <b><u>Industrial minerals</u></b> |                           |                             |                          |
| Natural nitrates (MT)             | 100                       | 100                         | 1°                       |
| Lithium (MT)                      | 58                        | 35                          | 1°                       |
| Iodine (MT)                       | 24                        | 61                          | 1°                       |

Sources: USGS Mineral Commodity Summaries, Cochilco

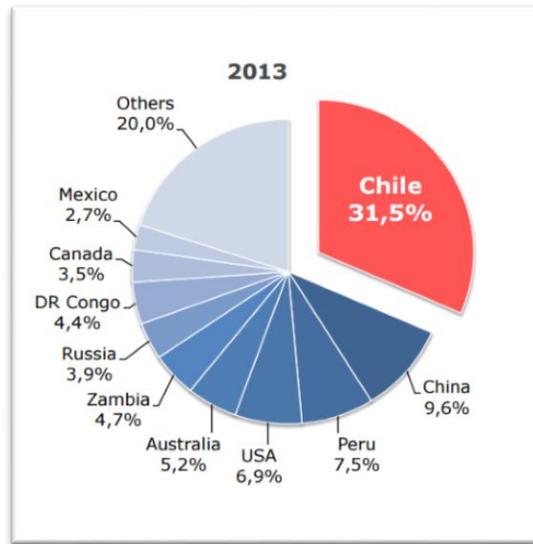
## COPPER

Chile, the world's largest copper producing country, hosts six of the 10 largest copper mines in the world, while the remaining four are located in Peru, Mexico and Indonesia.

## World Copper Mine Production

(In Thousand tons and shared by country)

| Country            | 2012          | 2013          |
|--------------------|---------------|---------------|
| <b>Chile</b>       | <b>5,434</b>  | <b>5,776</b>  |
| China              | 1,642         | 1,752         |
| Peru               | 1,299         | 1,376         |
| USA                | 1,196         | 1,268         |
| Australia          | 914           | 961           |
| Zambia             | 782           | 865           |
| Russia             | 725           | 720           |
| DR Congo           | 608           | 812           |
| Canada             | 579           | 632           |
| Mexico             | 500           | 487           |
| Others             | 3,401         | 3,665         |
| <b>World total</b> | <b>17,080</b> | <b>18,314</b> |



Source: Cochilco

The major deposits are almost entirely open-pit mines, with the exception of El Teniente, which claims to be the biggest underground copper mine in the world.

The huge open pit mines Chiquicamata and Escondida together make up almost 10% of the world's production; Escondida is the mine that produces most copper worldwide. It had been thought that Chuquicamata would be closed soon, but underground extraction has begun instead.



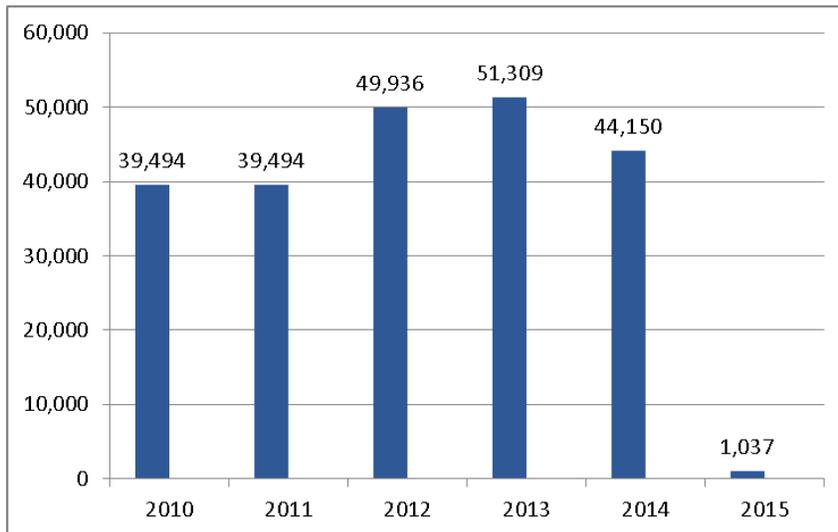
### Major mines:

- » Escondida, Chile
- » Collahuasi, Chile
- » Andina, Chile
- » El Teniente, Chile
- » Radomiro Tomic, Chile
- » Los Bronces, Chile
- » Chuquicamata, Chile

## GOLD

Chile's gold production is expected to grow 191% up to 2025, according to Cochilco's report with data from 2013-2025. This will represent a growth from 51,309 kilos registered in 2013 up to 149,480 Kilos estimated for 2025. This growth would move Chile up in the world's gold production ranking, reaching 6<sup>th</sup> place.

### Chile's Gold Production (Kg)



Note: 2015 up to March

Source: SONAMI

Gold Reserves in Chile remained unchanged at 0.25 Ton in the first quarter of 2015 from 0.25 Tons in the fourth quarter of 2014. Gold Reserves in Chile averaged 1.07 Tons from 2000 until 2015, reaching an all-time high of 35.96 Tons in the first quarter of 2000 and a record low of 0.21 Tons in the second quarter of 2005. Gold Reserves in Chile are reported by the World Gold Council.

### Main Gold Mines

- » Dayton
- » El Peñon
- » El Toqui

- » Florida
- » Guanaco
- » Mantos de oro
- » Pimentón

## **MOLYBDENUM**

Molybdenum a by-product from copper mining, which is used in the steel fabrication, is a significant mineral in the mining industry.

According to Cochilco's forecast report 2013 to 2025, Chile's molybdenum production is expected to grow 175% up to 2025 (from 38,716 tons registered in 2013 up to 106,452 tons expected for 2025), becoming the number one world producer of molybdenum.

According to Cochilco's estimations, molybdenum production would grow 16% and would reach 61,400 tons by the end of 2015.

Cochilco also estimated the molybdenum average price at US\$12 per pound, which is higher than the average price reached during 2014 (US\$11.5), despite the increase in global supply.

In Chile it is also expected an increase in supply given the beginning of the operations of new projects and expansions such as: Sierra Gorda and Caserones.

The molybdenum extraction is led by Codelco, with 35,400 tons, followed by Los Pelambres (Antofagasta Minerals); Collahuasi, (Glencore and Anglo American); and recently by the new operations of Sierra Gorda (KGHM).

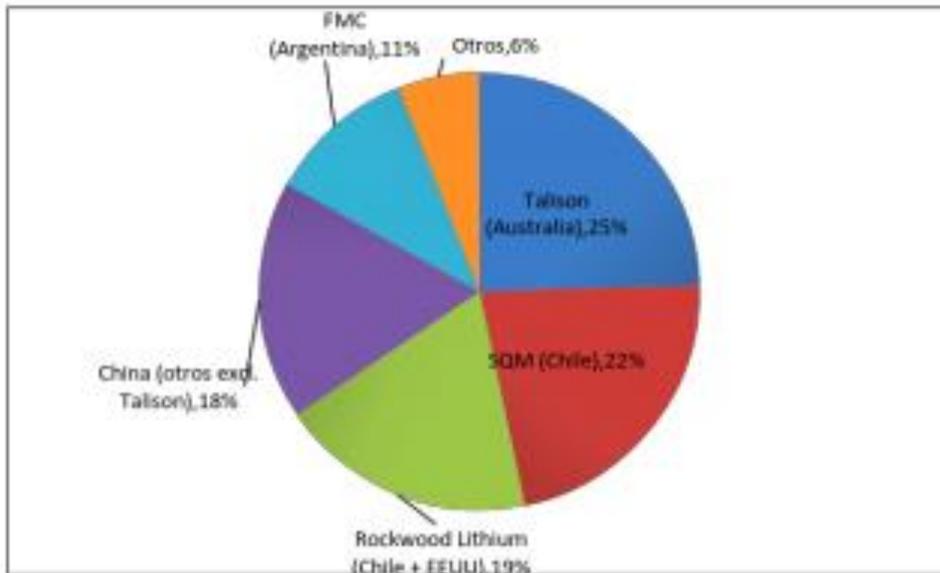
Chile is the third largest producer of molybdenum in the world, after China and the United States, and owns 21% of the world reserves of the metal.

## **OTHERS**

### **LITHIUM**

Lithium is another important mineral mined in Chile.

### Lithium Offer per World Producer (2014)



Source: Mining Ministry

In June 2014 the President of the Republic Michele Bachelet, created the Lithium National Commission. During August 2014, the Chamber of Deputies passed a resolution according to which this Committee was instructed to evaluate and propose the basis for a "Lithium National Corporation" to enable the State of Chile empower extraction of this mineral. The request is being analyzed and discussed by the Lithium National Commission.

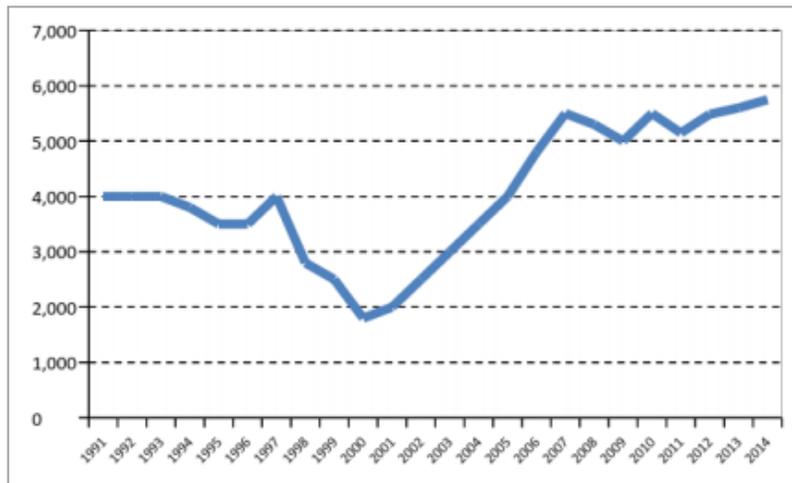
There are about 50 known salt mines in the north, which contains mainly sodium, potassium, lithium, magnesium, calcium, chlorides, sulfates and borates.

The pre-Andean salt flats with current exploitation of lithium are:

- » Atacama (SQM)
- » Punta Negra (Rockwood)
- » Pedernales (Codelco 18%)
- » Maricunga (Codelco 100%)

The Salar de Atacama is the most important lithium mine worldwide and it is the only one in exploitation of lithium, potassium and Boron compounds.

### Average price of lithium carbonate(USD\$/ton)



Source: Mining Ministry ([www.minmineria.cl](http://www.minmineria.cl))

SQM and Rockwood Lithium Chile are the main lithium mining companies extracting the mineral. In July 2014 the merger of the Albemarle and Rockwood companies was announced. The transaction is subject to regulatory and shareholder approvals and other customary closing conditions and is expected to be completed during 2015. It should be noted that the current Chilean company Rockwood Lithium Chile (ex SCL) will be owned by Albemarle once the aforementioned merger is completed.

### SILVER

Silver is in primary deposits of hydrothermal type, and its production also comes from copper, gold and lead-zinc deposits.

Primary silver deposits representative of medium and small silver mining:

- » Tres Puntas
- » Chañarcillo
- » Tunas y Arqueros
- » Elisa de Bordos
- » Lomas Bayas

Silver mines owned by big mining companies:

- » Esperanza
- » Tigre
- » Aldebarrán
- » La Coipa
- » Marte
- » Lobo
- » El Tambo

Current production of silver coming from primary silver deposits and deposits of copper, gold and lead-zinc, ranks Chile on 8th place in world production.

Chile produced 375 tons of silver in the first trimester of 2015. In 2014, Chile produced about 1,443 tons of fine silver (1,219 tons in 2013), which was obtained mostly as a byproduct of mining activities related to copper gold, lead and zinc.

About 60% of the total Chilean silver production is linked to the copper mining industry and only 0.3% is linked to the direct extraction of the metal.

Silver exports in 2014 reached USD\$275 million, much lower than the figure recorded in 2011, when returns totaled USD\$ 689 million.

Chilean silver production could double if Barrick Gold deposit operations Pascua Lama, would start operations, nevertheless it is suspended for environmental offenses. Pascua Lama has reserves of 17.8 million ounces of gold and 718 million ounces of silver, with a lifespan of about 25 years.

Silver production is located in the regions of Antofagasta, Atacama and Coquimbo, besides the central regions of Valparaíso, Metropolitan Area and Libertador Bernardo O'Higgins; there is also some production in southern Aysén.

## IRON

According to Cochilco's forecast report 2013-2025, Chile's iron production was expected to grow 183% up to 2025 (from 17,109 tons registered in 2013 up to 48,366 tons expected for 2025).

Nevertheless, the huge drop in world prices and the surplus of offer the mineral are affecting negatively the national industry.

Hierros de Taltal, with operations at Antofagasta, initiated a reorganization of its operations in November 2014, accusing debts for US\$30 million; Essex Holding, American owned and installed in Chañaral, filed for bankruptcy in December 2014 and in March 2015 CAP informed industry analysts that it would be open to review their investment plan, including to add tasks with "moderate risk of closure" in response to plummeting prices.

According to a recent report by Citigroup, CAP (Pacific Iron Company [www.cap.cl](http://www.cap.cl)) production costs are US\$55 a ton and the market estimates that prices below US\$70 per ton starts to be difficult to be profitable.

According to local banks, the mining company could reduce its steel production to 10 million tons starting in 2016, which would necessarily involve the closure of the El Romeral mine, the highest cost of all mines controlled by CAP. The company is aware that the closure is an option.

Iron deposits are located mainly at the Cordillera de la Costa in the Regions of Atacama and Coquimbo. Main Iron deposits are:

- » El Romeral

- » El Dorado
- » El Algarrobo
- » Boquerón Chañar
- » Los Colorados
- » Cerro Imán

Iron is being exploited, with a significant increase in recent years, and the deposits are owned by private companies with foreign and national investment.

## MANGANESE

The exploitation of manganese has been paralyzed since 2010.

Main manganese deposits are located at cordillera de la Costa and at Atacama and Coquimbo Regions, the latter being the one that contains the largest reserve in the country.

The main deposits are:

- » Fragua
- » Corral Quemado
- » Arrayán
- » La Liga

## LEAD AND ZINC

Lead and zinc deposits in Chile are located in two big areas:

First Area: Between Arica and Parinacota Regions, mainly related to copper deposits. The most important are:

- » Las Cañas
- » La Galena
- » Veta Grande
- » Delfina-Escondida

Second Area: Between Aysén and Magallanes Regions, where the most important deposits are located. Especially in the General Carrera lake, where the deposits are:

- » Silva
- » Cerro Pelado
- » Escondida
- » San Sebastián
- » El Rosillo
- » La Poza
- » El Toqui
- » San Antonio
- » Zúñiga

The existing mines belong to private companies, and production is concentrated especially, in the Toqui mine, at the Aysen Region.

## LIST OF MAIN MINE COMPANIES, ENTITIES AND ORGANIZATIONS (ASSOCIATIONS) IN CHILE

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### MAIN MINING COMPANIES

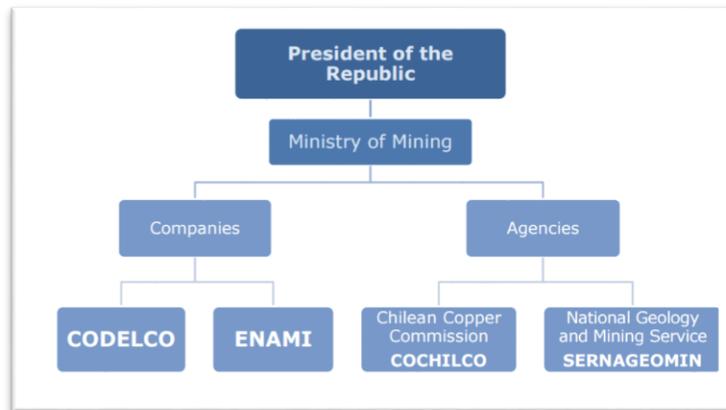
- » BHP BILLITON CHILE: [www.bhpbilliton.com](http://www.bhpbilliton.com)
- » CODELCO: [www.codelco.cl](http://www.codelco.cl)
- » BARRICK: [www.barricklatam.com/chile/](http://www.barricklatam.com/chile/)
- » GLENCOREXSTRATA: [www.glancore.com](http://www.glancore.com) / [www.xstrata.com](http://www.xstrata.com)
- » ANGLOAMERICAN: [www.anglochile.cl](http://www.anglochile.cl)
- » FREEPORT-MCMORAN COPPER & GOLD: [www.fcx.com](http://www.fcx.com)
- » ANTOFAGASTA MINERALS: [www.aminerals.cl](http://www.aminerals.cl) / [www.antofagasta.co.uk](http://www.antofagasta.co.uk)
- » SQM: [www.sqm.com](http://www.sqm.com)
- » TECK: [www.teckchile.com](http://www.teckchile.com)

### INDUSTRY ASSOCIATIONS

- » National Mining Society (SONAMI): [www.sonami.cl](http://www.sonami.cl)
- » Mining Council: [www.consejominero.cl](http://www.consejominero.cl)
- » Antofagasta Industrials Association (AIA): [www.aia.cl](http://www.aia.cl)
- » Industrial Mining Suppliers Guild (APRIMIN): [www.aprimin.cl](http://www.aprimin.cl)

## GOVERNMENT

Public Institutions related to the mining sector



Source: Chilean Copper Commission (CODELCO)

- » Ministry of Mining: [www.minmineria.cl](http://www.minmineria.cl)
- » National Geology and Mining Service (SERNAGEOMIN): [www.sernageomin.cl](http://www.sernageomin.cl)
- » Chilean Copper Commission (COCHILCO): [www.cochilco.cl](http://www.cochilco.cl)
- » National Copper Corporation (CODELCO) [www.codelco.cl](http://www.codelco.cl)
- » Chilean National Mining Corporation (ENAMI): [www.enami.cl](http://www.enami.cl)

## BUSINESS AND TRADE RESOURCES FOR CHILE

- » Foreign Investment Committee (CIE): [www.inversionextranjera.cl](http://www.inversionextranjera.cl)

## INDUSTRY PUBLICATIONS

- » Business News Americas: [www.bnamericas.com](http://www.bnamericas.com)
- » Minería Chilena: [www.mch.cl](http://www.mch.cl)
- » Que Pasa Minería: [www.quepasamineria.cl](http://www.quepasamineria.cl)
- » Revista Área Minera: [www.aminera.com](http://www.aminera.com)
- » Nueva Minería y Energía: [www.nuevamineria.com](http://www.nuevamineria.com)

## MAIN MINING EQUIPMENT COMPANIES

- » Finning (CAT): <http://www.finningsudamerica.com/chile/>
- » Komatsu: <http://portalkch.komatsu.cl/>

- » Janssen: <http://www.janssen.cl/>
- » Liebherr: <http://www.liebherr.com/en/deu/about-liebherr/liebherr-worldwide/chile/liebherr-in-chile.html>

# DOING BUSINESS IN CHILE

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## MARKET ENTRY

A foreign supplier to the mining industry usually establishes an office in Chile. Many have developed a presence through a subsidiary office, acquired a local company or developed a joint venture.

The best approach depends on a variety of factors including the type of business, the appetite for risk, funds available to the company and issues around protection of intellectual property. Relationships are very important in Chile and a local partner can provide valuable connections and networks to decision makers.

There are also suppliers that prefer not to have a presence in Chile, instead selecting to sell into the market through distributors or agents. This approach is certainly less capital intensive, but requires patience and a good local partner.

## TARIFFS, REGULATIONS AND CUSTOMS

According to Direcon (General Directorate of International Economic Relations Chile [www.direcon.cl](http://www.direcon.cl)) Chile has 24 commercial agreements with 63 markets, which represents 63.3% of the total world wide population and 85.3% of the global GDP.

Chile is also a member of Mercosur (Customs Union involving Argentina, Brazil, Paraguay and Uruguay), the Andean Community (Colombia, Ecuador, Peru and Bolivia) and the Pacific Alliance Agreement (Colombia, Mexico and Peru).

Imports from any country without a free trade agreement with Chile are subject to the flat 6% customs tariff plus 19% in VAT (importers must pay this VAT regardless of country of origin). Nevertheless, the vast majority of imports from the U.S. (of U.S.-origin products) are free of the 6% tariff because of the Free Trade Agreement signed with Chile in 2004. In order to verify if a product is duty free, HTS codes should be confirmed by checking the following website: [www.direcon.cl](http://www.direcon.cl).

- The U.S.–Chile FTA signed in 2004:
  - Eliminates tariffs on almost 90% of U.S. products imported into Chile and more than 95% of Chilean exports to the U.S. Tariffs on all products will be eliminated within 12 years.
  - Elimination of Chile's 6% general tariff has made U.S. products significantly more competitive (though FTAs also exist between Chile and Europe and some Asian countries). U.S. imports were previously losing ground to other countries with which Chile already had preferential trade agreements.

- Chile is considered to be a small market and is characterized as extremely competitive since tariff barriers are very low or nonexistent.
- Government procurement is processed through the ChileCompra system ([www.chilecompra.cl](http://www.chilecompra.cl)) and requires government suppliers to have local representation. Product reputation and market position will be the influencing factors in the buying decision.

## CHALLENGES AND KEY CONSIDERATIONS

- The Mining Equipment, Technology and Services (METS) industry in Chile is highly competitive and all of the major multinational vendors are in the market.
- Setting up in Chile sends a strong message to customers showing commitment to the market and will often convert interest into a solid commercial relationship.
- Given the focus on productivity and efficiency in the mining industry, foreign companies should prepare a concrete value proposition which demonstrates clearly how the solution offered has saved customers money in previous projects.
- Understand Chilean mining company structures and their process for procurement. To be successful you need to be patient, persistent and polite. It is not uncommon that contacts will not answer emails.
- It is important to consult with headquarters and the mine site while conducting business development. The mine sites tend to be in remote locations in the north of Chile and headquarters tend to be in Santiago.
- It is becoming increasingly difficult to visit mine sites and meet with personnel due to increased protocols related to mine visits.
- Consider participating in technical seminars or the Exponor and Expomin industry conferences in Chile. They are excellent ways to meet customers and gather intelligence.
- Carefully segment the market based on how open they are to new suppliers and whether they use Total Cost of Ownership (TCO) for procurement. Different mines within the same company can have vastly different cultures and procedures, affecting how willing they are to try a new approach or new supplier. Do your research on the mine itself, as well as the company that operates the mine.
- Among the Chilean mining sector the perception of U.S. mining industry is positive and is continuously used as an aspirational point of reference with regards to productivity and best practice.

## TIPS FOR MEDIA PROMOTION

- Chilean media wants to report on new technology, services and products that respond to Chilean challenges.
- Have communication collateral for the company in Spanish, this could be a local website and/or printed material.
- Customize value proposition and pitch a key message to match.
- Send information about the company, product and service to industry media.

## CHILEAN BUSINESS SOCIAL CULTURE

- When arriving on time to an appointment it might be possible that the foreign business man will be kept waiting even if the Chilean person is not doing anything important. It makes Chileans 'ap-

pear' like they are very busy and 'in demand'. The more important the foreign business person is, the less they will have to wait. This concept is not normally the case with reputable companies that have an international ideology.

- Most business meetings begin with a handshake (regardless of the gender) especially in first meetings. As the business relationship develops, both parts become more demonstrative which can include the kissing on the cheek with women and sometimes embracing between men. The latter is more normal with close associates.
- Business cards are given after the initial handshake. It is recommendable to spend a second or two to 'admire' it as Chileans put a lot of importance on their positions in companies. Chileans use two surnames on business cards - the father's first and then the mother's. When addressing the person, only the father's surname can be used.
- It is not recommendable to rush immediately into the topic to be discussed. Chileans will normally start with polite social chat and will often ask about your family. They are not being nose, just showing a general interest in you. It is polite to ask about their family too. Business meetings are often considered as being between two people more than two companies, hence the personal interaction.
- If there is time, it is often good to bring up topics like Chilean wine and the natural beauties of Chile. It will be appreciated and Chileans like to feel good about their country.
- Avoid business visits in the months of January and February as executives and staff tends to be away on holiday, slowing down general business activities
- In Chilean business culture, relationships and "insider" status are much more important than in the English speaking world. "Pitutos" (personal connections) are used a lot to get information or to do deals. Someone usually has "a friend" that can do what you are asking for.
- It is common to see relatives of the same family working in a company (unfortunately this also recently includes in the government where relatives seem to be able to find a way into official positions, or where a company the family owns/runs gets a lucrative contract with the government).
- Spanish is the national language. Middle managers and engineers in large companies generally speak some English, although English speaking is less frequent in medium and small companies. Being able to speak some Spanish will make a considerable difference in work and general life relationships.
- It is common that Chilean business people do not answer e-mails, faxes, letters or phone calls promptly. Acknowledging messages is not a common habit and many business people might not respond until there is an opportunity or something definite to answer.
- Most things are left until the last moment and sometimes it is good to follow up orders and arrangements to make sure that everything is getting done on time.
- Chile has one of the highest rates of working hours in the world, though unfortunately this does not convert into higher productivity. A couple of years ago, a law was passed to make the working week 45 hours instead of 48 as before. Since Chileans tend to put things off until the last moment, it usually means they have to work extra hours anyway in order to meet the deadline.
- Please note that these are only generalizations as there are many Chileans that do work very hard and are very productive and competitive in comparison to the rest of the world. One of the reasons why the country's economy is so strong is thanks to these hard workers.
- There is a clearly established hierarchy in companies. The formal "Usted" (you) is used with those in higher positions. It is not common for higher level executives to associate with the "common" workers especially outside of work hours. Not only is lot of importance placed on positions in a company and you will notice the same about their professions. Take a look at the business cards

and the number of “engineers” that exist in Chile. There are civil engineers, forestry engineers; fishing engineers, tourism engineers etc.

- Appearances are an important part of Chilean life.
- Dress codes are generally formal and conservative; suit and tie for men and discreet business suit (skirt or trousers) for women. Navy blue suits seem to dominate and men tend to put on their jackets when leaving the office, even if it is just for lunch.
- Though dressing well is the norm, more and more companies are adopting the system of wearing casual clothes on Fridays. Business attire becomes less formal in the regions of the country and in certain sectors such as mining in mining sites.
- Secretaries and clerks in large companies usually wear uniforms.

## CONCLUSION

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Chile's mining sector will see modest average annual growth of 1.6% in 2015-2019. Mining investment will be encouraged by the **country's stable political and business environments**, combined with its significant **mineral reserves**. Nevertheless, older mines will still face declining output, while subdued copper and precious metal prices will **limit** sector growth and miners' expansion plans.

A decline in Chinese and broader global demand over the past three years caused prices to drop, taking a toll on Chile's economy and public finances. Chile's GDP growth slowed considerably to 1.4% in 2014 after averaging more than 5% growth from 2010-2013.

Several of Chile's copper mines are preparing to close between 2015 and 2025, cutting copper production by a highly debated estimated 1.2 million metric tons per year. To compensate, Codelco and private mining firms are expected to expand exploration and activities in the coming years, requiring substantial investment. Codelco announced that it would invest a total of US\$25 billion over the next five years, largely to maintain production in existing mines.

Meanwhile, the economic slowdown has hobbled the Chilean government's attempts to pass labor reforms, meant to address lingering economic inequality in the country. In a period of weak economic growth, private businesses and opposition politicians are less likely to agree to measures that could threaten future investments. Some mining companies say the reforms could cost companies a total of US\$3 billion over five years.

Consequently, commercial and business interests and the government will try to maintain copper production over the next year, delaying or possibly even derailing labor reform efforts.

The Chilean government is struggling to preserve output and growth in its mining sector especially in copper, its crucial sub-sector, amid an economic slowdown.

The sector's pipeline of copper projects and the country's global dominance in copper production will ensure the country maintains its lead despite falling ore grades and lagging productivity. In 2014, copper accounted for approximately 92% of mining exports as measured in dollar terms and nearly 55% of the country's total exports. However, the latter represents a decline from 2010, when copper accounted for

slightly over 58% of the country's total exports. Moreover, lower oil prices and a weaker Chilean peso on the back of US dollar strength will cap growth in input costs, providing a boon to miners facing subdued metal prices.

Chilean transparency in its policies and foreign investment incentives still makes Chile a very interesting country to invest. Also the mining industry will continue to keep up with foreign policies and technologies. In this sense, it is estimated that products demanded in the mining area will reach US\$ 2,475 million approximately by the end of 2015, and services up to US\$ 3,245 million.

Chile's mining industry has demanding environmental and safety requirements, remote locations, energy is expensive and water scarce.

There is an important potential market in services, such as:

- Environmental studies
- Management of atmospheric emissions and air quality
- Energy efficiency
- Renewable energies

The Chilean mining sector is in the need of such innovative solutions.

Everything related to the handling and care of water is critical. General environmental services, such as management of solid and dangerous waste are in great demand.

In the near future, technologic solutions applied to processes and communications of companies will also be required:

- Exploration
- Geologic modeling
- Plant planning
- Habilitating technologies like: automatic control systems, tele-operation technologies, and production control systems.
- Applications for companies such as: ERP (Enterprise Resource Planning), CRM (customer relationship management), DAM (Digital Assets Management), or DW (Data Warehouse).

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