

SUSTAINABILITY REPORT 2014

# **BHP Billiton Chile**

**BHP Billiton Pampa Norte**  
**Minera Escondida**



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This ninth Sustainability Report of BHP Billiton in Chile provides an account of the annual performance of BHP Billiton Pampa Norte, Minera Escondida and the Minera Escondida Foundation. Minera Escondida and the Minera Escondida Foundation also publish their own separate reports. This Report contains information about our economic, environmental and social performance in the period from 1 January to 31 December 2014.



## Our Charter

**We are BHP Billiton, a leading global resources company.**

**Our purpose is to create long-term shareholder value through the discovery, acquisition, development and marketing of natural resources.**

Our strategy is to own and operate large, long-life, low-cost, expandable, upstream assets diversified by commodity, geography and market.

### **Our Values**

#### **Sustainability**

Putting health and safety first, being environmentally responsible and supporting our communities.

#### **Integrity**

Doing what is right and doing what we say we will do.

#### **Respect**

Embracing openness, trust, teamwork, diversity and relationships that are mutually beneficial.

#### **Performance**

Achieving superior business results by stretching our capabilities.

#### **Simplicity**

Focusing our efforts on the things that matter most.

#### **Accountability**

Defining and accepting responsibility and delivering on our commitments.

### **We are successful when:**

Our people start each day with a sense of purpose and end the day with a sense of accomplishment.

Our communities, customers and suppliers value their relationships with us.

Our asset portfolio is world-class and sustainably developed.

Our operational discipline and financial strength enables our future growth.

Our shareholders receive a superior return on their investment.

Andrew Mackenzie  
Chief Executive Officer

May 2013

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# Letter from the President

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## Our role as a company extends beyond strictly operational issues because it is anchored in a long-term vision

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In March of this year, I was appointed as President of BHP Billiton Copper. I am honoured to hold this post which implies leading one of BHP Billiton's pillar businesses. Our operations in Chile play an important role in the local mining industry and have a great impact on the country's economy, all of which means that we have an enormous responsibility.

In recent years, the mining industry has been working intensely to increase the efficiency and global competitiveness of its operations. BHP Billiton has implemented measures with whose initial results we are satisfied but much remains to be done. We have increased the productivity of our equipment and plants and this has allowed us to reduce costs and increase output. Now our focus is on optimisation of the use of our resources and simplification of the way we work as a means of further enhancing productivity.

In 2014, we continued to implement important investments that will allow us to maintain output at Escondida over the coming years - the new concentrator plant, a second seawater desalination plant and the OLAP project to maintain output of oxides. In addition, we have started construction of the Kelar gas-fired power plant in Mejillones which will permit diversification of northern Chile's energy matrix.

Pampa Norte continues with the environmental evaluation process for the project to extend Cerro Colorado's operations through to 2023 while, at Spence, we are studying the possible implementation of a project that would in future allow us to process primary minerals from the deposit using a concentrator plant.

Our role as a company extends beyond strictly operational issues because it is anchored in a long-term vision. Business decisions are guided by our Charter of Values where sustainability plays a paramount role. We understand that the key elements of the way we do business are the health and safety of the people who work at or are affected by our operations, responsibility as regards the environment and the establishment of transparent and mutually beneficial relations with communities and society in general. I would like to invite you to read this Report where you will find information about the distinctive way in which we seek to manage our business.



**Daniel Malchuk**  
President, BHP Billiton Copper





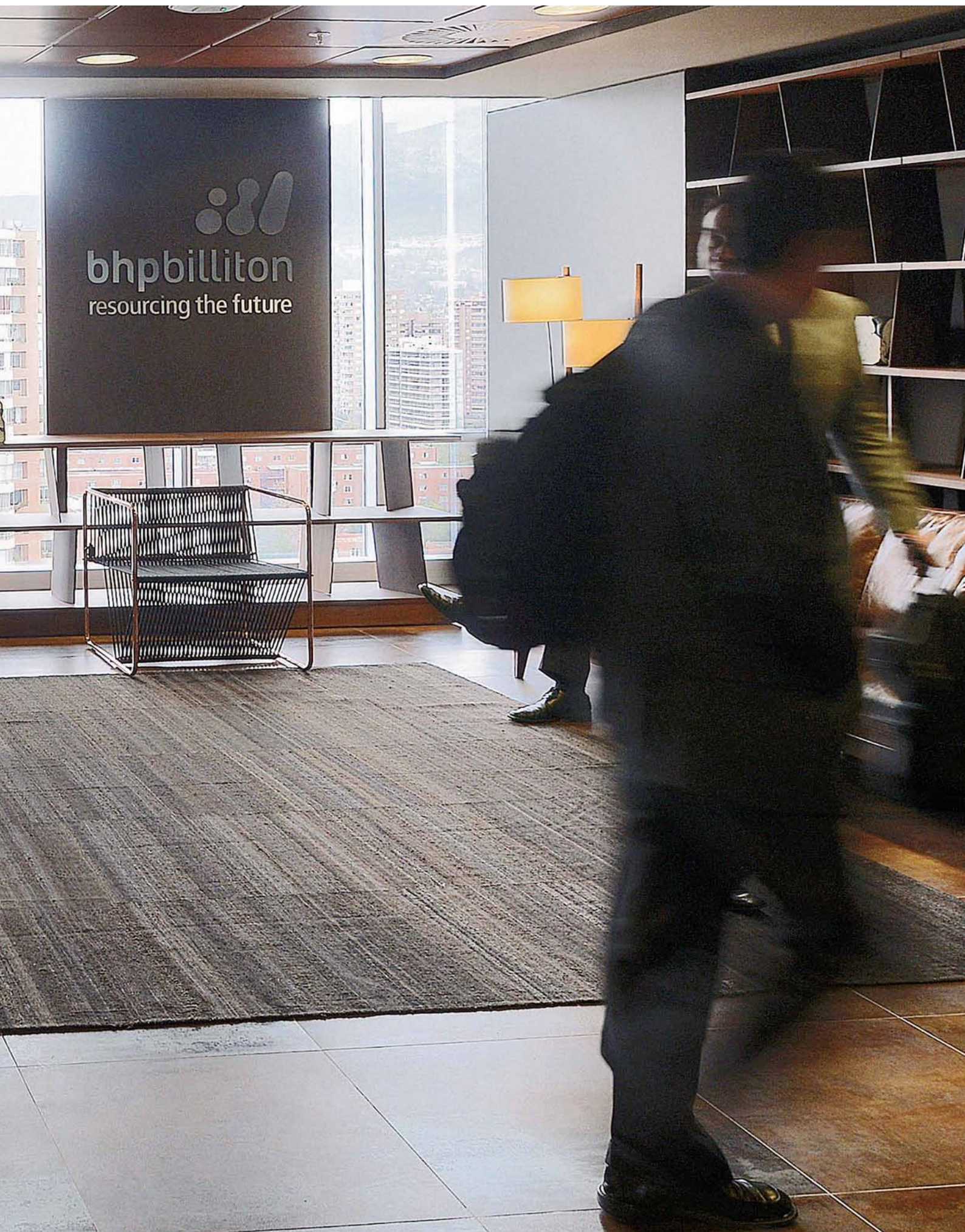


# Corporate Governance

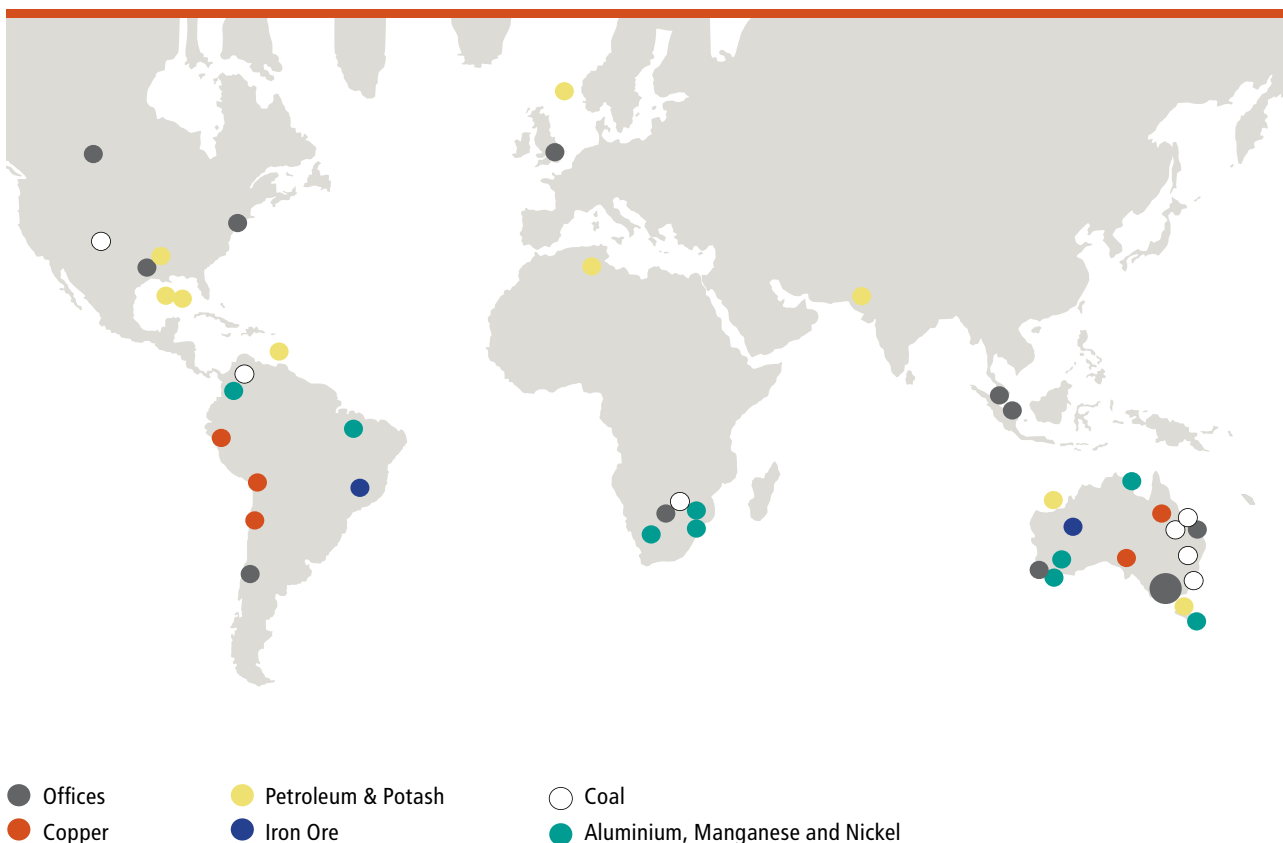
**For BHP Billiton, it is important not only that we meet targets but also how we do so**

**Cerro El Plomo 6000.** In 2014, we inaugurated the new offices of the Copper business unit in Santiago at Cerro El Plomo 6000, Floors 12 to 18, Las Condes. These ample and modern premises offer great comfort and include many areas for collaborative work. Both BHP Billiton's offices and the building in which they are located have Leadership in Energy & Environmental Design (LEED) certification awarded by the U.S. Green Building Council. ▲









\*This map does not reflect the changes that will occur in 2015.

## Company Information

BHP Billiton a leading global resources company. Its purpose is to create long-term shareholder value through the discovery, acquisition, development and marketing of natural resources.

In August 2014, BHP Billiton announced a plan to create a new independent global company ("South 32") bringing together a selection of aluminium, coal, manganese, nickel and silver operations. This separation process is scheduled to be completed in the first half of 2015 once all the corresponding authorisations have been obtained. In this way, BHP Billiton will maintain a simplified portfolio of four broad business units - Petroleum & Potash, Copper, Iron Ore and Coal.

Copper, whose headquarters are in Santiago, is one of the world's leading producers of copper, silver, lead, uranium and zinc. It has operations in Australia, Chile and Peru. In Chile, it operates Minera Escondida and owns BHP Billiton Pampa Norte, formed by Compañía Minera Cerro Colorado and Minera Spence. BHP Billiton Pampa Norte has its headquarters in Iquique.

The company made its debut in Chile in 1984 through the acquisition of Utah, then the principal partner in Minera Escondida. In 2000, Billiton bought Rio Algom whose assets included Spence and Cerro Colorado. In 2001, the merger of BHP and Billiton took place and, in 2004, given the concentration of copper operations in Chile, the company decided to establish the

offices of its Base Metals Division, now its Copper business unit, in Santiago.

Since 10 May 2013, Andrew Mackenzie has been the CEO of BHP Billiton and, since 1 March 2015, Daniel Malchuk has been the President of the Copper business unit.

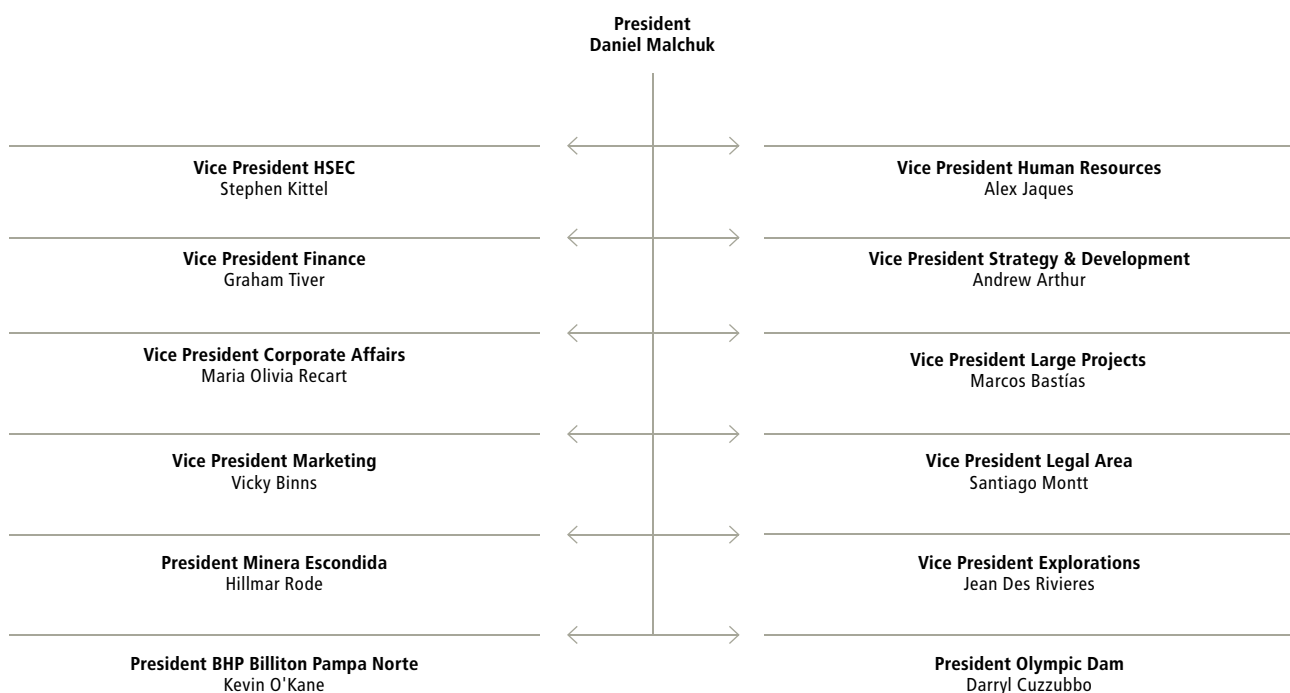
## Our Sustainability Approach

For BHP Billiton, sustainable development consists in ensuring that our business remains viable and contributes lasting benefits to society.

Our commitment to sustainability is reflected in our Charter, Code of Business Conduct and the different corporate documents that guide our actions.

Our Charter sets out our purpose and the values to which we adhere. It contains the pillars on which the organisation is based and which are transversal to all aspects of its management and performance. It guides the company's actions and those of each one of its employees. It establishes that "we are successful as a business when our communities, customers and suppliers value their relationships with us".

The Code of Business Conduct is based on the values set out in our Charter and represents BHP Billiton's commitment to maintaining



and adhering to ethical business practices. The Code describes the way in which we work and is applicable to all employees, regardless of location or position.

The minimum Health, Safety, Environment and Community performance standards expected throughout the company are set out in our corporate documents. Although these documents are for internal use, some of them are available on [www.bhpbilliton.com](http://www.bhpbilliton.com).

We are also committed to international standards such as the United Nations Global Compact, the United Nations Declaration of Human Rights and the Voluntary Principles on Security and Human Rights.

In order to monitor compliance with our corporate mandates, we carry out regular internal audits. Subsequently, in the light of their results, the company draws up the corresponding action plans for reinforcement or improvement. When sensitive points are detected in these areas, they are reported directly to the Health, Safety, Environment and Community (HSEC) Area.

Regular review of our performance and public reporting of our progress are also elements of the greatest importance in our sustainability approach. This Report is, precisely, a vehicle for relating transparently with our stakeholders.

At the community level, we have in place mechanisms for addressing stakeholder concerns and complaints. They include the Business Conduct Advisory Service, designed to facilitate response to enquiries from suppliers and contractors as well as employees.

For the company, it is important not only that we meet targets but also how we do so.

Our commitment to doing business with integrity, ensuring fulfilment of our obligations and acting within the framework of all legal requirements is key for our success.

## Compliance Programme

Our Compliance Programme, which applies to all the organisation, identifies the risks related to corruption, fair competition, transactions with sanctioned parties, asset laundering and the financing of terrorism and also includes the design, implementation and monitoring of the corresponding controls.

Changes in international anti-corruption legislation in 2011, principally the UK Bribery Act, triggered a corporate review of our Code of Business Conduct, which was completed in January 2012. In order to ensure that the new legal requirements were incorporated, annual face-to-face meetings took place with employees and contractors, accompanied by training and communications plans, the results of which have been reported and recorded.

In 2014, the Compliance Programme was strengthened and consolidated in different areas of the company through its key components - results of the analysis of material risks, application of the framework for approving these analyses, transactional

## Timeline 2014

2014	<ul style="list-style-type: none"> <li>–June: Start of operation of BHP Billiton's new corporate offices in Santiago</li> <li>–August: Start of construction of Kelar plant / Hilmar Rode becomes President of Minera Escondida</li> <li>–September: Kevin O'Kane becomes President of Pampa Norte / Start of operation of OLAP project</li> </ul>
2013	<ul style="list-style-type: none"> <li>–Base Metals renamed Copper / Incorporation of Explorations and Olympic Dam (an operation in Australia) into this business unit</li> <li>–BHP Billiton signs the contract for construction of the Kelar plant</li> <li>–Announcement of construction of Escondida's second seawater desalination plant</li> </ul>
2012	<ul style="list-style-type: none"> <li>–Start of production at Escondida Ore Access</li> <li>–Announcement of construction of OGP1 and OLAP projects</li> </ul>
2010	<ul style="list-style-type: none"> <li>–New BHP Billiton Pampa Norte business unit (Cerro Colorado and Spence) created</li> <li>–Inauguration of Minera Escondida Foundation building</li> </ul>
2008	Pampa Escondida discovered
2004	BHP Billiton Base Metals corporate centre installed in Santiago, Chile
2002	Start-up of Phase 4 Escondida Expansion
2001	Merger of BHP and Billiton
2000	Billiton acquires Rio Algom, owner of the Spence deposit and Compañía Minera Cerro Colorado
1999	Inauguration of Escondida Educational Foundation (CEIM)
1997	Inauguration of Minera Escondida Foundation
1996	Start-up of Phase 3 Escondida Expansion
1994	Start-up of Phase 2 Escondida Expansion
1993	Start-up of Phase 1 Escondida Expansion
1991	Official inauguration of Minera Escondida
1984	BHP acquires Utah, the principal partner in Escondida
1981	Escondida deposit discovered

monitoring and employee training. During the year, 1,773 employees received anti-corruption training and 405 employees received training in fair competition.

## Our Material Risks

We identify the risks that are material to our business and take into account their potential impacts on health, safety, the environment and the community as well as in the social, reputational, legal and financial spheres. The severity of any specific risk is evaluated according to a matrix which sets out the degree of damage, injury or loss that would be caused by its severest impact. The aim of this risk evaluation process is to understand the nature and tolerance of those risks that are material and ensure they are managed through the verification of critical controls.

We manage our material risks using a SAP system which allows us to ensure both compliance with the management process established and awareness within the organisation accompanied by identification of best practices. This, moreover, takes place within the framework of a process of continuous improvement.

We establish Risk Management Plans to evaluate, control and monitor material risks. We have increased our emphasis on the verification of critical controls through key performance indicators.

Our risk management processes are consistent with the hierarchy of controls set out in Article 6 of the International Labour Organization's Convention 176 on Safety and Health in Mines (1995).



*Our risk management processes are consistent with the hierarchy of controls set out in Article 6 of the International Labour Organization's Convention 176 on Safety and Health in Mines.*





## Our Sustainability Performance

In Fiscal Year 2014\*, we incorporated new health, safety, environment and community targets, designed to help us maintain a focus on our material risks. Our performance against these targets and their effectiveness are evaluated by internal auditors and the annual results are set out in this Report. Our targets also reflect our commitment to progressively lead management of health, safety, environmental and community issues.

**RESULT:** Achieved Underway Not achieved

Target	Comment	Status	Compliance Period
<b>Safety</b>			
Zero fatalities at our controlled operations.	The health and safety of our people is our priority in every aspect of our business. Our operations must have in place systems, processes and controls to identify, evaluate and mitigate potential fatal risks. In 2014, no fatal accidents occurred at our operations in Chile.		Annual
Year-by-year improvement in Total Recordable Injury Frequency (TRIF).	We use TRIF as an indicator that highlights broad trends in personal injury. The TRIF for 2014 was 2.05 compared to 2.0 in the previous year (a 2.5% increase). This increase was due principally to accidents to contractors' employees in construction projects. It is, however, important to note that accidentability at our construction projects is among the lowest in the industry. The TRIF for Escondida was 1.83 and, for Pampa Norte, 1.53.		Annual
Annual reviews of alignment with the Voluntary Principles (VPs) on Security and Human Rights and implementation of plans to close gaps.	We carry out annual reviews to ensure alignment with the Voluntary Principles (VPs) on Security and Human Rights and we implement improvement plans where they are required.		Annual
<b>Health</b>			
In addition to use of Personal Protection Equipment (PPE), 10% reduction in potential occupational exposure to cancerogenic substances and air pollutants.	By improving our occupational exposure controls, we will be better protecting our employees and improving our performance. Improvements will be achieved by implementing projects identified for each operation and will be compared with our baseline exposures and the levels of occupational exposure. In 2014, we achieved a 35% reduction as compared to 2013, due both to exposure reduction projects and to completion of the activities of some contractors.		30 June 2017
<b>Environment</b>			
No significant environmental incident at our controlled operations.	Our priority is to avoid or minimise any adverse environmental impact at our operations. To this end, operations must have management plans and controls in place to identify, evaluate and mitigate these impacts. According to our internal protocol, no significant incidents occurred at our operations in Chile.		Annual
Maintenance of the Group's total greenhouse gas emissions below their level in FY 2006(2).	We are committed to limiting our greenhouse gas emissions in FY 2017 to their levels in FY 2006. To this end, we will actively seek and use opportunities for reductions. The transformation of the Kelar plant from coal to gas is an important effort in this direction.		30 June 2017
Development by all operations of management plans, including controls to prevent, minimise, rehabilitate and compensate for impacts on biodiversity and ecosystems.	Land and biodiversity management plans are updated annually.		Annual
Financing for the conservation and management of areas of great biodiversity and ecosystemic value that are of national and international importance.	We will contribute through conservation to lasting environmental benefits. The land conserved will be measured through the conservation projects implemented. In June 2013, BHP Billiton and TNC signed an agreement for the long-term conservation of the Valdivian Coastal Reserve. Under the terms of this agreement, BHP Billiton will invest US\$20.4 million in an area recognised as a priority biodiversity site.		
Targets established by all operations with material risks relating to water and projects implemented to reduce their impact on this resource.	All operations must implement Water Management Plans that establish controls to limit our impact on water resources. Where material risks related to water are identified, each operation must set targets and implement projects tailored to specifically address these risks and monitor and report progress on the project's implementation. In FY 2014, operations in Chile achieved high-quality water reductions of 11.363 ML equivalent to 360 l/s.		Annual
<b>Community</b>			
No significant incident caused by our controlled operations.	We have in place Stakeholder Engagement Management Plans as well as processes and controls for the identification, evaluation and mitigation of incidents that could potentially impact our communities. No significant community incidents occurred at BHP Billiton operations in Chile during the reporting period.		Annual
1% of pre-tax profits, calculated as an average over the previous three years, invested in community projects.	We are committed to making a positive contribution to society, with a focus on programmes that benefit quality of life in our host communities. In 2014, BHP Billiton invested US\$33 million in social development projects in Chile while its Foundation implemented initiatives for approximately US\$3 million.		Annual
Local procurement plans at all operations with targets included in Community Development Management Plans.	We focus on improving the capacity of local companies and their opportunities to participate in our businesses. In 2014, BHP Billiton paid US\$5,300 million to suppliers in Chile. We also continued to implement our Supplier Development Programme.		Annual

(\*) From 1 July 2013 to 30 June 2014.

### Own Employees and their Families

- Who are they? Employees and their families; trade union, social and sports organisations.
- Engagement methods: Expanded quarterly meetings for each shift led by the operation's general manager / Operational supervision meetings / Company magazine and newsletter / Motivational communications campaigns and campaigns on specific issues / Annual communications survey (work climate, leadership and corporate values) / Meetings between Union and Human Resources / Training talks; recreational, social and cultural activities; end-of-year dinner and recognition for years of service; Christmas family parties; celebration of Miner's Day; sports competitions / Coordination meetings with different internal organisations / Performance evaluations.

### Contractors

- Who are they? Contractors' employees.
- Engagement methods: Contract administrators (as channel of information and support for coordination) / Regular meetings with the Health, Safety, Environment and Community Area, Superintendency for Finance and the Human Resources Area, geared to the contract administrator and risk prevention expert.

### Suppliers

- Who are they? Suppliers of goods and services.
- Engagement methods: Digitalisation of procurement processes (technological diffusion programme) / Participation in BHP Billiton's World-Class Supplier Programme.

### Indigenous Communities and Expanded Community

- Who are they? The communities in Cerro Colorado's area of influence are Mamifña, Macaya, Iquiuca, Parca and Quipisca in the ravines of the Andean foothills in the Pozo Almonte municipal district as well as Lirima, Collacagua and Cancosa on the Andean plateau of the Pica municipal district and the town of Pozo Almonte in the Pampa del Tamarugal / In the case of Spence, the inhabitants of the Sierra Gorda municipal district: the towns of Sierra Gorda and Baquedano / Community in Iquique and Alto Hospicio / At Escondida, the communities of Peine, Coloso and Antofagasta.
- Engagement methods: Development of projects with neighbouring communities as well as regular field work with the different participants in social investment projects and joint initiatives / Working groups with neighbouring communities / Alliances for the development of community activities / Distribution of Sustainability Report / Participation and Dialogue Process with CMCC indigenous communities (principles of ILO Convention 169) / Workshops implemented by Escondida in Coloso, Minera Escondida Foundation's office for indigenous affairs.

### Government and Regulatory Bodies

- Who are they? National and regional government authorities / National and regional heads of public services.
- Engagement methods: Development of joint projects through the establishment of alliances / Publication of annual Sustainability Report / Formal and technical meetings between company executives and authorities.

### Associations, Organisations, NGOs and Others

- Who are they? Iquique Industrialists' Association (AII) and Antofagasta Industrialists' Association (AIA) / Tarapacá and Antofagasta Regional Mining Safety Councils / Juventud Emprendedora Foundation (sponsored since 1998 in Iquique and since 2010 in Antofagasta) / At the national level, membership of Chilean Mining Council, National Mining Society (SONAMI), Chambers of Commerce, Acción RSE and other civil society organisations / Through specific projects, relations with Casa de la Paz and the Norte Grande and Fraternidad Ecológica Universitaria corporations, of which the latter two are regional environmental NGOs.
- Engagement methods: Periodic meetings with participation of company representatives as well as the coordination required for the implementation of joint initiatives / In the case of NGOs, informative and technical meetings as well as field visits, distribution of reports and other methods.

### Regional Media

- Who are they? Directors and journalists of national media and media in the Tarapacá and Antofagasta Regions.
- Engagement methods: Provision of opportune first-hand information through face-to-face meetings and press releases / Annual dinners in Santiago, Iquique and Antofagasta / Advertising contracts / Relations with the national media are the responsibility of the Vice President for External Affairs Copper.





*For BHP Billiton, sustainable development consists in ensuring that our business remains viable and contributes lasting benefits to society. Our commitment to sustainability is reflected in our Charter, Code of Business Conduct and the different corporate documents that guide our actions.*



## Corporate Management

BHP Billiton permanently seeks to generate value for its shareholders, employees and the community. In order to comply with this objective, it is structured in accordance with the principles of an operational model that standardises processes and functions simply and effectively, defines clear responsibilities for the results of each and every process and has sufficient flexibility to address growth opportunities and global challenges.

The Operational Model has been designed to provide a simple and flexible organisation that offers a competitive advantage through the definition of how we work, how we organise our company and how we measure our performance.

By having a common set of principles of organisational design, systems and processes and a defined set of performance requirements, we provide our employees with a planned, controlled and safe work environment in which all risks are managed.

BHP Billiton Copper's Executive Committee is responsible for effective implementation of the company's strategy, ensuring a high level of operational performance and alignment with the corporate purpose.

This Committee is headed by the Copper President and includes the Vice Presidents for Health, Safety, Environment & Community, Finance, Human Resources, Strategy & Development, External Affairs, Explorations, Large Projects and Marketing as well as the Presidents of Minera Escondida, BHP Billiton Pampa Norte and Olympic Dam. It is the body charged with taking the most important decisions for the functioning of each of the operations and with supervising management of operational performance.



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# Performance

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Contributing value through the way we manage  
our business

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*In 2014, BHP Billiton's operations in Chile (Escondida, Cerro Colorado and Spence) produced the equivalent of 1,427,286 tonnes of fine copper, accounting for 24.7% of Chile's total copper output and 7.7% of world output.*







	Units	Minera Escondida	Pampa Norte		BHP Billiton Chile
			Cerro Colorado	Spence	
Total fine copper produced	fmt	1,171,648	79,574	176,064	1,427,286
% of Chilean copper output	%	20.2	1.4	3.1	24.7
% of world copper output	%	6.3	0.4	0.96	7.7
Sales	US\$ million	8,004	1,054	1,517	10,575
Taxes paid	US\$ million	881	93		974
Direct employees <sup>(1)</sup>	Nº	4,608	928	1,129	7,476
Contractors	FTE	8,707	3,169		26,977
Investment in community	US\$ million	23	5	5	33
Local suppliers <sup>(2)</sup>	Nº	1,361	992		2,776
% of local suppliers <sup>(3)</sup>	%	91	96		91

(1) Total for BHP Billiton Chile also includes workforces of the Iquique and Santiago offices.

(2) Total contractors of BHP Billiton Chile also includes contractors for projects and the Santiago office.

(3) Total for BHP Billiton Chile also includes suppliers to projects and the Santiago office.

(4) Local suppliers defined as suppliers located in Chile.

## Operations in Chile

### Minera Escondida

Minera Escondida is the individual copper mining operation with the highest output in the world. It produces copper concentrate and copper cathodes. The mine is located in Chile's Antofagasta Region, 170 km southeast of the city of Antofagasta at 3,100 metres above sea level.

Its current mine infrastructure comprises two open-pit operations (Escondida and Escondida Norte), systems for crushing and transporting the mineral, two concentrator plants (Laguna Seca and Los Colorados), two leach pads, two solvent extraction plants and an electrowinning plant as well as two slurry pipelines that transport concentrate from the mine to the filter plant located at the Coloso Port, which is also owned by the company.

At Puerto Coloso, located south of the city of Antofagasta, a seawater desalination plant produces water for industrial use which, together with water from the filtering process, is pumped through a 157-km pipeline up to the mine.

Copper concentrate is obtained through flotation of sulphide mineral while copper cathodes are obtained by leaching oxide mineral, bioleaching low-grade sulphides, solvent extraction and electrowinning.

In the period from January to December 2014, Minera Escondida's output reached 1,171,648 tonnes of which 870,119 tonnes corresponded to copper contained in concentrate and 301,529 tonnes to copper cathodes.

This represented a 2% reduction from 1,193,680 tonnes in the same period in 2013 (888,346 tonnes of copper in concentrate and 305,334 tonnes of copper cathodes).

Minera Escondida's ownership structure comprises BHP Billiton, the operator with 57.5%, Rio Tinto (30%), JECO Corporation (10%) and JECO 2 Ltd. (2.5%).

## BHP Billiton Pampa Norte

The BHP Billiton Pampa Norte business unit is formed by two open-pit operations - Compañía Minera Cerro Colorado and Minera Spence. Both produce high-purity cathodes from copper oxides and sulphides through leaching, solvent extraction and electrowinning.

BHP Billiton Pampa Norte is wholly owned by BHP Billiton. In 2014, it produced a total of 255,638 tonnes of high-purity copper cathodes. This represented a 14% increase from 224,426 tonnes in 2013. BHP Billiton Pampa Norte has its corporate offices in the city of Iquique.

Cerro Colorado is located in the Pozo Almonte municipal district of the Tamarugal Province, at 2,600 metres above sea level and 120 km from Iquique. It started production in 1994 under the ownership of Rio Algom and, in 2000, became part of the portfolio of businesses of Billiton which, in 2001, merged with BHP to form BHP Billiton.

Minera Spence is located in the Sierra Gorda municipal district of the Antofagasta Province and Region at 1,750 metres above sea level. It started production in December 2006.

Both operations have certification under the highest quality standards for the production of cathodes as well as for environmental management.

## Sales

The BHP Billiton Marketing office is located in Santiago. It is responsible for marketing the copper produced by Minera Escondida and BHP Billiton Pampa Norte.





## Producing copper sustainably

### Construction of a second seawater desalination plant and the Kelar gas-fired power plant is underway

In 2014, construction of the Kelar power plant received its formal go-ahead. Located in northern Chile's port of Mejillones, this 517-MW combined-cycle plant will use natural gas.

Under the original plan, Kelar would have used coal but, although it had obtained its environmental permit, a decision was taken to switch to gas as a cleaner source of energy. The plant will supply our operations' increasing demand for electricity, including Escondida's new seawater desalination plant, currently being built in Puerto Coloso to the south of Antofagasta. Along with another desalination plant, also in Puerto Coloso and in operation since 2006, this new plant, with a capacity of 2,500 litres per second, will help to minimise our dependence on the Region's aquifers. It will mean an important increase in costs since the water will have to be pumped to an altitude of 3,100 metres. The plant is expected to start operation in 2017.

Both projects will help us to meet our environmental targets and allow us to pursue our long-term business strategy of producing copper and doing so in a sustainable manner.

## Business Strategy

The safe and sustainable operation of our assets is crucial for achieving our long-term vision which seeks to create one of the world's simplest and most profitable portfolios through the continuous optimisation of output, operating costs and capital at our operations. In its bid to achieve this vision, BHP Billiton has four assets - Escondida and Pampa Norte in Chile, the Antamina joint venture in Peru and Olympic Dam in Australia - that are characterised by their long life, low costs and growth potential. This is accompanied by a proactive approach to the industry's common challenges based on:

- ▶ An unflagging focus on health and safety through Management of Material Risks;
- ▶ Strict adherence to best environmental and community relations practices based on our corporate Charter;
- ▶ Operation of our mines at full capacity;
- ▶ Productivity gains systematically and sustainably achieved through our operating model;
- ▶ Elimination of bottlenecks through minor investments;
- ▶ Attractive and capital-efficient growth projects.

As from the second half of 2014, the stability of its processes has allowed Escondida to recover its level of copper output. This is the result of factors that include maximisation of the concentrator plants' capacity, optimisation of water consumption and higher cathode output at the OLAP project which recently started production. In addition, Escondida is closing the gap between its

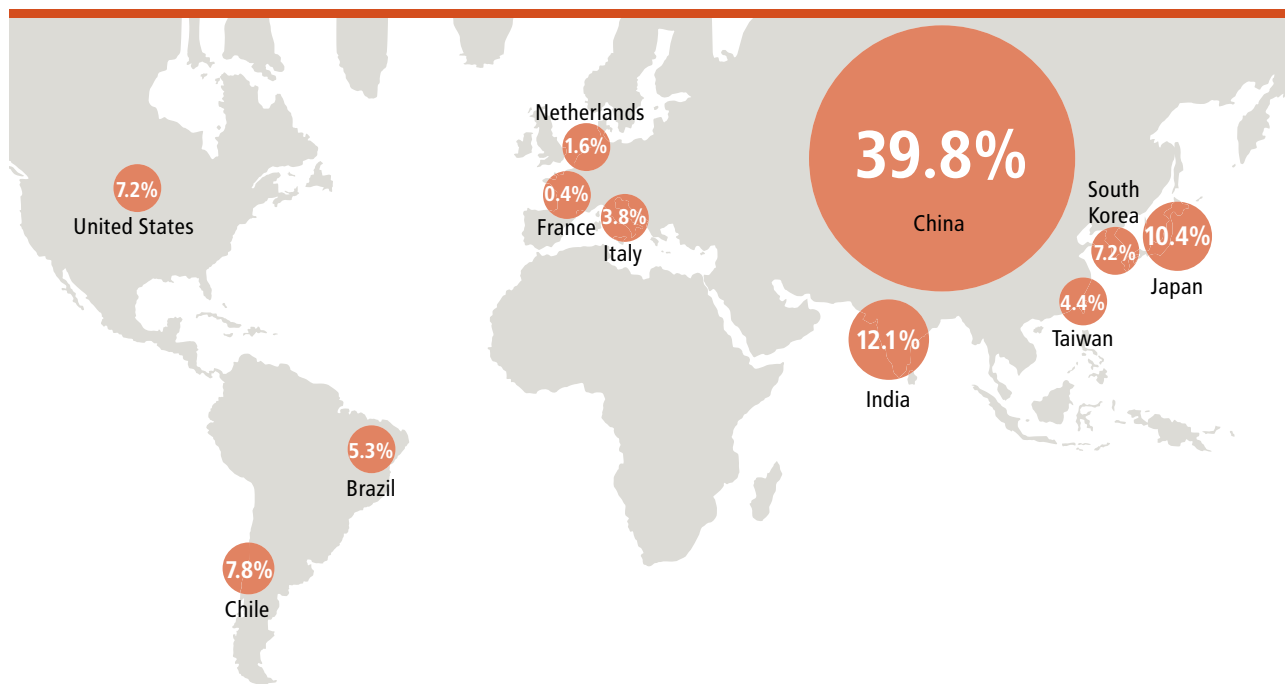
current performance and its equipment's benchmarks which has meant a 10% reduction in the mine's unit cost and is also improving recovery in the sulphides leaching process.

Given that Escondida's ore grade will decrease significantly in the coming years, the company is analysing the option of extending the life of the Los Colorados concentrator plant so as to maintain copper output. Under the OGP1 project, this plant would have been demolished once the new 152,000-tpd concentrator started operation in order to access mineral beneath Los Colorados. However, thanks to improvements in design of the pit, Escondida is still able to reach high-grade mineral adjacent to Los Colorados without requiring its demolition, giving it the option of operating three concentrators simultaneously.

Water is a critical aspect of the strategy for the three Escondida concentrators. The second seawater desalination plant currently under construction will satisfy growing water needs and allow to company to fulfil its commitment to ensure sustainable use of aquifers.

Another important challenge for all the mining industry is energy. In order to address this, BHP Billiton awarded a long-term energy contract at the end of 2013 for implementation of its Kelar plant, a gas-fired generator in the port of Mejillones that will form part of the Northern Interconnected Grid (SING). Construction of the Kelar plant began in 2014.

BHP Billiton Pampa Norte faces important challenges since the ore grade of the mineral processed by its two operations is declining.



This is in addition to the increase in costs that is impacting the industry as a whole. Pampa Norte's focus, therefore, continues to be on disciplined compliance with cost and production plans, using the available resources with maximum efficiency.

In July 2013, Compañía Minera Cerro Colorado submitted the Environmental Impact Study for its Operational Continuity Project for evaluation by the authorities. This project envisages the current operation's continuity through to 2023, exploiting its mineral reserves without modifying the process and maintaining the currently authorised level of production.

Minera Spence is studying the possibility of extending its useful life through the Primary Minerals Project for the processing of hypogene copper and molybdenum reserves adjacent to the mineral currently being exploited. This would be achieved using a conventional concentration system which will file for environmental authorisation in 2015. The project requires industrial-quality water which would be supplied by a desalination plant for which an environmental impact study will also have to be presented.

## Explorations

In 2014, exploration activities focused on the search for large-scale porphyry copper deposits in Chile, Peru and the United States. In Chile, three main programmes are being implemented - Inti (Tarapacá Region), Chile Norte (Antofagasta Region) and Chile Central (Central Chile and Atacama and Coquimbo Regions). During the past twelve months, Explorations have drilled over 46,000 metres in Chile.

In Peru and the United States, work has focused on surveying our own exploration properties and reviewing targets offered by third parties.

In a bid to generate new projects, our geologists actively seek new opportunities within both BHP Billiton's properties and those of third parties around the world. This allows us to have a diversified portfolio of high-quality long-term projects.

## Value Added

BHP Billiton is one of the world's leading suppliers of copper, a product that helps societies develop and contributes to improving quality of life for millions of people around the world.

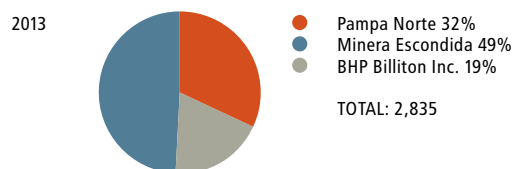
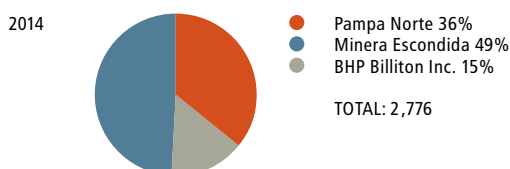
Chile accounts for 31.2% of world copper output. The copper mining industry contributes 10% of the country's GDP and generates a productive concatenation and multiplier effect that have a great impact on the economy even though, in recent years, the industry has been losing competitiveness due to declining ore grades, cost pressures, low productivity and the large volumes of capital required for investment projects.

In the Tarapacá and Antofagasta Regions, the industry is the main driver of economic growth, accounting for 42.2% and 57.4% of regional GDP, respectively (according to the latest figures which are for 2013).

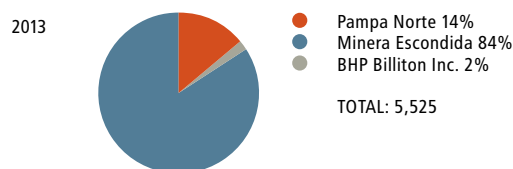
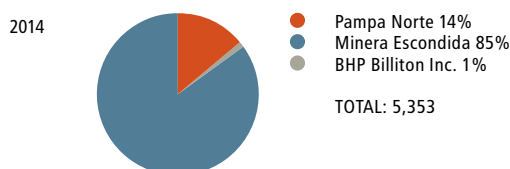
Copper is Chile's most important export and, in 2014, accounted for 49.5% of total exports.

Mining, therefore, continues to be a key pillar of the country's development and offers the opportunity to maintain and grow the benefits it provides. BHP Billiton seeks to take advantage of this opportunity and to help ensure that Chile also does so because the company understands that its success is directly related to the success of the societies of which it forms part.

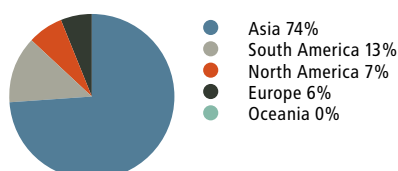
## N° of Chilean Suppliers



## Procurement from Chilean Suppliers (US\$ million)



## Copper Sales (Cathodes and Concentrate), 2014



In 2014, our operations in Chile produced the equivalent of 1,427,286 tonnes of fine copper, which represented 24.7% of Chile's total copper output and 7.7% of world output.

BHP Billiton is Chile's principal private mining company and, therefore, an important player in the national economy. Its contribution to Chilean society is reflected in its distribution of value added which, in 2014, totalled US\$7,477 million. This helped the company to achieve its corporate purpose of creating sustainable value for its shareholders, employees, communities, customers and suppliers.

BHP Billiton is the largest private contributor to the state of Chile and, in 2014, the taxes paid by our operations reached US\$974 million while, during the same period, payments to suppliers in Chile reached US\$5,353 million.

Sources: Central Bank of Chile, Chilean Copper Commission, National Customs Service and National Statistics Institute.

## World-Class Suppliers

The World-Class Supplier Programme is an initiative that seeks to foster the development of suppliers able to create solutions with high performance standards and which are, therefore, suitable for export.

BHP Billiton launched the Programme in 2008 when the Chilean mining industry began to face competitiveness challenges which have since intensified. At BHP Billiton, we believe that design, engineering and innovation capabilities will become ever more important in order to maintain and enhance our competitiveness and that, in this, suppliers have a very important role to play.

Projects developed under the World-Class Supplier Programme have their origin in internal analysis carried out by each of our operations to identify and prioritise problems that lack a satisfactory market solution and to which a solution would potentially have measurable economic benefits or a positive health, safety, environmental or community impact.

The Programme, therefore, has a twofold effect. On the one hand, it resolves our own operational challenges and, on the other, harnesses the mining industry's great production base to the development of a technology and services industry which targets the mining sector globally and can play a fundamental role in Chile's development. The Programme's goal is to reach 250 world-class suppliers by 2020.

In January 2010, we signed an agreement with Codelco to coordinate efforts in a bid to achieve an ever greater impact on Chile's production base.

With the collaboration of the Mining Ministry and the Chilean government's Economic Development Agency (CORFO) and the participation of other mining companies, Chile's large-scale mining industry will be able to consolidate a model of sustainable growth, extending beyond the life of existing mines, and accelerate the development of technological capacities that put it on a stronger footing to address the challenges of competitiveness and productivity.

As of 31 December 2014, we were developing 37 projects at Pampa Norte and Minera Escondida. Since the Programme was launched, over 70 innovation projects have been developed and some suppliers have begun to export the resulting solutions.

International organisations such as the OECD, the World Bank, the Inter-American Development Bank, the World Economic Forum and the International Finance Corporation (IFC) have recognised the





## Alliance with Fundación Chile

### Ten years supporting innovation in Chile

Escondida and BHP Billiton have participated, along with the state of Chile, in Fundación Chile since 2005.

Fundación Chile is a private non-profit corporation that, for over three decades, has played a leading role in the introduction of high-impact innovations and the development of human capital. Thanks to its model of technological innovation and networks of knowledge, it has contributed to increase the competitiveness and globalisation of different sectors of the Chilean economy.

Under this strategic alliance, BHP Billiton, represented by Minera Escondida, became a partner in Fundación Chile and joined its board of directors where it actively participates through its six directors, allowing it to contribute to the definition of the institution's strategic lines of action.

Supplier Programme as an innovative approach to local development in the mining industry.

For the third consecutive year, BHP Billiton's World-Class Supplier Programme was awarded a "Big Tick" by UK-based Business in the Community, an organisation that seeks to draw attention to best corporate practices internationally.

## Relations with Society

Our long-term success as a company depends on our capacity to build relations and work collaboratively and transparently with our business partners, governments, NGOs and the communities where we have our operations.

In accordance with our corporate guidelines on community relations, our operations implement a stakeholder relations plan which may start as early as the exploration phase of a project.

The activities of Minera Escondida and BHP Billiton Pampa Norte with neighbouring communities, therefore, take place within the framework of a formal process of stakeholder relations that is updated annually. These activities range from periodic meetings and workshops - at which issues of interest to the community are analysed and queries about business and related matters are addressed - to the perception studies that are carried out every three years.

We implement long-term community development plans that seek to improve quality of life and provide the necessary resources through our corporate commitment to allocate 1% of our pre-tax profits for this purpose.

We keep a register of responses to the concerns or complaints that are raised and regularly follow up the undertakings we enter into with the community.

In addition, we carry out annual evaluations of our performance on human rights so as to ensure that our work with the community always respects people's human rights and is in line with BHP Billiton's commitments in this field. All these initiatives provide an interesting outside insight into the quality of our relations and our stakeholders' views as to whether we are doing what we say we will do.

BHP Billiton defines its stakeholders as all those people who are potentially involved in or related to our operations or who have or could have an interest in or influence over what we do.

Our key stakeholders include our own employees, unions and contractors, local and indigenous communities, shareholders, customers, the media, trade partners, industrial associations, suppliers, authorities, governments and regulators, non-governmental and civil society organisations, universities, academic institutions and research centres.

Public-private associations and alliances are also important for our task of achieving stronger ties, commitment and engagement

with our stakeholders. In 2012, as part of this commitment, Minera Escondida became the first company to join the Creo Plan, an initiative that seeks to improve quality of life in the city of Antofagasta. The initiative is spearheaded by the regional government, the city's municipal government and the private sector with support from the OECD.

One of the key aspects of our relations with different players in society is our work in the field and the constant participation of our executives and coordinators in different regional and local bodies and activities. This fosters the face-to-face communication that is part of our style of work.

## Alliances

BHP Billiton is a member of the following international organisations related to sustainability issues:

- ▶ International Council on Mining and Metals (ICMM). BHP Billiton is a founding member of this organisation of which membership implies alignment of our management standards and practices with its sustainability framework, related principles and stated positions.
- ▶ UN Global Compact. BHP Billiton signed the Global Compact in 2003 and has undertaken to adhere to its principles.
- ▶ World Business Council for Sustainable Development (WBCSD). This international association brings together over 200 companies exclusively to work to promote sustainable development. BHP Billiton has been a member since 2000.

In Chile, we are members of organisations that include the Chilean Mining Council and the National Mining Society (SONAMI), the country's two main mining business associations.

In addition, we participate in the Iquique and Antofagasta Regional Mining Working Group, the Industrialists' Associations of Antofagasta and Iquique and the Antofagasta and Tarapacá Regional Mining Safety Councils.

## Recognitions

In the 2014 Ranking of Chile's Most Respected Companies, published by the Adimark opinion research company and the La Segunda newspaper, Minera Escondida took 8th place. Over the past nine years, it has consistently been one of the top ten in this ranking.

BHP Billiton once again performed well in the Ranking of Chile's Most Admired Companies, published by PwC Chile and the Diario Financiero business newspaper, in which it took 5th place.

For the third consecutive year, BHP Billiton's World-Class Supplier Programme was awarded a "Big Tick" by UK-based Business in the Community, an organisation that seeks to draw attention to best corporate practices internationally.



*In 2014, our company was awarded the Company Category Prize by the ICARE business organisation. This prize is for leadership and exemplary business practices. It was received by BHP Billiton's executive committee.*





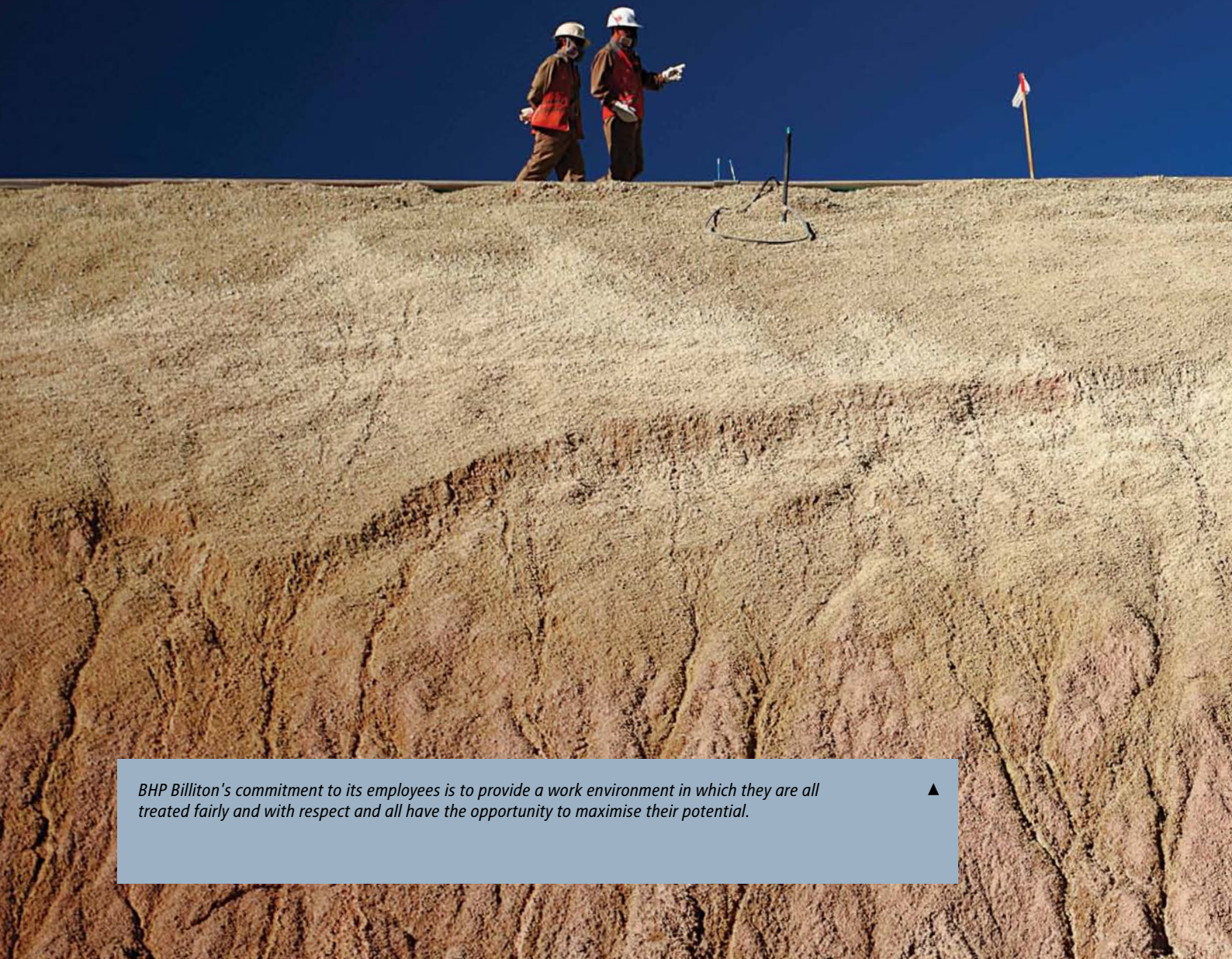
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# People

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**We have a strategy for attracting, retaining and developing professionals and technical personnel and strive to offer a work climate in which all our employees can maximise their potential**

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*BHP Billiton's commitment to its employees is to provide a work environment in which they are all treated fairly and with respect and all have the opportunity to maximise their potential.*











## Health and Safety

### Critical controls are verified through a programme that uses applications for smartphones and tablets

The health and safety of the people who work at the company are our paramount concern. Our commitment is to create a workplace free of injuries and occupational illnesses. This is reflected in the processes and controls we have implemented throughout our organisation and we strive constantly to reduce potential risks and exposures.

We also work with the communities where we have our operations to support programmes that address significant health and safety issues.

## Approach

Attracting, retaining and developing talented and motivated people who share our values is crucial for our long-term sustainability.

For this reason, we not only implement our own strategy to attract well-prepared people but have also played a significant role in the Mining Skills Council (CCM), a coordinated effort by the industry - in collaboration with the government, suppliers and educational institutions - to boost technical-professional education both quantitatively and qualitatively.

As part of our strategy as regards people, we have a plan to foster diversity at the corporate level. Through this plan, we seek to enrich the organisation through people who can contribute different approaches and ways of addressing our problems. Each BHP Billiton operation has established its own strategies for progress on this front and the initiatives they have implemented range from reinforcing the value of diversity, which in itself often calls for a cultural change, to setting certain goals as regards recruitment and selection. We also continue to implement our Graduate Programme through which we seek to recruit young professionals who have just completed their studies to fill significant posts in the company.

In general, BHP Billiton's commitment to its employees is to provide a work environment where they are all treated fairly and with respect and have the opportunity to maximise their potential.

## Safety

Our key goals as regards safety are to prevent fatalities, serious injuries and occupational illnesses and to identify and implement effective risk controls and verify their implementation. To this end, we apply the same safety standards at all BHP Billiton operations around the world.

The main workplace safety indicator we use is the Total Recordable Injury Frequency Rate (TRIFR), calculated as the number of injuries requiring medical treatment caused by workplace incidents per million man-hours worked, as defined by the US Occupational Safety and Health Administration (OSHA).

In 2014, our TRIFR was 2.05 as compared to 2.0 in 2013 (equivalent to an increase of 2.5%). This increase was explained principally by accidents involving contractors' employees working on construction projects. It is, however, important to note that accidentability at our construction projects is among the lowest in the industry.

## Health

We proactively analyse all our processes, giving priority to the implementation of control barriers in each one of them and the promotion of safe conduct. This enables us to reduce the probability of the occurrence of occupational illnesses.

We go beyond the requirements of Chilean legislation in seeking to reduce exposure to harmful agents such as noise, silica, acid mist and particulate matter which can, in the long term, cause occupational illnesses. If potential exposure to harmful agents exceeds 50% of the limit for workplace exposure, we implement a compulsory medical check-up programme in order, on the one hand, to identify a potential illness or potential effects on health at an early stage and, on the other, obtain feedback about the controls implemented.

Our corporate guidelines on health require the creation and maintenance of an exposure risk profile for our own employees and those of contractors as well as the definition and implementation of controls for significant exposures.

BHP Billiton's operations in Chile have completed their profiles of exposure to workplace risks for both their own and contractors' employees. Projects to reduce these risks are gradually being implemented.

Our corporate guidelines on health also explicitly state the need to identify the causes of fatigue, identify and evaluate the related risks and implement control systems. At our operations, we encourage employees to be aware of their own signs of fatigue and be well rested before starting work.

In order to mitigate this risk, all our operations have adopted technologies that provide operators with an early warning before they suffer an episode of micro-sleep. Minera Spence uses the Optalert system and Cerro Colorado uses SmartCap while Minera Escondida is implementing the Driver State Sensor (DSS) system.

In addition, we implement integral health programmes and programmes to promote healthy lifestyles. They include the Active Life, Healthy Life, Active Break, and Fatigue and Drowsiness Programmes. We are, in addition, addressing musculoskeletal disorders through movement and wellbeing initiatives as well as the identification and control of ergonomic risks whose management is obligatory if an occupational illness or injury is diagnosed. We

have also implemented educational programmes on drugs and alcohol.

BHP Billiton is working to comply with the requirements of a new Chilean law on work at an altitude of more than 3,000 metres above sea level, using medical check-ups for early detection of alterations caused by exposure to high altitudes. These check-ups take place at Minera Escondida and in the Large Projects and Explorations areas.

## Evaluating Risks and Establishing Controls

In 2014, we continued working on the application of corporate guidelines on management of material risks, understood as those risks which can have serious or fatal consequences. Our corporate document on Risk Management establishes the guidelines that must be applied in all our activities, functions and commercial processes.

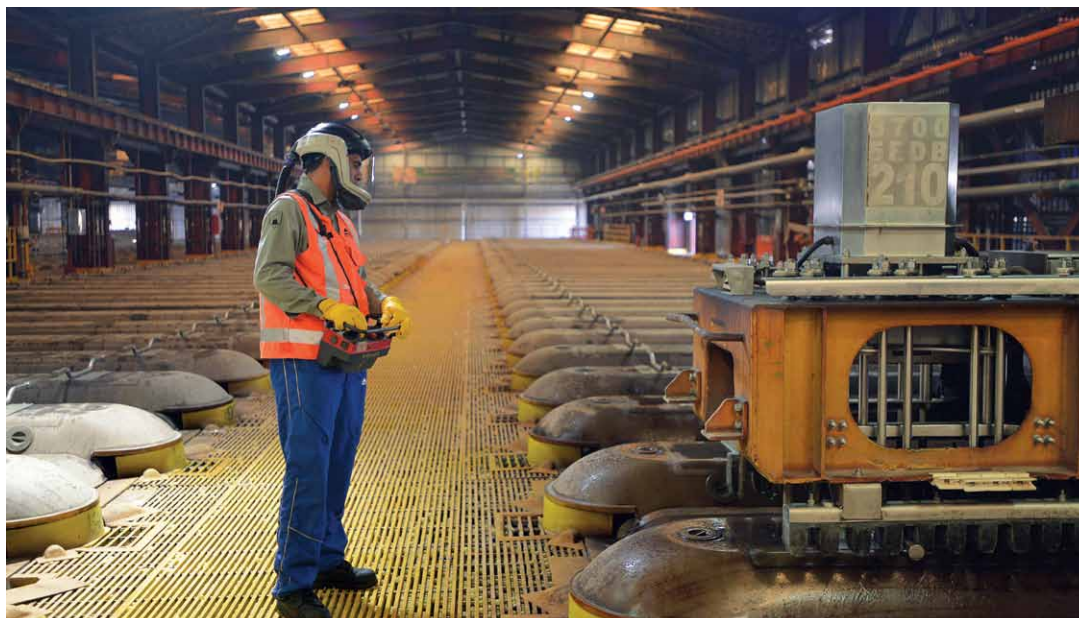
The objective of the evaluation of material risks is to understand the nature and tolerance of risks that can cause serious accidents and to ensure they are managed through verification of critical controls.

The programme developed by BHP Billiton in Chile to verify critical controls using binary questions is considered a best practice by the company and the industry. It is a simple programme that can be used in the field through applications for smartphones and tablets.

## Life at the Mine

At our operations, we seek to provide the best possible conditions for our employees' performance of their tasks in a safe and harmonious environment.

We do this through accommodation that is comfortable and where we also implement and foster leisure activities, sports and a healthy



**Controlling for risk agents.** In 2014, Minera Escondida continued to progress with projects to control exposure to risk agents. The principal controls implemented during the year in the electrowinning area of the Oxides Plant were respiratory protection, mechanical barriers, the use of surfactants to lower surface tension, and Same 2010 hoods and their automatic washing.



lifestyle whilst, at the same time, promoting the integration of the different teams that work at our operations.

Minera Escondida has two worksite camps - Villa San Lorenzo and Villa Cerros Alegres. With a modular design, they are equipped with thermal and acoustic insulation as well as safety systems.

Villa San Lorenzo has sports facilities that include a heated swimming pool, a gym with a multi-purpose sports pitch and a room with exercise machines in order to contribute to the good health of employees. In addition, it has two chapels (Catholic and ecumenical), a library and a pub without alcohol for relaxing in company at the end of the working day.

Villa Cerros Alegres is also equipped with sports facilities that include a gym, multi-purpose sports pitch and a synthetic-grass baby football pitch and has a prayer room, recreation rooms, a pub without alcohol and a dining room as well as its administrative offices.

At Pampa Norte, both Cerro Colorado and Spence have implemented healthy meal plans that include hypocaloric options at their canteens. This is complemented with plans to promote the practice of sports and exercise, including personalised routines tailored to the needs of each worker who so wishes. Both operations also have facilities for leisure and sports activities.

## Training and Development

We value internal promotion and seek to build a high-performance organisation through fair compensation and recognition. We seek to boost the skills and capabilities of our workforce through regular performance reviews combined with training and development programmes.

Training and development programmes are designed and implemented in accordance with the requirements of the business

and its management and include continuous training in safety and occupational health. As part of an obligatory induction process, all our employees and contractors must accredit having received training in safety and health and about our Charter, the Code of Business Conduct and our anti-corruption guidelines.

## Labour Relations

Our employees form unions in accordance with Chile's labour laws and negotiate collectively in a framework of full respect for their rights.

At Minera Escondida, the current collective agreement for operators came into force on 1 February 2013 and has a duration of 48 months, the maximum permitted under Chilean law.

In January 2014, the Minera Escondida Supervisors N°2 Union was formed. It has over 700 members and its first collective bargaining process took place in August 2014, ahead of the due date, with positive results in that it permitted the establishment of a constructive relationship through understanding and mutually beneficial agreements. An important innovative aspect of this process was the creation of incentives for fulfilment of business targets related to safety, output and costs.

In September 2014, there was an illegal 24-hour stoppage by operators belonging to the Minera Escondida N°1 Union seeking new benefits beyond those established by the collective agreement in force. In order to address these expectations as well as others that naturally arise over time, a special working group was established and met during three months.

At Cerro Colorado and Spence, the present collective agreement with their N°1 Union does not expire until the end of 2015. At Spence, the Supervisors and Professionals Union, which was formed in 2014, reached a collective agreement through a non-regulated collective bargaining process. This has a duration of 40 months through to June 2018.



*Relations with our employees are anchored in mutual respect and compliance with the law. This is a key aspect of our Charter of values and principles.*





## Joint Contribution Programme

### Supporting our employees' donations

Through its Joint Contribution Programme, BHP Billiton promotes and fosters the contributions that employees make to non-profit community and social organisations. Under the Programme, which has operated in Chile since 2007 with the participation of employees of Minera Escondida, BHP Billiton Pampa Norte and BHP Billiton Santiago, the company matches employees' donations 2:1 or, in other words, if the employee donates one peso, the company donates two pesos.

In 2014, a total of 604 employees of BHP Billiton Pampa Norte, Minera Escondida and BHP Billiton Santiago participated directly in the Programme.

It contributed 251,555,565 pesos to a total of 37 social organisations which, with the 168,272,351 pesos contributed by employees, gave a total of 419,827,917 pesos.

The contributions considered for this Report are those transferred to the recipient organisations between 1 January and 31 December 2014.

## Contractors

The company's contractors provide support that is crucial to all aspects of its business. BHP Billiton's operations in Chile promote mutually beneficial relations with contractors and their employees, fostering improvement measures and compliance with corporate guidelines and procedures.

Contractors' employees know and respect our Charter, Code of Business Conduct and corporate anti-corruption and other documents while those on Health, Safety, Environment and Community are an integral part of their contracts.

The management of contractors' employees and labour relations is the responsibility of the contractor company. Our operations maintain permanent and direct relations with contractors through the Contractor Labour Relations Area while external firms provide labour consultancy services, verifying and supporting compliance with the obligations established in labour legislation.



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# Environment

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We evaluate, plan and manage our environmental impacts in all the phases of our business from exploration to the development, operation and closure of a mine

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*By its very nature, mining has the potential to impact the environment. We are aware of this and the paramount objective of our environmental management is to avoid an impact or, if that is not possible, to minimise, mitigate and for compensate it.*









## Approach

By its very nature, mining has the potential to impact the environment. We are aware of this and the paramount objective of our environmental management is to avoid an impact or, if that is not possible, to minimise, mitigate and compensate for it.

We evaluate, plan and manage our environmental impacts in all the phases of our business from exploration through to the development, operation and closure of a mine. Our management approach is based on the identification and evaluation of material risks - those that have the potential to cause serious impacts, with a duration of 20 years - on the territory, biodiversity, the ecosystem, water resources or the air.

To this end, we set and do our utmost to achieve targets that ensure efficient use of resources and protection of these elements. We manage resources with a focus on sustainable development in accordance with the regulation in force and our corporate standards.

We have developed programmes based on national and international standards in order to use water more efficiently, control dust emissions, manage waste - including its minimisation, reuse and proper disposal - and manage hazardous substances. In the case of biodiversity, we take ecosystemic aspects and land use into account in each of our decisions and activities.

We have specific management plans that include:

- ▶ **Water Management Plan.** This comprises action plans and projects to reduce water consumption, including the calculation of curves of the marginal cost of high-quality water.
- ▶ **Energy Management Plan.** This comprises strategic action plans to reduce energy use and energy efficiency and renewable energy projects, including the calculation of curves of the marginal cost of energy and greenhouse gas abatement.

- ▶ **Emissions Management Plan,** including particulate matter and greenhouse gases.

- ▶ **Territory and Biodiversity Management Procedure.** This reflects our corporate guidelines on the environment and applies to any infrastructure or activity that implies intervening or altering the territory or another component of the environment in the areas to be intervened or their surroundings. One of its purposes is to guide the planning and implementation of infrastructure or activities, ensuring that natural resources are not contaminated and verifying compliance with environmental laws by current and future projects. It also seeks to provide guidelines, geared to protection of the natural and archaeological environment, for work relating to mining and to establish procedures as regards wild and domestic fauna.

- ▶ **Waste Management Plan.** This includes control of waste management by collaborator companies throughout the chain (generation of waste, its handling, storage, transport, recycling or reuse and final disposal).

In 2014, Minera Escondida maintained the ISO 14001 environmental certification which, in 1999, it pioneered in the Chilean mining industry. In order to maintain this certification, it carries out annual monitoring and audits.

Similarly, Pampa Norte obtained positive results in follow-up audits of its Environmental Management System under ISO 14001 in areas that included air quality control plans, efficient management of resources and waste generation.

Further progress was also achieved on abatement curves for water use and greenhouse gas emissions, a tool that is incorporated into our corporate policies.

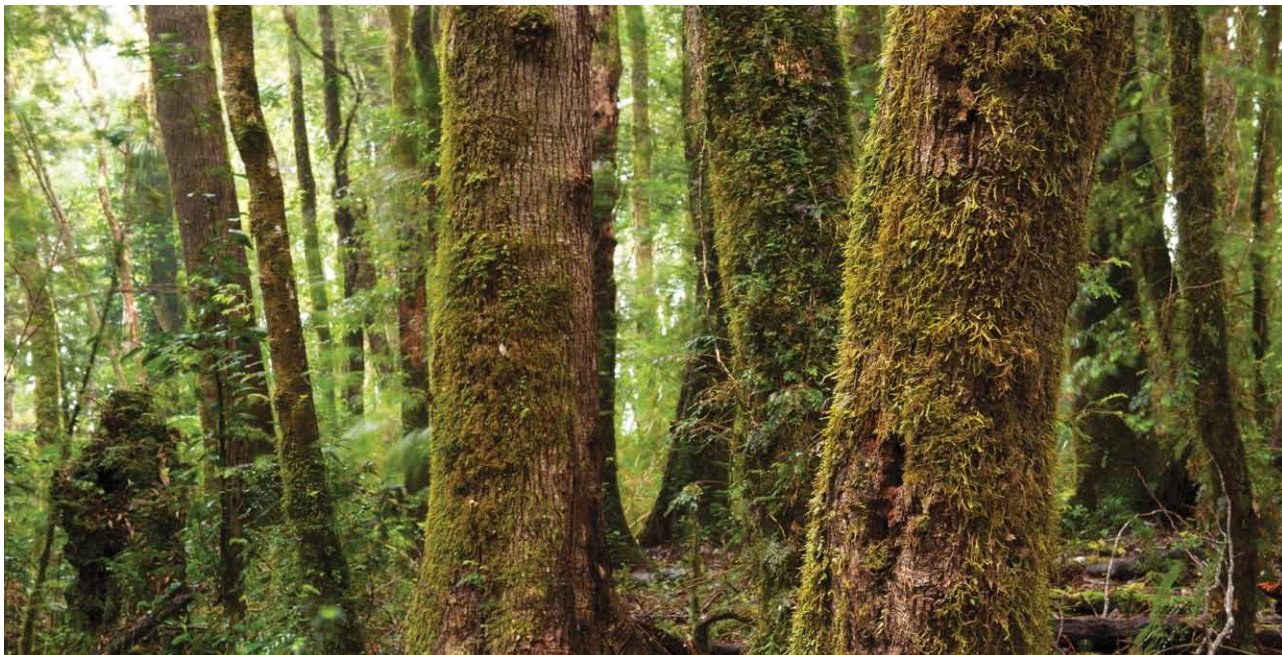
In an important event during 2014, the two slurry pipelines that, since 1990, have carried copper concentrate from Escondida to Puerto Coloso, passing along the coast at Playa Amarilla, were closed. This eliminated possible environmental risks since the new pipelines run inside a tunnel whose route was modified so that it does not pass along the coast.



**Recycling at Escondida.** In 2013, Minera Escondida launched a pilot recycling plan for plastic bottles, cardboard and industrial plastics. In 2014, this was made permanent and extended to include wood. As well as lengthening the landfill's life, this implies environmental benefits and cost reductions.







## Valdivian Coastal Reserve sells first carbon credits

### The first credits to be placed by a REDD project in Chile

In the framework of an agreement between BHP Billiton and The Nature Conservancy (TNC) for the permanent conservation of southern Chile's Valdivian Coastal Reserve, TNC made its first institutional placement of carbon credits in 2014.

One of BHP Billiton's aims in signing the agreement with TNC was to support creation of a system for the sale of carbon credits. The agreement stipulates that income generated in this way will go exclusively to the Reserve and that credits will not be acquired by BHP Billiton, either directly or indirectly.

These were the first credits to be placed by a Reducing Emissions from Deforestation and Forest Degradation (REDD) project in Chile and were assured under the Verified Carbon Standard.

The first buyer was Cheesemans' Ecology Safaris which acquired 10,000 credits from the project through the CarbonTree Conservation Fund, an international broker.

## Water

The sustainability of our operations depends on our ability to obtain the appropriate quantity and quality of water and to use this resource responsibly.

This is a major challenge for our operations which are located in arid areas where water availability is limited.

The range of possible risks related to water and the possible impacts on water resources, biodiversity and communities mean that water management is a complex task for our operations as well as a challenge for BHP Billiton globally.

In order to ensure that these impacts are kept within acceptable levels, all our operations must draw up a Water Management Plan. This takes into account the baseline quantity and quality of water that would potentially be affected and calculates the acceptable level of impact, taking into account regulatory requirements. It also sets out the preventive and mitigation measures needed to achieve an acceptable level of impact and each operation must implement a monitoring and review programme to verify the effectiveness of these measures.

Our intention in the long term is to maximise use of seawater and minimise withdrawals from groundwater sources. To this end, Minera Escondida has started construction of its second seawater desalination plant, despite the enormous cost this implies in terms of both infrastructure and operating costs. The desalinated water

will have to be pumped 170 km from our installations in Puerto Coloso - located to the south of the city of Antofagasta - to the mine at an altitude of over 3,100 metres. The plant is scheduled to start operation in 2017.

## Energy and Climate Change

The problems related to climate change in terms of both mitigation and adaptation represent an ever more important challenge for governments, communities and industries around the world. It is a challenge we must all seek to address and our operations continue to work to reduce their energy consumption and greenhouse gas (GHG) emissions.

At present, Chile's Northern Interconnected Grid (SING) comprises mainly thermal power plants (coal and gas) and coal has become increasingly important. BHP Billiton is seeking to ensure that gas once again has an important place in the matrix, with the evident environmental benefits.

In 2014, construction of the Kelar combined-cycle plant began. Using natural gas, it will supply 517 MW to the SING. The plant is being financed, designed and built and will be operated by a consortium formed by Korea Southern Power Co. and Samsung C&T Corp. to which, through a tender, BHP Billiton awarded a long-term energy contract. The plant is scheduled to start operation in the second half of 2016.



## Caleta Coloso

### Protecting biodiversity and enhancing quality of life

The marine environment in the Coloso area where Minera Escondida has its port installations, 18 km south of the city of Antofagasta, is rich in biodiversity. Rigorous monitoring programmes are, therefore, in place to control our production activities and prevent any type of impact on the marine environment. These programmes reflect the undertakings established in the company's Environmental Approval Resolutions (RCAs) in compliance with Chilean legislation and our corporate guidelines on the environment.

From before the start of its operations, Escondida has implemented a joint programme with Caleta Coloso's inhabitants, which has contributed to improve quality of life in the area. In 2014, it inaugurated, together with the community, the Villa San Pedro de Coloso Health and Community Centre, which was incorporated into the area's Primary Healthcare Plan.

BHP Billiton has in place an internal mechanism for estimating the costs of its carbon emissions. This is used to calculate the financial impact of the price of CO<sub>2</sub> emissions for both greenfield and brownfield projects as well as mergers and acquisitions. The Carbon Price Protocol is updated annually.

## Air

The maintenance of optimum air quality is one of our principal objectives and, in this field, the critical factor is the emission of particulate matter associated with some of our processes.

Following the definition of an annual management plan, we have implemented a number of measures to mitigate this impact. They include watering plans that optimise use of this resource and the application of bischofite and pilot tests of other dust-suppressants on roads (mining and non-mining) as well as the implementation of sprinkling systems at the stockpile.

We monitor not only dust or PM<sub>10</sub> but also nitrogen oxide (NO<sub>x</sub>) and sulphur dioxide (SO<sub>x</sub>). In addition, in preparation for new regulation, we monitor fine particulate matter (PM<sub>2.5</sub>).

## Waste

Our operations must have Waste Management Plans for the minimisation, storage, transport and disposal of waste. These plans seek to control the risk of adverse impacts on the environment and communities.

At Minera Escondida, waste treatment is carried out in accordance with an integral management plan that covers three types of waste: domestic waste (such as food, paper and bottles), industrial waste (without commercial value such as metal offcuts) and hazardous waste (contaminated with hazardous substances such as hydrocarbons). Domestic waste and industrial waste without commercial value is sent to Minera Escondida's authorised landfill.

In the case of hazardous waste, the cycle comprises its collection from the area where it is generated, onsite storage, transport, recycling or reuse (depending on the type of waste) and final disposal by specialised firms with the necessary permits. Whenever hazardous waste is generated, this is reported to and monitored by the corresponding authorities through the Health Ministry's Hazardous Waste Declaration and Monitoring System (SIDREP).

Industrial waste that has commercial value, such as iron scrap, HDPE and lead-containing sludges, is recycled in other industries and companies where it is used as raw material for new products with similar characteristics.



## Biodiversity

We evaluate and manage our operations' potential impacts on the land and biodiversity throughout their life cycle. Our operations must have in place Territory and Biodiversity Management Plans that include baseline and impact evaluations, controls to mitigate impacts on biodiversity and monitoring programmes to verify the effectiveness of these controls.

In this way, all worksites that require management of biodiversity have been and are adequately equipped through monitoring programmes, the implementation of scientific studies and the development of conservation tools.

Minera Escondida occupies a total area of 16,075 hectares of which 90% correspond to the mine site (pits, installations, stockpiling areas and the tailings dam) and 10% to power lines, water and slurry pipelines and its installations in the city of Antofagasta. It has in place territorial and biodiversity management plans for areas that are of high value because of their rich ecosystems. This is the case of the Punta Negra Salt Flat and, more specifically, the Vega-Canal-Laguna (VCL) systems, Tilopozo and the coastline of the Coloso area.

Due to the extremity of the climate, the biodiversity found in the Andes Mountains is necessarily highly specialised. Minera Escondida's biodiversity management plans focus on the High Andean wetlands, found in the salt flats mentioned above, where the presence of water attracts a larger number of plant and animal species, giving these sites their high biodiversity and landscape value.

In the case of Pampa Norte, Spence is located in an area with a low level of biological resources while Cerro Colorado withdraws water from the Lagunillas aquifer, an underground source located 50 km from the mine.

In line with the requirements of the Tarapacá Regional Commission for the Environment as regards protection of the Lagunillas wetland, we have had a management plan in place since 2006. It seeks to ensure this ecosystem's recovery and envisages artificial recharge of the wetland until this is totally achieved. Cerro Colorado has to date complied with the targets and undertakings established in Resolution N°67/2011, with sustained progress in vegetation coverage and towards the target of 70% azonal vegetation by 2017. Once this has been achieved, the artificial recharge system will continue to be used, maintaining the characteristic coverage and composition of the wetland's vegetation and its ecosystemic functions active, until it recovers its natural flows as is already being seen.

In July 2013, Cerro Colorado submitted the Environmental Impact Study for its Operational Continuity Project to the Environmental Impact Evaluation System (SEIA). This project seeks to ensure the site's operational continuity through to 2023. As the project envisages ongoing use of water from Lagunillas, which would lengthen the time required for the aquifer's recovery, the company has proposed mitigation measures related to a reduction in the operation's consumption and initiatives to offset the adverse effect of Cerro Colorado's water withdrawals, such as protection of the aquifer through the necessary studies and the return of water rights at the end of the project

## Mine Closure Plans

Closure planning is a fundamental aspect of the planning and development of our projects and operations. Operations must have a Closure Plan that serves as the basis for estimating the cost and accounting provisions related to closure and rehabilitation.

The detailed requirements for closure planning, including the issues to be addressed, the accuracy of the cost estimates and the risks that must be evaluated are established at the corporate level. Information about our closure and rehabilitation provisions can be found in our financial statements.

In addition, BHP Billiton has a programme for continuous auditing of closure planning, which focuses on the Closure Plan, its cost estimates and valuation. The results of these audits help us identify weaknesses in our planning, improve plans and cost estimates and review corporate closure planning management processes.

Closure plans are presented to Chile's National Geology and Mining Service (SERNAGEOMIN) and form part of the planning of the useful life of our assets.



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## Society

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**We work in areas where we can make a substantial contribution and that are aligned with public policies designed to take Chile to full development**

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*Chile's most important performing arts festival "Santiago a Mil" is presented annually by Minera Escondida and Fundación Teatro a Mil. It has been supported by the company for 16 years and also takes place in Antofagasta and Iquique. In 2014, it attracted over 500,000 spectators.*







## Approach

BHP Billiton's model for the creation of value places sustainable development at the heart of its business strategy, implying value creation in the regions and country where we work.

Our vision as a company, therefore, extends beyond the sphere of mining as such since we understand that, in order to be successful in the long term, companies need to undertake their activities in a society which is also successful and that, in this, we have a role to play.

Since the company began its operations in Chile, one of its priority objectives has, therefore, been to contribute to the country's development beyond the direct and indirect economic benefits generated by its activities.

For this reason, we voluntarily invest 1% of our profits, calculated over average pre-tax profits in the previous three fiscal years (July to June) in those areas where we can make a substantial contribution to the country and that are aligned with our strategy and with public policies. We want the projects we support to be transformational and help improve people's quality of life and strengthen their social capital.

In this belief and as part of a long-term commitment, our lines of work focus on quality of life, education and the creation of capabilities and culture.

Our model envisages the establishment of long-term alliances with public and/or private entities that have the skills to develop the innovative initiatives to which we want to commit. We also participate actively in the implementation of these initiatives, thereby permitting the transfer of knowledge and skills in both directions. We believe that partnerships between the public and private worlds are not only possible but also necessary for the country to continue advancing along its road to development.

It is important to note that all our social investment initiatives are evaluated in the light of the requirements of our Code of Business

Conduct and corporate anti-corruption documents. The guidelines of this management approach include consultation with local representatives and initiatives are designed on the basis of data gathered during the evaluation of impacts and opportunities.

The geographic scope of our social investment includes the communities close to our operations and the Tarapacá and Antofagasta Regions while, at the national level, we also implement projects in Santiago, Concepción and Valdivia.

Minera Escondida also has two related institutions that complement its activities in this field - the Minera Escondida Foundation (FME) and the Industrial and Mining Training Centre (CEIM).

In 2014, BHP Billiton and its operations in Chile invested a total of US\$33 million in social investment projects while the Minera Escondida Foundation implemented projects valued at US\$3 million.

## Quality of Life

Our work in this area focuses principally on communities close to our operations in the cities of Iquique and Antofagasta. It comprises a programme whose objective is to raise indicators of social welfare that include not only income and employment but also physical and urbanistic surroundings, infrastructure, healthcare, education, culture and the strengthening of civil society and local identity.

In this context, Minera Escondida was the first private company to adhere to the Creo Antofagasta Plan, an initiative that seeks to enhance quality of life in the city and brings together the regional government, the city's municipal government and the private sector, with support from the OECD.

In view of the importance of sports and the promotion of healthy and safe conduct, Minera Escondida and BHP Billiton supported different sports activities in Iquique, Antofagasta and Mejillones in 2014.



BHP Billiton supports sports activities in the Tarapacá and Antofagasta Regions. Examples include the Champions Challenge Programme supported by Pampa Norte and implemented by Fundación Ganamos Todos. Some 450 children from the Mamiña, La Tirana, Pozo Almonte, Alto Hospicio and Iquique communities participate in this inter-school league.







## Creo Antofagasta

### Urban and social development

In 2014, with the collaboration of representatives of the public and private sectors, the Creo Antofagasta initiative drew up an Urban Master Plan, which is currently undergoing a process of citizen participation. The Plan envisages over 200 initiatives for implementation in the short, medium and long-term through a plan of public and private strategic investment. In total, the initiatives would represent an investment of US\$1,200 million over the next twenty years.

Setting off the Plan, a Local Energy Strategy began to be developed and President Michelle Bachelet announced a public transport system for the city that includes the Metrocable project, a system that would be a pioneer in its field in Chile. (without investment)

In 2014, the Creo Antofagasta Plan held a second round of bids for funding for social innovation projects and started community work and the co-design of public spaces in the areas intervened under the *Antofagasta Limpia y Conectada* (Antofagasta Clean and Connected) initiative.

In line with their commitment to the development of neighbouring communities, BHP Billiton's operations in Chile each implement a local community relations, consultation and support plan covering different issues. These plans are reflected in projects implemented jointly with the community.

Pampa Norte's operations are located in the Tarapacá and Antofagasta Regions. Cerro Colorado works with the communities in Mamiña, Quipisca, Parca, Iquiuca, Macaya and Apo in the ravines of the Andean foothills, which form part of the Pozo Almonte municipal district, as well as the communities in Lirima, Collacagua and Cancosa in the Andean Plateau of the Pica municipal district, the town of Pozo Almonte in the Pampa del Tamarugal and the Iquique and Alto Hospicio municipal districts. Spence, in turn, works with its neighbours in Sierra Gorda and Baquedano in the Antofagasta Region.

For Minera Escondida, the community of Caleta Coloso, 18 km south of the city of Antofagasta, and the Atacameña communities are particularly important. The Minera Escondida Foundation has a permanent office in the town of San Pedro de Atacama.

From before the start of its operations, Escondida has implemented a community programme together with the inhabitants of Caleta Coloso, helping to improve quality of life in the area around its port installations. In May 2014, it inaugurated, together with the community, the Villa San Pedro de Coloso Health and Community Centre, which now forms part of the area's Primary Healthcare Plan and the Ministry of Health's network of public healthcare centres. It is administered by the Antofagasta Social Development Corporation.

In 2014, in the framework of the Development Fund for the Community of Peine in San Pedro de Atacama, it was agreed to complete construction of a covered gymnasium for the San Roque de Peine community and to implement an English programme and a Learning Reinforcement Centre in the Peine School.

In the 18 years since it was created, the Minera Escondida Foundation (FME) has implemented programmes to develop the capabilities of the people and communities of the Antofagasta Region. Since 2013, the areas it has focused on are early childhood education, economic development or social entrepreneurship and programmes to strengthen civil society and citizen participation.

### Education and the Development of Capabilities

Minera Escondida seeks to contribute to the improvement of both primary schooling and technical and professional education for the mining industry and also implements entrepreneurship programmes in communities. These efforts are channelled principally through the Minera Escondida Foundation (FME) and the Minera Escondida Educational Foundation's Industrial and Mining Training Centre (CEIM) which recently inaugurated its new building.

One of the FME's strategic pillars is early childhood education where its work has focused on the development of oral communication and writing in children of up to eight years of age in 26 nurseries and kindergartens in the San Pedro de Atacama and Mejillones municipal



## Pampa Norte Education Programmes

### *Yo Puedo and Mejor Escuela in Tarapacá*

Through its Cerro Colorado and Spence operations, BHP Billiton Pampa Norte implements various programmes to support education. They include the *Mejor Escuela* (Best School) and *Mejor Liceo Técnico* (Best Technical Secondary School) programmes implemented in alliance with Fundación Chile in the Mamiña Primary School and the Alcalde Sergio González Gutiérrez Secondary School in Pozo Almonte. In this latter school, some 150 pupils have also been participating since 2012 in the *Yo Puedo* (I Can) programme which seeks to develop their skills and capabilities in order to broaden their future academic and work prospects. This is accompanied by workshops for pupils and support for teachers and the school administration.

In Sierra Gorda and Baquedano, thanks to an agreement with the municipal government, three initiatives were implemented to improve the performance of local schools - Syllabus Coverage Tests, training for teachers and for the schools' Technical Teaching Units (UTPs) and an Environmental Syllabus Insertion Plan.

In order to facilitate access to and/or continuity in primary, secondary, university and technical education for children and young people from communities close to their operations, Cerro Colorado and Spence have implemented scholarship programmes since 2012 and 2010, respectively.

In 2014, scholarships were awarded to 111 primary pupils, 39 secondary pupils and 87 higher education students by Cerro Colorado and to 42 pupils by Spence.

The programme also provides academic support for pupils, tutoring, workshops on differentiating skills and meetings with parents.

districts. Through its Early Childhood Programme, it aims, over a period of four years, to improve the quality of education in these districts, using a methodology that involves school administrators, teachers and pupils and pupils' families.

The Minera Escondida Educational Foundation's Industrial and Mining Training Centre (CEIM) provides industrial and mining training to the regional and national community. Its Trades School offers courses, including both theory and practice, in different areas of specialisation. In 2014, CEIM trained 20,437 people out of whom only 13% corresponded to employees of Minera Escondida and BHP Billiton.

In the case of capability building, Pampa Norte's *Mejor Empresa* (Better Company) programme provides training to help micro-enterprise owners to manage their businesses more efficiently. In 2014, it trained the owners of 25 micro-enterprises from Cancosa, Quipisca, Lirima, Macaya and Alto Hospicio on subjects that included basic accounting and strategic and commercial planning.

In the case of research, innovation and technology, Minera Escondida supported the Research Project of the Biotechnology Centre of the Universidad Católica del Norte as well as the acquisition of equipment for the Radiometry, Photovoltaic and Storage Laboratories of the Renewable Energy Area of the Universidad de Antofagasta. This equipment will facilitate scientific research into solar energies and solar thermal storage.

In 2014, Pampa Norte, working together with the community, completed restoration of the Mamiña School in the Tarapacá Region.

The installations, which were also inaugurated in 2014, are in line with the mining company's own safety standards in aspects that include their design, materials and signage, thereby guaranteeing the children's wellbeing and protection.

In the sphere of community management and the capability building, Pampa Norte works with different organisations and institutions to foster local entrepreneurship and strengthen management and leadership capacities. The programmes include Production Development, Industrial Challenges, Worker Mentors, Business Game and Entrepreneurs Forum.

The Production Development Programme contributes to the economic development of communities in the vicinity of Pampa Norte's operations. Its principal initiative is its Agricultural Programme in the Mamiña and Quipisca communities whose key achievements include a study of management of fruit trees which has increased yields by 60% and 100%, the implementation of a veterinary clinic with field visits, the implementation of an agricultural-veterinary laboratory for soil, water and phytosanitary quality controls and the use of alternative energies for the storage and distribution of irrigation water.

The Preparing for New Challenges programme seeks to strengthen suppliers with less-developed technological and management capabilities. In addition, Pampa Norte has a programme to promote the development of local tourism which includes the equipment of the Barros Chinos tourism centre and a diploma course in Tourism Management.



After the 2010 earthquake, Minera Escondida undertook as an exceptional measure to rebuild two large schools - the Liceo Claudina Urrutia in Cauquenes and the Liceo Mariano Latorre in Curanilahue - which had been totally destroyed. The former was officially inaugurated in June 2013 while the latter, which was one of projects highlighted by the 2015 Chile Architecture Biennial, was inaugurated in March 2014. It has an area of 9,700 m<sup>2</sup> and a capacity for 1,200 pupils. Its vanguard design took into account the views of the community about the characteristics it should have.

## Culture

For BHP Billiton, culture is a central pillar of its social investment strategy. This has enabled us to establish alliances and implement successful projects with different groups from the world of the arts, literature and heritage, demonstrating that, in this field, public-private partnerships are not only possible but also add value.

We have worked uninterruptedly for 17 years to implement successful projects that achieve recognition and position us as the leading private company in support for cultural development.

We believe that culture strengthens social capital and that, through our work in this field, we are contributing to Chile's integral development. Our aim is to facilitate and increase the access of all to high-quality cultural activities and to foster cultural decentralisation, principally through innovative projects and activities, most of which are free-of-charge and broad in their coverage.

Our annual cultural programme seeks to contribute to strengthening local identity and care for and understanding of heritage and to promote reading and writing and the development of capabilities, particularly in regions, along with the discussion and debate of ideas.

In recent years, we have been working intensely to support cultural decentralisation, taking our most emblematic projects to the regions.

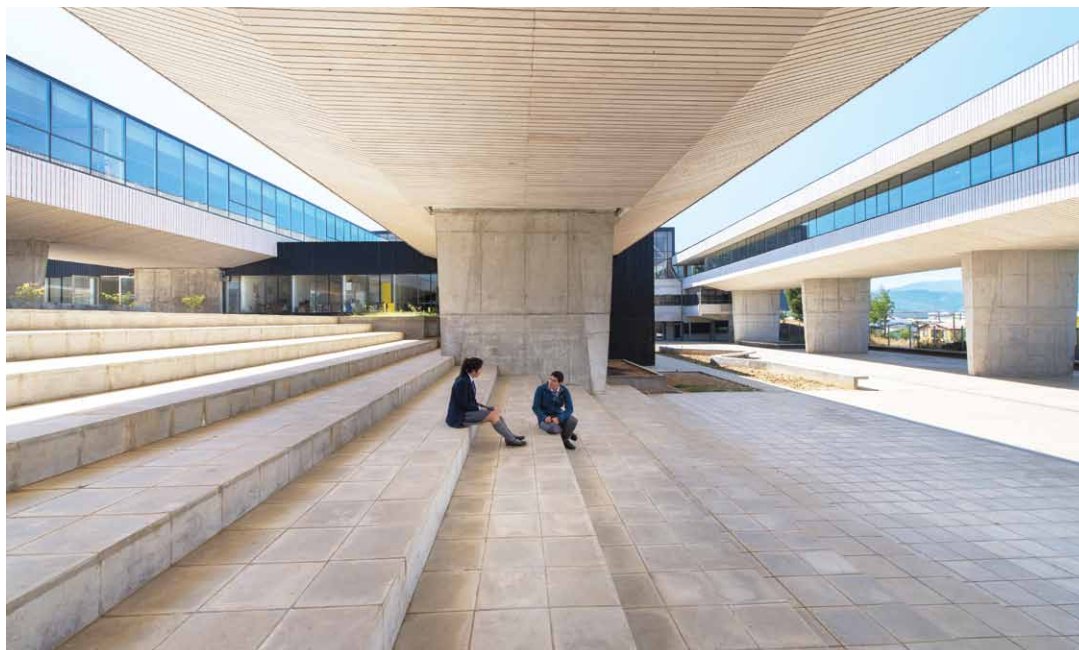
In line with this, we organised activities in Iquique, Antofagasta, Santiago, Concepción and Valdivia in 2014.

Key events of the year included the First Science Festival in Antofagasta, organised by Fundación Puerto de Ideas, and the inauguration of the expansion of the Museo Chileno de Arte Precolombino in Santiago. A second version of the Science Festival took place in Antofagasta in April 2015, with its 32 activities in different venues around the city attracting over 10,000 people.

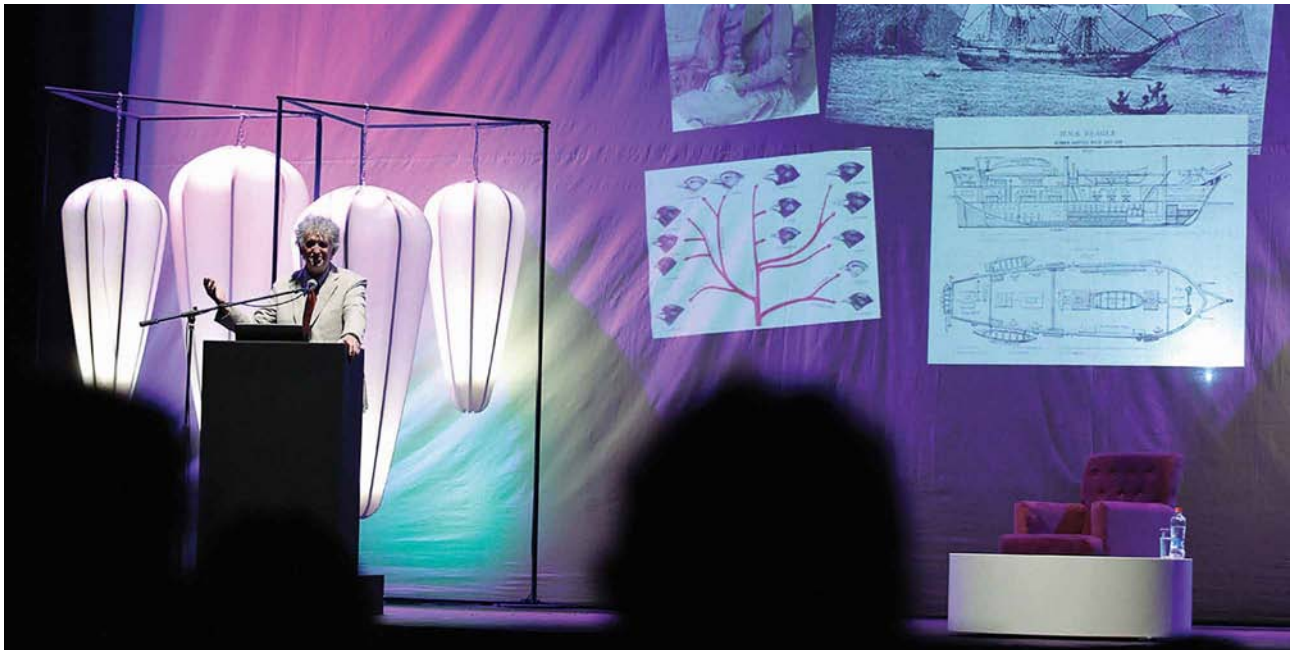
The inauguration of the expansion of the Museo Chileno de Arte Precolombino in January 2014 was the result of a long-standing alliance between the museum and Minera Escondida which has, among other activities, also permitted the organisation of temporary exhibitions in Chile and other countries. The new Isluga Textiles Room at the Museo Regional de Iquique, where some 100 pieces of Aymara textile art are displayed, is one of the latest of these collaboration projects. The new room was implemented jointly by BHP Billiton Pampa Norte, the Museo Chileno de Arte Precolombino and the Museo Regional de Iquique in an initiative that also included the presentation of a collection of books to indigenous communities close to Cerro Colorado.

In April 2014, the Puerto de Ideas (Port of Ideas) initiative held its first Science Festival in Antofagasta. For Puerto de Ideas, which was created in the port of Valparaíso, this was its first activity in another region. The aim of Puerto de Ideas is to heighten awareness and understanding of science among a general audience through direct experience. It involves multi-disciplinary and artistic activities that foster open and informal dialogue with guests who are important figures internationally, nationally or regionally. Over 8,000 people attended the conferences and workshops that formed part of the first Antofagasta Science Festival.

Among its permanent activities, Minera Escondida once again supported the Santiago a Mil performing arts festival, organised by Fundación Internacional Teatro a Mil. This festival has also taken place in Antofagasta since 2002 and Iquique since 2010. Since then, it has presented 35 free national and international events in Antofagasta and 17 in Iquique.



One of the secondary schools rebuilt with the support of Minera Escondida after the 2010 earthquake was the Liceo Mariano Latorre in Curanilahue. Due to its design and characteristics, it was highlighted in the 2015 Chile Architecture Biennial.



## Puerto de Ideas de la Ciencia 2015

### Antofagasta, capital of science

A first version of *Puerto de Ideas* (Port of Ideas) - Antofagasta Science Festival took place in April 2014. This cultural event sought to bring science closer to the general public through direct experience, multi-disciplinary and artistic activities and conversations with leading scientists.

Antofagasta was chosen as the venue because of its role as a natural laboratory for the planet and its international leadership in fields such as geology, astronomy, archaeology, anthropology and technological innovation as demonstrated, for example, by the presence in the region of high-technology mining projects and the Paranal and Alma astronomical observatories.

The event, organised by Fundación Puerto de Ideas and presented by Minera Escondida, attracted over 8,000 people who were able to attend the 26 different activities, conferences and workshops for children that took place in Antofagasta's historic centre.

In its 2015 version, the 16-day Festival presented 92 plays and shows - of which 47 were from other countries - which were attended by over 500,000 people. The Festival also took place in the cities of Iquique and Antofagasta and in neighbouring municipal districts such as Alto Hospicio, Mejillones and San Pedro.

Minera Escondida also contributed to the XVII Zicosur International Theatre Meeting which took place in Antofagasta, organised by the Corporación Pedro de la Barra, the Universidad de Antofagasta, the regional government and the Antofagasta municipal government, and was attended by over 50,000 people.

In November 2014, as part of international celebration of the 450th anniversary of the birth of William Shakespeare, BHP Billiton, Minera Escondida and Fundación Teatro a Mil presented the Shakespeare 450 event, a week of free-of-charge activities in Iquique, Antofagasta and Santiago. They included the first visit to Chile by one of Britain's most emblematic theatre companies, that of Shakespeare's Globe Theatre, which puts on only the work of the famous English playwright.

As in previous years, we continued to organise activities to promote reading, writing and the debate of ideas. They included Chile's most popular short story competition, *Santiago en 100 Palabras* (Santiago in 100 Words), launched in 2001. Presented by Minera Escondida and Metro de Santiago and organised by Plagio, it received over 44,000 entries in 2014. The competition also takes place in Iquique, Antofagasta and Concepción and, in these cities as well as Santiago, regularly holds writing workshops for children, young people, teachers and the general public.

BHP Billiton's cultural programme also aims to create opportunities for emerging artists and, through the MAVI-Minera Escondida Young Artists Prize, created in 2006, seeks to generate and foster new talent in the visual arts. In 2014, in order to encourage the participation of artists from the regions, its launch took place in Antofagasta during the SACO contemporary art week.

In order to foster debate of ideas and content analysis, BHP Billiton mounted a thirteenth cycle of *Pensamiento Propio* (Own Thinking) conversations in 2014 in which columnist and writer Cristián Warnken talked in depth to people from different fields and disciplines. Under the title, *En el Camino* (On the Road), Warnken conversed with Claudio Naranjo, Bernardo Nante, Carlos Aldunate, Francisco Sazo, Jennifer Middleton and Jens Bucher, Ziley Mora, Humberto Maturana and Ximena Dávila and the philosophers Martín Hopenhayn and José Jara.

In Antofagasta, we once again supported the Zicosur International Book Fair, organised by the FILZIC and Jenecherú cultural groups and the Estación Antofagasta cultural corporation.

Throughout the year, the exhibition room and auditorium of Minera Escondida Foundation's community building also served as the venue for different cultural activities such as exhibitions, literary meetings, concerts and plays.





## Pensamiento Propio

### "On the Road" cycle in Iquique, Antofagasta, Santiago, Concepción and Valdivia

Pensamiento Propio (Own Thinking) is a cycle of conversations has presented annually by BHP Billiton for the past 13 years in which columnist and writer Cristián Warnken talks in depth with his guests about ideas and experiences that cut across different disciplines.

The cycle En el Camino (On the Road), which took place in Iquique, Antofagasta, Santiago, Concepción and Valdivia, brought together experts from different fields to talk about the meaning of life and death from different perspectives and in different cultural traditions. In nine sessions, Cristián talked to Claudio Naranjo, Carlos Aldunate, Bernardo Nante, Francisco Sazo, Jennifer Middleton and Jens Bucher, Ziley Mora, Humberto Maturana and Ximena Dávila, and Gustavo Meza and Braulio Fernández and, in the closing session in Valdivia, with Martín Hopenhayn and José Jara.

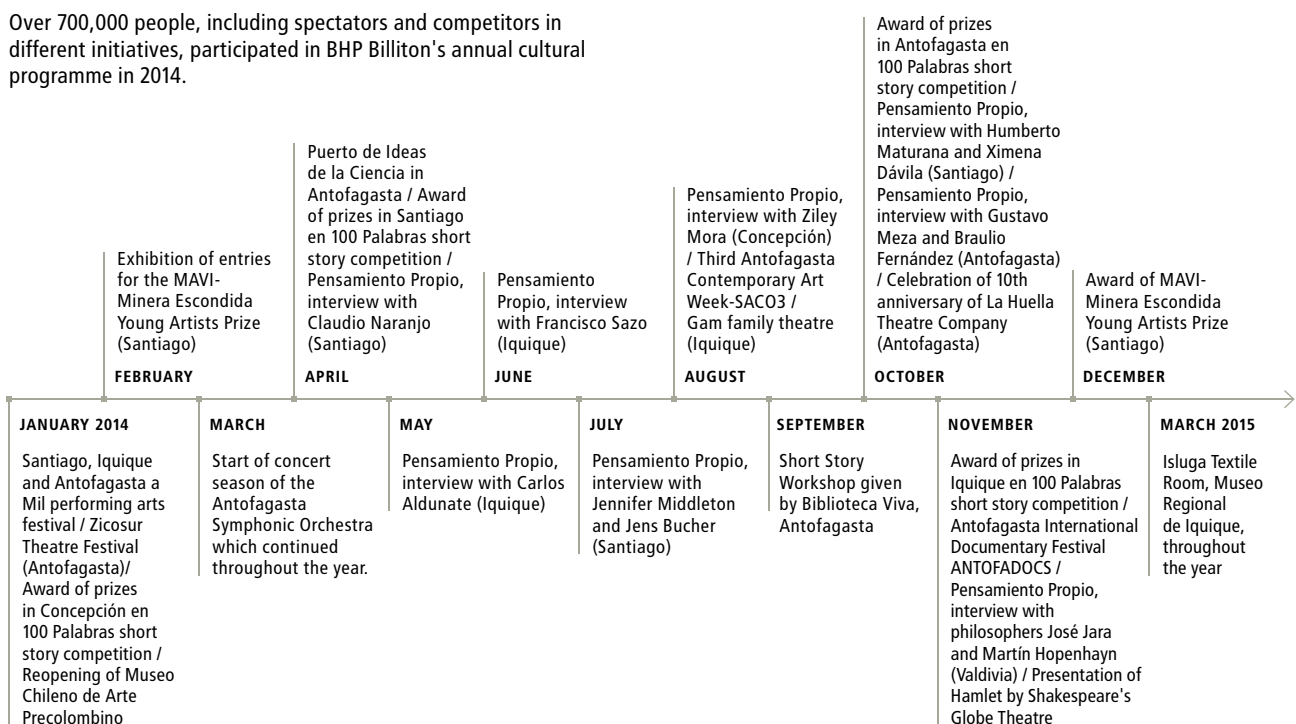
In 2014, Pensamiento Propio events were attended by 2,500 people and followed on Internet by over 13,000.



*Santiago en 100 Palabras. In the 14 years since its launch, over 400,000 people have participated in this short story competition which attracts an average 44,000 entries each year. The competition also takes place in the cities of Iquique, Antofagasta and Concepción whose histories reflect their region's unique identities.*

## Cultural Activities 2014

Over 700,000 people, including spectators and competitors in different initiatives, participated in BHP Billiton's annual cultural programme in 2014.





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# Appendix

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40 Performance

43 People

46 Environment

### 1 / Economic Value Generated, BHP Billiton Chile

	2013	2014
	US\$ million	US\$ million
Operating income	11,122	10,625
Financial income	32	56
Non-operating Income	79	75
<b>Economic value generated</b>	<b>11,233</b>	<b>10,756</b>

### 2 / Economic Value Distributed<sup>(1)</sup>, BHP Billiton Chile

	2013		2014	
	US\$ million	%	US\$ million	%
Operating costs	3,289	42	3,821	51
Employee wages and benefits	868	11	634	9
Other third-party expenses	1,364	17	1,109	15
Tax payments	1,070	14	1,145	15
Financial expenses	-2	0	6	0
Investment in community	46	1	33	0
Owners	1,153	14	668	9
Environment	61	1	61	1
<b>Economic value distributed</b>	<b>7,849</b>	<b>100</b>	<b>7,477</b>	<b>100</b>
<b>Economic value retained <sup>(2)</sup></b>	<b>3,384</b>		<b>3,279</b>	

(1) **Employee wages and benefits:** Value distributed to employees through remunerations, social security contributions, bonuses, social and medical benefits, holidays and training, etc. / **Other third-party expenses:** Payments by the company to collaborator companies for services provided during the year. / **Taxes:** Contribution of the company to the state in the form of corporate income tax and the specific mining tax. Also includes expenses such as business licences, property tax and stamp tax. / **Financial expenses:** Payments related to the company's financial liabilities as well as other expenses arising from financial operations. / **Investment in community:** Includes social programmes, sponsorships and donations. / **Owners:** Dividends paid to the company's shareholders. / **Environment:** Includes expenditure on environmental projects.

(2) **Retained by the company:** Profits reinvested in the company for the continuity of its operations. Includes depreciation and amortisations of the period as well as profits of the period and corresponds to the difference between Economic Value Generated and Economic Value Distributed.

### 3 / Economic Value Generated/Distributed (US\$ million), Pampa Norte

	2013	2014
Economic value generated	2,244	2,581
Economic value distributed	1,600	1,877
Economic value retained	644	704

### 4 / Economic Value Generated (US\$ million), Pampa Norte

	2013	2014
Operating income	2,233	2,571
Financial income	9	9
Non-operating Income	2	1
<b>Economic value generated</b>	<b>2,244</b>	<b>2,581</b>

### 5 / Local Suppliers by Region, Pampa Norte

	N° of suppliers by region			Expenditure on suppliers by region (US\$ million)		
	2013	2014	% by region	2013	2014	% by region
Arica and Paríacota Region	3	6	0.6	2	1	0.2
Tarapacá Region	121	118	11.9	37	35	4.7
Antofagasta Region	213	215	21.7	165	137	18.6
Santiago Metropolitan Region	595	590	59.4	542	514	69.9
Other regions	58	64	6.4	35	48	6.6
<b>Total</b>	<b>990</b>	<b>993</b>	<b>100</b>	<b>781</b>	<b>735</b>	<b>100</b>



## 6 / Economic Value Distributed, Pampa Norte <sup>(1)</sup>

	2013		2014	
	US\$ million	%	US\$ million	%
Operating costs	979	61.2	1,269	67.6
Employee wages and benefits	212	13.3	173	9.2
Other third-party expenses	294	18.4	249	13.3
Tax payments	63	3.9	139	7.4
Financial expenses	2	0.1	3	0.2
Investment in community	20	1.3	10	0.5
Owners				
Environment	30	1.9	34	1.8
Economic value distributed	1,600	100.0	1,877	100
Economic value retained <sup>(2)</sup>	644		704	

(1) **Employee wages and benefits:** Value distributed to employees through remunerations, social security contributions, bonuses, social and medical benefits, holidays and training, etc. / **Other third-party expenses:** Payments by the company to collaborator companies for services provided during the year. / **Taxes:** Contribution of the company to the state in the form of corporate income tax and the specific mining tax. Also includes expenses such as business licences, property tax and stamp tax. / **Financial expenses:** Payments related to the company's financial liabilities as well as other expenses arising from financial operations. / **Investment in community:** Includes social programmes, sponsorships and donations. / **Owners:** Dividends paid to the company's shareholders. / **Environment:** Includes expenditure on environmental projects.

(2) **Retained by the company:** Profits reinvested in the company for the continuity of its operations. Includes depreciation and amortisations of the period as well as profits of the period and corresponds to the difference between Economic Value Generated and Economic Value Distributed.

## 7 / Distribution of Economic Value to the State (US\$ million), Pampa Norte

	2012	2013	2014
1st category income tax	111	82	93
Effect of deferred taxes	29	-7	43
Provision for specific mining tax	20		
Other taxes (payments/refunds)			
<b>Total taxes provisioned**</b>	<b>160</b>	<b>75</b>	<b>136</b>
<b>Taxes provisioned 2014</b>	<b>US\$ million</b>		<b>136</b>
<b>Taxes paid 2014*</b>	<b>US\$ million</b>		<b>93</b>

\*Taxes provisioned in 2013 and paid in fiscal year 2014.

## 8 / Copper Sales by Product (tonnes), BHP Billiton Chile

Sales	2012	2013	2014
Fine copper (concentrate)	733,322	864,428	814,520
Fine copper (cathodes)	583,984	523,136	564,058
<b>Total fine copper*</b>	<b>1,317,306</b>	<b>1,387,564</b>	<b>1,378,578</b>

\*Includes only sales of own output.

## 9 / Key Figures, BHP Billiton Chile

Operating information	Units	2013				2014			
		Pampa Norte		Minera Escondida	BHP Billiton Chile	Pampa Norte		Minera Escondida	BHP Billiton Chile
		Cerro Colorado	Spence			Cerro Colorado	Spence		
Output fine copper (cathodes)	fmt	73,211	151,215	305,334	529,760	79,574	176,064	301,529	557,167
Output fine copper (contained in concentrate)	fmt	N/A	N/A	888,346	888,346	N/A	N/A	870,119	870,119
Total fine copper produced	fmt	73,211	151,215	1,193,680	1,418,106	79,574	176,064	1,171,648	1,427,286
Share of copper output in Chile	%	1.2	2.6	20.7	24.5	1.4	3.1	20.2	24.7
Share of world copper output	%	0.4	0.83	6.5	7.7	0.4	0.96	6.3	7.7
<b>Financial information</b>									
Sales	US\$ mill.	2,233		8,865	11,098	2,571		8,004	10,575
Economic value distributed	US\$ mill.	1,601		6,159	7,849	1,877		5,564	7,477
Economic value distributed to community	US\$ mill.	20		25	46	10		23	33
Economic value distributed to environment	US\$ mill.	30		31	61	34		27	61
Economic value distributed to state	US\$ mill.	63		996	1,070	139		1,002	1,145
<b>Workforce and contractors</b>									
Own employees <sup>(1)</sup>	N°	1,059	1,192	4,300	7,307	928	1,129	4,608	7,476
Total contractors' employees (operations and projects)	FTE <sup>(2)</sup>	3,901		9,015	22,435	3,169		8,707	26,977
Percentage of women in organisation	%	8.8		8.2	10.0	7.9		7.3	9.3
Total hours of training	hours	114,274		258,046	408,415	70,211		234,600	331,557
TRIFR (global) <sup>(3)</sup>	N/A	1,71	2,34	1,70	2,01	1,11	2,56	1,83	2,05
Severity rate	N/A	44,53	46,31	47,00	46,09	111,87	40,80	27,61	37,02
Frequency rate	N/A	1,36	1,72	0,90	1,08	1,77	1,71	0,97	1,11
<b>Suppliers</b>									
N° of local suppliers <sup>(4)</sup>	N°	908		1,401	2,835	992		1,361	2,776
Local suppliers	%	96		92	91	96		91	91
<b>Environmental information</b>									
Total water consumption	m <sup>3</sup>	10,304,783		67,522,960	77,827,743	9,855,590		69,271,079	79,126,669
Total energy consumption (direct and indirect)	GJ	6,790,888		22,688,930	29,479,818	7,299,981		22,847,225	30,147,206
Total GHG emissions	tCO <sub>2</sub> e	975,259		3,781,902	4,757,161	1,030,960		3,714,500	4,745,460

(1) Total for BHP Billiton Chile's own employees also includes workforces of the Santiago and Pampa Norte offices.

(2) Full time equivalent.

(3) Total for BHP Billiton Chile also includes contractors for projects managed through the Santiago office and contractors for the Santiago office.

(4) TRIFR includes own and contractors' employees.

(5) Defined as suppliers located in Chile.

(6) Total local suppliers also includes suppliers to projects and the Santiago office.



## 10 / Supporting Employees' Contributions: Joint Contribution Programme (PAC)\*, BHP Billiton Chile

Total contribution	BHP Billiton Santiago	Minera Escondida	Pampa Norte	Total employee contributions	Total PAC contributions	Total contribution to organisations
Cash donations	\$16,971,439	\$43,739,506	\$8,265,492	\$43,989,937	\$68,976,437	\$112,966,374
Donations collected	\$10,787,200	\$128,172,015	\$17,157,342	\$124,282,415	\$156,116,557	\$280,398,972
Voluntary work	\$0	\$25,969,772	\$492,800	\$0	\$26,462,571	\$26,462,571
<b>Total</b>	<b>\$27,758,639</b>	<b>\$197,881,293</b>	<b>\$25,915,634</b>	<b>\$168,272,352</b>	<b>\$251,555,565</b>	<b>\$419,827,917</b>

\* Values in Chilean pesos.

## 11 / Own Workforce, BHP Billiton Chile

	2012	2013	2014
BHP Billiton Santiago	557	589	674
Pampa Norte	2,462	2,418	2,194
Minera Escondida	4,103	4,300	4,608
<b>Total</b>	<b>7,122</b>	<b>7,307</b>	<b>7,476</b>

## 12 / Own Workforce by Type of Post, 2014, BHP Billiton Chile

Category	Pampa Norte		Minera Escondida		BHP Billiton Santiago		Total			
	Male	Female	Male	Female	Male	Female	Male	% Male	Female	% Female
Executives	7	1	179	27	82	19	268	85	47	15
Supervisors/professionals	438	104	1,028	210	385	104	1,851	82	418	18
Operators, administrative and other similar personnel (OAS)	1,543	56	2,939	67	16	48	4,498	96	171	4
Graduates	4	3	45	26	12	8	61	62	37	38
Operator and Maintenance Personnel Development Programme (apprentices)	27	11	77	10	0	0	104	83	21	17
<b>Total</b>	<b>2,019</b>	<b>175</b>	<b>4,268</b>	<b>340</b>	<b>495</b>	<b>179</b>	<b>6,782</b>	<b>91</b>	<b>694</b>	<b>9</b>
Contractors per year in FTE*	3,169		8,707		15,101					

(\*) Full time equivalent.

## 13 / Own Female Workforce, BHP Billiton Chile

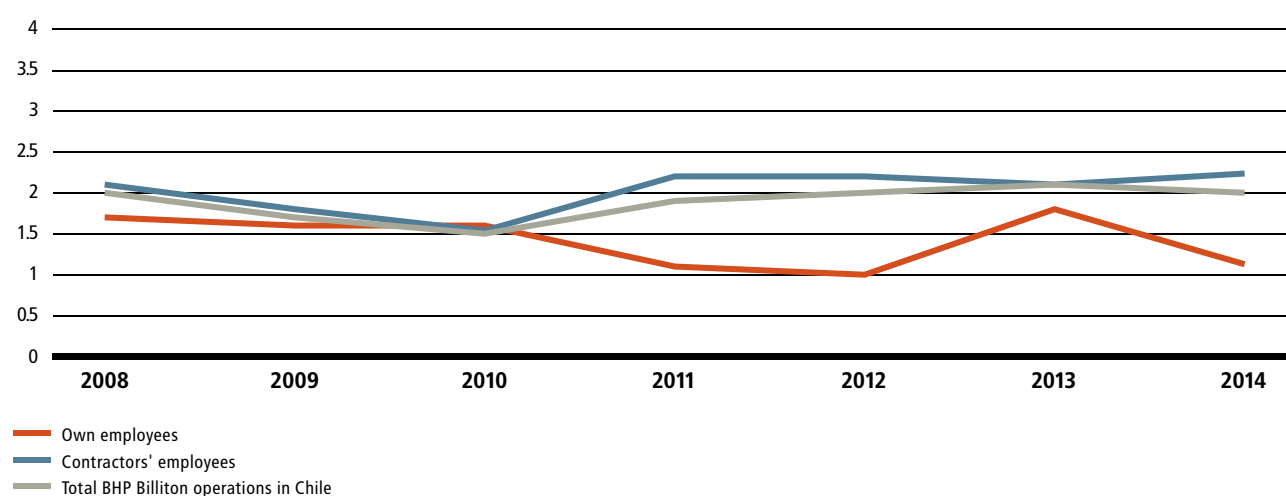
	2012		2013		2014	
	N°	%	N°	%	N°	%
BHP Billiton Santiago	154	27.6	161	27.3	179	26.5
Pampa Norte*	214	8.7	215	8.8	175	7.9
Minera Escondida	283	6.9	353	8.2	340	7.3
<b>Total</b>	<b>651</b>	<b>9.1</b>	<b>729</b>	<b>10.0</b>	<b>694</b>	<b>9.3</b>

## 14 / Workforce by Age Range and Average Age, 2014, BHP Billiton Chile

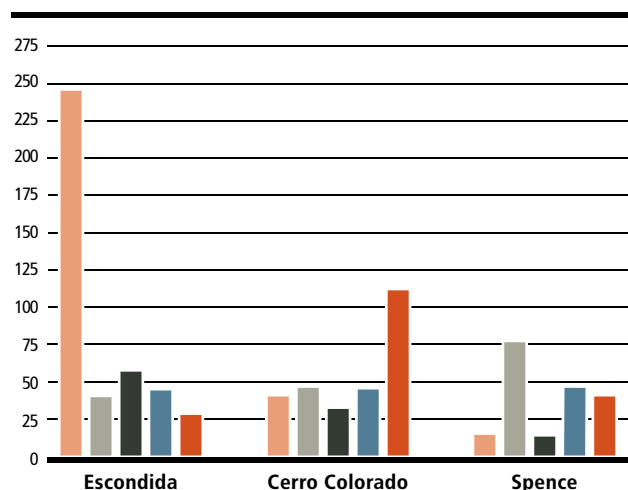
	< 30			30 - 50			> 50			2013	2014
	Masculinos	Femeninos	Total	Masculinos	Femeninos	Total	Masculinos	Femeninos	Total		
BHP Billiton Santiago	30	25	55	347	137	484	118	17	135	39	33
Pampa Norte*	246	39	285	1,517	132	1,649	256	4	260	35	39
Minera Escondida	462	59	521	2,790	260	3,050	1,016	21	1,037	41	42
<b>Total</b>	<b>738</b>	<b>123</b>	<b>861</b>	<b>4,654</b>	<b>529</b>	<b>5,183</b>	<b>1,390</b>	<b>42</b>	<b>1,432</b>	<b>38</b>	<b>38</b>

(\*) Includes workforce of the Iquique office.

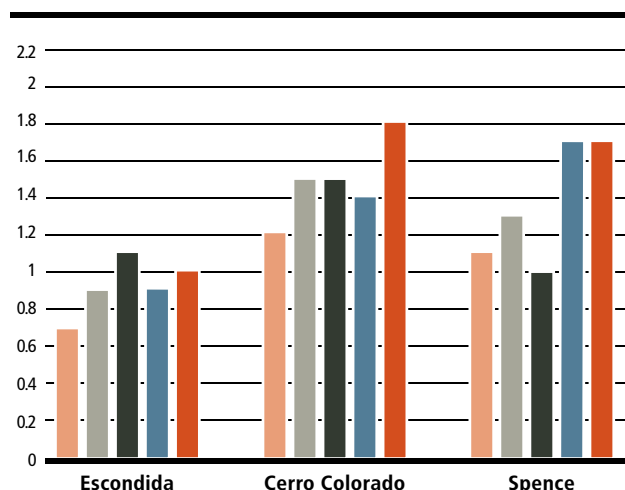
## 15 / TRIFR, BHP Billiton Chile



## 16 / Accident Severity Rate, Operations BHP Billiton Chile\*



## 17 / Accident Frequency Rate, Operations BHP Billiton Chile\*



\* In accordance with Chilean law and reported by SERNAGEOMIN.  
Source: Own calculations

2010 2011 2012 2013 2014

## 18 / Turnover and New Hires, BHP Billiton Chile

	BHP Billiton Santiago	Pampa Norte	Minera Escondida <sup>(1)</sup>	Total
Total workforce	674	2,194	4,518	7,386
Total exits	50	333	124	507
Total new hires	109	131	446	686
Turnover (%) <sup>(2)</sup>	7.4	15.2	2.7	6.9
Rate of new hires (%) <sup>(3)</sup>	16.2	6.0	9.9	9.3

(1) Only employees with indefinite contract.

(2) Calculated as exits/workforce.

(3) Calculated as new hires/workforce.

## 19 / Absenteeism, 2014, BHP Billiton Chile

	BHP Billiton Santiago		Pampa Norte		Minera Escondida		Total
	Male	Female	Male	Female	Male	Female	
Hours worked*	922,529	334,009	4,614,366	408,025	8,377,593	700,070	15,356,592
Hours of absenteeism	54,308	35,579	55,207	6,991	307,266	24,488	483,839
Absenteeism rate (%)	5.9	10.7	1.2	1.7	3.7	3.5	3.2

\* Theoretical hours by system.

## 20 / Training, BHP Billiton Chile

	Average hours/year/employee		Hours of training		Investment in training/year/employee (US\$)	
	2013	2014	2013	2014	2013	2014
BHP Billiton Santiago	61	40	36,195	26,746	1,225	1,465
Pampa Norte	47	32	114,274	70,211	1,460	1,122
Minera Escondida	60	51	258,046	234,600	2,167	1,176
BHP Billiton Chile	56	44	408,515	331,557	1,857	1,186

## 21 / Training, Pampa Norte

Categoría de Empleados	Hours of training			Average hours of training			Investment per employee (US\$)
	Male	Female	Total	Male	Female	Total	
Executives	59	3	62	8	3	8	234
Supervisors/ professionals	9,170	1,698	10,868	21	16	18	536
Operators, administrative and other similar personnel (OAS)	51,046	1,045	52,091	33	19	32	1,232
Graduates	123	74	197	31	25	15	882
Apprentices	4,656	2,337	6,993	172	212	206	5,071
<b>Total</b>	<b>65,054</b>	<b>5,157</b>	<b>70,211</b>	<b>32</b>	<b>29</b>	<b>32</b>	<b>1,122</b>



## 22 / Strategic Inputs, BHP Billiton Chile

Strategic input	Units	2012		2013		2014	
		Pampa Norte	Minera Escondida	Pampa Norte	Minera Escondida	Pampa Norte	Minera Escondida
Diesel	m <sup>3</sup>	115,390	271,238	109,501	270,367	112,505	283,772
Oils and lubricants	m <sup>3</sup>	2,750	5,814	2,921	6,431	3,055	6,383
Explosives	tonnes	31,029	102,822	19,327	103,076	29,400	112,811
Tyres	N°	466	1,498	633	1,293	708	1,507
Mill balls	tonnes	N/A	60,368	N/A	71,778	N/A	65,846
Quicklime	tonnes	N/A	154,365	N/A	153,925	N/A	159,634
Sulphuric acid	tonnes	521,880	735,776	658,209	679,298	632,026	591,671
Extractants	tonnes	324	730	453	593	581	720
Anodes	N°	2,663	17,020	1,500	10,320	10,948	10,496

## 23 / Energy Consumption by Source, BHP Billiton Chile

Direct energy consumption	Units	2013		2014	
		Pampa Norte	Minera Escondida	Pampa Norte	Minera Escondida
Diesel	L	109,596,425	270,366,818	112,504,607	283,771,622
Petrol	L	51,316	461,418	45,177	445,834
Liquefied petroleum gas (LPG)	L	354,879	220,052	348,776	223,484
Emergency diesel generators	L	0	0	0	0
<b>Subtotal direct energy consumed</b>	<b>L</b>	<b>110,002,620</b>	<b>271,048,288</b>	<b>112,898,560</b>	<b>284,440,940</b>
<b>Subtotal direct energy consumed</b>	<b>GJ</b>	<b>4,241,297</b>	<b>10,457,595</b>	<b>4,353,186</b>	<b>10,974,576</b>
<b>Indirect energy consumed</b>					
Electricity	MWh	708,220	3,397,593	818,554	3,305,650
<b>Subtotal indirect energy consumed</b>	<b>MWh</b>	<b>708,220</b>	<b>3,397,593</b>	<b>818,554</b>	<b>3,305,650</b>
<b>Subtotal indirect energy consumed</b>	<b>GJ</b>	<b>2,549,591</b>	<b>12,231,335</b>	<b>2,946,794</b>	<b>11,872,650</b>
<b>Total direct and indirect energy consumed</b>	<b>GJ</b>	<b>6,790,888</b>	<b>22,688,930</b>	<b>7,299,981</b>	<b>22,847,225</b>
Efficiency in total energy consumption	GJ/t fine Cu produced	30,3	19,0	28,6	19,5
<b>Conversion factors</b>					
Conversion factor to GJ (electricity)		3,60			
Conversion factor to GJ (diesel)		38,60			
Conversion factor to GJ (petrol)		34,20			
Conversion factor to GJ (LPG)		25,70			

## 24 / Water Withdrawal by Source, BHP Billiton Chile

Withdrawal of high-quality water					
Operation	Source	Units	2012	2013	2014
Cerro Colorado	Lagunillas	m <sup>3</sup>	4,386,118	4,055,792	4,041,158
Spence	FACB	m <sup>3</sup>	1,168,788	1,122,677	1,228,718
	ADASA	m <sup>3</sup>	5,406,928	5,749,969	5,339,301
Escondida	Monturaqui	m <sup>3</sup>	37,695,302	41,187,570	41,157,404
	Salar de Punta Negra	m <sup>3</sup>	8,515,062	9,231,112	11,484,121
Subtotal high-quality water withdrawn		m <sup>3</sup>	57,172,198	61,347,120	63,250,702
High-quality water returned to source		m <sup>3</sup>	590,540	623,655	1,133,116
Subtotal high-quality water consumed		m <sup>3</sup>	56,581,658	60,723,465	62,117,586
Withdrawal of low-quality water					
Cerro Colorado	Rainfall	m <sup>3</sup>	0	0	0
Escondida	Hamburgo	m <sup>3</sup>	3,166,542	3,058,535	3,300,340
	Mine drainage	m <sup>3</sup>	5,266,750	4,425,526	3,481,093
	Seawater	m <sup>3</sup>	23,188,654	21,819,260	23,673,437
Subtotal low-quality water withdrawn		m <sup>3</sup>	31,621,946	29,303,321	30,454,870
Low-quality water returned to source		m <sup>3</sup>	12,569,611	12,199,043	13,445,787
Subtotal low-quality water consumed		m <sup>3</sup>	19,052,335	17,104,278	17,009,083
Total water withdrawn BHP Billiton Chile		m <sup>3</sup>	88,794,144	90,650,441	93,705,572
Total water consumed BHP Billiton Chile		m <sup>3</sup>	75,633,993	77,827,743	79,126,669
Indicators BHP Billiton Chile					
High-quality water/total water consumed		%	74.8	78.0	78.5
Efficiency of total water consumption		m <sup>3</sup> /t fine Cu produced	57.5	54.9	55.4
Efficiency of high-quality water consumption		m <sup>3</sup> /t fine Cu produced	43.0	42.8	43.5

## 25 / Greenhouse Gas Emissions, BHP Billiton Chile

Type of emissions	Pampa Norte		Minera Escondida		BHP Billiton Chile		Units
	2013	2014	2013	2014	2013	2014	
Direct emissions	307,447	302,160	819,201	855,113	1,126,648	1,157,273	tCO <sub>2</sub> e
Indirect emissions	667,812	728,800	2,962,701	2,859,387	3,630,513	3,588,187	tCO <sub>2</sub> e
<b>Total emissions</b>	<b>975,259</b>	<b>1,030,960</b>	<b>3,781,902</b>	<b>3,714,500</b>	<b>4,757,161</b>	<b>4,745,460</b>	tCO <sub>2</sub> e
Intensity of direct emissions	1,37	1,18	0,69	0,73	0,79	0,81	tCO <sub>2</sub> e/t fine Cu produced
Intensity of indirect emissions	2,98	2,85	2,48	2,44	2,56	2,51	tCO <sub>2</sub> e/t fine Cu produced
Intensity of total emissions	4,35	4,03	3,17	3,17	3,35	3,32	tCO <sub>2</sub> e/t fine Cu produced

## 26 / Air Quality, BHP Billiton Chile

Type of emission	Units	Average annual concentration			Measurement point	Operation
		2012	2013	2014		
PM10	µg/m³N	72	81	96	Villa San Lorenzo	Minera Escondida
	µg/m³N	70	79	52	Campamento 2000	
	µg/m³N	68	73	89	Campamento 5400	
	µg/m³N	33	43	43	Coloso	Cerro Colorado
	µg/m³N	36	38	119	Mamiña	
	µg/m³N	38	40	129	Parca	
	µg/m³N	54	68	135	Sierra Gorda	

Note: Under the Chilean norm on PM10, the average annual concentration of (µg/m³N) ≤ 50 only applies to Coloso.

## 27 / Solid Waste, BHP Billiton Chile

Type of solid waste (tonnes)	2013			2014		
	Pampa Norte		Minera Escondida	Pampa Norte		Minera Escondida
	Cerro Colorado	Spence		Cerro Colorado	Spence	
Hazardous	1,629	1,853	10,363	1,805	1,643	8,341
Non-hazardous	2,052	2,521	24,284	1,673	3,813	36,067
<b>Total</b>	<b>3,681</b>	<b>4,374</b>	<b>34,647</b>	<b>3,478</b>	<b>5,456</b>	<b>44,408</b>
Intensity of hazardous waste (t/t Cu produced)	0,022	0,012	0,009	0,023	0,009	0,007
Intensity of non-hazardous waste (t/t Cu produced)	0,028	0,017	0,020	0,021	0,022	0,031

## 28 / Treatment and Disposal of Hazardous Waste, BHP Billiton Chile

Type of treatment or disposal (t)	2013			2014		
	Pampa Norte		Minera Escondida	Pampa Norte		Minera Escondida
	Cerro Colorado	Spence		Cerro Colorado	Spence	
Reuse*	1,142	1,053	4,439	1,143	1,020	4,283
External recycling	21	273	2,886	119	87	696
Secure external landfill	466	527	3,038	543	536	3,362
<b>Total</b>	<b>1,629</b>	<b>1,853</b>	<b>10,363</b>	<b>1,805</b>	<b>1,643</b>	<b>8,341</b>



## 29 / Treatment and Disposal of Non-Hazardous Waste, BHP Billiton Chile

Type of treatment or disposal (t)	2013			2014		
	Pampa Norte		Minera Escondida	Pampa Norte		Minera Escondida
	Cerro Colorado	Spence		Cerro Colorado	Spence	
External recycling	1,176	31	9,330	1,067	1,681	14,910
Landfill	876	1,963	14,954	606	588	21,157
Industrial landfill (Rescon)	N/A	527	N/A	N/A	1,544	N/A
Total	2,052	2,521	24,284	1,673	3,813	36,067

## 30 / Massive Mine Waste, BHP Billiton Chile

Mining waste	Units	2013			2014		
		Pampa Norte		Minera Escondida	Pampa Norte		Minera Escondida
		Cerro Colorado	Spence		Cerro Colorado	Spence	
Waste rock	tonnes	45,740,682	89,791,082	250,533,693	47,960,373	59,144,518	321,338,488
Tailings	tonnes	N/A	N/A	73,424,757	N/A	N/A	78,820,760
Leaching gravel	tonnes	16,615,784	19,922,365	0	17,392,969	17,402,739	0
Low-grade mineral	tonnes	0	1,882,984	N/I	0	18,555,269	22,486,382

Note: Waste rock at Minera Escondida in 2013 does not include low-grade oxides and sulphides.

N/R: Not reported.





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## Report of Independent Professionals "BHP Billiton Chile Sustainability Report 2014"

President and Directors  
BHP Chile Inc.

We have reviewed the information and data presented in "BHP Billiton Chile Sustainability Report 2014", mentioned below, of BHP Billiton Chile as of 31 December 2014.

Preparation of this report is the responsibility of the administration of BHP Billiton Chile. Similarly, the administration of BHP Billiton Chile is responsible for the information and statements contained in the Report, the definition of its scope and the management and control of the information systems that produced the reported information.

Our review was carried out in accordance with the assurance norms of the Colegio de Contadores de Chile A.G. A review has a scope that is significantly less than that of an examination whose objective is to express an opinion on "BHP Billiton Chile Sustainability Report 2014". We do not, therefore, express such an opinion.

The information and data presented in "BHP Billiton Chile Sustainability Report 2014" were reviewed taking into account the criteria set out in the Sustainability Reporting Guidelines of the Global Reporting Initiative (GRI) in their G4 version and the corresponding Mining and Metals Supplement, which are summarised below:

- ✓ To determine whether the information and data presented in the BHP Billiton Chile Sustainability Report 2014 are duly backed by sufficient evidence.
- ✓ To determine whether BHP Chile Inc. has prepared the BHP Billiton Chile Sustainability Report 2014 in accordance with the Content and Quality principles of the GRI G4 Guidelines and their Mining and Metals Supplement.
- ✓ To confirm the "core" level declared by BHP Chile Inc. in the BHP Billiton Chile Sustainability Report 2014 in accordance with G4 Guidelines.

Our procedures included questions to the senior management, areas and units of BHP Billiton Chile involved in preparation of the Report as well as other analytical procedures and tests as described below:

- ✓ Interviews with key BHP Billiton Chile personnel in order to evaluate the process of preparation of the BHP Billiton Chile Sustainability Report 2014, the definition of its content and the information systems used.
- ✓ Verification of the data presented in the 2014 Sustainability Report on the basis of back-up documentation provided by BHP Billiton Chile.
- ✓ Analysis of the processes for the gathering and internal control of the quantitative data reflected in the 2014 Sustainability Report.
- ✓ Verification of the reliability of the information using analytical procedures, sampling-based tests and review of calculations through re-calculation.
- ✓ Visit to the corporate offices of BHP Billiton in the Santiago Metropolitan Region and visits to the offices and operations of Minera Escondida Limitada and BHP Billiton Pampa Norte, located in the Antofagasta and Tarapacá Regions.
- ✓ Review of the text of the BHP Billiton Chile Sustainability Report 2014.

Based on our review, it has not come to our attention that:

- ✓ The information and data published in the BHP Billiton Chile Sustainability Report 2014 are not duly backed with sufficient evidence.
- ✓ The 2014 Sustainability Report has not been prepared in accordance with the G4 version of the GRI's Sustainability Reporting Guidelines and its Mining and Metals Supplement.
- ✓ The "core" in accordance level declared by BHP Billiton Chile does not comply with the requirements for this level as established in the GRI G4 Guidelines.

KPMG Auditores y Consultores Ltda.

Luis Felipe Encina  
Partner  
11 May 2015



#### About this Report

The 2014 Sustainability Report of BHP Billiton Chile has been prepared in accordance with the Guidelines of the Global Reporting Initiative (GRI) in their G4 version and its Mining and Metals Supplement.

As a founding member of the International Council on Mining and Metals (ICMM), BHP Billiton also adheres to its Sustainable Development Framework. The ICMM's activities seek to strengthen the industry's performance and enhance its contribution to sustainable development.

Our public commitments also include the Voluntary Principles on Security and Human Rights, the Extractive Industries Transparency Initiative and the Principles of the UN Global Compact.

The data contained in this Report have been externally assured by KPMG. Although this Report does not seek to cover all stakeholder issues, it addresses those that are most significant and their potential impacts.

The issues covered in this Report were selected through a three-stage materiality process of identification, prioritisation and consultation.

In the context of sustainability, materiality refers to those issues and activities that our internal and external stakeholders consider the most significant and relevant for our industry, the company and our operations.

#### Minera Escondida

Latitude: 24° 15' 30" South  
Longitude: 69° 4' 15" West  
Altitude: 3,100 metres above sea level.

#### Minera Escondida Antofagasta

Avda. de la Minería 501 (Casilla 690)  
Antofagasta, Chile.  
Telephone: (56-55) 203 000  
Fax: (56-55) 247 545

#### BHP Billiton Pampa Norte

Esmeralda 340, Piso 4,  
Edificio Esmeralda  
Iquique, Región de Tarapacá, Chile.  
Telephone: (56 57) 738 500

#### Cerro Colorado

Latitude: 20° 3' 33" South  
Longitude: 69° 15' 49" West  
Altitude: 2,550 metres above sea level.

#### Spence

Latitude: 22° 48' 24" South  
Longitude: 69°16' 20" West  
Altitude: 1,710 metres above sea level.

#### BHP Billiton Cobre

Cerro El Plomo 6000, piso 18  
Las Condes, Santiago, Chile.  
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[www.bhpbilliton.com](http://www.bhpbilliton.com)

#### BHP Billiton Operations in Chile. 2014 Sustainability Report

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Printed in Chile. 2015

#### Cover picture

Clinoclase on olivenite  
Specimen belonging to Jean des Rivières

#### Contact – Let us know your views

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To obtain the Index with all the GRI indicators responded to and further information about the materiality process, please send a request to the e-mail indicated.



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