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Message from the Chairman of the Board

The crisis served as an opportunity to make Codelco a better company. Today, we have to repay the trust placed in it not only with profitable projects but also total accountability.

Oscar Landerretche Moreno.
Chairman of the Board
In 2016, Codelco stood out for its great achievements in the face of adverse conditions. Three variables of the mining business, over which we have no control, showed a deterioration that negatively affected our results: copper prices whose average was down by 11% on 2015; exchange rate differences whose effect on our liabilities in Chilean pesos was extremely negative; and our ore head grade which dropped by almost 7% on the previous year.

These adverse conditions affected all the copper industry but, at Codelco, we were able to offset their impact by improving our performance on those variables which we do control. In 2016, we exceeded our production targets and achieved direct costs that were below the average for private mining companies. In turn, these two results of sound management enabled us to exceed the savings target agreed upon with the state, generating profits that were higher than budgeted by the Finance Ministry and surpassed all expectations at the beginning of the year.

At the same time, we progressed in preparing the company for the next 50 years. Between 2014 and 2017, we will have implemented investments worth US$12,000 million, positioning Codelco as the company in Chile that is investing most. As we progressed along this road, our owner, the state of Chile, showed its confidence in the company’s Board of Directors and senior management, approving first a capital injection of US$4,000 million and then a supplementary capitalization law that extended the period for the capitalization and mobilized fiscal resources to support Codelco. This trust in the company to implement structural and divisional projects, which will in future generate resources to finance social programs and other state policies, is a gesture whose importance must be recognized.

Of course, these resources do not resolve the company’s long-term financing problems. Over the past few months, we have explained to the country the nature of Codelco’s financial relationship with the state and have underscored the need to normalize this relationship.

We have explained that the company, which belongs to all Chileans, requires a new deal from its owner, with a credible and responsible capitalization rule that is sustainable over time and tied to our results. We believe that, by doing its job well, Codelco earns the right to continue receiving resources with which to invest.
The capital injections provided so far by the state are, in fact, tied to our undertaking to continue to reduce costs, implement a more austere budget, not increase our current level of debt and optimize our investment portfolio.

Materializing these investments whilst maintaining the company’s current level of debt is no easy task. For this, the capital injection will not suffice and high-quality management will, above all, be required. Our undertaking is to achieve productivity gains that will mean a saving of US$2,100 million by 2020 and a cash flow sufficient to service our debt whilst, at the same time, generating profits for our owner.

In 2016, we successfully optimized our portfolio of projects, adjusting the financing they will require. This implied rescheduling investments for a little over US$2,250 million as compared to the original plan. As a result, the plan will comprise investments for US$18,000 million over the five years to 2020 whilst maintaining our current level of production.

This means we will have to persist in efforts to reduce costs that began in 2014. We must be emphatic: if we are not able to maintain these savings, it will not be possible to implement part of our investment portfolio such as the structural projects. Each dollar we spend unnecessarily will be a dollar less to invest in these projects and, therefore, a dollar that will not be generated in the future as profits. If this occurs, Codelco will, in the not too distant future, be a smaller company that makes a smaller contribution to social policy, has a smaller impact on private mining suppliers and creates fewer jobs. That is not something which Chile can allow to happen.

Our goal is clear: to make Codelco a company with lower costs, projects that are better managed, a debt that is under control and higher profits. We will reinforce the policies we have implemented in order to guarantee that the company keeps to this road, striving to install structures that embed this approach institutionally.

As we have said before and will reiterate now, the crisis served as an opportunity to make Codelco a better company. Today, we have to repay the trust placed in it not only with profitable projects but also total accountability. That is why, over these past two years, we have significantly strengthened internal controls, restructuring...
our comptroller and auditing areas, drawing up new norms and establishing a more demanding framework of corporate governance. Our corporate reforms seek to guard against corruption, control conflicts of interest and ensure probity. We want to guarantee all Chileans that Codelco is managed in the country’s interest and is safe from the pressure of interest groups. Persistence is also required here. If there is any backsliding in Codelco’s reputation and social credibility, it will be unable to pursue its investment and cost-reduction projects because its capitalization will be more difficult.

At Codelco, we have also opted for a more open communications strategy that reflects a real vocation for transparency. Our option is simple: to explain the challenges to all the interested parties, to set out our strategy for addressing them and to report on our progress in implementing it. And, when a mistake or difficulty occurs, we want to be the first to act before regulatory agencies or the press ask us to do so. We have promoted a culture of transparency, proactively, opportunistically, accessibly and clearly disclosing information of public interest. When other state agencies with supervisory powers have requested information, we have opened our doors, answered their questions and used this as an opportunity to improve the institutional framework.

However, this increased transparency and probity will only serve their purpose if they are underpinned by a program of genuine improvements which, in our case, are designed to guarantee the good use of resources, higher productivity, control of costs and the decompression of our investment portfolio. That is what we have done and it has been noted by different audiences.

The latest Merco Empresas study of corporate reputation examined perceptions of financial results, talent attraction, ethics, corporate responsibility, internationalization and innovation, surveying directors and executives of 400 companies, financial analysts, NGOs, trade unions, consumers, academics and citizens. Codelco was once again among the top ten (7th) in the overall ranking and, for the sixth consecutive year, took first place among mining companies.

We believe that the improvement in our reputation is the fruit of clear reporting and of submitting with humility to the scrutiny of all in the awareness that the media, leaders of opinion and citizens in general deserve full explanations of our actions.
We have understood that, on our road to improvement, we must give priority to matters such as innovation. The mining industry’s endogenous challenges include deposits that are more complex and, because of their lower ore grades, also have higher operating costs while its exogenous challenges include increased environmental and community relations demands which call for processes that are ever more efficient and friendly towards their area of influence.

That is why we created Codelco Tech, the company’s technological subsidiary, whose mission will be to give a new boost to innovation in the company. In other words, its strategic mandate will be to lead and foster research to create a mining industry that has a minimal environmental impact.

Our workers are also changing. In young people, motivation and commitment are not the same as they were. Executives and supervisors must be able to lead and motivate these workers and elicit their commitment to the challenges we face today. At Codelco, we are aware that we must reinforce our capacity for dialogue and help the country’s best talents, men and women, to relate to the variables of the business.

We are also aware that the context in which we operate has changed. The present and the immediate future are more demanding as regards labor and socio-environmental matters. Today, operating permits are more restrictive and sustainability has become one of the pillars of competitiveness in our business. Moreover, access to critical inputs for the mining industry -energy, water and places for waste disposal- entails greater controversies and higher costs.

At Codelco, we do not complain about the changes arising from these increased citizen and institutional demands. On the contrary, we believe they call for perseverance in what we have been doing over the last two years. In this context, implementation of our projected investment of US$1,800 million in our smelters is proceeding according to the plan for compliance with Supreme Decree Nº 28, the air quality norm for copper smelters and other sources of arsenic and sulfur emissions. We have remedied the lags that existed in adoption of this standard because it is of the greatest importance to signal that Codelco will always comply with the law.

We have also progressed with the implementation of our Sustainability Master Plan under which we have undertaken to improve indicators of our safety, human resources, energy consumption and water use and reuse performance and, ultimately, the traceability of our processes.
All these advances demonstrate that the crisis was an opportunity to rethink the way we work and seek opportunities for improvement. There is still much to do but we can say that we have progressed towards being a company that is better prepared to address the challenges of the mining industry of today and the future. If we are able to persevere in this quest for greater productivity, financial prudence, corporate probity, operational excellence, project quality, investment realism, work with communities and our surroundings and innovation as essential for recovering competitiveness and fulfilling our mission to provide resources to the state of Chile, Codelco will continue to play a key role in Chile’s development over the coming decades.

That is why we have said that, in 2017, we must once again win the battle with our deposits, with costs, with technological challenges and with the temptation to abandon austerity and again give in to the seduction of size that, in recent years, did so much damage to Codelco.

We are certain that mining will be good business only for those who know how to change and adapt to the standards of the twenty-first century. Our critical challenge is to convince ourselves that it is imperative we continue making transformations so that Codelco is competitive and, therefore, sustainable.

We must continue to change the way we conduct our business in line with an industry whose foundations have changed forever. This is a road with no return: Codelco’s next 50 years depend on us assuming our responsibilities today.

Óscar Landerretche Moreno
Chairman of the Board
Message from the Chief Executive Officer

Codelco’s next 50 years demand that we always manage this business responsibly. This is a road with no return: only with financial prudence, innovation and adaptation to the new standards of the twenty-first century will Codelco continue to serve as a driver of Chile’s development.

Nelson Pizarro Contador
Chief Executive Officer
For all us who work at Codelco, 2016 was one of the most complex years in our history. It will be remembered as a year of great achievements in the midst of adversity.

I would like to begin by noting that it was not, unfortunately, the year in which we were able to eliminate fatal accidents at our mines.

It was a painful year during which we lost four colleagues. This obliged us to continue striving to ensure that all our employees fully comply with our strict safety and occupational health standards.

In 2016, our global frequency rate (including direct and contractors’ employees) was up by 3.3% on the previous year.

Our severity rate also increased. As a company, we are not happy with these results and, in response, have undertaken to consolidate the transformations we are implementing, starting with intensifying and improving our performance in this field. Care for life is and will continue to be our principal value and, as such, the factor around which our priorities must be organized.

Copper market

During most of 2016, copper prices were low, giving an annual average of US$220.6 ȼ/lb, which represented a drop of 11% from an average of US$249.2 ȼ/lb in 2015. This was accompanied by exchange rate differences which also affected our results.

But this crisis also became an opportunity to rethink the way we work and seek areas for improvement.

Despite these complex conditions, we fulfilled our undertakings with the company’s owner: we surpassed our target for production at our own mines which reached 1,707,000 tonnes of copper, 1.7% above the 1,678,000 tonnes agreed with the Finance Ministry.

For the third consecutive year, we also achieved a reduction in our direct cost (C1) which, at US$126.1 ȼ/lb, was down by 9% on the previous year. Under our Cost Reduction Plan for 2016, we had undertaken to save US$399 million (a far more challenging target than the US$242 million envisaged in the budget with the Finance Ministry) and achieved 108% compliance, with a saving of US$433 million.

It was not easy for anyone in the first quarter of 2016 when, as in the last quarter of 2015, we reported negative earnings. However, over the rest of the year, we were able to turn round this poor performance and generate profits for the state of Chile, even
before the price of copper began to rise. Over the whole year, we generated earnings of US$500 million.

In addition to these earnings, our contribution to the state of Chile included US$942 million under the Reserved Copper Law and the Royalty Law and in the form of income tax.

Year of collective bargaining processes
Over the course of the year, we negotiated collectively with 12 union organizations representing a total of 7,851 workers. In this sphere, our conversations were characterized by the responsibility and commitment shown by all the parties, including both the unions and the company, as a result of which it was possible to balance our employees’ legitimate aspirations with what the company could realistically offer them.

Human resources
Key milestones in this area included the preparation and publication by Human Resources of a new Norm on Filling Vacancies, with its corresponding recruitment and selection procedure. This established rigorous and objective criteria to ensure selection by merit and in strict accordance with the principles of equality of opportunity and non-discrimination in line with our values, particularly as regards the transparency and traceability of processes.

The company’s succession system is a strategic process designed to ensure the availability of leaders capable of achieving excellence in our business performance. Successors have been identified for all our strategic critical posts, with a corresponding development plan. In the case of critical management posts and experts, coverage reaches 62% in line with plans for 2017 for succession alternatives at the transversal level.

Capitalization and projects
The state approved a capital injection of US$4,950 million for 2014-19 of which US$1,575 million was already authorized in 2015 and 2016. This was good news, ratifying the confidence of our owner in the project we are implementing. However, these resources do not resolve the company’s medium and long-term financing problem. Codelco requires a new deal from its owner, establishing a capitalization rule tied to the company’s results.

For this reason, these capital injections are linked to the company’s undertaking to continue to reduce costs, implement a more austere budget, maintain or reduce its current level of debt and optimize its investment portfolio.

In the case of the latter, we have adjusted our financing needs. This implied rescheduling investments so that, in the five years to 2020, they will reach US$18,000 million whilst maintaining the current level of production.
In the case of company’s structural projects, Chuquicamata Subterránea and Tras paso Andina progressed according to plan while the rest of the projects were programmed sequentially so as to guarantee better business cases and greater financial sustainability.

We are very much aware that it is imperative we once again meet our production, cost reduction and profits targets. These three factors are decisive for the credibility of our work and the support required to advance with the implementation of our investment portfolio. We will, therefore, persist in the process of reformulating and optimizing these projects so as to be better prepared when the time comes to implement these crucial decisions for Codelco’s future.

**Sustainability Master Plan**

In December, we launched a master plan for the company’s sustainability, looking ahead to the long term and addressing the most complex scenarios for continuing to be a business that is profitable for the country, satisfies the needs of demand and responds to a society with increased expectations.

The six pillars of the Sustainability Master Plan are: to have a deeply embedded culture of safety and occupational health and raise standards of care for the environment; to build trust-based and transparent long-term relations with communities in the areas where we operate, with a target of zero community incidents by 2020; to strengthen corporate governance and maximize the value of our mining resources, ensuring an average C1 cost that is in the second quartile by 2020; to be an organization with people capable of adapting to the industry’s challenges and committed to the sustainability of the business; and to foster strategic innovation so as to use knowledge to create economic, environmental and social value.

As part of this Master Plan, we updated our Corporate Sustainability Policy, addressing the critical challenges for enabling the company’s economic activity in its social and environmental context.

**Community development**

Since November 2016, the company has been governed by a new corporate community investment norm (NCC 39) that establishes general instructions on procedures for implementing spending of this type, with internal mechanisms and procedures for making and reporting such contributions. Through transparency and accountability, it seeks to generate shared value with the communities.

Under the Master Plan discussed above, we have committed to a detailed review of our current standards and tools for the management of community relations. In line with this, we have begun inter-disciplinary work throughout the company to design a strategy, with medium and long-term indicators, to position Codelco as a reference for the industry in this field.
In 2016, we financed 68 community investment projects for a total of 4,744 million Chilean pesos. They focused principally on human capital, territorial development, socio-environmental undertakings and indigenous peoples.

Environmental investments
Our four copper concentrate smelters achieved significant progress on the changes required for compliance with new environmental standards. As we have reported on a number of occasions, we will be investing US$1,800 million between 2013 and 2018 in projects to comply with Supreme Decree No. 28 which will imply capture of 95% of emissions of sulfur dioxide (SO₂) and arsenic (As).

The capture levels and chimney emissions limits already came into force for our Ventanas Division on 12 December 2016 when the necessary environmental projects also began operation.

Values, transparency and probity
At Codelco, we have understood society’s new demands as an opportunity to set ourselves apart and enhance our performance, achieving important progress as regards transparency, probity and good governance.

In 2016, we launched the test version of a new website, www.codelcotransparente.cl, which contains information about the socio-environmental and community relations performance of our Andina Division. This new website will continue to grow until it encompasses the most important indicators of all our Divisions.

We have received a number of public and regulatory recognitions for our performance on transparency. In the Business Monitor of Corporate Reputation (MERCO), we took first place among state companies and ranked 7th out of the best 100 companies in general.

In addition, according to the Transparency Council, we achieved 100% compliance with the Transparency Law for state companies.

In the case of values, in June 2016, Codelco adhered to the UN Global Compact, a voluntary initiative through which companies...
undertake to align their strategies and operations with ten universally accepted principles across four areas: human rights, labor standards, the environment and anti-corruption.

**Gender diversity**

In the case of gender diversity and the harmonization of working, family and personal life, we obtained certification of our Head Offices, the Ventanas and Gabriela Mistral Divisions under Chilean Norm 3262. In addition, together with the Federation of Copper Workers (FTC), we drew up a Gender Diversity Policy.

The creation of mixed teams has called for adjustments in processes in the human resources area and the incorporation of measures such as those that seek to balance working and family life which benefit both men and women. Specifically, in order to better address this challenge, we have taken affirmative action that goes beyond what is legally required, including more flexible working times to facilitate achievement of this balance.

**Innovation**

In 2016, through the creation of Codelco Tech, we laid the foundations for positioning innovation at the heart of our business. This new subsidiary will enable us to play a key role in the revolution of the mining industry of the twenty-first century whilst also addressing our own challenges better.

Codelco Tech’s strategic mandate is to lead and foster research for the creation of a mining industry with a minimal environmental impact. Its objective is to generate technological breakthroughs that create value through solutions to problems such as the decline in ore grades, deeper mines, impurities in minerals, the scarcity of key inputs such as water and energy and stricter environmental norms.

At Codelco, we view innovation as a structural necessity of the business. In line with this, we are implementing an Innovation Management System that addresses all the spheres related to innovation and technological development and regulates the roles, responsibilities and powers of the different players involved, both within Codelco and in relations with Codelco Tech, partners, suppliers, universities, research centers and collaborators in general.

**Exploration**

In 2016, brownfield activities predominated in exploration in a bid to improve divisional development plans by identifying opportunities for increasing their mineral resources. Over the course of the year, seven new exploration targets were identified of which six are greenfield and one is brownfield.

Given the maturity of exploration in Chile, Codelco’s international exploration activities seek to broaden potential sources of mineral resources as well as to open opportunities for the company’s internationalization.
These activities have focused principally on countries such as Ecuador that have geological similarities with Chile or those such as Brazil with high potential for new copper discoveries.

Out of the more than 20 prospects so far evaluated in Ecuador under the company’s agreement with Enami EP, Mina Real (or Nanguipa) and Llurimagua are active. In Brazil, we have mineral resources at the exploration stage and with potential in the Liberdade project, which forms part of the company’s association with locally-based Pan Brasil. Preliminary estimates of in situ resources are of the order of 242 million tonnes, with a copper grade of 0.77%.

Suppliers, increased competitiveness, traceability and transparency

In 2016, we did business with 3,227 suppliers of whom 3,001 were Chile-based and 226 were overseas companies.

In 2016, we took a number of steps to incorporate more and better suppliers, including:

- **Probity and transparency.** We informed and emphasized to all our supplier base the imperative of continuously improving transparency, the symmetry of information and the probity of processes. This was also reinforced through policies, controls and internal management practices.

- **Competitiveness.** We boosted competitiveness and transparency in our procurement processes, reducing direct acquisitions from 6.2% of the total in 2015 to 1.9% in 2016.

- **Traceability and information symmetry.** All tender processes are now announced, published and documented on our electronic marketplace in [www.codelco.com](http://www.codelco.com).

- **New sources of supply.** We have a Business Intelligence Office which fosters the participation of local and international suppliers through vehicles that include contact with business associations and bilateral chambers of commerce as a way of increasing the visibility of our needs and exploring alternative sources of goods and services.

We are now certainly a better company than we were but we must still continue to improve. Codelco’s next 50 years demand that we always manage this business responsibly. This is a road with no return: only with financial prudence, innovation and adaptation to the new standards of the twenty-first century will Codelco continue to serve as a driver of Chile’s development.

\[Signature\]  
Nelson Pizarro Contador  
Chief Executive Officer
Board of Directors
To March 2017

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Chairman
Business Administration, Universidad de Chile
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Dante Contreras Guajardo
Director
Business Administration Universidad de Chile
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Board of Directors
To March 2017

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Senior management
Organization Chart

To March 2017
Senior management
To March 2017

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Ministro Hales División
Metallurgical Engineer
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Corporate profile

Codelco is an autonomous company, owned by all Chileans. It is the world’s leading copper producer and a driver of the country’s development.

Our core business is to explore, develop and exploit mineral resources and process them to produce refined copper and by-products for their subsequent sale. We carry out these activities through eight Divisions: Radomiro Tomic, Chuquicamata, Ministro Hales, Gabriela Mistral, Salvador, Andina, El Teniente and the Ventanas smelter and refinery.

Our corporate strategy is coordinated and led from our Head Office in Santiago, Chile’s capital, by a nine-member Board of Directors and the company’s Chief Executive Officer.

Our commercial products go to clients around the world. Our overseas sales accounted for 15% of Chile’s total exports in 2016, with Asia as our principal market, followed by Europe and South America.

Since it was founded in 1971 and through to 2016 or, in other words, over the course of 45 years, Codelco has contributed US$102,000 million (2016 dollars) to the state of Chile and, as of December 2016, had assets worth US$33,403 million and a net worth of US$9,890 million.
Shared values
Codelco’s Charter of Values and Code of Business Conduct guide all the company’s decisions and the way it conducts its business. Those who work at the company strive to fulfill undertakings and achieve recognition for the way they do things, based on the following values:

- Respect for life and human dignity
- Responsibility and commitment
- Personal competence
- Team work
- Excellence at work
- Innovation
- Sustainable development

Pillars of the business
Our strategic pillars seek to make the company more productive, more innovative and more sustainable in order to respond to the critical demands of the mining business of the twenty-first century.

We understand that we must be competitive across all areas, adding value to the extraction of resources, contributing to our country’s development and, in an intrinsic requirement of the mining business, innovating unceasingly. Over the past few years, we have implemented effective communications strategies that are more open and reflect a vocation for transparency. In this way, we seek to foster a culture of proactively, opportunistically, accessibly and clearly disclosing information of public interest.

Sustainability is another of our strategic priorities and includes maximum concern for safety and occupational health, the environment, community relations and efficiency in the use of natural resources as well as the defense and development of markets. Our Sustainability Master Plan, introduced in 2016, seeks primarily to develop a Codelco Seal of Quality, with sustainable and traceable products and processes, backed by an organization that is efficient, inclusive, open to dialogue and innovative.
Leading presence
Codelco is the world’s largest copper producer. In 2016, we produced 1,827,267 tonnes of fine copper, including our stakes in El Abra and Anglo American Sur. That is equivalent to 9% of the world’s mine copper output and 33% of that of Chile. Codelco is also the world’s second largest molybdenum producer, with an output of 30,641 tonnes of fine molybdenum in 2016.

Our commercial products
- Grade A copper cathodes
- Copper concentrate
- Calcined copper
- Molybdenum
- Gold
- Silver
- Anode sludges
- Sulfuric acid
- Wire rods (semi-finished product).

Financial strength
Codelco has developed and maintains long-term relations with a stable and geographically diverse base of clients who include some of the world’s leading manufacturing companies.

The company regularly accesses the banking system and capital markets of both Chile and other countries in order to finance investments and refinance liabilities. It has a long and respected track record in local and international markets that has enabled it to develop a broad, geographically diverse and high-quality base of banks and investors through which to access North American, Asian and European financial markets for the placement of bonds and to obtain bilateral and syndicated loans.

In August 2016, we successfully placed a bond for 10 million unidades de fomento, achieving some of the best conditions and highest demand ever seen on the Chilean market. This placement reflected investors’ confidence in the company and its management.

Similarly, reflecting the confidence of the Chilean government in Codelco’s management, it announced a capital injection of US$975 million for the company in December 2016.

Technology and innovation
Today, the copper mining industry faces adverse conditions: low ore grades, high operating costs and a drop in the price of the metal. In order to continue contributing to the country’s development in...
In response, Codelco has moved from a closed model of searching for solutions to one that is open in order to incorporate other players in the local and international innovation ecosystem such as suppliers, research centers and universities. In December 2016, we created Codelco Tech, our technological subsidiary, to coordinate and accelerate response to the mining industry’s challenges through cutting-edge improvements that promise economic, social and environmental sustainability.

Exploration
Taking a long-term view, we are constantly undertaking exploration activities in Chile and other countries in order to maintain and expand our resource base. The experience and professional quality of our workforce mean that, in our quest for new deposits, we are able to implement the highest standards as regards neighboring communities in both Chile and abroad, complying with local laws and applying our values and business principles.

The future
In 2016, we achieved important progress in implementing and optimizing an investment portfolio that seeks to extend the life of the company’s mines, raise its environmental standards and increase productivity.

This has allowed us to advance with the construction of structural projects and other initiatives, addressing their scheduling with realism. In 2016, the company invested US$2,738 million, an amount that was similar in nominal terms to the previous year and once again positioned Codelco as the company that invests most in Chile.

Foundation and legal framework
Codelco is a company owned by the state of Chile whose purpose is to undertake mining, commercial and industrial activities. It was founded as the Corporación Nacional del Cobre de Chile, Codelco Chile, under Decree Law N° 1.350 in 1976 when the company took over management of the large-scale mines that had been nationalized in 1971.

The company reports to the government through the Mining Ministry and is governed by ordinary legislation unless otherwise stipulated under the terms of Decree Law N° 1.350.

Law N° 20.392, published in the Official Gazette on 14 November 2009, modified Codelco’s Organic Statutes as established under Decree Law N° 1.350 as well as regulation of the disposal of assets that do not form part of the mines currently being worked (Law N° 19.137).

Corporate governance
Modern, professional, transparent and auditable management is the priority of the company’s current Board of Directors, which has promoted regulation on transparency, probity and good corporate governance. This regulation is based on demanding international standards regarding the different areas of the company’s activities such as commercial relations, institutional ties, conflicts of interest and lobbying as well as the management of human resources.

These changes have been possible thanks to the model of corporate governance introduced in March 2010. It opened the way to professionalization of the Board and definition of relations with the company’s owner or, in other words, the people of Chile represented at the shareholders’ meeting by the Ministries of Finance and Mining, as well as with regulatory agencies and the company’s principal stakeholders. This organizational model makes for better
management that is more closely aligned with the company’s nature and objectives, reinforcing due transparency, oversight and internal controls as well as communications and the intervention of each body within the sphere of its powers.

Our corporate organization also tends to underscore Codelco’s position as a company that belongs to the state as distinct from the incumbent government, helping to isolate its management from the effects of political cycles.

The amendments to Codelco’s Organic Statutes introduced by Law N° 20.392, published in November 2009 and in force since 1 March 2010, were based on the OECD Guidelines on Corporate Governance of State-Owned Enterprises.

Since then, Codelco’s corporate governance structure has been headed by a nine-member Board of Directors, with broad powers, whose current Chairman is the economist Óscar Landerretche Moreno while the company’s CEO is civil mining engineer Nelson Pizarro Contador.

Board of Directors
Codelco’s senior governance body is its Board of Directors which comprises:

Three directors appointed by the President of Chile;

Two representatives of the company’s workers, selected by the President of Chile from shortlists for each seat put forward, in one case, by the Federation of Copper Workers and, in the other, jointly by the National Association of Copper Supervisors and the Federation of Copper Supervisors;

Four directors selected by the President of Chile from a shortlist for each seat drawn up by the Civil Service Board, with the approval of four-fifths of its members.

The President of Chile chooses one of these nine directors to chair the Board while the Board appoints the company’s CEO, who is responsible for implementing the Board’s decisions and overseeing all the company’s productive, administrative and financial activities. The CEO has the powers delegated in him by the Board and remains in his post whilst retaining its confidence.

Budget and oversight
Codelco’s annual budget is approved through a Supreme Decree issued jointly by the Mining and Finance Ministries. Oversight of the company is exercised by the Superintendency of Securities and Insurance (SVS), the Chilean Copper Commission (COCHILCO) and, indirectly through COCHILCO, by the Comptroller General of the Republic.

The company is registered on the SVS Securities Register at Nº 785 and is subject to the Securities Market Law. It must therefore file with the SVS and publicly disclose the same information as listed companies.
Codelco is celebrating 45 years of existence, which has signified an era of growth, development, innovation and progress for Chile.

2016 marks Codelco’s 45th anniversary, when in 1971 the Chilean government and National Congress unanimously approved the nationalization of copper.

After decades of discussion over what should be done with Chile’s primary ore resource, which until then was under the control of foreign companies, a political and social consensus was reached among the Chilean people on July 11, 1971; whereby mineral deposits at Chuquicamata, Salvador, Andina, El Teniente and La Exótica became 100% owned by the Chilean state.

During this time, July 11 was declared National Dignity Day and copper became known as “Chile’s salary”, which would provide the nation with a “second independence”. This, given that Codelco contributions to state treasury were expected to solve the socio-economic problems of the country and future generations. From such beginnings, Codelco was then able to generate the production capabilities, the technical know-how and the managerial leadership necessary to take charge and drive operational performance, transform practices and build new projects.
Such leadership was undoubtedly one of the most significant assets that copper nationalization provided Chile with: highly qualified working men and women, technical personnel and professionals available to perform in a complex, demanding and dynamic working environment. This group later passed on its knowledge, skill sets, capabilities and talents to enable our company to achieve the privileged position it has held in the mining industry ever since.

During the initial five years in Chilean hands, Codelco increased its production by 50% and grew to become a global benchmark in underground and open pit mining, maintaining the largest copper production rates at a global level throughout these 45 years.

Since July 11, 1971, we have directly and indirectly created thousands of jobs and contributed $US 102 billion towards the advancement of Chile through the building of hospitals, infrastructure, schools, housing, pensions, health care and social protections for the general public.

**Corporación Nacional del Cobre de Chile - Codelco**

On April 1, 1976, by decree of laws No. 1.349 and No. 1.350, the Corporación de Cobre was divided into two independent organisations: the Comisión Chilena del Cobre (Cochilco) a technical and advisory service agency; and the Corporación Nacional del Cobre de Chile (Codelco), a state-owned copper producer that groups the mineral deposits under one mining, industrial and trading company, acquiring full legal status and capacity.

In November 2009, changes were made to Codelco’s corporate governance structure by the enactment of Law 20,392. This law amended Codelco Chile’s organic law (D.L. 1,350, 1976) and standards related to the disposal of assets currently in operation (Law 19,137). The new guidelines amended, including, but not limited to, the composition of the Codelco Board and have been in effect since March 1, 2010.

In 2016, we were faced with the worst crisis in our history, as the international copper price collapsed. For the first time Codelco was not able to transfer surplus to the state for two quarters. However, Codelco met this unfavorable situation with operational excellence and productivity, thereby permitting the company to turn this crisis into an opportunity to confront future challenges with greater competitiveness.

In addition to cost reduction efforts aggressively introduced in 2014, we established the 2020 Strategic Productivity and Cost Agenda, producing savings of US$ 433 million in 2016. Moreover, Codelco managed to generate surplus revenues of US $ 500 million during 2016.
Timeline

1904
El Teniente
The Braden Copper Co. from the United States, with cutting-edge technology, initiates operations at El Teniente.

1915
Chuquicamata
The Guggenheim family from New York, through the Chile Exploration Company, initiates operations at the Chuquicamata mine, using the new open-pit mining method.

1959
Precursor of Salvador
The Andes Copper Mining Co. from the United States discovers a new copper ore body in the Indio Muerto mountain, Region of Atacama. Today, this is Codelco’s Salvador Division.

1966
“Chileanization” of Copper
Law 16,425 constitutes the Copper Corporation, which had a decisive role in copper production and international trade. The state later became the owner with 51% interest in Chuquicamata, El Teniente and Salvador.

1971
Nationalisation
The National Congress unanimously approved the nationalisation of large-scale copper mining. The assets and facilities owned by foreign companies operating the five large-scale copper deposits -Chuquicamata, Exótica, Salvador, Andina and El Teniente- become the property of the Chilean state. The Copper Corporation begins the management of these mines.

1976
Birth of Codelco
On April 1, the Copper Corporation was divided into two independent organisations: the Chilean Copper Commission, Cochilco, a technical advisory agency, and Codelco, the producer entity (Decree Law N° 1350).
1997
New Division
Codelco designs, builds and initiates operations at the Radomiro Tomic Division.

2005
Ventanas
Codelco creates the Ventanas Division, after acquiring Las Ventanas smelter and refinery from Empresa Nacional de Minería (Enami).

2009
Corporate Governance Law
Codelco’s organic law is amended, which includes the composition of the Board. The new guidelines enter into force on March 1, 2010.

2010
First Structural Project
Operations begin at the Ministro Hales Division, officially inaugurated later in 2016, is introduced as the first completed structural project.

2013
New Division
Gabriela Mistral becomes new division.

2014
Capitalization Law
Congress approves a historic capitalization plan for Codelco that provides a capital influx of up to US$ 3000 million for the period through 2014-2018, thereby allowing the promotion and materialization of an investment plan.

2015
Historic Production
Codelco produces 1.891 million tons of fine copper and reduces direct costs (C1), moving from the third to the second lowest cost quartile in the industry.

2016
Facing Adversity
Despite facing the worst crisis in the history of the company, with a sharp drop in the international price of copper, Codelco manages to generate a US$ 500 million surplus revenue for Chile.
Milestones

Safety
Unfortunately, we suffered the painful loss of four of our coworkers. For this reason, our foremost challenge is safety.

Investment
We made important strides in the materialization and enhancement of our investment portfolio. We progressed on structural projects with a realistic approach towards scheduling and reconciling difficulties.

Excellence
We installed the foundation for the C+ management system (based on Lean Management methodology) as the path towards operations excellence.

Safety
Unfortunately, we suffered the painful loss of four of our coworkers. For this reason, our foremost challenge is safety.

Investment
We made important strides in the materialization and enhancement of our investment portfolio. We progressed on structural projects with a realistic approach towards scheduling and reconciling difficulties.

Excellence
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Production
This year we made considerable achievements and attained historic production figures, allowing us to compensate for the difficulties in the Andina and Salvador divisions.

Sustainability
Upon implementation of a master plan, we established the framework to incorporate sustainability into the core of our business model.

Costs
We managed to greatly exceed our established target for cost reduction, achieving US$ 433 million in savings this year.

Capitalization
The US$ 975 million announced by the government is a vote of confidence in the management of our company.

Dialogue
Agreements were made through collective bargaining with unions at Andina, Salvador, Chuquicamata and the Vice Presidency of Projects.

Results
We attained figures in the blue in second and third quarter surplus, prior to the increase in copper prices.

Transparency
We progressed in this area and were placed among the top 10 companies with the best corporate reputation in Chile.

Debt
We reduced the net debt, thereby alleviating Codelco’s financial burden.

Succession
We consolidated the plan for successors across 100% of the strategic positions of the company, thereby providing consistency in knowledge and internal talent at Codelco.

Gender
Codelco made progress in gender diversity issues and labor conciliation with Head Office and Ventanas division certifications.

Markets
With the Molybdenum Plant operations, we have opened the doorway to copper by-product markets for materials such as rhenium and calcine.

Codelco Tech
The board of directors approved the constitution of Codelco Tech, our technological affiliate that integrates IM2, BioSigma and Codelco Lab.

Water
We managed critical risks related to the scarcity of water resources and tailings storage facilities.
Divisions

**CHUQUICAMATA**

- **Mining method**: Open pit mine
- **Operation**: Since 1915
- **Location**: Calama, Antofagasta Region
- **Products**: Electro-won and electro-refined cathodes and copper concentrate.
- **Production**: 302,010 metric tons of fine copper
- **Own workforce**: 5,921 people as of December 31, 2016

**RADOMIRO TOMIC**

- **Mining method**: Open pit mine
- **Operation**: Since 1997
- **Location**: Calama, Antofagasta Region
- **Products**: Electro-won cathodes
- **Production**: 318,255 metric tons of fine copper
- **Own workforce**: 1,228 people as of December 31, 2016
GABRIELA MISTRAL

Mining method | Open pit mine
Operation     | Since 2008
Location      | Sierra Gorda, Antofagasta Region
Products      | Electro-refined cathodes
Production    | 121,712 metric tones of fine copper
Own workforce | 553 people as of December 31, 2016

MINISTRO HALES

Mining method | Open pit mine
Operation     | Since 2010
Location      | Calama, Antofagasta Region
Products      | Copper calcine, copper and silver concentrate
Production    | 237,020 metric tones of fine copper
Own workforce | 767 people as of December 31, 2016
SALVADOR

Mining method | Underground mine and open pit mine.
Operation | Since 1959
Location | Diego de Almagro, Atacama Region
Products | Electro-won and electro-refined cathodes
Production | 59,796 metric tones of fine copper
Own workforce | 1,643 people as of December 31, 2016

ANDINA

Mining method | Underground mine and open pit mine.
Operation | Since 1970
Location | Los Andes, Valparaiso Region
Product | Copper Concentrate
Production | 193,341 metric tones of fine copper
Own workforce | 1,682 people as of December 31, 2016
EL TENIENTE

Mining method | Underground mine and open pit mine.
Operation | Since 1905
Location | Machalí, Libertador General Bernardo O’Higgins Region
Products | Anodes and copper concentrate
Production | 475,339 metric tones of fine copper
Own workforce | 4,524 people as of December 31, 2016

VENTANAS

Activity | Foundry and refinery.
Operation | Since 1964
Location | Puchuncaví, Valparaíso Region.
Products | Copper cathodes
Own workforce | 954 people as of December 31, 2016
## Key performance indicators

<table>
<thead>
<tr>
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<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Sales</td>
<td>15,860</td>
<td>14,956</td>
<td>13,827</td>
<td>11,694</td>
<td>11,537</td>
</tr>
<tr>
<td>Consolidated pre-tax profit</td>
<td>7,805</td>
<td>3,889</td>
<td>3,033</td>
<td>-2,191</td>
<td>435</td>
</tr>
<tr>
<td>Codelco pre-tax profit</td>
<td>7,464</td>
<td>3,813</td>
<td>3,046</td>
<td>-1,357</td>
<td>500</td>
</tr>
<tr>
<td>Treasury Payments</td>
<td>3,177</td>
<td>2,856</td>
<td>2,234</td>
<td>1,088</td>
<td>942</td>
</tr>
<tr>
<td>Investments</td>
<td>4,093</td>
<td>4,178</td>
<td>3,364</td>
<td>3,343</td>
<td>2,738</td>
</tr>
<tr>
<td>Total Assets</td>
<td>31,660</td>
<td>33,355</td>
<td>35,257</td>
<td>33,305</td>
<td>33,403</td>
</tr>
<tr>
<td>Total Liabilities</td>
<td>19,481</td>
<td>20,948</td>
<td>23,731</td>
<td>23,572</td>
<td>23,512</td>
</tr>
<tr>
<td>Equity</td>
<td>12,179</td>
<td>12,408</td>
<td>11,526</td>
<td>9,733</td>
<td>9,890</td>
</tr>
<tr>
<td>Fixed assets incorporation</td>
<td>3,687</td>
<td>4,437</td>
<td>3,800</td>
<td>4,261</td>
<td>3,015</td>
</tr>
</tbody>
</table>

### Copper Production (Thousands of fine metric tons)

| (Thousands of fine metric tons) | 1,758 | 1,792 | 1,841 | 1,891 | 1,827 |

### Direct employment (as of December 31)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Own employees</td>
<td>19,019</td>
<td>19,242</td>
<td>19,073</td>
<td>19,117</td>
<td>18,605</td>
</tr>
<tr>
<td>Contractors, operations &amp; services companies (*)</td>
<td>28,360</td>
<td>26,523</td>
<td>26,562</td>
<td>23,098</td>
<td>21,357</td>
</tr>
<tr>
<td>Contractors, investment companies (*)</td>
<td>27,347</td>
<td>21,214</td>
<td>18,778</td>
<td>23,250</td>
<td>25,741</td>
</tr>
</tbody>
</table>

### Copper price (c/lb)

| (LME cathodes grade A) | 360,6  | 332,1  | 311,3  | 249,2  | 220,6  |


(1) As of December 31, 2016 and 2015, including write-offs and impairments for US$ 157 and US$ 3,217 million, respectively. Minority interests for US$ 58 and US$ 836 million, respectively.

(2) As of December 31, 2016 and 2015, including write-offs and impairments for US$ 131 and US$ 2,431 million, respectively.

(3) Includes Codelco’s stake in El Abra and In-Anglo-American Sur.

(*) They provide services under a subcontracting regime (Law No. 20,123). Since 2012, Codelco measures contractors participation with the Full Time Equivalent (FTE) indicator.
Codelco 2016

We operate eight work centers located between the Antofagasta Region and the Libertador General Bernardo O’Higgins Region; our Head Office is located in Santiago de Chile.

- **US$ 500 million** of pre-tax profit
- **1.827 thousands of fine copper production**
- **US$ 9.890 million** equity
- **18.605** own workforce
- **US$ 11.537 million** sales
- **45 years** of large-scale mining
- **US$ 2.738 million** investments
Mineral resources and reserves

Our mining base is the great strength that underpins the company’s future, with mega-deposits that have an expected life of over 80 years.

In reporting its mining asset inventory, Codelco differentiates between mineral resources and reserves in accordance with current regulation. In addition, in reporting geological resources, it indicates the current potential of deposits identified.

Geological resources - which are classified as measured, indicated or inferred - are the result of exploration and are estimated using geo-scientific models. When these resources are economically interesting and have a reasonable likelihood of being mineable, they are known as mineral resources.

Mineral reserves, which are classified as proven or probable, are the subset of measured and indicated mineral resources that can be extracted according to a technically and economically sustainable mine plan included in a production scenario.

The process of transforming mineral resources into reserves, which is carried out by a competent person, includes the projection of current operations and projects at the pre-feasibility and feasibility engineering level of each divisional production scenario.
Our mining assets are classified according to the common definitions for all the company’s Divisions, with a comprehensive and auditable classification process and quality control of the geological modelling and estimation process.

**Inventory of in situ geological resources**

<table>
<thead>
<tr>
<th>Division</th>
<th>Measured resources</th>
<th>Indicated resources</th>
<th>Inferred resources</th>
<th>Geological resources</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mineral Mt</td>
<td>CuT grade %</td>
<td>Fine Cu Mt</td>
<td>Mineral Mt</td>
</tr>
<tr>
<td>Radomiro Tomic</td>
<td>1,448</td>
<td>0.49</td>
<td>7.2</td>
<td>1,713</td>
</tr>
<tr>
<td>Chuquicamata</td>
<td>2,731</td>
<td>0.65</td>
<td>17.8</td>
<td>1,767</td>
</tr>
<tr>
<td>Ministro Hales</td>
<td>219</td>
<td>1.05</td>
<td>2.3</td>
<td>369</td>
</tr>
<tr>
<td>Gabriela Mistral</td>
<td>387</td>
<td>0.35</td>
<td>1.4</td>
<td>75</td>
</tr>
<tr>
<td>Salvador</td>
<td>704</td>
<td>0.48</td>
<td>2.4</td>
<td>671</td>
</tr>
<tr>
<td>Andina</td>
<td>2,856</td>
<td>0.74</td>
<td>21.0</td>
<td>2,493</td>
</tr>
<tr>
<td>El Teniente</td>
<td>2,956</td>
<td>0.83</td>
<td>24.4</td>
<td>2,701</td>
</tr>
<tr>
<td>Exploration/ businesses and subsidiaries</td>
<td>161</td>
<td>0.26</td>
<td>0.4</td>
<td>138</td>
</tr>
<tr>
<td>Total</td>
<td>11,463</td>
<td>0.68</td>
<td>77.5</td>
<td>9,928</td>
</tr>
</tbody>
</table>

Mt: Millions of tonnes. CuT%: Total copper percentage.

In our 2016 inventory, geological resources showed a minimal drop of 0.1% of fine copper over the 2015 inventory. This was explained by the update of geological models and new estimates of resources in the light of reconnaissance campaigns.

On the other hand, resources in artificial deposits showed a 2% increase in fine copper, due to an update of the estimate of stock and broken material.

**Inventory of resources in artificial deposits**

<table>
<thead>
<tr>
<th>Division</th>
<th>Mineral Mt</th>
<th>CuT grade %</th>
<th>Fine Cu</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chuquicamata</td>
<td>1,406</td>
<td>0.24</td>
<td>3.3</td>
</tr>
<tr>
<td>Salvador</td>
<td>1,390</td>
<td>0.24</td>
<td>3.3</td>
</tr>
<tr>
<td>El Teniente</td>
<td>2,415</td>
<td>0.53</td>
<td>12.8</td>
</tr>
<tr>
<td>Total</td>
<td>5,210</td>
<td>0.37</td>
<td>19.4</td>
</tr>
</tbody>
</table>
Mineral Resourses

Each year, Codelco prepares a Business and Development Plan that contains a projection of the business in the short, medium and long term.

The strategic long-term plan is drawn up on the basis of mineral resources with potential economic value, taking into account geological, metallurgical, geo-mechanical, economic, financial, environmental and community factors and other factors of a technical-economic nature with their corresponding degree of reliability.

In order to update and refine the classification of mineral resources, we carry out drilling campaigns that provide additional information. This allows us to implement the different profile, pre-feasibility and feasibility engineering stages in a robust manner. This process involves a series of specific activities that are set out in the company’s strategic agenda and are scheduled, programmed and budgeted over time. The Division with the lowest level of resources has an expected exploitation horizon of ten years while, in the case, of some of the company’s mega-deposits, it is in excess of 80 years.

In our corporate inventory of mineral resources, information from all the company’s Divisions is consolidated, based on measurement of the pit shell in the case of open-pit mines and, in the case of underground mines, the volumes of mineral, using variable cut-off grades calculated from a mine plan.

Inventory of mineral resources (I)

<table>
<thead>
<tr>
<th>Division</th>
<th>Measured resources</th>
<th>Indicated resources</th>
<th>Inferred resources</th>
<th>Mineral resources</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mineral Mt</td>
<td>CuT grade</td>
<td>Fine Cu Mt</td>
<td>Mineral Mt</td>
</tr>
<tr>
<td>Radomiro Tomic</td>
<td>1,300</td>
<td>0.50</td>
<td>6.5</td>
<td>1,288</td>
</tr>
<tr>
<td>Chuquicamata</td>
<td>650</td>
<td>0.87</td>
<td>5.7</td>
<td>641</td>
</tr>
<tr>
<td>Ministro Hales</td>
<td>136</td>
<td>1.22</td>
<td>1.7</td>
<td>59</td>
</tr>
<tr>
<td>Gabriela Mistral</td>
<td>355</td>
<td>0.36</td>
<td>1.3</td>
<td>69</td>
</tr>
<tr>
<td>Salvador</td>
<td>208</td>
<td>0.67</td>
<td>1.4</td>
<td>123</td>
</tr>
<tr>
<td>Andina</td>
<td>1,585</td>
<td>0.85</td>
<td>13.5</td>
<td>1,073</td>
</tr>
<tr>
<td>El Teniente</td>
<td>1,405</td>
<td>0.98</td>
<td>13.8</td>
<td>685</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>5,640</strong></td>
<td><strong>0.78</strong></td>
<td><strong>43.7</strong></td>
<td><strong>3,939</strong></td>
</tr>
</tbody>
</table>

Note: At variable copper grade according to mine plan.
Mt: millions of tonnes. CuT%: Total copper percentage.
### Inventory of artificial material (II)

<table>
<thead>
<tr>
<th>Division</th>
<th>Artificial material</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mineral Mt</td>
<td>CuT grade %</td>
<td>Fine Cu Mt</td>
<td></td>
</tr>
<tr>
<td>Radomiro Tomic</td>
<td>31</td>
<td>0.34</td>
<td>0.1</td>
<td></td>
</tr>
<tr>
<td>Chuquicamata</td>
<td>130</td>
<td>0.35</td>
<td>0.4</td>
<td></td>
</tr>
<tr>
<td>Ministro Hales</td>
<td>76</td>
<td>0.38</td>
<td>0.3</td>
<td></td>
</tr>
<tr>
<td>Salvador</td>
<td>236</td>
<td>0.60</td>
<td>1.4</td>
<td></td>
</tr>
<tr>
<td>Andina</td>
<td>221</td>
<td>0.72</td>
<td>1.6</td>
<td></td>
</tr>
<tr>
<td>El Teniente</td>
<td>482</td>
<td>0.54</td>
<td>2.6</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,176</strong></td>
<td><strong>0.55</strong></td>
<td><strong>6.4</strong></td>
<td></td>
</tr>
</tbody>
</table>

*Note: At variable copper grade according to mine plan.*

### Inventory of mineral resources by division (I+II)

<table>
<thead>
<tr>
<th>Division</th>
<th>Total 2017 Business and Development Plan</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mineral Mt</td>
<td>CuT grade %</td>
<td>Fine Cu Mt</td>
<td></td>
</tr>
<tr>
<td>Radomiro Tomic</td>
<td>3,815</td>
<td>0.46</td>
<td>17.6</td>
<td></td>
</tr>
<tr>
<td>Chuquicamata</td>
<td>2,066</td>
<td>0.67</td>
<td>13.9</td>
<td></td>
</tr>
<tr>
<td>Ministro Hales</td>
<td>997</td>
<td>0.91</td>
<td>9.1</td>
<td></td>
</tr>
<tr>
<td>Gabriela Mistral</td>
<td>431</td>
<td>0.35</td>
<td>1.5</td>
<td></td>
</tr>
<tr>
<td>Salvador</td>
<td>877</td>
<td>0.48</td>
<td>4.2</td>
<td></td>
</tr>
<tr>
<td>Andina</td>
<td>4,817</td>
<td>0.81</td>
<td>39.2</td>
<td></td>
</tr>
<tr>
<td>El Teniente</td>
<td>4,252</td>
<td>0.81</td>
<td>34.3</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17,254</strong></td>
<td><strong>0.69</strong></td>
<td><strong>119.8</strong></td>
<td></td>
</tr>
</tbody>
</table>

### Contribution of mineral resources by subsidiaries

<table>
<thead>
<tr>
<th>Participation in subsidiary</th>
<th>Subsidiaries’ mineral resources</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Anglo American Sur (20%)</td>
<td>1,629</td>
<td>0.64</td>
<td>10.4</td>
<td></td>
</tr>
<tr>
<td>Inca de Oro (33.84%)</td>
<td>156</td>
<td>0.41</td>
<td>0.6</td>
<td></td>
</tr>
<tr>
<td>El Abra (49%)</td>
<td>1,089</td>
<td>0.44</td>
<td>4.8</td>
<td></td>
</tr>
<tr>
<td><strong>Subtotal subsidiaries</strong></td>
<td><strong>2,875</strong></td>
<td><strong>0.55</strong></td>
<td><strong>15.8</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Total Codelco</strong></td>
<td><strong>20,129</strong></td>
<td><strong>0.67</strong></td>
<td><strong>135.6</strong></td>
<td></td>
</tr>
</tbody>
</table>

*Note: Codelco’s stakes in other companies include the Los Broncos, El Soldado, El Abra and Inca de Oro mines. Mineral reserves are included in mineral resources.*

*Sources: Anglo American Sur, Freeport McMoran and Panaust (Annual Report 2014).*

*Mt: Millions of tonnes. CuT%: Total copper percentage.*
In our 2017 Business and Development Plan, mineral resources show a drop of 2.4 million tonnes of fine copper as compared to the previous Plan. This reduction is explained by annual consumption and an update of the inventory of mineral resources in mine plans. One example of the latter is the reformulation of the El Teniente Division’s Recursos Norte project where, as a result of a review of future projects to expand processing capacity and optimization of the global plan, a plan was achieved that requires less mineable resources.

The inventory adds 15.8 million tonnes of fine copper to the company’s resources, taking into account stakes in the Anglo American Sur mines, Inca de Oro and El Abra, and brings the total up to 136 million tonnes of fine copper.

**Mineral reserves**

Our mineral reserves were determined in accordance with the norms issued by Chile’s Mining Resources and Reserves Competency Appraisal Commission created under Law N° 20.235. They are the result of long-term mine planning and include only the measured and indicated mineral resources of projects for which a pre-feasibility or feasibility study has been completed. Inferred resources within the life of the mine plan of open-pit and underground mines are treated as waste rock for the purposes of economic evaluation.

Details of the calculation of the company’s mineral reserves as of 2016 can be found in each Division’s Resources and Reserves Public Report.

In 2016, mineral reserves showed a drop of 2.7 million tonnes of fine copper, due principally to consumption during the year which explained 2 million tonnes. The rest of the difference corresponds to the reduction in the reserves of El Teniente’s Recursos Norte project.

The inventory of mineral reserves includes 2.7 million tonnes of fine copper which correspond to Codelco’s stake in SCM El Abra and Anglo American Sur, taking the total of mineral reserves to 48.2 million tonnes of fine copper.

### Inventory of sulfide and oxide reserves

<table>
<thead>
<tr>
<th>Division</th>
<th>Proven</th>
<th>Probable</th>
<th>Reserves</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mineral Mt</td>
<td>CuT grade %</td>
<td>Fine Cu Mt</td>
</tr>
<tr>
<td>Radomiro Tomic</td>
<td>887</td>
<td>0.51</td>
<td>4.6</td>
</tr>
<tr>
<td>Chuquicamata</td>
<td>638</td>
<td>0.88</td>
<td>5.6</td>
</tr>
<tr>
<td>Ministro Hales</td>
<td>169</td>
<td>1.07</td>
<td>1.8</td>
</tr>
<tr>
<td>Gabriela Mistral</td>
<td>320</td>
<td>0.36</td>
<td>1.2</td>
</tr>
<tr>
<td>Salvador</td>
<td>30</td>
<td>0.54</td>
<td>0.2</td>
</tr>
<tr>
<td>Andina</td>
<td>728</td>
<td>0.78</td>
<td>5.7</td>
</tr>
<tr>
<td>El Teniente</td>
<td>763</td>
<td>1.07</td>
<td>8.1</td>
</tr>
<tr>
<td><strong>Total Codelco</strong></td>
<td><strong>3,536</strong></td>
<td><strong>0.77</strong></td>
<td><strong>27.2</strong></td>
</tr>
</tbody>
</table>

*Note: Codelco’s stakes in other companies include the Los Bronces, El Soldado and El Abra mines. Source: 2015 Annual Reports of Anglo American Sur and Freeport McMoran. Mt: Millions of tonnes. CuT%: Total copper percentage.*
The budget restrictions of recent years prompted a review of the development of projects and the company’s strategy for consumption of reserves, which may imply some variation in estimates of mineral resources and reserves in the next planning exercise.

**Competent persons**

Codelco’s public reports on resources and reserves are signed by the following competent persons from the company, depending on their divisional or corporate level of responsibility, and are the information on the basis of which the company’s inventory of resources and reserves is prepared. These competent persons are registered with the Mining Resources and Reserves Competency Appraisal Commission.

In line with best practices, the geo-mining metallurgical information on which the inventories of the company’s different Divisions (2015) are based was audited and reviewed, depending on the case, by independent auditors from within the company as well as from Tetratech-Metálica, NCL Ingeniería y Construcción S.A. and EMI-S.A.

Chilean Law N° 20.235 regulates matters relating to competent persons and created the Mining Resources and Reserves Competency Appraisal Commission. This Commission is a member of the Committee for Mineral Reserves International Reporting Standards (CRIRSCO), which brings together organizations from Australia (JORC), Canada (Instrument 43-101), South Africa (SAMREC), the United States (Society of Mining Engineers), Europe (Pan-European Code) and Russia (NAEN) which adhere to common international regulation on the reporting and disclosure of exploration prospects and mineral resources and reserves.

**Subsidiaries’ contribution to reserves**

<table>
<thead>
<tr>
<th>Participation in subsidiary</th>
<th>Reserves</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mineral Mt</td>
</tr>
<tr>
<td>Anglo American Sur (20%)</td>
<td>337</td>
</tr>
<tr>
<td>El Abra (49%)</td>
<td>196</td>
</tr>
<tr>
<td>Subtotal subsidiaries</td>
<td>533</td>
</tr>
<tr>
<td>Total Codelco</td>
<td>7,200</td>
</tr>
</tbody>
</table>

*Mt: Millions of tonnes. CuT%: Total copper percentage.*

Note: These competent persons were certified in February and March 2017.
The search for new deposits in Chile and overseas is a permanent strategic activity that will enable us to ensure the future of our business.

In mining, exploration activities comprise a series of stages that range from basic studies through to advanced projects. At each stage of this process, data, information and knowledge is added, regarding mineral resources discovered which, depending on their size and quality, will add to the company’s mineral base and could in the future become new main operation for Codelco.

Our strategic plan has included exploration activities since 1991 when the company’s Explorations Area was created.

Between 1991 and 2016, these activities contributed 68.2 million tonnes of fine copper to Codelco’s resource and reserve inventory.
Geological resources discovered and incorporated into Codelco’s inventory, 1991-2016

(in millions of tonnes of fine copper)

In 2016, reconnaissance work was completed on the La Huifa project. This geological resource, which contains 2.43 million tonnes of fine copper with a 0.2% total copper (CuT) cut-off grade, now forms part of Codelco’s inventory.

After exploration work undertaken through to 2016, the company has a project portfolio with potential geological resources in the order of 7-10 million tonnes of fine copper. As these resources are still at different stages of exploration, they do not yet form part of the corporate inventory and their inclusion will depend on the results of subsequent phases.

Codelco is among the companies with the world’s lowest exploration costs (according to Strategies for Copper Reserves Replacement 2015, a study prepared annually by SNL Metals & Mining).

Geological resources incorporated in 2016

<table>
<thead>
<tr>
<th>0.2% CuT cut-off grade</th>
<th>Resource millions of tonnes</th>
<th>Copper grade %</th>
<th>Fine copper millions of tonnes</th>
</tr>
</thead>
<tbody>
<tr>
<td>La Huifa</td>
<td>606</td>
<td>0.4</td>
<td>2.43</td>
</tr>
</tbody>
</table>

CuT: cobre total.
Investment

Global exploration investment marked a new record in 2012 when it reached US$21,000 million. Non-ferrous metal exploration budgets subsequently tightened gradually to US$7,000 million in 2016, which represented a 21% drop respect of the previous year and almost two-thirds regarding the 2012 record.

In 2016, investment in exploration in Chile reached US$443 million, positioning it fourth in the world and first in Latin America where it was followed by Peru and Mexico.

At Codelco, we invested US$38.4 million in mineral exploration activities during 2016, a 47% drop respect of previous year. This is mainly explained by budget adjustments due to lower commodity prices.

In response to these market conditions, we drew up a contingency plan that mainly implied postponing exploration follow-up activities which, although they correspond to the discovery stage, are the most intensive in investment. Instead, we were able to boost the process of generating exploration areas, thereby increasing the base of early-stage exploration projects, which will put us on a stronger footing once the investment cycle returns to normal.

Exploration in Chile

In 2016, the company focused mainly on brownfield exploration activities in an effort to improve the different Divisions development plans by identifying new opportunities to increase their mineral resource base.

In the case of greenfield exploration, which focuses on areas with the greatest potential to contain porphyry copper deposits, the different phases of the exploration process include geological mapping, geochemical sampling, the use of geophysical techniques and scouting drilling.

Areas of brownfield and greenfield exploration in Chile, 2016

In 2016, we successfully identified seven new exploration targets of which six were greenfield and one was brownfield.

<table>
<thead>
<tr>
<th>Anomalies</th>
<th>Prospects</th>
<th>Targets</th>
<th>Advanced exploration</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>N° areas under study</td>
<td>44</td>
<td>18</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>N° areas perforated</td>
<td>Studies without drilling</td>
<td>4</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Meters drilled</td>
<td>5,820</td>
<td>4,358</td>
<td>6,269</td>
<td>16,447</td>
</tr>
</tbody>
</table>

The La Huifa advanced exploration project, located in the vicinity of the El Teniente mine, concluded with a geological model and estimation of its copper and molybdenum resources. Its databases were audited by a specialized external company. Using a cut-off grade of 0.2%, its resources were estimated at 606 million tonnes, with an average CuT grade of 0.4% and 151 ppm Mo (parts per million of molybdenum) which, at a CuT cut-off grade of 0.5% corresponds to 128 million tonnes with an average CuT grade of 0.79% and 306 ppm Mo.

Mineralization occurs in a system of hydrothermal tourmaline breccias and copper sulfides which is associated with the earliest stages of the mineralization of the El Teniente deposit.

Through the studies conducted in the La Huifa area, preliminary knowledge was acquired about mineralization on the eastern flank of the El Teniente Division, opening up new opportunities for exploration in this area.
**Exploration overseas**

Codelco’s overseas exploration seeks to broaden potential contributions to mineral resources considering that exploration in Chile has historically been intense, and to progress in the company’s internationalization efforts.

This work has focused on Andean countries such as Ecuador, which have geological similarities to Chile, as well as those such as Brazil with a high potential for new copper discoveries.

**Ecuador**
- Exploration Agreement with Ecuador’s ENAMI EP in 2011
- Operated through the EMSA Ecuador subsidiary since 2012
- More than 20 prospects assessed
- Prospect at stage of obtaining environmental permit for follow-up exploration
- Project at follow-up exploration stage: Llurimagua, 25,000 meters of drilling
- In 2016, EMSA Ecuador applied for mining rights in 49 areas, totaling some 200,000 hectares.

**Brazil**
- Activity since 2000
- Operated through the Codelco do Brasil Mineração subsidiary since 2001
- Deposit discovered in 2005
- Two follow-up exploration projects: Tancredo (with Xstrata) and Liberdade (with Pan Brazilian)
- Five prospects for basic exploration
- Exploration activity is concentrated in the Carajás mining district and positioning in the Tocantins and Goiás states.
- In 2016, EMSA Ecuador applied for mining rights in 49 areas, totaling some 200,000 hectares.

**Brazil**

Our Codelco do Brasil subsidiary continued to evaluate its own portfolio of prospects and those which we are exploring under partnerships. Activities were concentrated in the Carajás mining district, located in the State of Pará, where most of the world’s largest mining companies are also engaged in exploration or have mining interests.

At present, Codelco has mining resources at the exploratory stage and with potential in the Liberdade project, which is part of the portfolio with its partnership, the local company Pan Brasil. Preliminary estimates of in situ resources at Liberdade are in the order of 242 million tonnes, with a copper grade of 0.77%.

We also carried out scouting drilling at five prospects in four of which we have found geological evidence of hydrothermal systems, similar to those associated with the district’s deposits. These will, therefore, be further explored in greater detail.

We also expanded our sphere of action positioning new mining properties in other states, particularly Tocantins and Goiás, which will increase our exploration base in Brazil.
Ecuador

In this Andean country, Codelco is undertaking exploration activities through an agreement, signed in November 2011, with state-owned Enami EP (Empresa Nacional Minera del Ecuador). In addition, it is conducting its own exploration through its 100%-owned subsidiary, Emsaec S.A. (Exploraciones Mineras Andinas Ecuador).

Under the agreement with Enami EP, we have evaluated more than 20 prospects of which the Llurimagua and Mina Real (or Nanguipa) projects are active.

The Llurimagua project is located in the Imbabura Province, 80 kilometers north of Quito, and is the most important prospect in the Enami EP-Codelco portfolio. In 2016, 10,000 meters of boreholes were drilled which, together with those drilled in 2015, takes the total to 25,000 meters. The geological evidence gathered so far confirms the existence of a porphyry copper-type deposit which is of interest to Codelco and means that exploration work will continue in 2017.

The Mina Real or Nanguipa project is located in the Zamora-Chinchipe Province, some 460 kilometers south of Quito. It is still at the initial exploration phase, with work on the surface to define possible drilling targets.

One of the most important events for mining exploration in Ecuador was the government’s announcement in March 2016 that it will resume the award of mining concessions. In this context, our subsidiary there has applied for mining rights in 49 areas that total almost 200,000 hectares located in very promising and scarcely explored regions of the country. Once these rights have been obtained, these areas will become part of Codelco’s own portfolio in Ecuador and will be subject to evaluation and preliminary geological exploration.

Innovation in exploration models

Exploration is a knowledge-based activity which handles a large volume of data, which is necessary to classify, keep up and update. To this end, we have created a system of geographic information that facilitates ready access to it.

Together with the conceptual models created using knowledge of the different deposits, this information enables us to identify the factors and critical variables that determine the geological processes involved in the formation and location of mineral deposits.

In developing exploration models, we have focused on applying technologies that allow indirect detection of mineral bodies located at great depth. This is, indeed, the key challenge for mining exploration today since all those bodies that are exposed or easy to detect have already been found.

In 2016, we also participated in research and technology development programs that included:

- A program of collaboration sponsored by the Australia’s AMIRA International that focuses on identifying diagnostic minerals which form halos of mineralized systems. Based on the results of the first phases of this study, it was concluded that this methodology is promising for its use in areas with outcrops that are distant from mineralized centers which would permit vectorization towards the mineralized system. In 2016, a blind test was carried out in a pilot area proposed by Codelco and its results will be used to validate the methodology.

- Tests of new technologies for the acquisition of geophysical data, including the use of a drone for an internal magnetometry pilot project was carried out. In the second stage of this project, the data gathered will be validated and a second survey will be carried out, using a new drone with magnetometry equipment, designed specifically for high-resolution work.
Exploration partnerships

In the case of exploration, our aim is also to identify and manage the acquisition of assets and/or partnerships with third parties as a complementary mechanism for increasing our base of mineral resources.

These partnerships enable us to develop business opportunities in projects on mining properties belonging to Codelco or third parties.

As of end-2016, we had partnerships with third parties on properties belonging to Codelco in Chile in the Puntilla Galenosa project (with Pucobre), the Anillo project (Fortune Valley Resources Inc.) and the Roberto project (Anglo American Norte). In other countries, partnerships include both Codelco properties and those of third parties.

### Exploration partnerships

<table>
<thead>
<tr>
<th>Projects in Chile</th>
<th>Partner</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Anillo</td>
<td>Fortune Valley</td>
<td>Oro</td>
</tr>
<tr>
<td>Puntilla – Galenosa</td>
<td>Pucobre</td>
<td>Cobre</td>
</tr>
<tr>
<td>Roberto</td>
<td>Anglo American Norte</td>
<td>Cobre</td>
</tr>
</tbody>
</table>

### Projects overseas

<table>
<thead>
<tr>
<th>Projects overseas</th>
<th>Partner</th>
<th>Type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Liberdade</td>
<td>Pan Brasil</td>
<td>Cobre</td>
</tr>
<tr>
<td>Tancredo y otros</td>
<td>Xstrata Brasil</td>
<td>Cobre</td>
</tr>
<tr>
<td>Grupo Propiedades</td>
<td>(ENAMI EP) de Ecuador</td>
<td>Cobre</td>
</tr>
</tbody>
</table>
Investments & Projects

We invest more than any other company in Chile. In 2016 we allocated US$ 2.738 billion to our Capex portfolio. For the 2016-2020 period, we have developed a US$18 billion investment plan.

Our structural projects are currently in different development and consolidation stages. They will be implemented as part of the transformation needed to ensure our company’s future in order to offset the effect caused by declining ore grades at our current operations, improve productivity and add new production to maintain our leadership position in the global copper industry.

We also invested in our divisional study and project portfolio carried out every year to maintain assets in operation, ensure compliance with environmental standards and implement appropriate standards to improve our long-term competitive advantage. For the five-year period from 2016 to 2020, we will have allocated US$ 18 billion to our Capex portfolio.

In 2016, pre-investment studies and projects involved an investment of US$ 2.738 billion, of which approximately US$ 1.183 billion went to development projects.
Investment in 2016

<table>
<thead>
<tr>
<th>USS million</th>
</tr>
</thead>
<tbody>
<tr>
<td>Development Projects</td>
</tr>
<tr>
<td>Equipment Replacement and Facility Refurbishment</td>
</tr>
<tr>
<td>Sustainability</td>
</tr>
<tr>
<td>Research and Studies</td>
</tr>
<tr>
<td>Business</td>
</tr>
<tr>
<td>Mine Development &amp; Deferred Expenses</td>
</tr>
<tr>
<td>Exploration</td>
</tr>
<tr>
<td><strong>Total</strong></td>
</tr>
</tbody>
</table>

*Note:* Data obtained from actual costs as of December 2016 SAP/R3. Nominal currency, subject to accounting adjustments.

Chuquicamata Division

**Chuquicamata Underground Mine Structural Project**

Its goal is to continue mining the resources available under the open-pit mine another 40 years, this 100-year old mine will be converted into a world-class underground operation.

In 2016 we started the mass development of mine tunnels in order to commence operations in 2019.

During the year, we connected the access tunnel that will join the surface to the underground mine, through a 7.5 km long road (April 2016).

After more than three and a half years of work, we successfully completed the return airshaft excavation (918 metres deep and 11 metre effective diameter), one of the largest in global mining (July 2016).

Furthermore, we continued making progress on the mineral transport tunnel and other permanent infrastructure works. At the end of the year, this project had developed more than 59 km of tunnels, chimneys and shafts, out of a total 181 km.

**Other Projects**

At the concentrator plants, we continued implementing our investment plan to treat an average 175,000 tonnes per day and improve metal recovery. Key milestones in 2016 include: we started operations at the flotation plant to treat smelter slag, we prepared the initial start-up of the improvement projects for the secondary SAG mill and we replaced the flotation cells for the mineral processing plant.
Likewise, we continued to develop the project portfolio at the smelter to comply with Supreme Decree 28, issued by the Ministry of the Environment, for smelter emissions in Chile and it will become effective for Chuquicamata Smelter from December 2018.

We made significant progress in various projects, for example, the new Pierce-Smith converter started operations and we developed the Acid Plant Transformation project, which includes two new plants using double absorption and double contact technology.

During this project we started preparing the site where the new facilities will be located; at the same time, we made progress on detail engineering and purchased critical equipment for this plant. We are also completing the study to enhance the smelter business, by increasing the Flash Furnace smelting capacity to improve our competitive position.

At the electrolytic refining plant, we continued to implement the projects to refurbish the facilities and improve safety conditions.

At the Talabre dam we continued to develop the VIII stage, raising the dam walls from 2,490 m to 2,496 m above sea level. This project will ensure operational continuity of sulphide production at the North District.

In hydrometallurgical processing of minerals, we completed the studies of leaching of current gravel and artificial resources, in order to boost the division’s oxide business.

Radomiro Tomic Division

Radomiro Tomic Sulphide Mine Structural Project

In January 2016, we obtained the project’s Environmental Qualification Resolution, successfully concluding the consultation process with the majority of the local communities.

We also completed the detail engineering stage for the first concentrator module and we concluded the site preparations and land-clearing operations required for our future facilities.

In respect of the investment stage of the project, we adopted a development strategy consistent with market conditions; therefore, the start-up of the first module was rescheduled for 2024. This will enable us to optimise the business case, which will focus on extracting and processing sulphide minerals at the Radomiro Tomic Division.

Furthermore, we continued to develop engineering and analysis of the water desalination system, for which we are currently assessing implementation alternatives with third parties.

In 2017, we have already advertised to request for expression of interest. This system should initially supply 630 l/s of desalinated water to the North District.

Other Projects

At the mine operations we implemented projects to sustain production and improve mine safety. During the year we received new support drills and excavators, improving mine safety. We also installed next-generation sensors in the sulphide belt to predict overheating incidents and failures.
As for the development of the mine, we implemented the first stage to relocate the mining equipment’s the electrical feed infrastructure to ensure operational continuity.

In resources and reserves, we continued to invest to improve mineral resources data to transform them into reserves, and include them in the production plans. In 2016, the funds required to ensure the drilling, sampling and modelling programmes were approved for the next five years.

In order to make the crushing and leaching plant sustainable, investments were made to improve and expand the tailings extraction system, reconditioning the secondary crushers, and we made progress in replacing the buck wheel excavator.

In solvent extraction and electrowinning (SX/EW) process, to sustain and improve throughout rate, we improved the EW Plant tankhouse, we installed a new stainless steel tank at the SX Plant. Finally, the long-term expansion of this business is being developed through a long-term, heap leaching prefeasibility study, to extend the division’s hydrometallurgical business.

**Ministro Hales Division**

In 2016 we focused our investments on personnel safety projects, on complying with our commitments to the Calama community (road works), improving efficiency of production processes and on obtaining geological resources data.

A key improvement in safety was geotechnical and hydrogeological monitoring, ensuring a safe operation inside the mine, preventing accidents in the event of any structural collapse of mine walls.

With regard to community commitments, we completed a new north access road to the city of Calama, improving integration of the Tucnar Huasi and Huaytiquina villages.

Key projects that contribute to production efficiency and reliability, focused on increasing recovery at the concentrator plant and improving availability of the roasting plant, installation of a third column flotation cell, implementation of an expert control system at the concentrator, installation of a second fan and incorporation of a second cooler in the roasting plant.

By identifying geological and geometallurgical resources we delineated the southern side of the open pit to develop new mining phases. The delineation of the north ore body and deep central body helped to update the future mining models for Ministro Hales Underground Mine.
Investments & Projects

We carried out the company’s largest investment program, in order to ensure the future of Codelco and to transform large mining reserves into resources for Chile.

Gabriela Mistral Division

Our 2016 Capex portfolio included investments to ensure operating continuity; we have practically completed the Tailings Dump Liner Installation – Phase VI project to store the tailings in heaps in line with the division’s business plan. Furthermore, the Division started the feasibility study to install the Tailing Dump Liner Installation – Phase VII and VIII, to implement the phase VII of the project from 2018 and phase VIII, from 2020, in line with the 2017 Development & Business Plan.

Development and Business Plan
We developed the Hydrogeological Exploration project to ensure the division has water resources; it aims to improve the water supply to the division and develop two wells in Laguna Seca.

In respect of future developments, we completed the second drilling stage in the geological exploration for sulphide ores, the results will help to define the mineralisation potential of the Gabriela Mistral mine, go beyond the copper oxides currently being mined, and analyse long-term planning scenarios and incorporate potential mine projects in the division’s future business plans.

Finally, the division continued its district geological exploration campaign that studies potential oxide and sulphide ores bodies and known porphyry feeder zones. We also conducted exploration using indirect methods (geophysics) in district zones identified as areas of geological interest for potential of economic mineralisation.

Salvador Division

Inca Mine Structural Project
In view of depleting reserves at Salvador Division’s mine operations, we identified the potential to extend the mine life of the Rajo Inca project, by extracting through an open pit the remaining resources at Indio Muerto mine.

In 2016, we continued to collect geo-mineral-metallurgical data and we expect to complete the prefeasibility study at the beginning of 2017, so as to develop an alternative project to give continuity to the Salvador business unit.

Other projects
The Salvador Division investment portfolio developed in 2016 primarily focused on driving sustainable development. In this context, we conducted the studies required to build the second stage of the tailings dump filtered from the slag flotation plant,
sulphuric acid tanks and the electrical installation in workshops and industrial facilities at Potrerillos. We started building a new filter plant adjacent to the concentrator plant, so as to stop using the concentrate duct to the old plant located in Llanta, eliminating environmental risks during transport.

In line with the new copper smelter emission standards, we continued the study required to find a solution to treat the black smoke from the smelter, generated during the reduction and oxidation steps in the anode furnaces, as well as implementing the Gas Capture and Processing Improvement project to find a comprehensive technical solution from the mouth of the converter furnace to the acid plant. During 2016, we started the building contracts required to implement the first project stage and we issued the purchase order for the main equipment.

Furthermore, given the strategic decision to internalise the underground mine operation, we acquired a new fleet of mining equipment to give operational continuity to the business, significantly reducing the division’s operating costs.

We also started building the refinery anode sludge plant to obtain and process copper-rich precipitates, thus improving recovery at the new Metal Recovery Plant, recently built in Mejillones.

**Andina Division**

**Andina Future Development Structural Project**

We have made progress on the prefeasibility study for the future development of Andina to expand the division’s treatment capacity. As a general concept, the project involves transferring the flotation facilities to the valley and recycling water from the Ovejería dam. The project will balance the division’s need for mineral resources with a business case that will require less investment, less construction time and which is to the current environmental scenario.

**Andina Transfer System Structural Project**

During 2016, this project, to maintain the current mineral throughput rate at Andina Division, was on schedule, and we started the excavation work where the new primary crusher will be located, in an area known as Nodo 3,500; it will replace the current system that will be affected by pit growth.

We also had good results in underground developments; we started the project’s main tunnel, for the new mineral transport system, towards the plant located in the mountains.

**Other Projects**

We continued to implement the Ovejería dam - Stage I project, more than 640 m above sea level.
We also made progress on the second stage of the Andina drainage water treatment project (TADA Barroso). At the same time, we started the feasibility study on the extended north waste rock dump project; it incorporates new clear water capture and piping and contact water treatment.

We started building and developing the new areas for the underground mine included in the divisional business plan; we defined to water resource optimisation and assurance-related investments, both in the underground mine and the concentrator, as well as projects to implement the infrastructure required to improve workplace health and safety conditions.

Furthermore, we commenced work on replacing the concentrate transport line and improving the tailings pipelines, significantly mitigating environmental risks.

**Ventanas Division**

Key investments focused on the executing and starting projects to comply with the new copper smelter emission standards to control fugitive emissions, specifically for secondary gas capture and leakage from the Teniente Converter, Pierce Smith Converters and the electric furnace.

We also launched a project to eliminate the visible fumes around the fire-refining area and the tail gas treatment plant at the acid plant. In terms of safety, we opened the new footbridge over the F30-E motorway to reduce risks for pedestrians crossing the access road to the division.

We also made progress on implementing the project to build a refinery copper-rich precipitate treatment plant, where they are prepared, packed and sent to the Metal Recovery Plant in Mejillones.

In terms of energy efficiency and given the success of the project to replace the diesel oil burners with oxy-fuel burners in the Pierce Smith converter and furnace, we started a project to replace the burners in the tilting furnace and retention furnace in the fire-refining area.

**El Teniente Division**

**Teniente New Mine Level Structural Project**

This project expands El Teniente mine operation even deeper, incorporating reserves that extend the division’s useful life by more than 50 years. During 2016, we made progress on finding a solution for the project’s technical and construction challenges.

While developing the main tunnels we generated new knowledge and innovations to address geomechanical issues, incorporating technical solutions and cutting-edge technology, applying innovation in the construction process, to ensures our employee’s safety. It
should be noted that renowned global and national experts and professionals have helped to adapt project engineering and obtain a better response to the unfavourable geomechanical conditions detected.

We also made progress on the underground works in the area where future mine production will start, and the project is on schedule.

**Other Projects**

We continued to implement mining projects to renew the mine’s production capacity, to replace depleting areas and the delayed start-up of the structural project, in particular, we started on the prefeasibility studies for two areas, Andesita and Diamante, which will allow us to extend Teniente level 8 mine operations.

We began implementing the Diablo Regimiento project Phase V, a throughput rate of 8,000 tonnes per day at the processing plant and an expected 126,000 tonnes of refined copper in 8 years. In this last phase, on of five phases planned to operate the Diablo Regimiento mine, our production should be 403,000 tonnes of refined copper over the next 10 years.

The Dacita project is in full operation, its production capacity is 17,000 tonnes of mineral per day, expected to generate 490,000 tonnes of refined copper over a 12-year period, and most of the work was completed in 2016. We also commissioned the Pacífico Superior project that should produce 216,000 tonnes of refined copper over the next 8 years.

We also completed the prefeasibility study for the North Resources project, to mine the north section of the deposit; we started work on the main access roads and initial infrastructure. The project is expected to start operations in 2020, producing 1 million tonnes of refined copper over a period of 20 years.

In terms of sustainability, at the Caletones smelter, we completed the feasibility study and we started work on the emission reduction projects for the gas cleaning plants, the slag treatment plant for the Teniente convertors. We have also made progress on the feasibility study to reduce the opacity of the smoke from the anode furnaces.

After implementing these projects, in December 2018 the Caletones smelter will be able to comply with Chilean gas emission, opacity and particulate matter standards.
Business & Innovation

We laid the foundations to position innovation as our core business process, creating Codelco Tech and applying an open innovation management system to confront challenges and play a leading role in new mining.

Value-added business initiatives
In 2016 we not only focused on innovation, but also on strategic management to develop third-party relationships, creating value for the company.

Specifically, our Business and Innovation Corporate Management is in charge of identifying, designing, assessing, planning and implementing new opportunities with third parties, through procurement, sales and/or technology partnerships, mining assets and exploration, both in Chile and overseas.

It also develops and formulates strategies, work plans and activities to implement new technologies in our Company.
In order to fulfill its objectives, we have a multidisciplinary professional team, transversal and flexible, who have solid technical competences and skills to analyze the complete negotiation and innovation cycles, from identifying an opportunity to implementing a business, measuring its impact and internalising lessons learnt.

We also established our innovation management system that will systematize the innovation process and measure its impact on results through time. During 2016, an extensive diagnosis was carried out of the innovation projects implemented and under development, a baseline was defined and priority was given to the initiatives that would be promoted.

In 2017, our goal is to expand the system, that in general focuses on identifying, valuing and prioritising requirements and then find solutions among suppliers in the innovation and technology ecosystem, such as Codelco Tech and together successfully implement these solutions at Codelco operations, increasing its benefits.

Key Projects
During 2016, our innovation projects focused on our priority topics, such as automation, construction and we started operations at the Integrated Information Centre, its goal is to analyze the historical data from mining processes (Big Data) and prepare predictive models and also search for technological breakthroughs in metallurgy, pyrometallurgy, hydrometallurgy and technologies in response to safety, environmental sustainability and community requirements in the mining business.

In 2016 we restructured our technology companies, i.e., IM2, BioSigma and Codelco Lab, into Codelco Tech. This technology subsidiary, 100% owned by Codelco, has a strategic mandate to lead and promote research to minimize the environmental impact of mining and risk for people.

Codelco Tech combines and promotes the experience, knowledge and skills of IM2, BioSigma and CodelcoLab, to create to a model that develops open solutions, incorporates and promotes initiatives provided by suppliers, research centres, start-ups and other entities.

The primary goal of our subsidiary Codelco Tech is to achieve technological breakthroughs for mining challenges, such as grade decline, deeper deposits, mineral impurity, lack of enabling resources, such as water and energy, and higher environmental standards.

Codelco Tech’s field of work focuses on solutions, such as processing mineral resources, pyrometallurgy, hydrometallurgy, water & energy, underground mining, open-pit mining, biotechnology, automation, robotics, remotisation: data science; new uses of copper, lithium, molybdenum, sulphuric acid and by-products.
Loader automation: Codelco Tech was in charge of designing with functionality suppliers improvements to enhance the performance of LHDs in underground mines. The loader has autonomous haulage and remote loading, operated from a control room, which could be several kilometres away, outside the mine, thus extracting of minerals without exposing employees. Currently, an industrial validation test is underway at El Teniente Division. We have also considered running tests for 100% automated underground trucks at the end of 2017.

Extraction point overhang removal device: underground mining system used to remotely characterise, visualise, direct and place an explosive on the overhang surface, avoiding employee exposure.

The method currently used to solve this operating problem consists of suspending explosive charges at height using bamboo poles. This operation is known as unblocking trenches and employees are highly exposed to different hazards, such as falling material and explosive handling.

During 2016, we ran tests to place explosives at overhangs up to eight metres at the Diablo Regimiento mine, El Teniente Division, as part of the first industrial validation stage.

Detecting and extracting uncrushable material in the primary crusher feed: This system is used to detect and extract material such as shovel teeth, steel sheets, strengthening mesh and beams, so as to reduce stoppage time and employee exposure to operation risks through remote control operations.

During 2016, focus was on developing technology that would detect such material, so we have been making an industrial scale prototype.

White metal electroleaching: After this process, the white metal can be treated at traditional hydrometallurgical plants, widely available in our Company. It is currently in the industrial validation stage at El Teniente Division.

Heap bioleaching of sulphides at room temperature: it is currently in industrial application at Radomiro Tomic Division. During 2016, engineering work was carried out to adapt facilities so as to expand the use of this technology and achieve the design scale.

Smelting – refining technological breakthroughs: they well help to improve operational and environmental performance, based on the predominant technology of our company, the Teniente Converter. During 2016, two key projects were started, use of high-pressure nozzles and development of an expert sensor control system.

Automation, telecommunications and robotics
In 2016 we developed a project for remote operation, from our offices located in Santiago, of all Ministro Hales Division processes: mine, crusher, concentrator and roaster.

We have been remotely operating the above mining processes since April, a unique global experience with excellent results; we now have a more autonomous and integrated operation that is safer for employees. We hope to replicate this initiative at our other division plants.

We also standardised 93% of our concentrator plant control systems, primarily instrumentation infrastructure, communications networks, distributed control systems, operating stations and advanced control systems, to improve operations and to be in line with production plans.

Key milestones during the year:
• At Chuquicamata Division we 767upgraded the ore grade, particle and image analysers. We also integrated the mill, slag remover, thickener and plant control system. As a result, and by migrating the plant control system, we have standardised 85% of the control systems.
• At Ministro Hales, we implemented a vital signs monitoring system (critical signs such as water usage, reactive usage and liquid pressure) for the roasting process and concentrator plant.

• At El Teniente we incorporated an advanced control system at the molybdenum plant.

• At Salvador we integrated the filter plant control system and we digitalised the critical variables of the concentrator plant.

**Integrated Data Centre:** located our the Head Office, its main goal is to analyse the historical data of the unit processes and prepare predictive mathematical models to make decisions regarding specific operating events. We built this centre in 2016 and in 2017 we will address application cases, such as our thickener operations, as well as the concentrator plant data analysis at El Teniente Division.

**Smelting process:** as part of the roadmap to develop advanced control systems, we implemented an advanced control application for the Chuquicamata’s three acid plants at, in order to stabilise processes and have a better quality product.

**Robotics:** we integrated two robotic arms to support the copper concentrate sampling process in the trucks at Salvador and the molybdenum concentrate sampling in maxi bags for the Moly plant, improving safety standards as well as sampling data quality and precision.

**High-fidelity dynamic simulator:** in a training environment to efficiently operate and face critical conditions, we developed and implemented this simulator for the roasting operations at Ministro Hales Division. This initiative is in addition to the operator training systems at the concentrator plants; it will also be applied in other operation areas over the next few years.

**Recognition and agreement**

In 2016, The Smart Industry 50 recognised Codelco as one of the “innovators on the leading edge of digital transformation.”

In July 2016, we signed a framework collaboration agreement with Subtel the Office of the Undersecretary of Telecommunications under the Ministry of Transport and Telecommunications. This alliance enables joint work on topics related to standards, projects and communication technologies roadmap.
Economic-Financial Results

In 2016, we delivered US$ 500 million in pre-tax profits, reversing the negative trend during the first six months, when global mining was hit by falling copper prices.

Pre-tax profits refers to earnings before tax and Law 13,196 that imposes a 10% tax on export sales of own-sourced copper and by-products.

Our pre-tax profits in 2016 were US$500 million, down 53% from US$1.075 billion* the previous year, mainly because copper prices fell by 11.5% and the negative effect of the dollar on our liabilities in Chilean pesos. However, this was mainly offset by lower costs, thanks to an aggressive strategic cost reduction and productivity plan.

If we compare Codelco’s profits, calculated by applying the same tax requirements as private sector companies, they totalled US$262 million, up from US$ -1.646 billion the previous year (including impairment loss).

*Before extraordinary items.
Copper and by-products prices

The average London Metal Exchange (LME) copper price was US$ 220.6 ¢/lb in 2016, down 11% from the average price in 2015, when it was traded at US$ 249.2 ¢/lb.

Molybdenum prices also fell by 2%, our main by-product, which was traded at 14.3 US$/kg during 2016, based on the Metals Week price. Meanwhile, gold prices fell (8%) and silver (9%).

Contribution to the Treasury

Codelco delivered US$937 million to the Treasury in 2016, as shown in the comparison table below:

Data does not include subsidiary taxes:

<table>
<thead>
<tr>
<th>Contribution to Treasury (US$ million)</th>
<th>2016</th>
<th>2015</th>
</tr>
</thead>
<tbody>
<tr>
<td>Income Tax &amp; Royalty</td>
<td>20</td>
<td>216</td>
</tr>
<tr>
<td>Law</td>
<td>917</td>
<td>867</td>
</tr>
<tr>
<td>Total</td>
<td>937</td>
<td>1,083</td>
</tr>
</tbody>
</table>

Figures do not include taxes of subsidiaries

Economic-Financial Results

We achieved our production goals; we increased productivity and exceed our cost reduction target, saving US$ 433 million.

Production

Overall production was 1,827,267 tonnes of refined copper in 2016, from our own operations, plus copper from our stake in Minera El Abra (49% interest) and in Anglo American Sur S.A. (20% interest).

In 2016, production fell by 64,000 tonnes (3.4%) from 1,891,376 tonnes in 2015, primarily due to less production from Codelco’s stake in El Abra and Anglo American Sur S.A., and declining copper ore grades at Codelco divisions, which fell by 7%.

Production from Codelco divisions, i.e., excluding its stake in El Abra and Anglo American Sur, totalled 1,707,474 tonnes, down by 1.4% over 2015.

Our molybdenum production, our second product in terms of revenue, totalled 30,641 tonnes, up 10.7% from 2015, mainly due to higher output from Chuquicamata Division.

Furthermore, our sulphuric acid production was 3.156 billion tonnes, 40% was traded and the rest was mainly used at our divisional leaching operations. While anode slime production, containing gold and silver, totalled 1.684 tonnes.
Copper and molybdenum production 2015-2016

<table>
<thead>
<tr>
<th>(Refined tonnes)</th>
<th>Copper</th>
<th>Molybdenum</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2016</td>
<td>2015</td>
</tr>
<tr>
<td>Chuquicamata</td>
<td>302,010</td>
<td>308,625</td>
</tr>
<tr>
<td>Radomiro Tomic</td>
<td>318,255</td>
<td>315,747</td>
</tr>
<tr>
<td>Gabriela Mistral</td>
<td>121,712</td>
<td>125,009</td>
</tr>
<tr>
<td>Ministro Hales</td>
<td>237,020</td>
<td>238,305</td>
</tr>
<tr>
<td>Salvador</td>
<td>59,796</td>
<td>48,582</td>
</tr>
<tr>
<td>Andina</td>
<td>193,341</td>
<td>224,264</td>
</tr>
<tr>
<td>El Teniente</td>
<td>475,339</td>
<td>471,157</td>
</tr>
<tr>
<td><strong>Codelco</strong></td>
<td><strong>1,707,474</strong></td>
<td><strong>1,731,688</strong></td>
</tr>
<tr>
<td>El Abra</td>
<td>48,957</td>
<td>72,131</td>
</tr>
<tr>
<td>Anglo American Sur S.A.</td>
<td>70,836</td>
<td>87,557</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>1,827,267</strong></td>
<td><strong>1,891,376</strong></td>
</tr>
</tbody>
</table>

**Productivity and cost reduction**
For the third consecutive year we have controlled our operating costs, through our cost reduction plan, expecting to save US$ 399 million. We exceeded this savings target and by the end of the year we were 108% on target, saving US$ 433 million.

Furthermore, during the year we defined and put into practice a Strategic Agenda to consolidate our competitive position by 2020, with a savings target of US$2.1 billion during the 2016-2020 period. This agenda has the following strategic pillars:

- Operational Excellence
- Development towards proactive maintenance
- Highly competitive third-party services
- Low-cost sourcing management
- Synergies and best practices
- Asset management
- Innovation and applied technology
- Working Capital

Compared to 2015, our overall costs and expenses increased by 6%, from US$ 203.0 ¢/lb. to US$ 214.6 ¢/lb. in 2016.

Net cathode cost rose 4%, from US$ 196.9 ¢/lb to US$ 204.1 ¢/lb.

The total cost and expense indicator and the net cathode cost were hit by the negative effect of the US dollar on our liabilities in pesos.

While our direct cash cost (C1) in 2016 was US$ 126.1 ¢/lb., down 9% from 2015.

C1 is the type of cost used in the global mining industry to compare cost management of different companies.

*Excludes extraordinary item adjustments.*
Funding

Our company has regular access to capital markets and bank facilities to finance its investments. Our long and respected history in local and foreign markets has allowed us to develop an extensive geographically diversified and high-quality banking and investor base. Thus we have access to North American, Asian and European financial markets, by issuing bonds, bilateral and syndicated loans.

After being absent for 11 years in the local capital market, on 25 August 2016 we placed a high demand and successful bond issue of UF 10 million (equivalent to US$406 million). The 10-year bonds have an annual yield of 2.09%.

This US dollar bond issue, through a swap transaction, had a rate of 3.09% per year. It attracted orders from major and prestigious local investors and the demand was led by pension funds and fund management companies. This transaction was managed by Banco Santander Chile. Furthermore, in October and November 2016, the company renewed its 5-year bilateral loans from the Bank of Tokyo and Export Development Canada, for a total amount of US$ 550 million. The funds obtained were used to partially finance investments and refinance liabilities for the 2016 period.

Capitalisation

In the context of the Codelco multiannual capitalisation law, (2014-2019), Law 20,790, in 2016 the Government authorised a capital injection of US$ 500 million. In turn, on 18 January 2017, the Capitalisation law, it includes an additional maximum contribution up to US$ 475 million per year for 2016 and 2017, was promulgated to reduce the Company’s debt level, and to mitigate transfers under the Reserve Law.

This major and extraordinary capitalisation is in recognition to the effort and work performed by the entire Company and it will allow Codelco to move forward with its project portfolio, and boost corporate management.

Financial Management

Copper prices had a significant impact on the company’s financial results. Therefore, to face price fluctuations, our main strategy is to maintain a competitive cost structure with regard to the industry. Our company uses derivatives to ensure that its exports have a fair market value in line with the production profile and at the prevailing market prices in the month they are produced. These derivative transactions do not include speculative transactions.

Interest Rate and foreign exchange

At Codelco we have policies to manage foreign exchange risk and floating interest rates. Currency risk hedging covers fluctuations in foreign liabilities, other than in US dollars; while interest rate hedging involves interest rate contracts for current obligations.

These measures do not include speculative transactions.
Insurance
At Codelco we have insurance plans to cover assets, employees and potential losses caused by business interruption.

In turn, these insurance policies contain risk prevention terms and conditions that duly consider current insurance market conditions and Codelco’s own capacity to absorb loss claims.

Insured assets
All our facilities used for our key refined products are insured.

Losses
As at 31 December 2016, the adjustment for the loss caused by the weather event on April 2016 that hit El Teniente and Andina divisions was still pending. The loss is currently being analysed by the adjuster.

Risk rating
Our company is analysed by four rating agencies: Moody’s, Standard & Poor’s, Fitch Ratings and Feller-Rate. During the first quarter of 2016, due to the downturn in the base metal market, the major risk rating agencies performed a general downward review of ratings. Thus Codelco’s international credit rating for foreign currency fell to A3, and Moody’s placed a negative outlook and A+ rating and a stable outlook from S&P. In both cases, the company has the best rating in the mining industry. In the case of local rating, Fitch Ratings and Feller-Rate reaffirmed the AAA rating, both with stable outlook.
Copper Market

Copper prices had a weak start last year, due to rising fears in the market of a weaker Chinese demand and the risks related to higher debt exposure shown by emerging economies in Asia, Europe and South America.

The average London Metals Exchange (LME) copper price was 220.6 US cents per pound (US¢/lb.), i.e., US$ 4.863 per tonne in 2016, down 11% from the average price in 2015 (249.2 ¢/lb.). However, the overall price trend in 2016 was positive, recording a minimum price of 196 US¢/lb. (4.311 US$/tonne) in January and reaching the highest price of 269 ¢/lb. (5.936 US$/tonne) in November.

From the beginning until the end of 2016, copper prices rose 27%. Market balance forecasts for 2016 showed a relatively balanced supply and demand trend, with a slight oversupply of 150,000 tonnes of refined copper. This number plus the accumulated strategic inventories and a positive stock variation in registered warehouses, resulted in stocks equivalent to 2.3 weeks of consumption.
The average price in 2015 was 249.2 US¢/lb. (5.494 US$/tonne), while the average price during the first two months of 2016 did not exceed 210 US¢/lb. (4.672 US$/tonne).

The first price recovery was observed in March when China’s growth forecast improved and the European Central Bank announced it had cut interest rates and had extended its asset purchase programme, injecting more than 80 billion euros. In March, copper prices rose to above 220 US¢/lb. (4.850 US$/tonne).

At the end of the first six months of 2016, the price fell again after the United Kingdom voted against remaining in the European Union.

**LME copper price trend**

In July, there was more positive data from the Chinese economy, it grew more than had expected during the second quarter, encouraging investment funds to consider metals such as copper, zinc and nickel in their investment strategy. At the time, Chinese public spending sustained part of the growth of copper-intensive sectors, more investment in infrastructure, including the recovery of the industrial sector and the increase in domestic consumption, reflected in higher retail sales. Real estate was a key sector in strengthening the copper demand, which showed a positive recovery compared to 2015.
Copper prices showed a positive trend during the second half of the year; prices averaged 228 US¢/lb. (5.027 US$/tonne), compared to 213 US¢/lb. (4.700 US$/tonne) in the first six months, in line with market fundamentals that had forecast a copper supply deficit.

In respect of supply, more non cost-related interruptions, but to work and productivity issues of operations in Asia and South America, reduced copper production. Furthermore, the economic performance of China, better than expected, and a positive macroeconomic environment, with the best US industrial production data since March 2015 and solid numbers shown by companies in the Chinese manufacturing sector, raised demand growth forecasts.

Total copper stocks in registered warehouses (LME, Comex and SHFE) began to decline in September, from a total of 574,000 tonnes of refined copper to 417,000 tonnes at the beginning of December, providing an additional boost to prices. This scenario was favourable for numerous market agencies to invest in three metals markets (LME, Comex and SHFE) with buying positions favourable to copper, boosting its price, consolidated after the elections in the United States.

LME copper prices and official inventory trend (LME, Comex and SHFE)

Source: Bloomberg
Sales
In 2016, our sales revenue was US$ 11.537 billion; this includes copper, molybdenum, by-products and toll processing services. Copper represents 91% and the remaining products 9% of total sales.

Our own-sources copper sales and third-party sales revenues were US$10.534 billion, equivalent to 2,262,000 metric tonnes of refined copper.

By-product sales revenue totalled US$1.003 billion; molybdenum sales accounted for US$419 million and anode slime, gold, silver, sulphuric acid and toll processing services for US$583 million.

**2016 Codelco Products (US$ million)**

<table>
<thead>
<tr>
<th>Product</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Copper</td>
<td>10,534</td>
</tr>
<tr>
<td>Molybdenum</td>
<td>419</td>
</tr>
<tr>
<td>Others</td>
<td>583</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>11,537</strong></td>
</tr>
</tbody>
</table>
Copper Sales distribution by product and market

Total copper sales (own and third-party) were 2.3 million tonnes of refined copper distributed as follows: 65% refined copper, 30% concentrate and 5% blister and anodes. Key markets were Asia (64%), followed by Europe (13%), South America and other markets (12%), and North America (11%).
Procurement

We purchased many goods and services, including energy and fuel, strongly revitalising the country’s economy. In 2016 we did business with 3,227 suppliers, allocating more than US$ 5.6 billion.

We have a procurement department that coordinates the goods and services we need with the best options available in the domestic and international market.

We have policies and standards in place that guide our supply chain operation, including purchases, logistics, accounting and custody of materials and goods; at the same time, we ensure our quality standards are applied in the definition, hiring and delivery of the services acquired.

In this context, in 2016 we did business with 3,227 suppliers; 3,001 were local suppliers and 226 were foreign suppliers. The total amount allocated was US$ 5.651 billion; this amount also includes long-term energy and fuel supply contracts.

Supplier Development

Our challenge is to strengthen our competitive advantage, consistently and sustainably, and to do so we have to build reliable relationships with goods and services suppliers.
We are convinced that our suppliers, given their wide range of customers and experience, can expand their knowledge base to our Company, not only by providing techniques, equipment and goods, but also practices to improve process efficiency.

Based on these goals, in 2016 we implemented a series of initiatives to capture more and better suppliers, such as the following:

- **Probitity and transparency**: we reported and strengthened our supplier base, our target to continuously improve transparency, data symmetry and process probity. We have also strengthened this with policies, controls and in-house management practices.

At the same time we communicate with more than 4,000 companies active on our database and explain how to report at ethics point at our website (www.codelco.com).

- **Competitive advantage**: we promoted competitive advantage and transparency in our procurement process. We reduced direct contract tenders, from 6.2% in 2015 to 1.9% in 2016; we also reduced the number of single source supplier contracts, from 6.6% in 2015 to 5.0% in 2016.

- **Supplier data traceability and symmetry**: currently all our tender processes are issued, published and documented on our electronic procurement at our web site www.codelco.com. Where, suppliers have access to all the process data.

- **New supply sources**: we have a Business Intelligence Department focused on different initiatives, such as providing incentives to domestic and foreign suppliers to participate via different means, how to contact trade associations and chambers of commerce in different countries, in order to make our needs more visible and explore new alternative goods and services suppliers.

In this context, we have an office in Shanghai, China, to increase our competitive advantages in different management areas.

In 2016, Asian market suppliers participated in more than 100 tender processes carried out by the Shanghai office; transactions amounted to more than US$ 100 million in products, directly from China or with the support from local logistics operators.

In November, at the Asian Copper Week held in Shanghai, Codelco CEO, Nelson Pizarro, stressed the important work undertaken by our office in China.

Our medium-term plans are focused on promoting the Codelco 2020 Productivity Agenda, to strengthen our competitive advantage through sustainable and quality products and services.

- **Inventories**: we managed to reduce materials inventory by 8.7% compared to 2015, which is consistent with our control strategy based on what order request and what we need to stock. This is to move part of our requirements towards a low-cost and more efficient process and for suppliers to commit to on-time delivery, quality and quantity.

In this respect, supplier on-time delivery performance was 79% in 2015 versus 80% in 2016, higher than the average standard of the local mining industry.
## Business by type of assignment 2012-2016

<table>
<thead>
<tr>
<th>Type of allocation</th>
<th>2012</th>
<th>2013</th>
<th>2014</th>
<th>2015</th>
<th>2016</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Business contracts</td>
<td>Amount (US$ thousand)</td>
<td>%</td>
<td>Business contracts</td>
<td>Amount (US$ thousand)</td>
</tr>
<tr>
<td>Government tenders</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment</td>
<td>57</td>
<td>156,190</td>
<td>2.8%</td>
<td>13</td>
<td>6,901</td>
</tr>
<tr>
<td>Operation</td>
<td>27,468</td>
<td>1,819,348</td>
<td>32.2%</td>
<td>30,624</td>
<td>2,085,489</td>
</tr>
<tr>
<td>Total government tenders</td>
<td>27,525</td>
<td>1,975,538</td>
<td>35.0%</td>
<td>30,637</td>
<td>2,092,390</td>
</tr>
<tr>
<td>Private tenders</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment</td>
<td>638</td>
<td>2,380,429</td>
<td>42.1%</td>
<td>704</td>
<td>1,572,282</td>
</tr>
<tr>
<td>Operation</td>
<td>2,966</td>
<td>706,954</td>
<td>12.5%</td>
<td>4,300</td>
<td>2,343,385</td>
</tr>
<tr>
<td>Total private tenders</td>
<td>3,604</td>
<td>3,087,383</td>
<td>54.6%</td>
<td>5,004</td>
<td>3,915,667</td>
</tr>
<tr>
<td>Total direct allocation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment</td>
<td>128</td>
<td>68,102</td>
<td>1.2%</td>
<td>231</td>
<td>326,332</td>
</tr>
<tr>
<td>Operation</td>
<td>456</td>
<td>40,752</td>
<td>0.7%</td>
<td>1,094</td>
<td>104,434</td>
</tr>
<tr>
<td>Total allocation</td>
<td>584</td>
<td>108,855</td>
<td>1.9%</td>
<td>1,325</td>
<td>430,766</td>
</tr>
<tr>
<td>Other allocations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Investment</td>
<td>62</td>
<td>211,645</td>
<td>3.7%</td>
<td>149</td>
<td>47,296</td>
</tr>
<tr>
<td>Operation</td>
<td>1,281</td>
<td>267,474</td>
<td>4.7%</td>
<td>1,361</td>
<td>459,316</td>
</tr>
<tr>
<td>Total other allocations</td>
<td>1,343</td>
<td>479,119</td>
<td>8.5%</td>
<td>1,510</td>
<td>506,613</td>
</tr>
<tr>
<td>Investment</td>
<td>885</td>
<td>2,816,366</td>
<td>49.8%</td>
<td>1,097</td>
<td>1,952,810</td>
</tr>
<tr>
<td>Operation</td>
<td>32,171</td>
<td>2,834,528</td>
<td>50.2%</td>
<td>37,379</td>
<td>4,992,624</td>
</tr>
<tr>
<td>Total</td>
<td>33,056</td>
<td>5,650,894</td>
<td>100.0%</td>
<td>38,476</td>
<td>6,945,434</td>
</tr>
</tbody>
</table>
Human resources

2016 was a challenging year for the copper industry. However, it was the people within the organization who enabled us to reach our own demanding short-term objectives towards our commitment to being a sustainable and competitive company.

Keeping in line with the strategic agenda of the human resources area, 2016 saw a focus on the management of initiatives tied to business needs, established through three strategic targets: productivity, governability and transformation.

<table>
<thead>
<tr>
<th>Strategic target</th>
<th>Initiative</th>
</tr>
</thead>
<tbody>
<tr>
<td>Productivity</td>
<td>Diverse Codelco leadership</td>
</tr>
<tr>
<td></td>
<td>Key group job skill certification</td>
</tr>
<tr>
<td></td>
<td>Performance management</td>
</tr>
<tr>
<td></td>
<td>Staff management</td>
</tr>
<tr>
<td>Governance</td>
<td>Collective bargaining</td>
</tr>
<tr>
<td></td>
<td>Strategic agreement</td>
</tr>
<tr>
<td>Transformation</td>
<td>Gender diversity</td>
</tr>
<tr>
<td></td>
<td>New generations</td>
</tr>
<tr>
<td></td>
<td>Change management</td>
</tr>
</tbody>
</table>
Highlights

Collective bargaining 2016

In 2016, collective negotiations were conducted with 12 union organizations that represent a total of 7,851 workers. These negotiations led to the association of economic benefits to increased production results (in addition to cost reductions). The only recorded strike activity was during negotiations with Union No. 2, who held a legal 5-day strike. Subsequently, our management team expeditiously came to an agreement with the union to finalize a deal, thereby circumventing negative impact on divisional production.

2016 Negotiations

<table>
<thead>
<tr>
<th>Work unit</th>
<th>Trade union</th>
<th>Term of agreement (months)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Andina Division</td>
<td>Workers unions Unificado de Trabajadores /</td>
<td>28/24</td>
</tr>
<tr>
<td></td>
<td>Sindicato Industrial de Integración Laboral</td>
<td></td>
</tr>
<tr>
<td>Head Office</td>
<td>Supervisors</td>
<td>24</td>
</tr>
<tr>
<td>Projects</td>
<td>Workers, professionals and administrative</td>
<td>30</td>
</tr>
<tr>
<td></td>
<td>personnel</td>
<td></td>
</tr>
<tr>
<td>Salvador Division</td>
<td>N° 2 Potrerillos / N° 6 Benito Tapia Tapia</td>
<td>26/24</td>
</tr>
<tr>
<td>Chuquicamata Division</td>
<td>Union numbers 1, 2, 3, 5 (Mining) and union</td>
<td></td>
</tr>
<tr>
<td></td>
<td>number 1 (Antofagasta)</td>
<td></td>
</tr>
</tbody>
</table>

Succession management

The succession system is a strategic process aimed at ensuring the availability of leaders capable of propelling Codelco to levels of excellence in business performance.

Currently, all our critical strategic positions have identified successors with an associated development plan in place. With respect to critical management and expert positions, the result is 62% with identified successors, a figure that is in line with the succession strategy plan moving into 2017.

Mentor program

In 2016 we launched a mentor program aimed primarily at skills development and maximization for successors. The program generates collaborative alliances between the successor and mentor, allowing the transfer of experiences from recognized executives to professionals with identified development potential.

Key teams

We also introduced an development program aimed at division work groups and the leadership skills of our executives. The program seeks to strengthen professional development, leadership and the development and other skills of those within our company.

Labor relations

Trade unions and federations

At Codelco, recognition and respect for the role of trade unions and federations is a key principle of our business philosophy.
In 2016, management and the Federación de Trabajadores de Cobre (FTC) moved forward to strengthen their relationship model based on participative management, open dialogue and a new atmosphere of trust, with several instances of joint undertakings.

At the corporate level, the top council, coordinating committee and the human capital, competitiveness and sustainability councils worked together on gender issues, in addition to the dedicated council for that specific purpose.

Both Codelco administration and union management continued to work together towards the implementation of the Strategic Pact for Chile, with 33 management work groups and 4 technological convergence work groups, in which 25 commitments were identified and defined for 2016. These commitments focus on competitive improvement and present and future sustainability of the company. Throughout the year, permanent and systematic monitoring was conducted for compliance with the agreed commitments.

Progress was made with La Federación de Supervisores del Cobre (Fesuc) in the exchange of pertinent information that will lead the way to overcoming differences, permitting us to move proceed towards a transparent and lasting relationship.

During this process, emphasis was placed on the value and contribution of people, their opinions, respect for differences and the desire to unify our efforts to meet our mutually beneficial objectives, thereby ensuring success in meeting future challenges.

**Unionization**

Codelco has a high rate of union membership. Moreover, we at Codelco fully comply with international standards and conventions pertaining to fundamental human and labor rights and the principles of social responsibility.

On December 31 2016, union membership rates reached 92.4% for in-house staff with permanent contracts. This figure reflects the value and importance that our workers place on union representation in relations with the administration.

<table>
<thead>
<tr>
<th>Division</th>
<th>In-house staff with permanent contract</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Rol A</td>
</tr>
<tr>
<td>Chuquicamata</td>
<td>85.1%</td>
</tr>
<tr>
<td>Radomiro Tomic</td>
<td>64.9%</td>
</tr>
<tr>
<td>Ministro Hales</td>
<td>80.7%</td>
</tr>
<tr>
<td>Gabriela Mistral</td>
<td>59.6%</td>
</tr>
<tr>
<td>Salvador</td>
<td>87.8%</td>
</tr>
<tr>
<td>Andina</td>
<td>88.8%</td>
</tr>
<tr>
<td>El Teniente</td>
<td>70.4%</td>
</tr>
<tr>
<td>Ventanas</td>
<td>0%</td>
</tr>
<tr>
<td>Head Office</td>
<td>79.3%</td>
</tr>
<tr>
<td>Projects</td>
<td>53.5%</td>
</tr>
<tr>
<td><strong>Codelco</strong></td>
<td><strong>71.4%</strong></td>
</tr>
</tbody>
</table>

**Organizational climate**

Under the orders of the board, labor climate studies re-commenced during 2016. These studies were applied to staff with permanent contracts at the professional and operational level across all divisions, Projects and Head Office.

Applying quantitative methodology, we went into the field to collect 5,605 validly issued surveys with a response rate of 92%.

**Talent development**
2016 recruitment and selection
In 2016, we posted 338 job offers aimed at the external job market to cover 773 vacant positions. We received a total of 108,220 applications, 12% of which were submitted by women.

One important milestone reached in this area was the creation and issue of a new internal standard for position assignments and a respective talent recruitment and selection procedure. This procedure contains stringent criteria and objectives for ensuring personnel selection based on merit, all in strict adherence to the principals of non-discrimination and equal opportunity; this, in accordance with our values pertaining to transparency and traceability.

In the same spirit, we have optimized lines of communication and access to information for applicants so that applicants may consult the status of their respective selection process through www.codelco.cl and a contact form to submit doubts or queries.

Graduate program
This initiative continues being one of our foremost sources for attracting young talent. Since its conception in 2008 on through to 2016, 526 young professionals have taken part in this program. Each graduate within the graduate process develops an annual training plan aimed at meeting yearly challenges pertaining to productivity, stainability and the future mining industry. Development is further fostered through 3 key approaches: the transfer of knowledge from primary leaders, onsite fieldwork and the enablement of leadership skill development.

Early attraction
526 Young professionals 2008-2016
773 Vacancies filled
2016 Workforce Supply
108,220
In order to meet objectives associated with early attraction of talent, we maintain and nurture ties with universities through participation in company and labor recruitment fairs.

A new application and selection process was implemented, providing applicant trainees and dissertators with greater transparency and options to follow-up on individual application statuses. We received 28,688 applications for annual and summer internship and dissertator positions, 30% of which were submitted by women. As a result of these efforts, upwards of 500 students were incorporated across different work fronts in 2016.

**Training**

15,899 people underwent training in 2016, employing 644,806 training hours with an investment in the proximity of US$ 12 million.

<table>
<thead>
<tr>
<th>Training 2016</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Training rate</td>
<td>1.6</td>
</tr>
<tr>
<td>Average hours per person</td>
<td>34.4</td>
</tr>
<tr>
<td>Average investment per employee (US$)</td>
<td>624</td>
</tr>
</tbody>
</table>

**Performance**

The performance management focus was placed on aligning individual work with business results and strengthening the role of the performance evaluator, thereby improving the quality of conversation and feedback between evaluator and staff. The performance evaluation phase reached 3,841 executives and professionals, a figure representing 95% participation of target staff.

**Gender diversity and conciliation of labor, family and personal life**

At Codelco, gender equality, diversity and equal opportunity constitute indisputable principles in the management of personnel and in our labor practices. Such established principles are a clear expression of our commitment to fundamental human rights and one of the ways in which to ensure its promotion and defence. These core values are based on our conviction that mixed gender teams contribute directly to the business, productivity and sustainability of our company.

We understand that to be competitive, our human resources must be world class and capable of attracting and retaining talent without any distinction with regard to gender.

In this sense, we have encouraged gender balanced teams in our 2016 programs, ensuring that no single gender is overrepresented.

Therefore, 42% of admissions to the Graduate Program were women; with a 56% level of female participation in internship and dissertator positions and 60% representation in Director Training.

During the year, we attained certification for Head Office and

![Image of 2016 Programs]

- Graduates: 42%
- Internships and Dissertations: 56%
- Director training: 60%
Ventanas Division in Chilean Standard 3262, Management Systems for Gender Equality and Conciliation of Work, Family and Personal Life. This standard is unique at the national level and is embodied in our commitment to gender issues.

The formation of mixed gender work teams has required adjustments to processes in the human resources area, and in the incorporation of measures that benefit both men and women, such as those that bring about the conciliation between life at work and at home. Specifically, we have implemented actions beyond the legal framework to the benefit of this challenge, with improved time flexibility and family / work space.

A key factor towards progress in the formation of mixed gender teams has been the implementation of infrastructure that facilitates the full exercise of labor activity of a balanced workforce in optimal conditions of safety, hygiene and comfort. One example of necessary cultural transformations is evident by the first female Morgan crane operator at the Chuquicamata smelter.

In terms of female participation, women represent 9% of our staff. According to Semageomin data, this rate is above average in the national mining industry (7.5%). In 2016, 1,668 women worked in Codelco; specifically, 888 workers / operators, 759 professionals and 21 executives. The average age of our female staff is 41 years. In addition, 14% of new hires in 2016 were women, a figure that rose in comparison with the 2015 figure at 12.8%.

We closed the year with the approval of the Policy Gender Equality and Conciliation of Professional, Family and Personal Life. This milestone was achieved through the joint effort of the Federación de Trabajadores del Cobre (FTC) and the administration, under the framework of roundtable discussions formed to carry out the Strategic Pact of Codelco.

### Labor indicators

#### Staffing

On December 31 2016 our in-house staff reached 18,605 individuals (permanent and temporary contracts), a figure that was 2.7% lower than the previous year. Average annual staff is at 18,759 workers.

#### In-house staff per level

<table>
<thead>
<tr>
<th>Codeco</th>
<th>2015</th>
<th>2016</th>
<th>Variation %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Executives</td>
<td>265</td>
<td>220</td>
<td>-17.0%</td>
</tr>
<tr>
<td>Professionals / Supervisors</td>
<td>3,907</td>
<td>3,816</td>
<td>-2.3%</td>
</tr>
<tr>
<td>Operators / Administrative Staff</td>
<td>13,930</td>
<td>13,507</td>
<td>-3.0%</td>
</tr>
<tr>
<td>Registered Staff</td>
<td>18,102</td>
<td>17,543</td>
<td>-3.1%</td>
</tr>
<tr>
<td>Temporary Staff</td>
<td>1,015</td>
<td>1,062</td>
<td>4.6%</td>
</tr>
<tr>
<td>Total</td>
<td>19,117</td>
<td>18,605</td>
<td>-2.7%</td>
</tr>
</tbody>
</table>

#### In-house staff per level

<table>
<thead>
<tr>
<th>Division</th>
<th>2015</th>
<th>2016</th>
<th>Variation %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chuquicamata</td>
<td>6,342</td>
<td>5,921</td>
<td>-6.6%</td>
</tr>
<tr>
<td>Radomiro Tomic</td>
<td>1,287</td>
<td>1,228</td>
<td>-4.6%</td>
</tr>
<tr>
<td>Ministro Hales</td>
<td>772</td>
<td>767</td>
<td>-0.6%</td>
</tr>
<tr>
<td>Gabriela Mistral</td>
<td>566</td>
<td>553</td>
<td>-2.3%</td>
</tr>
<tr>
<td>Salvador</td>
<td>1,352</td>
<td>1,643</td>
<td>21.5%</td>
</tr>
<tr>
<td>Andina</td>
<td>1,699</td>
<td>1,682</td>
<td>-1.0%</td>
</tr>
<tr>
<td>El Teniente</td>
<td>4,750</td>
<td>4,524</td>
<td>-4.8%</td>
</tr>
<tr>
<td>Ventanas</td>
<td>953</td>
<td>954</td>
<td>0.1%</td>
</tr>
<tr>
<td>Head Office</td>
<td>522</td>
<td>465</td>
<td>-10.9%</td>
</tr>
<tr>
<td>Projects</td>
<td>874</td>
<td>840</td>
<td>-3.9%</td>
</tr>
<tr>
<td>General Audit</td>
<td>0</td>
<td>28</td>
<td>0.0%</td>
</tr>
<tr>
<td>Codelco</td>
<td>19,117</td>
<td>18,605</td>
<td>-2.7%</td>
</tr>
</tbody>
</table>
Codelco workforce 2016

Absenteeism

Our average annual absentee rate was 3.8% in 2016. This rate has been maintained over the previous two years. Without considering factors such as pre-post natal maternity and paternity leave, the average annual rate of absenteeism is 3.6%.

Monthly Absenteeism / December 2015-2016

- Supervisors & Professionals
- Operators
- Administration Services
- Codelco
Overtime
Average annual overtime at Codelco was 2.5 in 2016, versus 3.3 in 2015, representing a 24.2% drop in overtime rates.

Monthly Overtime / December 2015-2016
Social responsibility and sustainable development

Board of Directors diversity
During 2016, our Board of Directors was composed of 7 men and one woman, all Chilean.

Age range | Board of Directors
---|---
Under 30 | 0
30 to 40 | 0
41 to 50 | 2
51 to 60 | 1
61 to 70 | 3
Over 70 | 2
Total | 8

Length of service | Board of Directors
---|---
Less than 3 years | 5
Between 3 and 6 years | 1
More than 6 years and less than 9 years | 1
Between 9 and 12 years | 1
More than 12 years | 0
Total | 8

Diversity of CEO, Vice Presidents, General Managers and Managers
140 people composed senior administration in 2016, 9 of them were women

Nationality | Senior Administration
---|---
Chilean | 139
Peruvian | 1
Total | 140

Age range | Senior Administration
---|---
Under 30 | 0
30 to 40 | 11
41 to 50 | 45
51 to 60 | 58
61 to 70 | 25
Over 70 | 1
Total | 140
Diversity

Our workforce with permanent employment contract reached 17,543 people as of December 31, 2016. 1,560 of this workforce were women.

In addition to Chile, we have workers from other countries of origin:

<table>
<thead>
<tr>
<th>Nationality</th>
<th>Workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chilean</td>
<td>17,480</td>
</tr>
<tr>
<td>German</td>
<td>2</td>
</tr>
<tr>
<td>Argentinian</td>
<td>6</td>
</tr>
<tr>
<td>Belgian</td>
<td>1</td>
</tr>
<tr>
<td>Bolivian</td>
<td>8</td>
</tr>
<tr>
<td>Brazilian</td>
<td>1</td>
</tr>
<tr>
<td>British</td>
<td>1</td>
</tr>
<tr>
<td>Canadian</td>
<td>1</td>
</tr>
<tr>
<td>Colombian</td>
<td>8</td>
</tr>
<tr>
<td>Cuban</td>
<td>3</td>
</tr>
<tr>
<td>Ecuadorian</td>
<td>7</td>
</tr>
<tr>
<td>Spanish</td>
<td>9</td>
</tr>
<tr>
<td>French</td>
<td>1</td>
</tr>
<tr>
<td>Italian</td>
<td>1</td>
</tr>
<tr>
<td>Peruvian</td>
<td>10</td>
</tr>
<tr>
<td>Venezuelan</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17,543</strong></td>
</tr>
</tbody>
</table>

**Age Range**

<table>
<thead>
<tr>
<th>Age Range</th>
<th>Workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Under 30</td>
<td>1,240</td>
</tr>
<tr>
<td>30 to 40</td>
<td>5,047</td>
</tr>
<tr>
<td>41 to 50</td>
<td>4,838</td>
</tr>
<tr>
<td>51 to 60</td>
<td>4,958</td>
</tr>
<tr>
<td>61 to 70</td>
<td>1,445</td>
</tr>
<tr>
<td>Over 70</td>
<td>15</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17,543</strong></td>
</tr>
</tbody>
</table>

**Length of Service**

<table>
<thead>
<tr>
<th>Length of Service</th>
<th>Workers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 3 years</td>
<td>1,410</td>
</tr>
<tr>
<td>Between 3 and 6 years</td>
<td>3,677</td>
</tr>
<tr>
<td>More than 6 years and less than 9 years</td>
<td>1,808</td>
</tr>
<tr>
<td>Between 9 and 12 years</td>
<td>2,962</td>
</tr>
<tr>
<td>More than 12 years</td>
<td>7,686</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>17,543</strong></td>
</tr>
</tbody>
</table>

**Gender pay gap**

<table>
<thead>
<tr>
<th>Position, responsibility or function</th>
<th>Proportion of the average gross salary of female executives and employees versus male executives and employees</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managers</td>
<td>88%</td>
</tr>
<tr>
<td>Department Directors</td>
<td>81%</td>
</tr>
</tbody>
</table>
Sustainability

Codelco has established a Master Plan for Sustainability that will serve as a roadmap for the next 25 years. With the respective measures in place, we aim to establish a Codelco Seal that verifies sustainability and traceability within our processes and products.

In 2016, we established a Master Plan for Sustainability that condenses Codelco’s sustainability strategy and defines short, medium and long-term objectives. Among the most urgent measures are to have zero fatal accidents and incidents affecting our communities; progressively reduce freshwater consumption per processed ton; execute a business plan that includes socio-environmental variables at a competitive cost; assume personnel management systems that include diversity and high levels of performance. Additionally, we aim to reach 5% traceable cathodes in three years, a figure that will gradually increase.

We are convinced that to progress towards a sustainable future and confront the enormous challenges in the mining sector (whilst optimizing productivity and adjusting our costs) it is necessary to adopt a long-term view and approach to face more challenging scenarios. Codelco must continue to be a profitable business for Chile, to satisfy an exceedingly demanding marketplace, and to respond to a society with higher expectations. Moreover, Codelco must strengthen its management in anticipation of the effects of climate change and the critical risk factors to sustainability, among other variables, across all operations.
With this in mind, in 2016 the Board requested the development of a Master Plan aimed at incorporating sustainability into the vision of the Business and Development Plan; ensuring long-term profitability of our business, as well as the encouragement of change in the way we think about (and execute) mining, moving towards and virtuous, sustainable and inclusive approach.

Thanks to a participative process that brought together more than 100 professionals from all Divisions, a similar number of individuals from academia, the mining industry, NGOs, specialists from a wide array of disciplines and the Sustainability Council of the Federación de Trabajadores del Cobre (FTC), we were able to prepare the Master Plan for Sustainability, approved by the Board of Directors in November 2016.

The plan establishes concrete and challenging goals for the six key elements of the 2020, 2030 and 2040 sustainability model, reducing uncertainties on resources availability and minimizing socio-environmental risks and impacts. The strategic elements are:

- Occupational health and safety
- People
- Environment
- Communities and territory
- Strategic Innovation
- Business and Corporate Governance

Within the master plan, we update the Corporate Sustainability Policy, undertaking the critical challenges identified to enable the economic activity of the company in its social and environmental context.
Investment

Accordingly, Codelco invested US$ 496 million in sustainability projects in 2016. These investments were allocated to initiatives related to occupational health and safety and environmental projects, as well as undertakings associated with improvements to the gas capture system, surface runoff treatment and tailings management.

Investment in sustainability 2010-2016*

*(In US$ million)

![Investment in sustainability 2010-2016*](chart)

*values in nominal currency.

Occupational Health and Safety

In 2016, under the framework of the management system for occupational health and safety and risk in the workplace, Codelco defined a work program, arranged with the cooperation of the Divisions and the Vice President of Projects. This program that compiled the key data from internal audits and analyses of prior incidents. Moreover, we updated 5 control standards for fatalities and 5 control standards for occupational health.

Management of the corporate Technical Workgroups continued with outstanding results, triggering the creation of other work groups to respond to cross management issues in occupational health and safety. The scope of these work groups included the following areas:

- Electrical
- Fire and emergencies
- Tailings storage facilities
- Eradication of silicosis
- Underground mining
- Smelters and refineries
- Fatigue and drowsiness
- Geotechnical
Notable progress was made in the reporting and learning system that facilitated the management and issuance of action plans as defined in incident investigation reports. With the participation of different areas, we analyzed 50 high potential risk incidents that in turn generated 2,772 action plan for the implementation of corrective measures, 98% of which were closed at the end of 2016.

Progress in safety

- Based on business process mapping, risk matrices were prepared to protect the lives and physical integrity of individuals, safeguard Codelco assets and ensure operations continuity. Codelco has identified 10 critical risks in our processes and necessary controls.

- Codelco has established an internal fire protection safety standard NCC 40 that outlines the parameters, conditions and minimum technical requirements for the design of safety systems for projects and operations.

- We standardized operational controls in accordance with technological advances, new legislation and operational requirements.

- Risks associated with sulphuric acid plants were identified and evaluated to protect personnel integrity (in addition to maintenance until necessary replacements were made). In total, we recorded 62 high risk areas with 89 identified mitigation actions.

- We strengthened the use of the Green Card (a tool that shuts down operations in the event of imminent hazard), which was highly appraised by workers. The Green Card was implemented an average of 281 times per month.

- With respect to performance improvements and skills training, Codelco updated the corporate induction course for occupational health and safety to include the requirements set forth in the Mining Safety Regulation. Furthermore, this course is also now available to contractor companies.

- For the first time at Codelco Divisions and Projects, an assembly of joint committees consisting of Codelco staff and contractor personnel was held to review and align risk prevention management. The role of the corporate workgroup for the joint committees was reaffirmed, who approved the structural procedure for its organization and operation.

Leadership and behavioural safety

Through the Divisional and Projects Management Committee, Codelco developed a monthly leadership program that attained 98% completion. This schedule included managerial walks, the formation of a Senior Occupational Health and Safety Council, and monthly meetings with contractor companies, allowing enhanced interaction in the field between executives and workers.

Codelco has 13,652 qualified behavioural monitors whose observations permit the detection and correction of hazardous conduct. In 2016, the most critical hazardous behaviour was reduced by 38% (from 3.7% in 2015 to 2.3 in 2016).

Special regulation

We proceeded in the application of the special occupational health and safety regulation through the incorporation of audits, together with the provision of systematic support to assigned professionals from respective mutual insurance companies. In combination with the internal efforts of the Divisions and Projects, we executed 231 audits on contractor companies, representing 90% coverage of these companies.
Occupational health

Our main priority is the timely and efficient management of health at in the workplace, for both Codelco staff and contractor staff. Essentially, we must identify, evaluate and control the agents and factors that pose a risk to health. To meet this objective, the following key actions were undertaken in 2016:

Execute traceable environmental monitoring plans that address health risk factors and agents in occupational hygiene and ergonomics. Implement controls to close detected breaches.
- Strengthen the workplace health management model in contractor companies.
- Maintain performance standards in medical surveillance of exposed workers.
- Reinforce actions against workplace fatigue and drowsiness

With respect to occupational hygiene, we updated the cadastre of radioactive sources, reviewed compliance with the dosimetry monitoring of exposed personnel and established a corporate procedure with minimum requirements for the development of radiation management, protection and radiological monitoring programs.

The Technical Workgroup for the eradication of silicosis prepared 10 key milestone objectives aimed at the following action areas: operational control and maintenance, dust control initiatives (with preventative maintenance plans for dust control systems) environmental oversight, standardization in respiratory protection programs, leadership guidelines in the use of respiratory protection and contractor company management.

We also implemented controls focused on closing the discrepancies for risk factors and agents in workplace hygiene and ergonomics.

Furthermore, we standardized critical requirements for contractors with respect to occupational hygiene, ergonomics, and occupational health by means of self-verifications and compliance audits in the field.

Corporate procedure pertaining to occupational health and monitoring programs for workers exposed to arsenic were standardized. Moreover, Codelco established life saving guidelines with critical controls for silica and arsenic.

Under the framework of these new regulations, 5-year compliance plans were submitted to government authorities, pursuant to Supreme Decree 43: Regulation on Storage of Hazardous Substances.

To pre-empt fatigue and drowsiness, Codelco formalized a corporate procedure and corresponding action plan, while executing audits to verify the scope of procedural implementation. Moreover, we updated the corresponding workplace health standard.

In delegated administration, Codelco adhered to instructions given by the Superintendence of Social Security that specify the regular function of the Professional Disease Qualification Commission, which evaluated 185 cases.

Moreover, we received rulings of permanent disabilities that required worker relocation in compliance with legal deadlines pursuant to article 71 of Law No. 16.744.

Accident rates

We deeply regret the fatalities of 4 workers at El Teniente (1), Andina (1) and Chuquicamata (2) divisions this year.
Frequency rates
In 2016, we recorded a global accident frequency rate (in-house Codelco and contractor staff) of 0.94 accidents per million hours / person worked. This figure exceeds the 2015 figure by 3.3% (0.91).

Severity rate
The global severity rate (in-house Codelco and contractor staff) amounted to 263 lost days of injured workers per 1 million hours worked in 2016. This is an approximate 88% rise from the figure recorded in 2015 (140 days).

Occupational illness and after-effects of work accidents
In 2016, we recorded 53 new disability rulings for in-house Codelco workers. Of these 53 rulings, 7 correspond to silicosis, 27 to deafness, 9 to osteomuscular disorders and 10 after-effects of work accidents.

Environmental
Included in the new Corporate Sustainability Policy are commitments to the preventative and transparent management of environmental risk; compliance with standards; consideration of climate change; increased water and energy efficiency and reduced inland water consumption and gas and particulate matter emissions.

Codelco has an environmental risk management system in place to address identified performance inconsistencies at work sites and operations; to prevent and review environmental incidents and their reoccurrence. This system also responds to community concerns and suggestions where these work sites and operations are situated to ensure compliance and follow-up of legal and environmental Qualification Resolution requirements.

Our Environmental Management System seeks to raise the Codelco standard in response to important aspects such as water and energy efficiency, waste treatment and impact reduction in the areas in which we operate.

Occupational diseases and occupational accidents after-effects 2016

<table>
<thead>
<tr>
<th>DIAGNOSIS</th>
<th>Delegated Administration</th>
<th>Mutual Health &amp; Safety Associations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Chuquicamata</td>
<td>Salvador</td>
</tr>
<tr>
<td>Silicosis</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Hypoacusia</td>
<td>17</td>
<td>0</td>
</tr>
<tr>
<td>Osteomuscular</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Other Diseases</td>
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<td>0</td>
</tr>
<tr>
<td>Total EP</td>
<td>21</td>
<td>1</td>
</tr>
<tr>
<td>AT Aftereffects</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>24</td>
<td>2</td>
</tr>
</tbody>
</table>

*Resolutions issued by Preventive and Disability Medical Commission (Compin), with loss of earning capacity of 15% or more.
*Since a worker can be disabled by two or more diagnoses simultaneously, the number of disabled professionals is less than the number of resolutions indicated in the table.
**Water resources**

One of the challenges of Codelco’s Master Plan is the goal to reduce freshwater consumption per treated ton by 10% from now until 2020. Respective efforts towards this goal are centred on the efficient management of water use, increased reuse of hydric resources and reduced consumption associated with each ton of processed ore.

We have also established Water and Tailings Divisional Project Management to validate strategies, verify compliance with commitments, and ensure availability and sustainable management of water resources, while considering territorial impact and preventing associated socio-environmental impact.

**Smelter emissions**

Our four copper concentrate smelters made significant progress with respect to changes required to meet new environmental requirements.

During the 2013-2018 period, we will have invested US$ 1.800 million to finance projects that will bring about compliance with the provisions of Supreme Decree N. 28, requiring a 95% capture rate of sulphur dioxide (SO2) and arsenic (As) emissions.

Emission capture requirements and restrictions on Ventanas Division smokestacks entered into force on December 12 2016, when the requisite environmental projects were put into operation.

Additionally, our smelters are governed by emission laws and decontamination plans for certain cities in which these are applicable. Our foundries also comply with limits and legislation established for SO2, As and particulate matter. Moreover, the Ministro Hales Division reports all its As emissions to government authorities.

**Incidents**

We have established a management system for incidents with environmental consequences classified as minor, serious, severe and very severe. The system involves online reporting and analysis of each event to ensure learning and prevention of reoccurrence.

Despite improved results of reported incidents since 2009 without very severe incidents, 2016 presented considerable challenges in this area. Two very severe and five severe incidents were recorded, in addition to 168 minor incidents.

We commenced an evaluation process of our internal safety regulation to strengthen aspects related to education and to have a more stringent incident management model.

Both incidents classified as ‘very severe’ occurred at the Andina Division. Therefore, we implemented all necessary actions to investigate the causes of the occurrence; applying required corrective actions and submitting all information to the inspection process conducted by the competent authorities.

The first of two very severe incidents occurred on February 25, when an underground copper concentrate pipe fractured in the Saladillo sector, spilling approximately 50 m³ of material into the Rio Blanco. The situation was brought under control and company emergency protocols were promptly activated, immediately bringing the Division’s operations to a halt.

Furthermore, the situation was reported at once to the corresponding regional and local authorities and to nearby communities and irrigators in the zone. Subsequently, these communities and irrigators shut down their water catchment systems from this river, as did the water company that supplies potable water to the city of Los Andes and surrounding municipalities.
Subsequently, the Andina Division executed an exhaustive cleanup of the affected zone that was certified by the Universidad de Chile, a recognized external entity. Protocols were signed in accordance with the neighboring community and commitments were made to conduct a study in the medium-term with the Center for Environmental Sciences EULA at the Universidad de Concepción.

The second very severe incident occurred on April 17 when, as Chile’s central region were being affected by adverse weather conditions, approximately 520 m³ of tailings spilled from the tailings transport system. The spill precipitated from four landslides of considerable magnitude, which partially or completely covered the tailings launder, dislodging the concrete covers, and obstructing tailings flow.

A portion of tailings runoff reached a natural water course in the area, thus efforts were focused on activating emergency protocols and communication with authorities and communities, in addition to the cleanup of the affected locations. In this case, all tailings spillage was gathered during a 3-month period.

The Faculty of Agronomy Sciences of the Universidad de Chile later certified that there were no tailings remaining in the zone. Moreover, protocols were established in accordance with the neighbors involved.

Environmental evaluation and compliance
In 2016, we submitted 12 projects into the Environmental Impact Evaluation System, with respective Environmental Impact Statements. Eight of these projects received authorization in 2016.

As in previous years, efforts were made to ensure compliance with our commitments, while responding to the requirements of governing bodies on this topic. Over the last four years, the authorities have conducted 235 investigations, including data reviews and environmental inspections.
Sanctions
On May 6 the Superintendence for the Environment (SMA) notified the Ventanas Division of the filing of charges for failure to comply with Environmental Qualification Resolutions and with regulations and general instructions set forth by the SMA, whereupon sanction proceedings commenced in August. The Ventanas Division subsequently submitted a compliance plan that was approved by the authority, thereby suspending the sanction process. As of December 2016, progress of the compliance program is at 30%.

In June, the SMA filed charges against Codelco associated with failure to comply with the Environmental Qualification Resolutions with respect to the raise project at the Carén tailings impoundment of the El Teniente Division. Faced with these punitive proceedings Codelco formulated disclaimers which, as of December, have been under review.

Territory and community relations
The Master Plan for Sustainability identifies two major areas of management: territorial development and community relations. In this area, Codelco faces significant challenges with respect to fostering reliable and transparent long-term relationships, contributing to the development of territories in which we are installed, and in the quality of life of the inhabitants. The foregoing signifies a move from territorial intervention to territorial development, in accordance to our Corporate Sustainability Policy.

Our management strategy seeks to forge a fresh outlook in community relations; from the procurement of operating permits to an inclusive, virtuous and sustainable mining operation. Within this context and, strategically, we work towards the formulation and execution of community relations plans for each territory where we have our operations, making use of our community relations tools and conducting systematic, ongoing and simultaneous activities that are friendly and transparent. These plans are based on the following three approaches:

- **Community development**: introduce new skill sets, strengthen human capital.
- **Social investment**: projects executed in conjunction with communities in accordance with the needs and development potential of the territory.
- **Community relations**: permanent and transparent information. Face-to-face relations.

Codelco made updated to its internal guidelines in these matters. Accordingly, a new corporate standard for community relations (NCC 39) will come into effect in November. NCC 39 includes general instructions on the procedure for issuing disbursements, clearly establishing the internal mechanisms and procedures for community contributions and respective issuance.

We are committed to a detailed review of the current community management standards and tools in the Master Plan. In this manner, we commenced company-wide interdisciplinary activities to design our strategy, including medium and long-term performance indicators, thereby positioning ourselves as an industry benchmark in these areas.
Investment
We financed 68 community investment projects in 2016, for a total of 4,744 million pesos, with a focus on human capital projects, territorial development, socio-environmental commitments and commitments to indigenous peoples.

Community investment lines 2016
Social Investment Fund

Our Social Investment Fund financed five projects in the Gabriela Mistral, Salvador, Ministro Hales, Andina and El Teniente divisions for a total investment of $264,405,660 Chilean pesos. Of this amount, the Fund directly contributed $126,200,000 Chilean pesos.

At least 20% of the value of these projects must be financed by the divisions; 10% by beneficiary institutions or organizations and / or co-executors (may be recoverable contributions), while the remaining percentage is covered by the Fund.

<table>
<thead>
<tr>
<th>Division</th>
<th>Project</th>
<th>Total amount of the project (chilean pesos)</th>
<th>Amount to be co-financed by the Fund of Social investment (chilean pesos)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gabriela Mistral</td>
<td>Sustainable community tourism: adding value to tourism in the Lican Antay community</td>
<td>$ 84,000,000</td>
<td>$ 30,000,000</td>
</tr>
<tr>
<td>Salvador</td>
<td>Emergency Plan for Aeropuerto population in Chañaral</td>
<td>$ 51,690,000</td>
<td>$ 28,000,000</td>
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<tr>
<td>Ministro Hales</td>
<td>Self-sustainable bus stops</td>
<td>$ 50,288,250</td>
<td>$ 25,783,000</td>
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<tr>
<td>El Teniente</td>
<td>Coya, developing sustainable tourism</td>
<td>$ 28,427,410</td>
<td>$ 14,077,410</td>
</tr>
<tr>
<td>Andina</td>
<td>Lighting our neighbourhoods with sustainable energy</td>
<td>$ 50,000,000</td>
<td>$ 28,339,590</td>
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<tr>
<td><strong>Total</strong></td>
<td></td>
<td><strong>$ 264,405,660</strong></td>
<td><strong>$126,200,000</strong></td>
</tr>
</tbody>
</table>

SENCE surplus

In 2016, resources totalling 2,091 million pesos were transferred to conduct 141 courses to be executed in 2017 across all divisions of the company.

Contributions were prioritized into two areas: mining professions and community development tools, distributed into four internal programs.

- **Veta minera**: five training courses for operators and maintenance personnel.
- **Programa Juntos**: 61 training courses for high-risk groups in communities in the vicinity of Codelco operations.
- **Contractor agreement**: 67 courses
- **Historic institutions**: eight courses associated with collaborative efforts with Senda and Prodemu.

SENCE surplus was distributed to the aforementioned programs through Technical Training Organisms (OTIC) specializing in the respective topics, as established in Law No. 19.518.
Key social initiatives

**Calama Plus: Parque Borderio**

Covering an area of approximately 18,000 m², Parque Borderio will raise the urban standard of the city, improve the quality of life of its inhabitants and become a cultural and touristic benchmark in the zone. This park will be situated in the southern sector of the city next to El Loa Park and will be executed within the framework of Calama Plus, an initiative that aims to transform Calama into a sustainable city. To proceed with the execution of the Parque Borderio initiative, public opinion was engaged through massive public consultations conducted in 2012.

The project involved the construction of walkways, a cafeteria, showroom access booths, a sewage treatment plant and a footbridge that, besides joining the north and south banks of the river, provides a panoramic view of the entire park.

Resource optimization permitted an extension in the quantity of surface that was recovered, originally estimated at 10 kilometers.

**Paving in several sectors of Calama**

Paving works were executed on a surface of 13.3 kilometers at different locations of the Calama, some of which had not been maintained for more over 40 years. The project included asphalt surfacing, signage, sidewalks, kerbs, edgings and other similar road improvement works.

**Recovery of ancestral heritage**

In May we commenced activities in the Atacama indigenous community of Caspana, under the framework of the Management Plan for Management and Appraisal of Cultural Heritage associated with the pre-Hispanic road network in the Incahuasi, Pila, Caspana and Cerro Verde sectors. These efforts were spearheaded by a team of archeologists, conservationists, audio-visual personnel and surveyors.

The National Monument Council defined activities for the survey and study of archeological data from sites, using the participatory action research (PAR) method. The PAR approach established the inclusion of members from the Caspana community and their archeological training in the registration of technical files to manage data associated with archeological prospecting, archeological structures, rock art and conservation. This training made it possible to develop local experiences to socialize elements of heritage protection in the indigenous community of Caspana.
Salvador Division

Chañaral

Following the devastating effects of a mudslide that affected the Region of Atacama in 2015, leaving more that 25 dead, missing and extensive material loss, the Salvador Division entered into two cooperative agreements with the municipalities within the Province of Chañaral.

Within the framework of these agreements, we contributed more than 3,500 million pesos to the inhabitants of the Diego de Almagro and Chañaral. Goods and equipment were provided to 18 institutions such as neighbor’s associations, sport clubs, seniors groups, evangelical churches and a language school. Additionally, we aided in the construction completion and turn over of the El Saldo roofed gymnasium (whose financing was shared with AngloAmerican) and also constructed a public square in the logistic centre in the same town in the municipality of Chañaral.

In addition to these works, the paving of Concepción Avenue was completed and the first dialysis centre was built, equipped, and the administration was handed over to the municipality of Diego de Almagro.

Furthermore, a community project executed by the Corporación Ciudadana Red Nacional de Emergencia commenced. This project is financed by Codelco’s Social Investment Fund and Salvador Division’s own funds, which provide for the generation of an Emergency Plan for members of the four neighbor’s associations in the airport sector of Chañaral.

El Teniente Division

Sustainable Tourism in Coya

This project was executed in Coya in the municipality of Machalí, the closest municipality to El Teniente’s mining operations. The initiative was born out of the concerns of the ‘Agrupación Mujeres Turísticas Culturales Tierra que Encanta’, an association that sought out possibilities for growth and development in tourist activity within this locality.

The development of a tourist circuit has provided a substantial contribution to Coya, which is reflected in increased quantities of tourists visiting the information office, an increase in the number of membership to this association and an 500% increase in revenues. Moreover, there has been an upswing in the quantity of new start-ups associated with the formation of this tourist route.

Community efforts were integrated into a concrete initiative with the general objective being the creation of a tourist circuit in the area. Accordingly, a plan was implemented that considered upgrading the tourist office to include a cafeteria; training in tourist-related subjects (i.e. business plans, hygiene and food preparation,
safety, languages and tour guide training); the generation and interconnection of tourist enterprises; and the publication of the tourist route online and other conventional media.

The development of this project involved the design of different tourist routes, with the tourist information office and cafeteria as a starting point. Strategic alliances were forged between four tourist operators and entrepreneurs within the municipality to attract more visitors and add new tourist attractions to the routes.

An unfortunate feature of Alhué is that it is one of the poorest municipalities in the Metropolitan Region; this, given its geographic isolation and high cost and scarcity of public transportation.

The beginnings of this agreement were initiated by a work group established within the Alhué in 2015. At that time, Codelco established a community development work plan that community and municipal government representatives participating in the group agreed to.

After the work group analyzed the community’s medical care issues, an agreement was reached to strengthen El Teniente’s support for medical attention not covered under the public system.

The agreement included the services of a mental health specialist, permitting 100% of the mental health cases to be addressed at the local level.

If patients had not had access to this assistance, they would have been referred to Mellipia or, depending on the referral plan and availability of specialties, directly to Hospital San Juan de Dios (170 km), Hospital Felix Bulnes (175 km) or Instituto Traumatológico (172 km).

Comprehensive medical agreement in Alhué
The objective of this agreement is to improve medial attention for Alhué community members by instituting skills and knowledge regarding healthy lifestyles and strengthening medical assistance: this community of Alhué is situated within the direct area of influence of the Carén tailings dam of the El Teniente Division.

The impact of this agreement has been notable: 100% of the general medical assistance cases that would not otherwise be covered by the public health system were covered under this agreement. 2,400 community members received medical care assistance in 2016.

Rural medical station Hijuelas de Pincha
The second major arrangement contained in this agreement was to provide the area of influence with a rural medical station, staffed by a medical team from the municipality.

This agreement has facilitated access to a higher level of medical care for the most vulnerable members of the community, complimented by the introduction to healthy living practices via talks and workshops provided by the municipality.
**Ventanas Division**  
**Children’s Symphony Orchestra**

Like the gentle sound of an opening note from a violin string, the onset of this project was simple, sincere and had one clear objective: to provide a space where local youth would be able to grow into better people in the present and develop into exemplar citizens of the future.

In 2014, a delegation from the Municipality of Puchincaví, together with community leaders and Ventanas Division staff, converged to listen to a recital of the Los Andes Children’s Symphony Orchestra. Being captivated by the experience, members of the audience were convinced that this objective was indeed possible in the area. From that moment on the efforts of the committed Division and a Corporation that believed in the initiative were united, agreeing to a Social Investment Fund that would create the future Ventanas Children’s Symphony Orchestra.

With his instrument in hand, musical director Mario Brignardello travelled to every corner of the 22 localities that form the Municipality of Puchuncaví to open doors for the orchestra. He auditioned students from the school in La Quebrada a hamlet situated deep in the interior of a hidden valley, engaged children of fishermen from Horcón and captivated the interest of students from the emblematic La Greda School.

Later, students from the Costa Mauco Art College in Quintero were added to form a group of more than 60 youngsters, who rehearsed for four hours Monday to Friday throughout the year. One of the most important aspects of these efforts was that these young boys and girls were recognized as capable of achieving any dream, exuding talent and a spirit of achievement with each note played.

The orchestra currently has an advisory council consisting of representatives from the Ventanas Division and municipalities of Quintero and Puchuncaví, headed by Mayor Eliana Olmos. The first official presentation took place on December 22 2016, with a moving Christmas recital for an audience of more than 300 and several government officials in the Puchuncaví public square. During the vacation season, students also have the possibility of participating in fun summer school programs. The quality of the orchestra’s activities has been recognized thorough the endowment of a regional Fondart grant.

The Children’s Symphony Orchestra gradually became a bridge between the Ventanas Division and the community, bringing about a magical encounter through music, friendship, education and the youth, the future cultural ambassadors of Puchuncaví and Quintero.
We participate in various international copper and molybdenum associations to boost these markets. Our subsidiary Codelco Tech, meanwhile, seeks to support initiatives and businesses that combine innovation and technology, to open new niche markets for our products.

International participation

International Copper Association, ICA
At Codelco we continue our role as a key member of the ICA, actively participating in the definition of strategic guidelines for the control, development and execution of programs that involve significant impacts on copper consumption; guidelines which are also included in the strategic plan of our organization.

With the ICA Executive Committee’s approval of the US$ 51 million budget for 2016, the primary organization for the promotion of copper consumption managed to attain a strong leading position for copper among its primary substitutes.
2016 was marked by milestones pertaining to regulation and sustainability issues, given the extraordinary level of global credibility that the ICA has earned in many areas.

An audit conducted by the United Nations on 17 sustainable development objectives reveals that ICA-developed programs have had a positive impact on all 17 of these objectives. Such findings provide strong evidence that of the importance of copper in the sustainable development agenda, and the commitment of the industry towards this issue.

As a result of commitments for development of these objectives, the ICA and the United Nations Environmental Program are set to spearhead the global alliance ‘United for Energy’ (U4E), which provides aid to countries (primarily developing countries), with the aim of encouraging the use of energy efficient products within their economies.

By the end of 2016, U4E had raised approximately US$ 56 million in financing. This influx of capital allowed the ICA to expand its geographic presence and develop programs in locations where they do not usually operate, with a focus on high copper consumption markets.

Furthermore, the ICA continued working in the defence of access to markets in which notable initiatives are underway in the classification of copper metal and concentrate, particularly those pertaining to offshore regulations. Such efforts aim to provide sustainability in the logistics and management of these products.

Meanwhile, efforts continued through programs for market protection in China, India and Southeast Asia, where copper consumption in the energy, electrical transmission and construction is considerable with respect to other geographic areas.

Over the forthcoming years, through the implementation of defense and promotion programs for copper use, ICA is expected to meet its committed goal to increase global demand for refined copper by one million tons in comparison with 2014.

The International Molybdenum Association (IMOA)

In 1989 Codelco promoted the founding of the IMOA which encourages the use of molybdenum and analyzes the impact of this metal on the environmental and human health. Moreover, the IMOA conducts investigations and studies on regulatory aspects in areas pertaining to sustainable development and public health.

In 2016 the IMOA faced issues that are vital to regulatory challenges of importance to the industry. Such challenges involved market access and the threat of classifications associated with potential molybdenum toxicity. In this regard, the IMOA developed studies with world renowned entities, which in turn provided for the development of programs in defence of the molybdenum market in different geographic zones around the globe. These programs were developed by means of a collaborative work agenda with different regulatory bodies and procured sustainability in the production and commercialization of molybdenum products in those areas.

The IMOA has a budget of US$ 3 million for the implementation of market development, sustainability, market intelligence and communications programs.
Market access projects

Molyb – Molybdenum Process Plant
Codelco is the world’s second leading molybdenum producer and, given molybdenum’s strategic importance in the market, in 2016 we executed the start-up of our molybdenum process plant, Molyb, a 100% Codelco subsidiary currently in operation.

Molyb enables Codelco to ensure long-term access to molybdenum production to markets of interest. Furthermore, Molyb production provides Codelco with the ability to generate other commercial molybdenum products of greater added value, in addition to the recovery and commercialization of rhenium.

The total investment for Molyb was US$ 555 million. More than one-fifth of this amount was allocated to efforts to meet strict requirements pertaining to sustainability and environmental regulation. Moreover, Molyb’s commitment to the community was evident though the training of 60 people and subsequent hire of 42 inhabitants from the Municipality of Mejillones.

Molyb plant operations will process 16,500 tonnes of fine molybdenum from molybdenum concentrate provided by each of our Divisions. Moreover, Molyb is also expected to produce molybdenum oxide, ferromolybdenum, highly soluble molybdenum, rhenium and sulfuric acid, among other by-products.

Metal Recovery Plant
This project commenced in 2014 with the strategic joint venture of Codelco and Korean firm LS-Nikko. 2016 saw the completion of the following significant milestones: start-up of the plant; and production of the first gold ingot and first silver ingot produced in Chile in many years.

Metal Recovery Plant has been designed with the highest environmental standards, thanks to its cutting-edge technology and expert operation.
The plant’s start-up phase commenced in July 2016 to produce 124,974 kilos of silver and 1,371 kilos of gold in ingot form.

The project implemented an exchange program for young people around Mejillones and scholarships in Korea, worker training and local labor hiring.

Moreover, the project helped Codelco expand its portfolio of products of greater added value and enhanced market access. In addition to gold and silver ingots, the plant also recovered palladium, platinum, selenium and tellurium.

**Codelco Lab: An accelerator of innovative projects**

In 2016, Codelco Lab commenced a stage of consolidation of the work model that was designed two years prior; seeking to become the principal catalyst for mineral-based innovation by 2018, thus impacting the development of the country and the needs of the world.

Codelco Lab set its strategic guidelines upon three pillars: links with universities and national and international technology centers; expansion of work focus; and communicational deployment. Throughout the year, these pillars were transformed into a series of milestones and activities, emphasising among these the following:

**Links with international institutions:** In order to accelerate the implementation process of the Codelco Lab strategy, agreements were drafted with universities and organizations linked to innovation and entrepreneurship in the United Kingdom.

Highlights of these efforts include agreements with Imperial College Innovation and Oxford University Innovation; the Kaist, Kisti and Etri Institutes in South Korea; YEDA in Israel; the transfer office of the Weizmann Institute and; in Spain, with the technological centres Tecnalia, Graphenea and Aimplas.

**Results of the roadmap for copper use:** Results were obtained from the roadmap for copper use on topics associated with energy (especially solar energy), electrical mobility, energy efficiency, integrated transmission, water, the environment and new materials.

Invitation to tender ‘Mineralízate’: The first Mineralízate open call was launched in 2016 to attract national start-up projects to the Codelco Lab portfolio. Mineralízate received 100 applications, 40 of which were submitted at a “Demo Day” held at the Centro de Innovación UC, before a jury of global experts from the public and private sector. Ten winners were selected with projects covering areas such as medicine, mining, clothing and animal care, among other projects that will be nurtured within the Codelco Lab portfolio.

**Liaisons with national institutions:** Codelco Lab established agreements and action plans with several Chilean universities such as the University of Chile, Adolfo Ibáñez, Antofagasta, Concepción, Universidad Católica del Norte and Andrés Bello.

During 2016, the creation of Codelco Tech, Codelco’s new innovation subsidiary, was announced. Codelco Lab has already started its integration process, contributing its experience in the development of projects on the forefront of open innovation and co-creation.
Values and Transparency

The Statement of Values and the Code of Conduct are the guiding principles that inspire and direct us in our decision-making and in day-to-day operations at Codelco.

Our core values are:
Respect for the life and dignity of all individuals is paramount. Nothing justifies assuming uncontrolled risks that threaten our health or safety:

• Working at Codelco takes great pride, is a great responsibility and an enormous commitment.
• We value and recognize competent employees with initiative and leadership, that face changes with determination and courage.

• We promote teamwork, responsible participation and contribution from diversity of experiences and workers’ organizations.
• We pursue excellence in everything we do and we practice ongoing improvement, to be among the best in the industry.
• We are a creative company, which relies on innovation to generate new knowledge, create value and enhance our leadership.
• We are committed to sustainable development in our operations and projects.
Business Code of Conduct and complaint hotline

Implemented in August 2011, Codelco’s Business Code of Conduct provides the guidelines for the day-to-day application of our Statement of Values, allowing the effective development and implementation of a strategy for good business practice.

In order fully introduce our Code of Conduct, a complaint hotline was established to permit anonymous callers to safely and confidentially report suspected code violations in the workplace.

In 2016, the hotline received 365 complaints (86 from 2015 and 279 from 2016). Investigations for 267 of these complaints were closed (79 from 2015 and 190 from 2016). To date, 96 cases are still undergoing investigation.

Of all closed investigations, 14 resulted in sanctions (50% involving dismissal from the company). The quantity of received complaints rose 26% in comparison with 2015.

Integrity and transparency

We at Codelco have adopted a set of regulations on transparency, integrity and good corporate governance, under the framework of our corporate policy on conflict of interest. In 2016, we implemented an agenda on integrity and transparency, as established by the Board.

The primary regulations that govern dealings and the prevention and control of conflict of interest and influence peddling focus on the following areas:

Related persons: Controls on business dealings with related persons, establishing requirements for authorization and controls for the early detection of conflict of interest.

Subsidiaries and associated companies: Regulations established for business dealings with firms in which Codelco holds proprietary interest.

Gifts and invitations: Criteria for all persons that work in Codelco with respect to the acceptance of gifts, specifying applicable monetary limits.

Interest and asset statement: Law No. 20,880 on Probity in Public Service and Prevention of Conflict of Interest and its associated regulation was brought into force in 2016. Codelco has undertaken efforts to adapt our information and control mechanisms to these new legal provisions.

Lobbying: Codelco adheres to the provisions of Law No. 20.730 with respect to activities considered as lobbying, and which are subject to the regulations and obligations set forth therein. Despite the fact that Codelco does not qualify as a “passive subject of lobbying” as stipulated in the aforementioned law, as a state company, we consider transparency an essential imperative in our affairs.

Therefore, Codelco has self-imposed standards that exceed the provisions of this legislations. On July 1 2015, the Board of Directors approved the regulations governing corporate relations and lobbying. This specific procedure stipulates that certain third party arrangements and approaches to Codelco may be construed as passive lobbying, for which specific and transparent procedures are adopted in the internal regulation.

Political campaigns

Our Business Code of Conduct is rather clear in stating that Codelco transcends political preferences and actions. Therefore, the company continues to maintain an unbiased position on any political activity or party. The Code also stipulates that Codelco does not or will not make, under any circumstance, political contributions or donations of any kind.
In the event that people working in the company engage in political activities, or make donations to political organizations, they do so on their own behalf and under no circumstance on behalf of the company. Codelco has established, and informed all personnel on specific guidelines dealing with this matter which indicate the prohibition of political contributions and donations on behalf of the company.

In 2016, we issued an updated revision of the instructions for periods during election complaints. These instructions specify that during the period leading up to an election processes, Codelco is prohibited from organizing, or participate in, public action related to the community; or in any public act that may be linked to some political tendency or persuasion. This restriction includes signing third party agreements, conducting inaugurations, or launching community projects or programs of a social nature. Under exceptional circumstances, duly justified when required, the subscription of agreements or the performance of public activities during such periods shall be subject to prior authorization of the Board of Directors.

Transparency law
Since April 2009, when Law 20,285 on Public Service Transparency and Access to Information of the State Administration came into effect, Codelco has maintained a section on its website at www.codelco.com that discloses all information required by this legislation. This information is as follows:

- Regulatory framework
- Organizational structure
- Roles and responsibilities of executive staff
- Financial statements and annual reports
- Subsidiaries, affiliate companies and interest in other entities and organizations
- Composition of the Board of Directors and individual responsibilities of the management team.
- Consolidated employee information

- Board member allowance and remunerations of Codelco employees, the CEO and managers responsible for the administration and guidance of the company.

During 2016, the audit report of the Transparency Board certified 100% compliance with the commitments to active transparency in our company.

Business with politically exposed persons (PEP) or companies:
Codelco has established strict standards for regulating (PEP) and business with politically exposed persons. Moreover, we have expanded the scope of the PEP definition.

People exposed to Codelco: This concept refers to people who have held certain executive or senior positions at the company. After having concluded the exercise of these positions, Codelco requires special authorization from senior management for possible future business dealings with such persons or companies under their charge.

Administration and control of personnel management processes: Definition and associated control of incompatibilities that may affect the execution of certain positions.

Information and communication
Codelco’s performance is an ongoing source of news in Chile and abroad. 2016 was marked by a sharp drop in commodities prices, which triggered the worst crisis we have experienced as a company. Moreover, this crisis also implied large-scale communication efforts to educate citizens on the mining industry’s challenging situation and how this would impact the results of the Chile’s foremost company and, in turn, the national budget.

Efforts were also made to inform management to avoid losses to the State and to conclude the year with positive results. The
significant media exposure that our company usually receives rose drastically and peaked in August with the statements made by our CEO Nelson Pizarro during a presentation, explaining the serious situation of the company.

Codelco’s website www.codelco.com includes an Questions and Complaints page the collects all information from the company’s electronic communications channels in the community. One of these channels is the email address comunica.cl which received 19,458 emails (44 per day) in 2016. This figure fell with respect to the previous year, with most queries pertaining to providers, employment and recruitment.

Codelco has managed social network accounts since 2009, being one of the pioneers of digital communications strategy. In 2016, we obtained the following results in comparison to 2015 figures:

Facebook: reaching 182,056 followers, an increase of 63.06%

Twitter @Codelco Chile: reaching 168,501 followers for 44.24% growth; and the second Twitter @CodelcoCorp: reaching 75,810 followers.

However, in 2016 we received improved media exposure with 16,477 positive news releases / reports (consisting of 50%); and 6,855 negative releases (consisting of 21% of published releases). This data is favourable in comparison with 2015 data with 14,940 positive (44%) and 9,924 negative (17%) published news releases.

Our website www.codelco.cl received 2,650,133 visits with 6,106,102 pages viewed. We also compiled all communication from the Questions and Complaints section.

6,493 images were made available to the public on Flickr, receiving 9,250,642 visits in 2016, signifying a 29.93% increase with respect to the previous year.

With respect to broadcast / publication data for 2016, we had considerable coverage of different aspects of Codelco management in the primary press, radio, television and internet media; with 33,262 reports broadcasted, compared to 33,915 in 2015, which is 1.92 % Lower.

192,648 follow us on LinkedIn, making us the Chilean firm with he most followers on this social network, for an increase in 9.79% during 2016.
Moreover, the official Codelco Instagram account was created, attracting 8,609 followers 2016.

8,609 followers

Citizen engagement
We consider public affairs management to be indispensable for engaging our public of interest. The following are among some of the actions undertaken this year towards this objective:

Fairs and conferences
We had outstanding participation at the 2016 Prospects and Developers Association of Canada, PDAC 2016, the biggest gathering in the world for new mining exploration projects. We were present at the Chilean Pavilion and had the privilege of exhibiting special patrimonial artifacts from the Codelco Collection.

In Chile, Codelco took part in the XIV versing of EXPOMIN 2016 and in the Exhibition and World Congress for Latin-American Mining, one of the most important expos in the country and Latin American region. The Chuquicamata Underground Project was the central theme of our stand, where we were able expound upon this structural project and publicize this magnificent work of engineering underway underground.

Our professionals, executives and experts actively participated as speakers at numerous conferences and seminars in Chile and abroad.

Events and ceremonies
Our key milestones were commemorated with ceremonies that included the participation of the officials of the highest levels of government such as the President of the Republic of Chile, ministers, parliamentarians, mayors, councillors, representatives of the community and workers.

One of the more significant events was the inauguration of the Ministro Hales Division, the first Codelco structural project in operation, whose construction commenced in 2010. Codelco also commemorated its 45th year since the nationalization of copper, solemnly observing this historic date and what it meant to national mining. We also celebrated the launch of the ‘Codelco Transparent’ platform and the signing of the United Nations Global Pact.

Codelco Educa
Our commitment to education is detailed in the website www.codelcoeduca.cl, which is a direct channel with the education community (students and teachers) that require information on mining and copper and the complexities of the production process. This site also contains sections oriented towards Mining Vocations and Mining Heritage (recounting the historic and cultural value of the Chuquicamata, Sewell and Potrerillos mining camps), in addition to a teaching library and interactive and visual material that complements the documentation.

In 2016, www.codelcoeduca.cl recorded a total 581,466 hits, with 1,822,633 pages viewed. Codelco also participated in the X version of the Explora Science and Technology Festival and the III Festival of Engineering and Sciences of the Faculty of Physical Sciences and Mathematics of the Universidad de Chile.

Recognition
In October, Codelco received 2 acknowledgements in the 2016 Corporate Transparency Index prepared by the consultants ‘Inteligencia de Negocio’. Among 27 state corporations, we scored fists place as the most transparent institution in the sector. Also, we earned firsts position in the Productive Sector companies category.

Another highlight of 2016 was our request to voluntarily incorporate Codelco in the open corporation rankings, where we attained fourth place among 95 evaluated institutions.
The Corporate Transparency Index is an indicator that evaluates the level and quality of reports published on websites of different companies, providing recommendations from international organizations such as the European Union, the UN and OCDE, among others.

In December of 2016, the ‘Monitor Empresarial de Reputación Corporativa’ (Merco), that recognizes 100 companies with the best corporate reputation in the country, placed Codelco in 7th place and 1st place among mining companies operating in Chile. Codelco also lead in the ranking of companies that best attract and retain talent. Meanwhile, our CEO Nelson Pizarro ranked 17th among the country’s top 100 business leaders.

Merco is an instrument for reputational evaluation that in 2016 utilized 18 sources of data. During the evaluation and study process, which lasted more than six months and involved 400 companies, 9,019 people were surveyed.

In 2016, we complied with all the obligations required of public companies by the Transparency Council; thereby qualifying as an institution that ensures the issue of complete information to the public, within established time periods and in accordance with procedure and the provisions of the Transparency Law.

The Transparency Council audit has been conducted annually since 2014, from when our compliance level was 87.4%. In 2015, this figure rose to 97.5%, then making considerable strides in 2016 to attain a maximum 100% compliance level.
Annual Management Report of the Board of Directors

The Board Committee’s Chairman, Blas Tomic Errázuriz, noted that, in accordance with the provisions established in article 50° bis of Law No. 18,046 on Corporations, the Board Committee of Codelco, i.e. the Audit, Compensations and Ethics Committee, is entitled to present in the annual report and inform to the ordinary shareholders’ meeting, the activities carried out, its annual management report and the expenses incurred, including those from its advisors, during 2016. For such purposes, he proposed to the Committee the approval of the following text:

Board Committee Management

Codelco’s Board Committee consisted of Blas Tomic Errázuriz, Gerardo Jofré Miranda, Juan Enrique Morales Jaramillo and Isidoro Palma Penco.

During 2016, the Committee committed to fulfill its duties and exercise the powers set out in Decree Law 1,350 of 1976 and Law No. 18,046 on Public Limited Companies, which included reviewing reports submitted by external auditors, quarterly financial statements, remuneration systems and compensation plans of managers and senior executives; and, finally, to examine the background information relating to transactions referred to in Title XVI of Law No. 18,046 on Corporations. On this last point, it is also worth noting that the Committee analyzed the transactions referred to in said Title, stating that the operations performed comply with market conditions.

The main subjects and activities reviewed by the Board Committee are identified below.

Audit Subjects 2016:

- **Regular session held on January 20**: evaluated the Investigation Report on Chuquicamata Retirement Plan and Action Plan proposed by the Management, as well as the Cochilco Audit Report for the 4th quarter of 2015.

  The Board Committee requested the report on the renewal results of the insurance program to the Management, which was studied in detail, raising some suggestions to be addressed in subsequent sessions.

  The Board Committee analyzed in depth the purchasing procedures and contracts over US$ 100 million presented by the Corporate Supply Management and the Projects Vice-Presidency; recommending their approval to the Board of Directors.

  The Board Committee, following the Vice-Presidency of Administration and Finance presentation, supervised the work of the External Auditors, analyzing the Action Plan and the letter to the Administration submitted by E&Y External Auditors.

  The Board Committee reviewed the financial accounting proposal on assets for impairment and/or write-offs in 2016.

- **Regular session held on February 24**: met with the auditor general to learn more about the results of the work, specifically to analyze and approve the activities of the Internal Audit Plan 2016.

  The Board Committee supervised the implementation of the financial accounting proposal on assets for impairment and/or write-offs in 2016.

• **Regular session held on March 23:** the Board Committee was informed of the Report on Internal Audit Activities.

The Board Committee, after the presentation made by the Administration, addressed on the Agreement between Codelco and OUTOTEC, requesting to analyze other factors.

The Board Committee analyzed in depth the purchasing procedures and contracts over US$ 100 million presented by the Corporate Supply Management and the Projects Vice-Presidency; recommending their approval to the Board of Directors.

The Board Committee reviewed and addressed the Financial Statements and the Report of the External Auditors, recommending their approval to the Board of Directors.

The Board Committee, after a thorough study of the different proposals, proposed to the Board the External Auditors for the year 2016; the newspaper for publications for 2016 and the Risk Rating Company for the same period.

• **Regular session held on April 21:** received the Auditor General, in order to learn more about the results of the work of this area, specifically to analyze the activities of the Internal Audit Plan and the deficiencies detected.

In addition, analyzed in depth the purchasing procedures and contracts over US$ 100 million presented by the Supply Management of the Projects Vice-Presidency; recommending their approval to the Board of Directors. Authorized and ratified sole source contract submitted by the International Business Directorate.

Finally, the Board Committee analyzed the proper operation of the risk management process, especially the main sources of risk, the methodology for detection and probability and impact and occurrence, as well as the improvements incorporated in the new “Comprehensive System for Risks Management and Controls”.

• **Regular session held on May 19:** supervised the internal operation regarding Cochilco Audit Reports, and addressed the Bidding Process Progress of External Auditors.

At the request of The Board Committee, the Administration presented the 2016 Insurance Program.

The Board Committee reviewed Codelco’s Consolidated Financial Statements and External Auditors’ reports. The Board Committee, after an exchange of questions and answers with the exhibitors, unanimously declared the Company’s Financial Statements, Notes, Income Statements and Relevant Events, as well as the External Auditors Reports as reviewed.

The Board Committee analyzed in depth the purchasing procedures and contracts over US$ 100 million presented by the Corporate Supply Management and the Projects Vice-Presidency; recommending their approval to the Board of Directors.

• **Regular session held on June 23:** supervised the internal operation regarding Cochilco Audit Reports.

The Administration presented a progress report on the improvement of bidding and award processes, since the Board Committee requested to take notice of these processes and to establish optimizations and improvements. In addition, the Report on Directors’ liability policy was presented, as a result of the concerns raised by the Committee in previous sessions.

The Board Committee analyzed EY recruitment to carry out community management audit, reporting to the Board of the suitability in its recruitment, since it does not affect its independence as Codelco’s External Auditor.
• Regular session held on July 21: received the Auditor General to analyze the quarterly results of the area, specifically to analyze the activities of the Internal Audit Plan and the deficiencies detected.

The Board Committee analyzed EY recruitment to carry out tax and legal consulting services, reporting to the Board of the suitability in its recruitment, since it does not affect its independence as Codelco’s External Auditor.

• Regular session held on August 18: analyzed and approved the 2017 Internal Audit Budget. It also addressed on the Bidding Process for Internal Audit Co-Sourcing services, suggesting some modifications to the bidding terms.

Report on Directors’ liability policy was presented, due to the consultations carried out by the Committee in previous sessions.

The Board Committee analyzed in depth the purchasing procedures and contracts over US$ 100 million presented by the Corporate Supply Management, recommending their approval to the Board of Directors.

The Board Committee reviewed Codelco’s Financial Statements and External Auditors’ reports. The Committee, after an exchange of questions and answers with the exhibitors, unanimously declared the Company’s Financial Statements, Notes, Income Statements and Relevant Events, as well as the External Auditors Reports as reviewed.

• Regular Session held on September 22: analyzed in depth the purchasing procedures and contracts over US$ 100 million presented by the Supply Management of the Projects Vice-Presidency; recommending their approval to the Board of Directors.

The strategy for bidding the transport service of North Zone product was submitted for analysis and pronouncement by the Board Committee. The Committee, after an exchange of questions and answers with the exhibitors, approved to recommend to the Board, the contracts modifications requested by the Corporate Supply Management in line with the strategy reviewed.

• Regular session held on October 20: analyzed the proper operation of the risk management process, especially the main sources of risk, the methodology for detection and probability and impact and occurrence, as well as the progress of the “Comprehensive System for Risks Management and Controls”.

The Board Committee received the Auditor General to analyze the quarterly results of the area, specifically to analyze the activities of the Internal Audit Plan, the deficiencies detected and the follow-up of Cochilco Audits.

The Committee analyzed the desirability of extending the Commercial Current Account between Codelco and Molyb, recommending its approval to the Board of Directors.

The Board Committee analyzed in depth the purchasing procedures and contracts exceeding 40% of the original amount, presented by the Corporate Supply Management and the Projects Vice-Presidency.

The negotiation strategy for the supply of spare parts developed by the Corporate Supply Management was submitted for analysis and pronouncement of the Board Committee, authorizing the commencement of negotiations and implementations of the strategy stages.
• Regular session held on November 17: The Board Committee was informed of the Report on Internal Audit Activities.

The Administration submitted a Preliminary Report issued by the Comptroller General of the Republic, which was studied in depth by the Board Committee, requesting the Administration to implement the agreed strategy.

At the request of the Committee, the Administration presented the Future Market Surveillance Report from the Internal Revenue Service (SII) and the Progress Report on the improvement of bidding and award processes, both reports were discussed by the Board Committee, who requested periodic reports from both presentations.

The Board Committee analyzed in depth the purchasing procedures and contracts over US$ 100 million presented by the Supply Management of the Projects Vice-Presidency

The Board Committee reviewed Codelco’s Financial Statements and External Auditors’ reports. The Board Committee, after an exchange of questions and answers with the exhibitors, unanimously declared the Company’s Financial Statements, Notes, Income Statements and Relevant Events, as well as the External Auditors Reports as reviewed.

The Board Committee, after a thorough study of the different proposals, proposed to the Board the company that will perform the External Audit service and review of the Financial Statements for 2017, 2018 and 2019.

The Board Committee analyzed EY recruitment to carry out consultancy services on taxation applicable to subsidiaries, reporting to the Board of the suitability in its recruitment, since it does not affect its independence as Codelco’s External Auditor.

• Regular session held on December 20: defined the structure of Internal Auditor and approved the Internal Audit Plan 2017-2020. It also analyzed the sessions’ Schedule for 2017, making few adjustments and then approving the Scheduling.

The Board Committee was informed of the Report on Internal Audit Activities and the Cochilco Audits Report.

The progress Report of the Model of Corporate Document Management requested by the Board Committee was presented, which was further analyzed, providing the guidelines to continue with the design and implementation, also requesting expert advice to validate the proposed Model.

The Board Committee reviewed the bidding process for Internal Audit Co-Sourcing services and approved the award proposal.

The strategy and bidding process for explosives was submitted for analysis and pronouncement of the Board Committee. After an exchange of concerns, its approval was rectified.

The Board Committee analyzed in depth the purchasing procedures and contracts over US$ 100 million presented by the Supply Management of the Projects Vice-Presidency

• Extraordinary Session held on December 26: reviewed the Internal Audit Report regarding Human Resources.
**Subject of related parties and related persons**

The Board Committee throughout 2016 reviewed all transactions with related parties as well as transactions when a Company director, manager or executive could have potential conflicts of interest.

- Regular Session held on January 20: approved the contracts with related companies submitted by the Corporate Supply Management and the Projects Vice-Presidency.

- Regular Session held on March 23: the Vice-Presidency of Administration and Finance presented, and the Board Committee, reviewed and addressed the strategy in Cupic Operation.

- Regular Session held on May 19: approved contracts with companies with trading links with Codelco employees, persons exposed to Codelco (PEC) and politically exposed persons (PEP) submitted by the Corporate Supply Management and the Projects Vice-Presidency.

- Regular Session held on June 23: approved contracts with companies with trading links with Codelco employees, persons exposed to Codelco (PEC) and politically exposed persons (PEP) submitted by the Corporate Supply Management and the Projects Vice-Presidency.

- Regular Session held on July 21: approved contracts with companies with trading links with Codelco employees, persons exposed to Codelco (PEC) and politically exposed persons (PEP) submitted by the Corporate Supply Management and the Projects Vice-Presidency.

- Regular Session held on August 18: approved contracts with companies with trading links with Codelco employees, persons exposed to Codelco (PEC) and politically exposed persons (PEP) submitted by the Supply Management of the Projects Vice-Presidency.

- Regular Session held on September 22: approved contracts with companies with trading links with Codelco employees, persons exposed to Codelco (PEC) and politically exposed persons (PEP) submitted by the Corporate Supply Management.

- Regular Session held on October 20: discussed in detail Codelco Tech implementation strategy, recommending its approval, according to a presentation made by the Corporate Business and Innovation Management.

- Regular Session held on November 17: approved contracts with companies with trading links with Codelco employees, persons exposed to Codelco (PEC) and politically exposed persons (PEP) submitted by the Corporate Supply Management.

- Regular Session held on December 20: approved contracts with companies with trading links with Codelco employees, persons exposed to Codelco (PEC) and politically exposed persons (PEP) submitted by the Corporate Supply Management and the Projects Vice-Presidency.

The Board Committee prepared a Report with the analysis and approvals made at each session, a copy of this Report was sent to the Board for its knowledge.
Subject of Compensation
During 2016, the Board Committee reviewed and supervised the Remuneration Systems and Compensation Plans (Performance Agreements) of the Chief Executive Officer as well as the Division General Managers, Vice Presidents and other second level executives, and also reviewed the Company’s Human Capital and Compensation Policies.

In particular:
- **Regular session held on January 14:** carried out the performance evaluation of the Chief Executive Officer for 2015, and unanimously approved the evaluation and payment of the corresponding bonus.
- **Regular session held on February 24:** the Vice-Presidency of Administration and Finance presented, and the Board Committee, reviewed and recommended the Performance Agreement Proposal for the year 2016.
- **Regular session held on March 23:** the Vice-Presidency of Administration and Finance presented, and the Board Committee, addressed on the 2016 Bonuses, requesting the Administration to take into account the Committee’s opinions and considerations.
- **Regular Session held on May 19:** after a thorough analysis, the Board Committee rejected the amendment to the 2016 Performance Agreement, proposed by the Vice-Presidency of Administration and Finance.
- **Regular Session held on July 21:** reviewed and analyzed in detail the Corporation’s Succession Plan.
- **Regular session held on September 22:** the criteria for collective bargaining were presented at the request of the Board Committee’s Chairman, which were discussed and reviewed, providing guidelines and requesting the Administration to take into account the considerations established.
- **Extraordinary Session held on December 26:** approved the Remunerations System and Compensation Plans for Managers, Senior Executives and employees of Codelco.

Subject of ethics
The Board Committee reviewed the compliance with the Code of Business Conduct and Ethics of the company, especially practices to prevent or address situations of conflict of interest, transparency, corruption and fraud. In addition, the Committee ensured compliance with regulations regarding Criminal Liability for Legal Persons.

Especially, during all the regular sessions of 2016 the Committee studied, analyzed and addressed the Report prepared by the Administration on: Contracts signed with subsidiaries, related and associated companies and Report on Direct Allocations performed. In addition, during the year, a monitoring of the Complaint Hotline and the Crime Prevention Model-Law 20,393 was performed.

In regular session held on April 21, 2016, the Board Committee approved to recommend Daniela Mora E. to the Board of Directors as Director of Crime Prevention. In regular session held on August 18, 2016, the Board Committee approved the bidding process for the follow-up and certification service Law No. 20,393. In regular session held on December 20, 2016, the Board Committee analyzed and approved the amendment to the crime prevention model Law No. 20,393, as presented by the Auditor General.

Advisory Fees of the Board Committee
The Board Committee does not have a budget for operating expenses, therefore there have been no contracting of advisory services from this Committee.