ANTOFAGASTA PLC

DEVELOPING MINING FOR A BETTER FUTURE

Annual Report and
Financial Statements 2021

/ *Contents*

OUR REPORTING SUITE

Sustainability Report
antofagasta.co.uk/sr20

TCFD Progress Report
antofagasta.co.uk/tcfd21

Climate Change Report
antofagasta.co.uk/ccr21

Social Management Report
antofagasta.co.uk/smr21

Developing mining for a better future

OUR VISION

To be an international mining company, focused on copper and its by-products, known for its operating efficiency, creation of sustainable value, high profitability and as a preferred partner in the global mining industry.

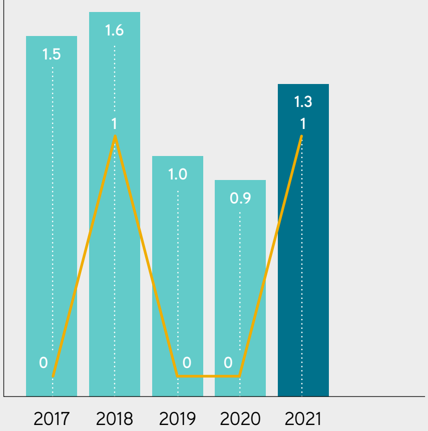
/ Performance highlights

An overview of performance and key highlights from 2021

Safety

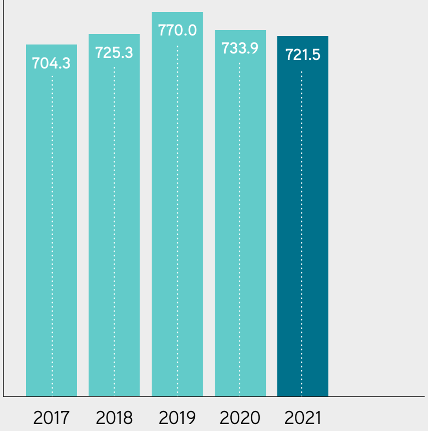
1 Fatalities

1.3 LTIFR[1]



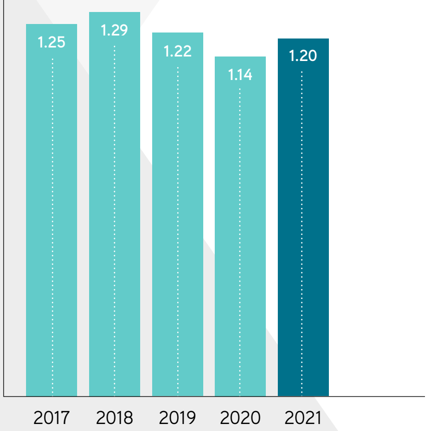
Copper production[2]

721.5k tonnes



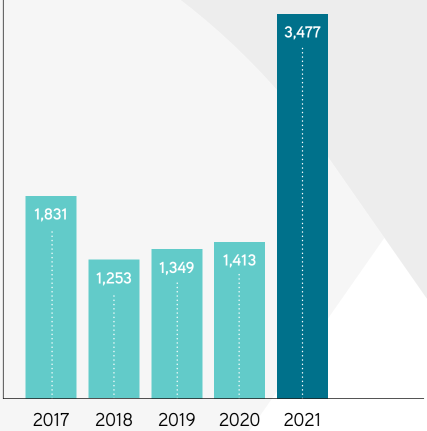
Net cash costs[3]

$1.20/lb



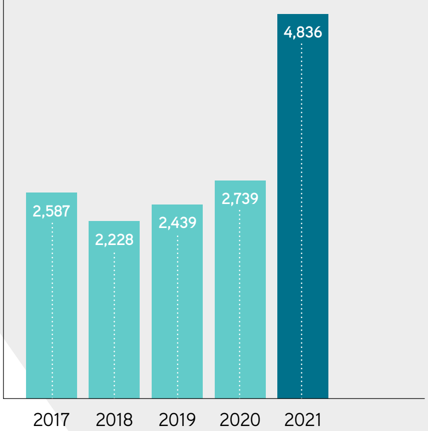
Profit before tax

$3,477m



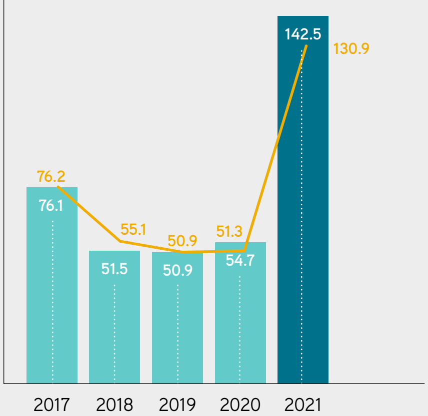
EBITDA[3]

$4,836m



Earnings per share[4]

$142.5¢/share



Underlying EPS from continuing operations, excluding exceptional items

EPS from continuing and discontinued operations, including exceptional items

1. The Lost Time Injury Frequency Rate is the number of accidents with lost time per million hours worked.
2. 100% of production at Los Pelambres, Centinela and Antucoya, and 50% of Zaldívar's production.
3. Non-IFRS measure, refer to the alternative performance measures section on page 229.
4. Underlying EPS from continuing operations, excluding exceptional items, and EPS from continuing and discontinued operation, including exceptional items. Reconciliation shown on page 199.

SAFETY
Very sadly we had a fatality at Los Pelambres.

COPPER PRODUCTION
Copper production was 721,500 tonnes, reflecting lower grades and the impact of the drought at Los Pelambres, partially offset by higher grades at Centinela Concentrates.

NET CASH COSTS
Net cash costs were $1.20/lb, 5.3% higher than last year due to the stronger Chilean peso, higher energy and diesel prices, and lower production, partially offset by an increase in by-product credits.

EBITDA
EBITDA increased by 76.6% to $4.8 billion with an EBITDA margin of 64.7%, reflecting a strong copper price, controlled costs and solid production.

DIVIDEND PER SHARE
Total dividend of 142.5 cents per share, equivalent to a payout ratio of 100%.

EARNINGS PER SHARE
Underlying EPS of 142.5 cents per share, an increase of 161% compared to 2020 with higher EBITDA partly offset by higher non-controlling interests and tax.

EPS including discontinued operations and exceptional items was 130.9 cents per share, up 155%.

GROWTH PROJECTS
Los Pelambres Expansion and Esperanza Sur pit growth projects advanced during the year. Zaldívar Chloride Leach project completed in January 2022.

/ At a glance

We are a Chile-based copper mining group

Key Concentrate | Cathodes | Rail | Road

	PRODUCTS	REVENUE	EBITDA[1,2]
LOS PELAMBRES 60% owned 13-year mine life Produces copper concentrates containing gold and silver and a separate molybdenum concentrate	Cu, Mo, Au, Ag (concentrate)	$3,621m 48.5%	$2,526m 52.2%
CENTINELA 70% owned 42-year mine life Produces copper cathodes and copper concentrates containing gold and silver and a separate molybdenum concentrate	Cu, Mo, Au, Ag (concentrate) Cu (cathodes)	$2,981m 39.9%	$1,919m 39.7%
ANTUCOYA 70% owned 22-year mine life Produces copper cathodes	Cu (cathodes)	$698m 9.3%	$337m 7.0%
ZALDÍVAR 50% owned (and operated) 14-year mine life Produces copper cathodes	Cu (cathodes)		$173m 3.6%
TRANSPORT Cargo transport system in the Antofagasta Region of Chile 900 km rail network	Road, Rail	$170m 2.3%	$68m 1.4%
GROUP		$7,470m	$4,836m

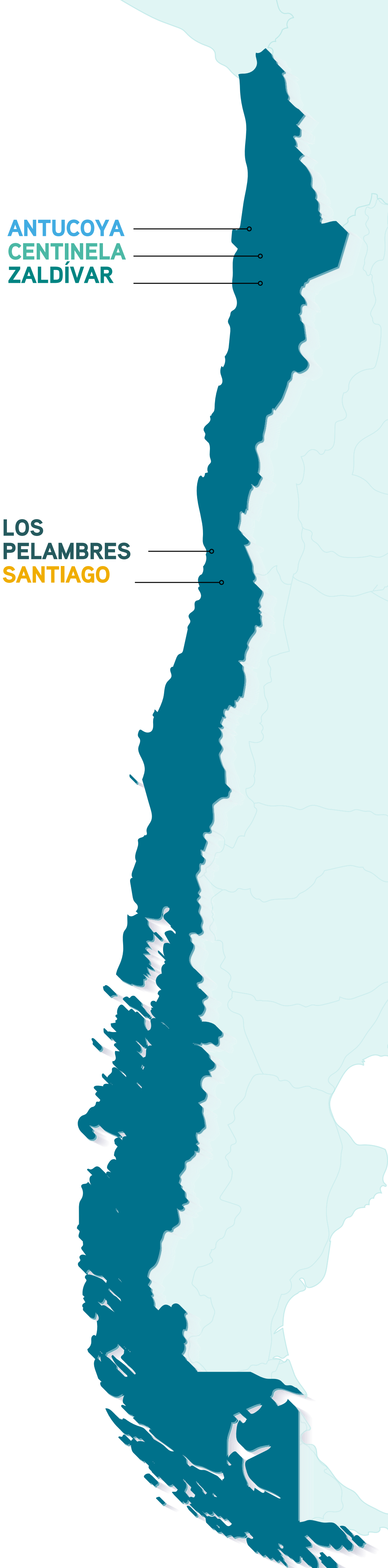
1. Non-IFRS measure, refer to the alternative performance measure section on page 229.
2. Totals to more than 100% as excludes $187 million of corporate costs, exploration and evaluation, and other non-operating income and expenses. See note 6 to the financial statements.

Mining is our core business, representing over 97% of our revenue and EBITDA.

We operate four copper mines in Chile, two of which produce significant volumes of molybdenum and gold as by-products. We also have a portfolio of growth opportunities located mainly in Chile.

In addition to mining, our Transport division provides rail and road cargo services in northern Chile predominantly to mining customers, which include some of our own operations.

COPPER PRODUCTION (TONNES) NET CASH COSTS[1]		
2021	**2022 FORECAST**	**GROWTH POTENTIAL**
324,700 $0.89/lb	290-300,000 $1.25/lb	**LOS PELAMBRES EXPANSION** Phase 1 will increase annual production by 60,000 tonnes. Completion in H2 2022 Phase 2 will increase the capacity of the desalination plant and extend the mine life by 15 years
274,200 $1.13/lb	245-255,000 $1.60/lb	**CENTINELA EXPANSION** Opening Esperanza Sur pit in 2022, which will increase annual production by 10-15,000 tonnes Evaluating building a second concentrator. Decision in late 2022
78,600 $2.04/lb	75-80,000 $2.30/lb	**MINE LIFE EXTENSION** Potential to process satellite ore bodies
44,000 $2.39/lb	50-55,000 $2.20/lb	**MINE LIFE EXTENSION** Assessing viability of leaching the primary sulphide ore body Chloride Leach project completed in January 2022 increasing annual production by 10-15,000 tonnes
6.7m tonnes		
721,500 $1.20/lb	660-690,000 $1.55/lb	



/ Letter from the Chairman

Strong results in challenging times

Jean-Paul Luksic
Chairman

Dear shareholders

In a year when the effects of COVID-19 and climate change continued to be felt powerfully across the globe, when the political landscape was complex and uncertain, and when setbacks ranging from energy shortages in the northern hemisphere to supply-chain bottlenecks all over the world rattled the global economy, Antofagasta's resilience was not only tested – it was demonstrated.

That resilience, as this Annual Report details, is a testament to the creativity and commitment of our employees and contractors. So before sharing the progress we've made this year, I'd like to acknowledge – and thank – everyone at Antofagasta who made it possible.

Two of 2021's defining global issues: COVID-19 and climate change

The pandemic's many operational and economic headwinds continued in 2021, yet their expected effects on copper prices were countered by the tailwinds of high demand and constrained supply. In May, copper reached an all-time-high of \$4.77/lb, and closed the year at \$4.40/lb.

As the world grappled with the ongoing effects of the pandemic, it also contended with the accelerating – and increasingly evident – effects of climate change. In November, that focus on climate change was brought into sharp focus with COP26, the UN climate conference in Glasgow. And the year ended with 88% of global emissions and 90% of global GDP covered by net-zero targets.

Copper has a vital role to play in helping countries, cities, and companies realise those targets. On average, an electric vehicle uses four times more copper than a conventionally powered car. The charging ports for those electric vehicles, the wiring and components for greener energy grids, wind power plants, solar panels – all are copper-intensive. One estimate concludes that limiting global warming to 2°C above preindustrial levels will require 60% more copper – an additional 19 million tonnes – by 2030 alone.

Developing Mining for a Better Future

The copper we produce will be a pivotal part of the transition to a low-carbon world. No less important than the metal itself is how we produce it. We view our responsibility as operating sustainably, reliably and with respect for communities and the environment – to live up to our purpose, both in our products and practices, of 'Developing Mining for a Better Future'.

This is a crucial issue not only for our business, but also, I believe, for our industry as a whole. We have a tremendous responsibility – and opportunity – to provide the materials for the green transition our societies are demanding. Yet clearly more needs to be done to earn society's trust and garner its support for the investments and innovations such a historic transition will require. It's a relationship that is being built over time and with actions, not words, which is why I'd like to highlight a few of the steps we have taken – and are committed to continue taking – that demonstrate our sincerity to 'Developing Mining for a Better Future'.

Attaining the Copper Mark

Inspired by the UN Sustainable Development Goals, the Copper Mark initiative ensures responsible production practices across the industry. Thirteen mines worldwide hold the Copper Mark distinction – two of which are Antofagasta's. Centinela and Zaldívar both obtained the Copper Mark this year. Our other two operations, Los Pelambres and Antucoya, have begun their assurance processes to obtain the Copper Mark in 2022.

Reducing emissions and setting a net-zero target

In 2018, Antofagasta set emissions reductions targets for 2022. This year we achieved – and surpassed – those targets and set two new ones: an updated emissions reduction target for 2025, and a carbon-neutral target for 2050, in line with Chile's own national target.

This year we also progressed towards the goal of all our mines operating on fully renewable power by the end of 2022, and also published our first Climate Change Report as well as reporting against the TCFD[1] recommendations in this Annual Report. Our Transport division is already taking steps to become more eco-friendly, and will start to explore the use of hydrogen powered locomotives soon.

Reducing our use of continental water

Our mining operations are in water-stressed areas, and we know that care for water is vital for the environment, for local communities, and for our operations. This is particularly true as Chile continues to endure a punishing drought that has lasted more than a decade. In 2019, we began building a desalination plant and water pipeline at Los Pelambres. And, provided environmental permitting advances as scheduled, we expect that by 2025, raw or desalinated sea water and recirculated water will account for 90% of our total usage at our operations.

Whether it is reducing continental water usage or lowering emissions, these are issues for which we have a group-level strategy, board-level focus, and company-wide initiatives to spur action. And we will continue to be transparent as we work to deliver meaningful, measurable progress.

An update on Chile's economic, social, and political environment

Chile's handling of the pandemic has been widely applauded. The country ended the year with more than 80% of the population having had two doses of the vaccine and more than 40% having received a booster. Yet as the impacts of COVID-19 continued, so did the efforts of our Community COVID Fund, to which we have now contributed more than \$12 million since the pandemic began, to support local causes.

[1] Task Force on Climate-related Financial Disclosures

Unfortunately, the political polarisation flaring up in many countries could also be seen in Chile. Sharp differences of opinion about what the country's priorities should be, and what changes are most urgently required, manifested in political candidates as well as proposed legislation.

In the face of a polarised political environment, the broad-based government support provided to workers and citizens was possible because of the financial discipline that has characterised Chile over many years. For example, the massive liquidity injection as part of the response to the pandemic, was one of the largest in the world as a proportion of GDP. However, this has triggered significant temporary local inflationary pressures that compounded those associated with the global economic recovery.

Focusing on our industry, a bill was approved by the lower house of Congress in mid-2021 that proposed changing mining companies' royalties to a revenue-based progressive marginal rate linked to the copper price. Early in 2022 a committee of the Senate published its proposal for the royalty, less onerous than that proposed by the lower house, and this is now being debated in the Senate. With the establishment of a new government in March 2022, we expect the bill to then progress through the legislative process and to come into law around the middle of the year.

Mining represents over half of Chile's exports and 10% of its GDP – while 90% of revenue generated by the industry remains in the Chilean economy – and as one of Chile's largest mining companies, we continue to welcome opportunities to constructively explore how we can support the competitiveness of Chile's mining industry and foster the country's economic growth and development.

This year, an elected Constitutional Convention also began the process of drafting a new constitution. The text, expected to be finalised by July 2022, at the latest, will then be subject to a national referendum. Our hope is that a framework emerges which represents and creates opportunities for all Chileans – a 'house for everyone,' as a popular slogan goes.

Antofagasta's 2021 performance

Redoubling our focus on employee and contractor safety

Sadly, after 33 months without a fatality, a contractor suffered a fatal accident at Los Pelambres in July. Our condolences go to his family and everyone affected by this tragic loss. Antofagasta launched an investigation to prevent this type of accident happening again.

The findings from that investigation were shared with the Board, and the changes and actions inspired by that review are being directly overseen by senior management. We cannot undo what happened, but we can – and we will – learn from the mistakes made and become a stronger, safer company as a result.

Challenging times

While Antofagasta met its net cash costs guidance of $1.25/lb, the ongoing drought in Chile caused us to reduce full-year copper production guidance during the year to 710,000-740,000 tonnes. However, this reduction was offset by the strong performance of the copper price, which helped increase our annual revenue to $7.5 billion and our EBITDA to $4.8 billion.

Looking ahead, we have strong embedded growth options within our portfolio, including very sizeable mineral resources, and the levers to unlock that growth that will allow us to produce sustainably, long into the future.

Governance update

Following the retirement of Ollie Oliveira from the Board in July, Tony Jensen assumed the role of Senior Independent Director and Audit and Risk Committee Chair, having served on the Committee as a member for more than 12 months. I would like to take this opportunity to thank Ollie for his sage and considered counsel over his ten years on the Board.

Michael Anglin assumed the role of Projects Committee Chair and joined the Sustainability and Stakeholder Management Committee in place of Tony who rotated off that Committee in line with the Company's policy.

We were delighted to appoint Eugenia Parot to the Board in April and welcome her to the Projects and Sustainability and Stakeholder Management Committees in August. Eugenia's technical background and considerable leadership experience have already been, and will continue to be, of great benefit.

Our people – diversity & inclusion and talent

The Board has met the Parker Review target for ethnic diversity, and with Eugenia Parot's appointment, 30% of Antofagasta's Board is now comprised of women. The Board's Nomination and Governance Committee continues to work with an independent external search consultancy to identify a diverse pool of candidates for the future, although there are currently no plans to appoint a new director.

This focus on diversity in the boardroom is mirrored across the Company. Diversity, as we've written before, makes us a more creative, responsive company. In 2018, Antofagasta set a goal of doubling the number of women in its workforce by 2022 – a target achieved in 2021.

Day-to-day we seek to create a better and more innovative work environment and we continue to invest in and support initiatives – from our Young Graduates Programme to our Apprentices Programme – aimed at building a diverse pipeline of talent at all levels of the company.

Dividend

For the second year running, the Board decided to pay a dividend equal to the year's underlying net earnings to reflect the Company's continued strong performance.

Outlook for 2022

As vaccines and booster shots become more widely distributed and available globally, we are seeing moderate economic recovery together with stability. Yet inflation poses a risk in many major economies, as do shortages of labour and critical components. If last year is any indication, periods of recovery will be strong, but uneven.

Meanwhile, demand for copper continues to climb, with a significant share of that growth coming from regions other than China. Having made ambitious commitments to the green economy in recent years, governments and companies are set to make sizeable investments to meet them. The supply of copper is currently constrained by declining resource quality as well as very long lead times – and high scrutiny – for new projects. In Chile, we have vast sources of renewable energy, and at Antofagasta we have a large mineral resources base which positions us well to meet that demand for copper at the same time as we reduce our carbon footprint.

But 2021 once again reminded us how swiftly and starkly change can arrive, and how varied the catalysts of that change can be – from political decisions to virus mutations, energy shortages to inflation. We continue to focus on managing costs and maintaining a strong balance sheet. We know we must continue to work to keep our people safe and healthy, find ways to strengthen our culture, and drive innovation across the Company.

Chile is in the process of writing a new constitution that I hope will help unify the country's people and return it to the development trajectory that characterised it in the past. Mining will be fundamental in this process and will help the country overcome the current weakness forecast in its growth.

Antofagasta has navigated some turbulent times in its 133-year history and last year certainly qualifies as among the choppiest. The resilience our people showed in the face of such difficulty calls to mind a saying: 'On the other side of the storm is the strength of having gone through it.' That might serve not only as a lesson from the past year, but also a motto for the upcoming one.

Jean-Paul Luksic
Chairman

/ Letter from the Chief Executive Officer

Responding well in demanding circumstances

Iván Arriagada
Chief Executive Officer

Dear shareholders

I am pleased to share with you this report on our performance and results for 2021. Given the ongoing COVID-19 pandemic, it was, like 2020, a challenging year but, at Antofagasta, we can be proud of our achievements.

Despite the challenges, our mines and plants performed as planned. This, in turn, reflected what was certainly one of the highlights of the year: the way our team has responded to the circumstances.

Thanks to their commitment and motivation, we have been able to continue to operate, contribute to the national economy and support local communities socially and economically. And we have done this while protecting the safety and health of our employees, contractors and communities.

We have also learned from the pandemic and have become more flexible in the way we work to become an organisation fit for the future. Our new hybrid way of working – combining in-person and remote formats – offers a better balance between personal needs and the demands of work and makes us more productive as a team. This flexibility in how we work is something we will be seeking to consolidate in 2022.

Safety

After almost three years of being fatality free, I am very saddened to have to report the fatality of one of our contractor's employees at Los Pelambres in July. Our condolences go to his family, friends and colleagues. We have completed a rigorous investigation of the accident's causes and the lessons learned have been shared with all our operations to ensure this does not happen again.

It goes without saying that safety continues to be our top priority and, in 2021, the general trend was positive. We achieved a consistent reduction in high-potential incidents, which serve as an important leading indicator to where more serious accidents might occur.

The rate of lost-time incidents has increased slightly, primarily related to our growth projects where incidents tend to be of low severity and with fewer consequences, but more frequent than at our operations, which continued to perform well.

Our strong safety and health culture was also a key factor in our resilience to the COVID-19 pandemic, facilitating the incorporation of sanitary protocols into our daily work. In line with this approach, we made vaccinations available at our sites and, thanks to this and our strong health and safety culture, 97% of our workforce had been immunised by the end of the year.

Climate change

At Antofagasta, we see climate change as one of the greatest challenges facing the world today and are committed to being part of the solution. As a copper producer, we have a clear role to play in supplying a metal that is a critical input for so many low-carbon technologies – from electromobility to the generation of renewable energy – where we expect demand to continue to increase.

It is also paramount that we decarbonise our own operations and, in 2021, we took a major step in this direction by deploying our new Climate Change Strategy, which envisages broad-ranging measures of both adaptation and mitigation. Following the achievement of our previous emissions reduction target, this year we announced new, more ambitious targets, carbon neutrality by 2050 – in line with Chile's national commitment – and the shorter-term target of a 30% reduction in emissions by 2025.

This is supported by the transition of our operations to electricity generated exclusively from renewable sources, which we will complete in 2022. At the same time, we are working to reduce and, ultimately, eliminate the use of diesel at our mining operations through initiatives that include an Electromobility Plan and a portfolio of energy efficiency initiatives.

In 2019, we committed to implementing the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) and, having published a TCFD Progress Report in September, we are reporting against the recommendations in this Annual Report. The TCFD framework has already proved useful in helping us integrate risk management for climate change into our planning cycles but, above all, it serves as a transparent and credible way of informing stakeholders about the expected impact of different climate scenarios on our business.

Water management

One of the clear impacts of climate change is the 12-year drought in central Chile, including the Choapa Valley where our Los Pelambres operation is located. Several years ago, we took the decision to build a sea water desalination plant for Los Pelambres and the first stage of this project, with an output of 400 litres per second, is due to start operation in the second half of 2022. We are also planning to double its capacity as soon as the necessary permitting is obtained, and we expect the plant will be operating at its expanded capacity in 2025.

At Los Pelambres, water is an integral part of our relations with the community. In line with this, we are part of the Choapa Valley's water management system. The priority, of course, is human consumption, which is always assured, followed by agricultural needs. In the case of agriculture, we are increasing local resilience by investing in measures to improve the sector's water use efficiency and minimise losses, and on completion of the desalination plant's expansion, this will release additional water for use in the region.

Our Centinela and Antucoya operations in the north of Chile already almost only use sea water. As a result, we expect raw or desalinated sea water and reused or recycled water to account for 90% of the consumption of all our mining operations by 2025.

Operating results

In 2021, we produced 721,500 tonnes of copper, down from 733,900 tonnes in 2020. The drop is explained by the planned lower grades at Centinela and restrictions on water availability at Los Pelambres due to the drought. As I indicated above, our mines and

Iván Arriagada
Chief Executive Officer

Thanks to our team's commitment and motivation, we have been able to continue to operate, contribute to the national economy and support local communities socially and economically.

plants performed at their planned capacity, despite the difficulties of the COVID-19 pandemic, and we are very pleased with the level of stability and reliability we consistently achieved across our operations.

Total transport volume at our Transport division was up by 4% in 2021, thanks partly to a new contract with a mining client. We see a significant opportunity in the train transport business in the context of climate change to operate using alternative fuels and offering mining clients an efficient, low-carbon bulk cargo service.

At $1.20/lb, our net cash costs in 2021 were below guidance. The increase from $1.14/lb in 2020 is explained by the fall in production and the higher cost of inputs, such as oil, steel and acid, in the context of the global economic recovery and increased commodity prices. Set against this, the copper price also rose, as did the prices of the gold and molybdenum which made an important contribution to reducing our net cash costs.

Looking ahead to 2022, we see the copper market as maintaining its strong fundamentals. Supply is tight, largely because there have been very few major discoveries over the last ten years and grades at existing mines are declining while, at the same time, demand is strong. As well as copper's use in low-carbon technologies, this reflects factors that include the economic development in emerging economies and urbanisation.

Growth outlook

Antofagasta is a reliable and responsible copper producer, with a large resource base. At our main sites – Los Pelambres and Centinela – we have a mineral inventory that offers options for growth that we can sequence over time as and when the market outlook is right. That is a very important competitive advantage.

In 2021, capital expenditure reached $1.8 billion and we expect to invest a similar amount of $1.7-1.9 billion in 2022. A review of the final cost of the Los Pelambres Expansion project is currently underway considering the most recent wave of COVID-19 and its impact. And as well as this investment in Los Pelambres, we are looking at extending its mine life beyond 2035. If we also decide by the end of 2022 to build a second concentrator at Centinela, our copper production could increase to approximately 900,000 tonnes by 2026.

Supporting these options, we are looking to innovation as a key enabler of our strategy. The initiatives we implemented in 2021, or are in the process of implementing, include Centinela's new remote operating centre in the city of Antofagasta and its fleet of autonomous trucks. Similarly, all our sites have strong data analytics teams to identify opportunities for efficiency gains and continuous improvement.

Another potentially important innovation is our Cuprochlor®-T technology, a chloride leaching process for treating lower grade primary sulphides. Until now, treatment in a concentrator or, occasionally, bacterial leaching have been the only options for a mineral of this type, and our process looks as if it could be an important breakthrough. Following the completion of industrial-scale tests in 2021, the process will potentially unlock value from previously uneconomic mineral resources at our existing operations.

In March 2022 we reached an agreement in principle with Barrick Gold and the Governments of Pakistan and Baluchistan on a framework that provides for the reconstitution of the Reko Diq project, and a pathway for the Company to exit the project. If definitive agreements are executed and the conditions to closing are satisfied a consortium comprising various Pakistani state-owned enterprises will acquire an interest in the project for consideration of approximately $900 million to jointly develop the project with Barrick and we would exit. If all the conditions are satisfied during 2022, we would expect to receive the proceeds in 2023.

Our priorities in 2022

We expect copper production in 2022 to reach 660-690,000 tonnes, affected by lower grades at Centinela and, in the first half of the year, restrictions on water availability at Los Pelambres. This latter constraint will, however, disappear once the rains return in the winter months and the operation's desalination plant comes on-line.

On costs, net cash costs are expected to be $1.55/lb reflecting the impact of temporary water restrictions on throughput at Los Pelambres, increased input costs, especially sulphuric acid at our cathode operations, and lower copper production at our two lowest cost operations: Los Pelambres due to temporary water limitations and Centinela Concentrates due to lower grades which are then projected to increase in 2023. By-product credits are also expected to decrease as gold and molybdenum production falls. During the year innovations, such as remote operation and automation, will continue to produce efficiency gains, helping to offset some of the higher costs of inputs and inflation and lower production.

A key event in 2022 will be the completion of the switch of our mining operations to the use of electricity generated solely from renewable sources. This happened at Antucoya and Centinela early-2022 and Los Pelambres will switch later in the year.

The implementation of our Climate Change Strategy will remain a top priority. Our plans include the deployment of our new internal carbon-pricing methodology and a new sustainable procurement strategy, both at the beginning of the year, as well as several longer-term initiatives to test the use of hydrogen as an alternative to diesel in mine haulage trucks.

Through all these initiatives, we will be unlocking our embedded growth and pursuing our purpose of developing mining for a better future and, in this way, creating value for our shareholders, other stakeholders and wider society.

Iván Arriagada
Chief Executive Officer

/ The future of Copper

Copper in a greener world

The near- to medium-term outlook for the copper market will continue to be overshadowed by the COVID-19 pandemic. The most significant impact on the market is likely to be ongoing supply chain disruption, as has been the case over the past couple of years. Given copper's key role within the energy transition, and a realisation that in the medium to long term there is a growing supply gap and limited supply elasticity, the market is expected to move into deficit in the next few years.

In the shorter term, the emergence of new COVID-19 variants could derail continued strong global growth in GDP, which is expected to exceed 4% during 2022. This will feed through to demand which, together with a modest supply response, will keep the metal market finely balanced in 2022. As new supply from projects currently under construction comes to the market, this will push the metal market into a surplus in 2023.

Copper in a greener world

Demand growth will be shaped by copper's role in a greener, more sustainable world. Copper is central to the delivery of the energy transition and is a critical element in the generation, transmission, storage and consumption of low carbon electricity. According to the UN Environmental Programme (UNEP), the International Energy Agency (IEA) and others, the policy drivers currently in place will deliver a decarbonisation pathway that limits the global average temperature rise to just under 3˚C, well short of the "preferably 1.5˚C" target set out in the Paris Agreement.

Our view remains that the copper market is in long-term structural deficit. It is anticipated that a shortfall will emerge as global mine supply begins to contract and growth in demand, shaped by decarbonisation, builds on the longer-established trends of urbanisation and industrialisation. This expected deficit, with the resulting drawdown of accumulated inventories, is positive for the market outlook. Some closed mines may reopen and incremental expansions and mine life extensions may be undertaken, but producers remain cautious about committing to large greenfield projects due to geographic, ore quality, technical, environmental, social or other challenges.

Without additional and yet to be committed investment in mine production, the effect of grade decline and depletions will mean a growing supply gap from mid-decade onwards. This is estimated by some forecasters at approximately five million tonnes by the end of the decade – the equivalent of 10 to 20 large new mines.

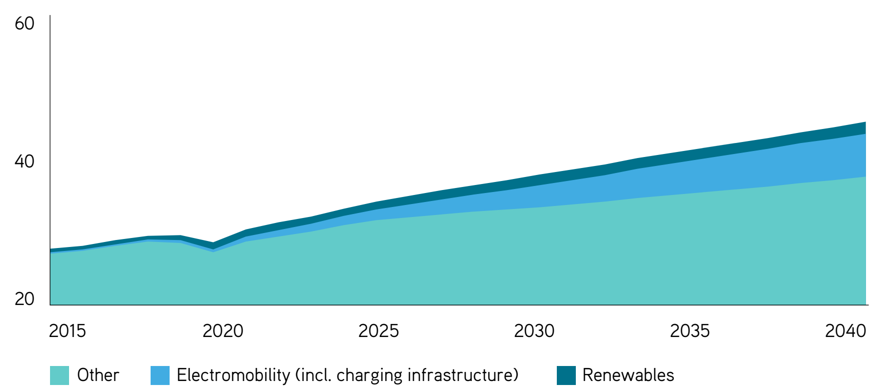
Increasing investment in the collection, sorting and use of scrap will be needed to help fill the supply gap. However, there are limitations to the speed at which scrap can be delivered in large volumes back into the product cycle. The mismatch between the requirement for new supply and the need to meet the challenges of a decarbonised world will lead to turbulence in the copper sector over the next ten years.

If global leaders are to deliver on their COP26 pledge to maintain a 1.5˚C world, this will support even higher copper demand. However, in a market that is consistently short of committed mine supply versus long-term requirements, the prospect of an accelerated transition presents a challenge for the mining industry. Additionally, climate change pledges that should encourage higher consumption could hamper supply, with local environmental and social concerns about the impact of mining heightened at the same time as the industry seeks to deliver on global solutions for climate change. As an industry, copper miners are part of the solution for the energy transition and seek to minimise their direct impact on the environment.

Despite the clear requirement for more copper to meet the world's climate change targets, it could become more challenging to produce refined metal as restrictions on industrial activity tighten. The more environmental and other requirements are needed to meet COP26 pledges, the harder it will be for projects to reach the required economic and climate change criteria. However, the emissions profile of copper is attractive when benchmarked against other non-ferrous metals, including its closest substitute, aluminium.

Renewable power generation sources and cleaner transportation vehicles are considerably more copper intensive compared to their conventional counterparts. An offshore wind power plant can consume around five times more copper compared to a coal-based plant.

Global Copper Consumption[1] (mt)



Source: Wood Mackenzie

1. Including direct use of scrap

Copper is used in cables within the turbine towers, in array cabling (particularly deep water offshore) and in export cables to bring power back to shore. Similarly, a passenger battery electric vehicle (BEV) is nearly four times more copper intensive than an internal combustion engine car. A large part of the copper within a passenger BEV is used within the battery in the form of copper foil. This is predominantly from high grade scrap. Significant quantities will also be required to strengthen the grid infrastructure to handle variable sources of energy and support EV charging requirements. The additional requirement for grid transmission and distribution has the potential to be significant, possibly even matching the rise due to an expansion of renewables and the EV fleet.

The increase in demand for copper in electromobility and renewables uses is expected to account for nearly 40% of total growth over the next 20 years.

Wood Mackenzie's Accelerated Energy Transition scenario delivers a decarbonisation pathway consistent with limiting the average global temperature rise to 2°C by 2050 (AET 2.0 scenario). It shows that the demand for copper in green end-uses – electric vehicles and renewable power generation (wind and solar) – will increase by a further two million tonnes, or more by the end of the decade if a more challenging decarbonisation pathway is assumed.

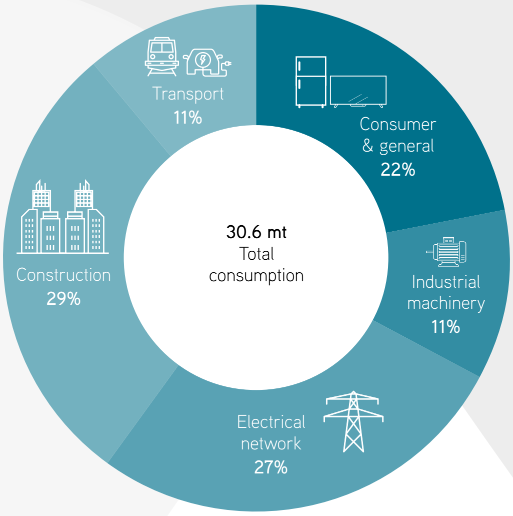
The three Rs of waste management – reduce, reuse, recycle – apply to copper, as to other materials. Thrifting has been a feature for many years and will continue within green as well as traditional end-uses.

As for recycling, copper can be infinitely recycled without losing any of its chemical or physical properties. This becomes particularly marked at higher copper prices. Today some 15-20% of refined copper production is recycled and this proportion is expected to increase in response to greater environmental and regulatory pressures, facilitated by technical and other improvements.

Some of the leading copper mining countries, such as Chile, Zambia and the Democratic Republic of the Congo (DRC), are already heavily reliant on renewable energy sources. However, beyond power generation, the reduction of the industry's use of hydrocarbons as a fuel is arguably more challenging, particularly in downstream smelting and refining. Any meaningful reduction in carbon emissions will require significant investment in technology yet to be used or proven, specifically in the use of green hydrogen and/or carbon capture.

The COP26 pact emphasises the importance of long-term climate finance and improving the flow of money. Several developing countries' targets, including copper-producing nations, are conditional on receiving timely funds. With copper viewed by investors as a key raw material to enable the energy transition, this should be a positive for project development. However, despite the many challenges in delivering supply growth, access to capital should not be a major constraint, although the investment requirement will be considerable. This represents an unprecedented challenge and opportunity for the copper industry to deliver an accelerated energy transition.

Total copper consumption[1] by industry sector 2021



Source: Wood Mackenzie, Copper Outlook December 2021

1. Including direct use scrap

/ Business model

Delivering value for our stakeholders through the mining lifecycle

Mining is a long-term business and timescales can run into decades. The period from initial exploration to the start of production can exceed ten years and, depending on the nature of the project and the market conditions, it may take more than five years of operation to recoup the initial investment.

For geological reasons, copper deposits frequently have higher-grade material nearer the surface and therefore grade declines with depth. This means that unless action is taken, such as an expansion, copper production declines as a mine gets older. Also, as an open pit gets deeper, haulage distances and rock hardness increase, and this, combined with the declining grade, leads to higher unit costs. Large long-life mines will have several expansions during their lives. The current expansion at our 23-year-old Los Pelambres mine is its fourth.

INPUTS

- Energy
- Water
- Labour
- Service contracts
- Fuel and lubricants
- Explosives
- Grinding balls and mill liners
- Sulphuric acid

Our mining operations depend on a range of key inputs such as energy, water, labour, sulphuric acid and fuel. The management of these inputs has a significant impact on operating costs and the sustainability of mining operations, and ensuring the long-term supply of key inputs is a vital part of the business.

As part of our commitment to mitigating and adapting to climate change, all of our mining operations will use 100% renewable energy by the end of 2022 and by 2025 more than 90% of the water used by the Mining division will be either sea, reused or recycled water.

Find out more
P82-85

EXPLORATION

- Chile
- International

To ensure the long-term sustainability of our mining business, we must focus on at least maintaining our mineral resource base.

We undertake exploration activities in Chile and abroad, with particular focus outside Chile on the Americas. Our international exploration programmes are generally carried out in partnership with other companies, in order to benefit from their local knowledge and experience.

3-5 years

Find out more
P81

EVALUATION

- Los Pelambres Expansion – Phase 2
- Centinela Second Concentrator
- Twin Metals Minnesota

Effective project evaluation and design maximise value at this stage of the mining cycle. Antofagasta's wealth of experience in both areas helps to make the best use of mineral deposits. We integrate sustainability criteria into the design process and project evaluation phase, developing innovative solutions for challenges such as water availability, long-term energy supply and community relations.

5 years

Find out more
P78-80

CONSTRUCTION

- Los Pelambres Expansion – Phase 1
- Esperanza Sur pit
- Zaldívar Chloride Leach project

Once a project has been approved by the Board, construction begins.

This stage requires significant input of capital and resources as well as effective project management and cost control to maximise the project's return on investment.

We have a co-operative approach to developing projects. Typically, after the feasibility stage and before the construction phase, we seek a development partner to buy an interest in the project, generating an immediate cash return, diversifying risk and providing broader access to funding while we maintain operating control of the project.

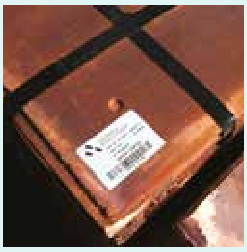
3-5 years

Find out more
P78-80

OUR PURPOSE

We believe in developing mining for a better future. As custodians of natural resources, we have a responsibility not only to manage these resources efficiently and responsibly, but also to harness copper's potential to contribute to the development of a greener and more sustainable world.

CORE OPERATIONS



EXTRACTION

- Los Pelambres
- Centinela
- Antucoya
- Zaldívar

Antofagasta's four operations in Chile are Los Pelambres, Centinela, Antucoya and Zaldívar.

The world-class Los Pelambres and Centinela mining districts have sustainable long-life copper mining operations, with large mineral resources, and produce significant volumes of gold, molybdenum and silver as by-products. All our mines are open pit operations.

Safety and health are key elements of operating efficiency and remain a top priority for the Board and management team.

20+ years

Find out more
P68-75

PROCESSING

Antofagasta mines both copper sulphide and copper oxide ores, which require different processing routes:

COPPER SULPHIDE OPERATIONS

Los Pelambres
Centinela Concentrates

Mined sulphide ore is milled to reduce its size before passing to flotation cells where it is upgraded to a concentrate containing 25–35% copper. This concentrate is then shipped to a smelter operated by a third party and converted to copper metal.

COPPER OXIDE OPERATIONS

Centinela Cathodes
Antucoya
Zaldívar

Mined oxide ore, sometimes combined with leachable sulphide ore, is crushed, piled onto heaps and leached with sulphuric acid, producing a copper solution.

This solution is then put through a solvent extraction and electrowinning ("SX-EW") plant to produce nearly pure copper cathodes, which are sold to fabricators around the world.

Find out more
P68-75

MARKETING

The marketing team builds long-term relationships with the smelters and fabricators who purchase our products, with approximately 60% of output by value going to Asian markets.

As well as copper, Los Pelambres and Centinela produce significant volumes of gold, molybdenum and silver as by-products. Gold and silver are sold for industrial and electronic applications and for jewellery-making. Molybdenum is used to produce steel alloys.

Most copper and molybdenum sales are made under annual contracts or longer-term framework agreements. Sales volumes are agreed each year, which guarantees offtake.

Find out more
P88-89

MINE CLOSURE

During the operation of a mine, its impact on the environment and the neighbouring communities is carefully managed. At the end of its life, a mine must be closed and remediated according to the international standards and national regulations in force at the time.

A closure plan for each mine is maintained and updated throughout its life to ensure compliance with the latest regulations and provide for a sustainable closure.

Find out more
P59

OUTPUTS

- Copper
- Molybdenum
- Gold
- Silver

Our mining operations create significant economic and social value for a wide range of stakeholders. Local communities benefit from job creation and improved infrastructure, while the Chilean government and local municipalities receive tax payments and royalties.

There are also benefits to society in general, with the copper we produce being used across many sectors, from industrial to medical, and increasingly playing a vital role in the world's major challenges such as sustainable urban development, the availability of clean energy and electromobility and green technologies.

Our copper and by-products go on to be further processed for use in end markets, including property, power, electronics, transport and consumer products.

Find out more
P10-11

/ Strategic framework

Our strategic framework

We are committed to our Purpose of Developing Mining for a Better Future. This is what drives and motivates us.

Our Purpose is supported by our Strategy, Organisation and Culture through which we seek to fulfil our Vision. In turn, our Strategy has five pillars, People, Safety and Sustainability, Competitiveness, Growth and Innovation.

Our Vision is to be an international mining company, focused on copper and its by-products, known for its operating efficiency, creation of sustainable value, high profitability and as a preferred partner in the global mining industry.

STRATEGY

Our strategy is built around five pillars, each of which has defined long-term objectives with short- and medium-term goals. These pillars are:

- People
- Safety and Sustainability
- Competitiveness
- Growth
- Innovation

PEOPLE

People are the core of our business. We want our employees to feel recognised and to have the maximum opportunities for personal and professional growth.

We seek to generate a culture of diversity and inclusion in which our employees can achieve their full potential. We are committed to equality and believe that we can develop our business and make a significant contribution to Chile's development.

We work to improve opportunities for individuals' internal promotion fostered through initiatives such as technical and managerial training programmes. Our goal is to be the best employer in the mining industry.

To achieve this, we understand the importance of creating an environment of trust and collaboration that looks to the long term.

Find out more
P42-43

SAFETY AND SUSTAINABILITY

The safety and health of our employees is non-negotiable. We are committed to achieving zero fatalities at our operations and continuing to reduce the number and seriousness of accidents and occupational health issues.

We view sustainability as a source of value creation that is an integral part of our decision-making processes. This includes taking into account all socio-environmental factors throughout the different stages of the development through to the closure of a mining operation.

In line with this, we manage natural resources efficiently and are constantly seeking ways to reduce water consumption, find energy from cleaner sources and protect biodiversity, while always collaborating with local communities.

We are sensitive to the threats posed by climate change and are always seeking to improve our practices accordingly. Our aim is to maximise the utilisation of renewable energy sources and to reduce our greenhouse gas (GHG) emissions.

Find out more
P32-65

COMPETITIVENESS

Our key focus as regards competitiveness is to achieve productivity gains through cost control and streamlining our processes.

Our Operating Model seeks to reduce the variability of our production plans and includes an operating excellence area, a discipline that focuses on productivity issues. Our Cost and Competitiveness Programme (CCP) also produces significant savings.

Find out more
P86-87

GROWTH

We have a portfolio of growth projects that allows us to remain competitive and develop sustainable operations in the long term.

We continue to review our options for maximising returns and reducing the capital cost of projects, and are enhancing the capabilities of the project team to improve our project execution strategy, management and control.

Our focus is on the production of copper and by-products in the Americas (particularly Chile, Peru, the United States and Canada).

Find out more
P78-81

INNOVATION

We innovate as a means of improving social, environmental and economic conditions while, at the same time, delivering strong returns for our shareholders.

Innovation is key to improving productivity and efficiency and promoting growth. We are investing in innovation and developing opportunities, and encourage and reward employees and contractors who send us their ideas for improving our operations.

During the year we continued to implement our digital roadmap to facilitate and accelerate the adoption of information and analysis technologies, automation and robotics.

Find out more
P86-87

CULTURE

Our culture represents our shared values and the way we work. It is evident not only in our people but also in how we engage with local communities and our suppliers, partners and customers. We also understand the importance of diversity and inclusion as a driver of our competitive advantage.

The way we work and manage our risks is anchored in our shared values: Responsibility, Respect, Commitment to sustainability, Excellence in our daily performance, Forward-thinking and Innovation as a permanent practice, and the Board embraces its important role in setting the tone for the Group's culture and promoting our shared values.

ORGANISATION

The way we manage our activities is paramount in reaching our goals. Our structure is designed to deliver results and growth while also having the flexibility to adjust to challenges and opportunities as they arise.

This is achieved by stabilising and strengthening our production processes, improving collaboration between key areas, defining clear roles and responsibilities and seeking to reduce variability and deviation from our production plans.

/ Key Performance Indicators

Measuring our performance

We use Key Performance Indicators (KPIs) to assess performance in terms of meeting our strategic and operating objectives.

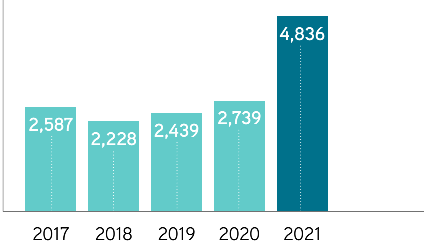
Performance is measured against the following financial, operating and sustainability KPIs:

Remuneration performance criteria.
P149

Financial KPIs

EBITDA[1]

$4,836m



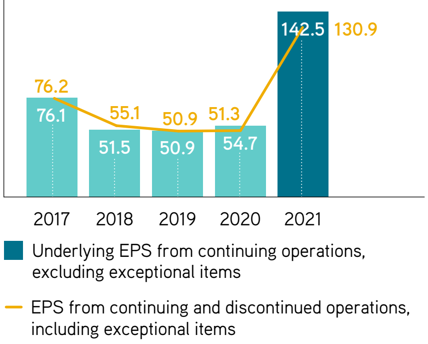
Why it is important
This is a measure of our underlying profitability.

Performance in 2021
EBITDA increased by 76.6% to $4.8 billion with an EBITDA margin of 64.7%, reflecting a strong copper price, controlled costs and solid production.

Find out more
P92

Earnings per share[2]

$142.5¢/share



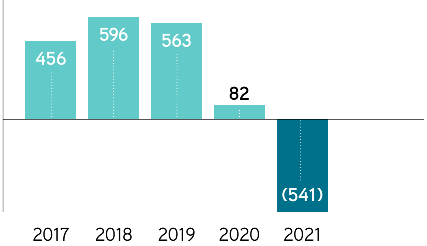
Why it is important
These are measures of the profit attributable to shareholders, before and after exceptional items.

Performance in 2021
Underlying earnings per share from continuing operations increased by 161% compared to 2020 with higher EBITDA partly offset by higher non-controlling interests and tax. Earnings per share including discontinued operations and exceptional items rose by 155%.

Find out more
P99

Net debt/(Net cash)[1]

($541m)



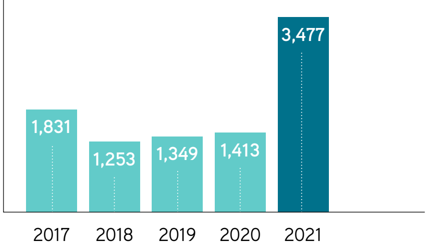
Why it is important
This measure reflects our financial liquidity.

Performance in 2021
Strong balance sheet with net cash of $541 million at the end of 2021, an improvement of $623 million from the net debt position at the end of 2020.

Find out more
P100

Profit before tax

$3,477m



Why it is important
This is a measure of our profitability before the deduction of taxes.

Performance in 2021
Profit before tax increased by 146% to $3.5 billion.

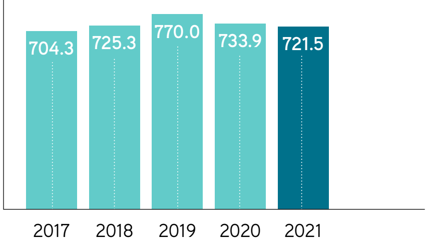
Find out more
P97

1. Non-IFRS measures, refer to the alternative performance measures section on page 229.
2. Underlying EPS from continuing operations, excluding exceptional items and EPS from continuing and discontinued operation, including exceptional items. A reconciliation can be found on page 199.
3. 100% of Los Pelambres, Centinela and Antucoya, and 50% of Zaldívar's production.
4. Mineral resources (including ore reserves) relating to the Group's subsidiaries on a 100% basis and Zaldívar on a 50% basis.
5. The Lost Time Injury Frequency Rate is the number of accidents with lost time during the year per million hours worked.
6. Mining division only.
7. Tonnes of CO_2 equivalent per tonne of copper produced.
8. The intensity of CO_2e emissions for the Mining division was overestimated at 3.19 tCO2e/tCu and has been updated.

Operating KPIs

Copper production[3]

721.5k tonnes



Why it is important

Copper is our main product and largest source of revenue.

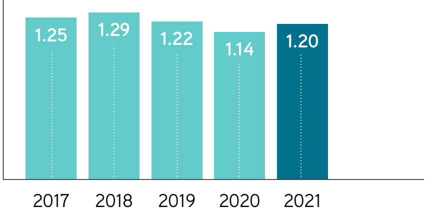
Performance in 2021

Copper production was 721,500 tonnes reflecting lower grades and the impact of the drought at Los Pelambres, partially offset by higher grades at Centinela Concentrates.

Find out more
P64

Net cash costs[1]

$1.20/lb



Why it is important

This is a key indicator of operating efficiency and profitability.

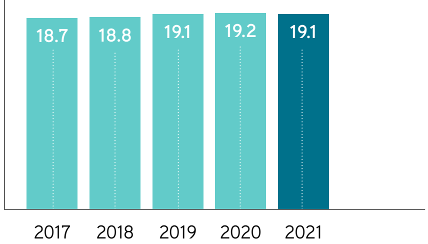
Performance in 2021

Net cash costs were $1.20/lb, 5.3% higher than last year due to the stronger Chilean peso, higher energy and diesel prices, and lower production, partially offset by an increase in by-product credits.

Find out more
P64

Mineral resources[4]

19.1bn tonnes



Why it is important

The Group's mineral resources base supports its strong organic growth pipeline.

Performance in 2021

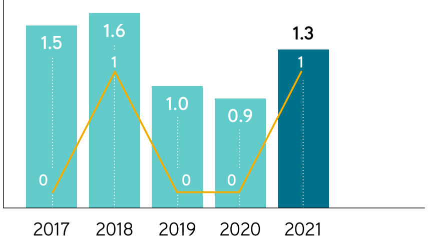
Mineral resources reduced, partly offset by the inclusion of the Cachorro deposit for the first time.

Find out more
P235-244

Sustainability KPIs

Safety

1 Fatalities — 1.3 LTIFR[5]



Why it is important

Safety is our top priority, with fatalities and the LTIFR[5] being two of our principal measures of performance.

Performance in 2021

Very sadly there was a fatality at Los Pelambres.

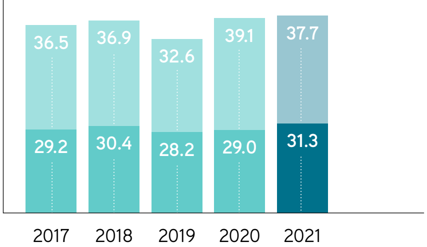
Our LTIFR also increased, primarily related to our growth projects.

Find out more
P44

Water withdrawal

69 GL

Continental water
Sea water



Why it is important

Water is a precious resource and we are focused on using the most sustainable sources and maximising its efficient use.

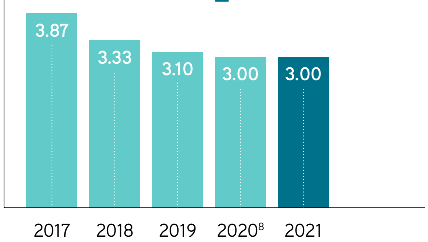
Performance in 2021

The Mining division's operational sea water withdrawals in 2021 increased by 8% compared to 2020 as ore throughput increased at Centinela and Antucoya, and continental water withdrawals reduced by 3%.

Find out more
P51

CO_2e emissions intensity[6, 7]

3.00 tCO_2e/tCu



Why it is important

We recognise the risks and opportunities arising from climate change and the need to measure and mitigate greenhouse gas (GHG) emissions.

Performance in 2021

While CO_2e emissions intensity were unchanged compared to 2020, total emissions fell by 1.8%.

Find out more
P49

Risk management framework

Effective risk management is an essential part of our culture and strategy.

The accurate and timely identification, assessment and management of principal risks give us a clear understanding of the actions required to achieve our objectives.

Key elements of integrated risk management

We recognise that risks are inherent to our business

Only through adequate risk management can internal stakeholders be effectively supported in making key strategic decisions and implementing our strategy

Exposure to risks must be consistent with our risk appetite

The Board defines and regularly reviews the acceptable level of exposure to emerging and principal risks. Risks are aligned with our risk appetite, taking into consideration the balance between threats and opportunities

We are all responsible for managing risks

Each business activity carries out risk evaluations to ensure the sound identification, management, monitoring and reporting of risks that could impact the achievement of our goals

Risk is analysed using a consistent framework

Our risk management methodology is applied to all our operating companies, projects, exploration activities and support areas so that we have a comprehensive view of the uncertainties that could affect us in achieving our strategic goals

We are committed to continuous improvement

Lessons learned and best practices are incorporated into our procedures to protect and unlock value sustainably

Areas of focus and development during 2021

Our main focus in 2021 was on climate change risk analysis and the COVID-19 restrictions required at our operations. We implemented the TCFD recommendations using their risk designation for climate change risks dividing them into two categories; risks related to the impact of the transition to a low-carbon economy, and risks related to the physical impact of climate change. Principal physical and transition risks were identified, and certain controls and action plans were agreed.

We maintained our commitment to review and update our principal risks according to our risk methodology. These are some of the actions that our Risk and Compliance Management Department has undertaken during the year:

- Organised an external independent risk evaluation analysis of the Group. The level of risk maturity for the Group was re-evaluated and action plans were defined
- Co-ordinated the COVID-19 contingency committees throughout 2021, in line with the risk management response system
- Presented an update of the Company's risk appetite statement to the Board, which included some updates relating to Talent Management/Labour Relations, Tailings Storage and Cybersecurity. The level of risk appetite was unchanged
- Updated the Risk Analysis Manual to include learnings from 2020
- Harmonised the risk of Environment Management, Climate Change and Strategic Resources between all the operating companies
- Implemented automatic reporting, which is shared monthly with the executive management team
- Started developing a new risk analysis model for goods and services agreements
- Continued training risk owners and main users
- Updated and monitored critical controls and action plan dashboards
- Prepared new action plans to maintain risk exposure within acceptable limits
- Embedded timely and comprehensive risk analysis into each relevant decision-making process
- Shared best practices across our operating companies
- Included budgeting and planning processes related to risk monitoring in the monthly executive review, to identify and manage any deviation from expected performance in a timely fashion

Governance

The Board has overall responsibility for risk management and determines the nature and extent of the principal and emerging risks that we will accept in order to achieve our strategic objectives.

The Board receives detailed analysis of key matters in advance of Board meetings. This includes reports on our operating performance including safety and health, financial, environmental, legal and social matters, and key developments in our exploration, project and business development activities, as well as information on the commodity markets, updates on talent management and analysis of financial investments.

The provision of this information allows the early identification of potential issues and the assessment of any necessary preventive and mitigating actions.

The Audit and Risk Committee assists the Board by reviewing the effectiveness of the risk management process and monitoring principal and emerging risks, preventive and mitigation procedures and action plans. The Chairman of the Committee reports to the Board following each Committee meeting and, if necessary, the Board discusses the matters raised in more detail.

These processes allow the Board to monitor Antofagasta's major risks and preventive and mitigating procedures effectively, and to assess whether the actual exposure is consistent with the defined risk appetite. If a gap is identified, additional action plans are prepared.

The Risk and Compliance Management Department is responsible for risk management systems across the Group. It implements the Company's risk management policy, vision and purpose to ensure a strong risk management culture at all levels of the organisation. The Department supports business areas in analysing their risks, identifying existing preventive and mitigating controls and defining further action plans. It maintains and regularly updates the Company's risk register.

The Department reports twice a year to the Audit and Risk Committee on the overall risk management process, with detailed updates on principal risks, mitigation activities and actions being taken.

The General Managers of each of the operations have overall responsibility for leading and supporting risk management. Risk owners within each operation have direct responsibility for the risk management processes and for regularly updating individual business risk registers, including relevant mitigation activities. The individual owners of the risks and controls at each business unit are identified, to provide effective and direct management of risk.

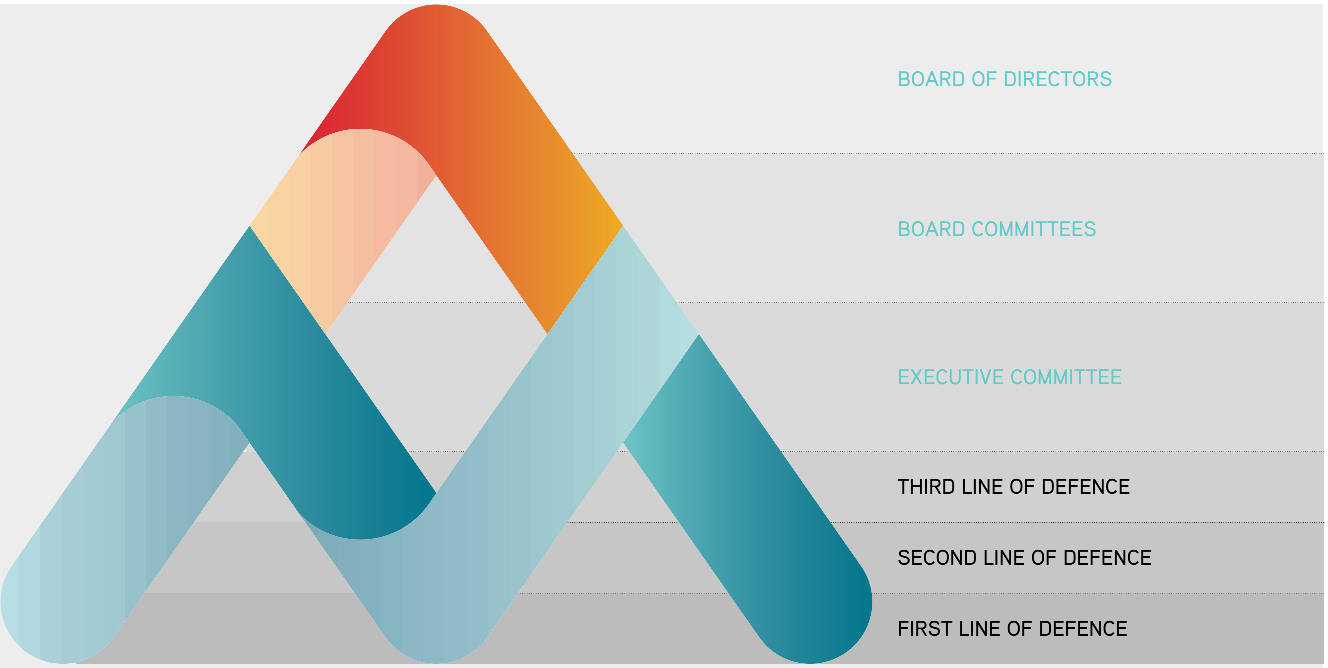
Each operation holds its own annual risk workshop at which the business unit's risks and mitigation activities are reviewed in detail and updated as necessary. Workshops are also used to assess principal risks that may affect relationships with stakeholders, limit resources, interrupt operations and/or negatively affect potential future growth.

Mitigation techniques for significant strategic and business unit risks are reviewed quarterly by the Risk and Compliance Management Department.

We promote a consistent risk management process across our different business units, ensuring risk is considered at all levels of the organisation. Risk information flows from the business units to the centre and from the Board back to the business units.

Find out more
P134

Our risk management structure



BOARD OF DIRECTORS
Overall responsibility for risk management and its alignment with Antofagasta's strategy

Approves the Risk Management Policy

Defines risk appetite

Reviews, challenges and monitors principal risks

BOARD COMMITTEES
Support the Board in monitoring principal risks and exposure relative to our risk appetite

Make recommendations to the Board on the risk management system

Review the effectiveness and implementation of the risk management system

EXECUTIVE COMMITTEE
Assesses risks and their potential impact on the achievement of our strategic goals

Promotes our risk management culture in each of the business areas

Is the owner of principal risks

THIRD LINE OF DEFENCE
The Internal Audit Department provides assurance on the risk management process, including the effectiveness of the performance of the first and second lines of defence.

SECOND LINE OF DEFENCE
The Risk and Compliance Management Department is accountable for monitoring our overall risk profile and risk management performance, registering risks and issuing alerts if any deviation is detected.

FIRST LINE OF DEFENCE
Each person is responsible for identifying, preventing and mitigating risks in their business area and escalating concerns to the appropriate level if required.

/ *Risk management* continued

Principal risks

We maintain a risk register through a robust assessment of the potential principal risks that could affect the Company's performance. This register is used to ensure that principal risks are identified in a thorough and systematic way and that agreed definitions of risk are used.

Risk management

We are aware that not all risks can be completely eliminated and that exposure to some risks is necessary in the pursuit of our corporate objectives.

Mining is, by its nature, a long-term business and as part of the principal risks update and evaluation process we identify new or emerging risks which could impact the Company's sustainability in the long run, even if there is limited information available at the time of the evaluation.

Any new or emerging identified risks that could impact our long-term strategic objectives are included in the principal risk analysis and are reviewed and monitored periodically by the Board. As new information based on research, expert analysis and internal investigations becomes available, suitable controls and action plans are defined and incorporated into the Company's risk matrix.

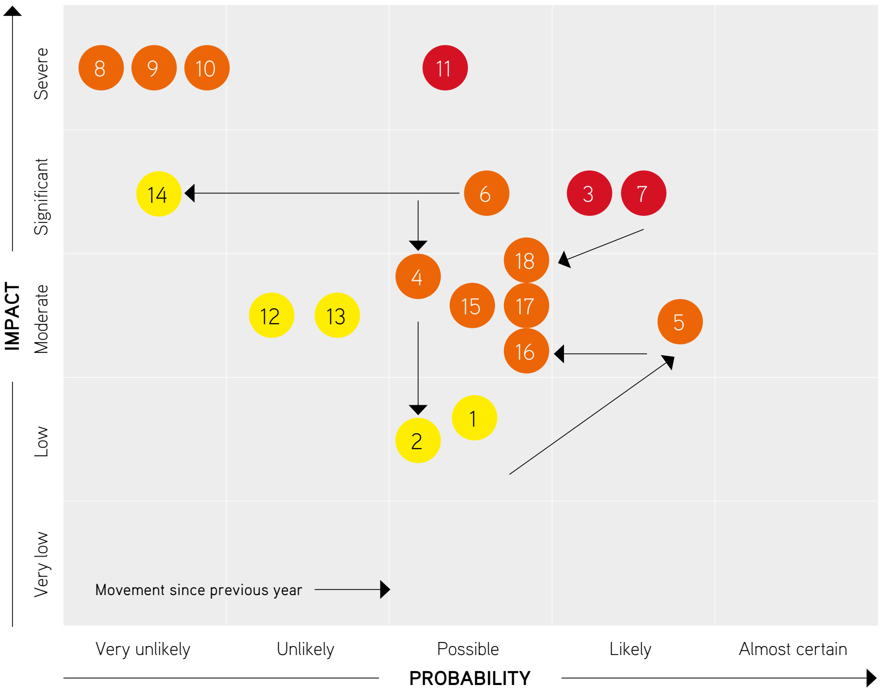
We identify, assess and manage the risks critical to the Company's success. Overseeing these risks benefits Antofagasta and protects our business, people and reputation. The risk management process provides reasonable assurance that the relevant risks are recognised and controlled, and the Company achieves its strategic objectives and creates value.

Because risks change and are periodically re-evaluated, the risk map shown here represents the position, considering the controls in place, at a specific point in time and the changes that have taken place since 2020.

The Board carried out a robust assessment of the Company's emerging and principal risks during the year, which are set out below with their related preventive and mitigation measures.

	Risk appetite	Risk level
Low		
Medium		
High		
Very high		

Risk Heat Map



Risk	Risk appetite	Risk level	Change in risk level vs. 2020
People			
1. Talent management	High	Medium	=
2. Labour relations	High	Medium	↓
Safety and Sustainability			
3. Safety and health	Medium	Very high	=
4. Environmental management	Medium	High	=
5. Climate change	Medium	High	↑
6. Community relations	Medium	High	=
7. Political, legal and regulatory	Medium	Very high	=
8. Corruption	Low	High	=
Competitiveness			
9. Operations	High	High	=
10. Tailings storage	Low	High	=
11. Strategic resources	High	Very high	=
12. Cyber security	Medium	Medium	=
13. Liquidity	High	Medium	=
14. Commodity prices and exchange rates	High	Medium	↓
Growth			
15. Growth of mineral resource base and opportunities	High	High	=
16. Project execution	Medium	High	=
Innovation			
17. Innovation and digitisation	Very high	High	=
Transversal			
18. External risks	High	High	↓

Defining risk appetite is key in the process of embedding the risk management system into our organisational culture.

The Company's risk appetite statement helps to align our strategy with each business unit's objectives, clarifying which risk levels are, or are not, acceptable. It promotes consistent risk decision-making, allied to the strategic focus and risk/reward balance approved by the Board.

During the year the Board reviewed and updated Antofagasta's risk appetite statement, which included updates relating to Talent Management/Labour Relations, Tailings Storage and Cybersecurity risks. The Board considered the New Ways of Working as a strength in the evaluation of Talent Management/Labour Relations risk and a new tailings policy as a strength in the Tailings Storage risk. Also, a more strategic statement was defined for the Cybersecurity risk.

We maintain a risk register through a robust assessment of the potential principal risks that could affect the organisation's performance.

This process ensures that principal risks are identified in a thorough and systematic way and that agreed definitions of risk are used.

The principal risks, together with related preventive and mitigation measures, have been presented to the Board and are in line with the organisation's strategic pillars of People, Safety and Sustainability, Competitiveness, Growth and Innovation. In addition, these strategic pillars are supported by our corporate governance structures. The principal risks are outlined in the risk heat map and table, and in more detail below.

PEOPLE

Description	Preventive and mitigation measures	Highlights
1. TALENT MANAGEMENT		Risk appetite Risk level Outlook
Managing talent and maintaining a high-quality labour force in a fast-changing technological and cultural environment is a key priority for us. Any failures in this respect could have a negative impact on the performance of the existing operations and prospects for future growth.	We develop the talents of our employees through training and career development, invest in initiatives to widen the talent pool and are committed to our diversity and inclusion policy. Through these actions we aim to increase employee retention, as well as the number of women, people with disabilities and employees with international experience in the workplace. Our Employee Performance Management System is designed to attract and retain key employees by creating suitable reward and remuneration structures and providing personal development opportunities. We have a talent management system to identify and develop internal candidates for key management positions, as well as identifying suitable external candidates when appropriate.	During 2021 we changed our methodology for identifying and managing talent to look for the competencies we require to ensure the sustainability of the business. This change allowed us to identify the key people for our talent pool. Our New Ways of Working was introduced at the beginning of the year, facilitating business continuity and helping us to attract and retain talent. Implementation of our diversity and inclusion strategy progressed during the year, increasing the proportion of women in our workforce to 17.2%, achieving our target set in 2018.
2. LABOUR RELATIONS		Risk appetite Risk level Outlook
Our highly-skilled workforce and experienced management team are critical to maintaining our current operations, implementing development projects and achieving long-term growth without major disruption.	We maintain good relations with our employees and unions, founded on trust, regular dialogue and good working conditions. We are committed to safety, non-discrimination, diversity and inclusion, and compliance with Chile's strict labour regulations. There are long-term labour agreements (usually three years) in place with all the unions at our operations, helping to ensure labour stability. We seek to identify and address labour issues that may arise throughout the period covered by the labour agreements and to anticipate any potential issues in good time. Employees of our contractor companies are an important part of our workforce and under Chilean law fulfil the same duties and are subject to the same responsibilities as our own employees. We treat contractors as strategic associates and build long-term, mutually beneficial relationships with them. We maintain constructive relationships with our employees and their unions through regular communication and consultation. Union representatives are regularly involved in discussions about the future of the workforce.	Three-year labour agreements were successfully negotiated with two of the unions at Los Pelambres and one at Centinela, in a climate of mutual respect.

/ *Risk management* continued

Principal risks continued

SAFETY AND SUSTAINABILITY

Description	Preventive and mitigation measures	Highlights
3. SAFETY AND HEALTH		Risk appetite · Risk level · Outlook
Safety and health incidents could result in harm to our employees, contractors and local communities. Ensuring their safety and wellbeing is our ethical obligation, top priority and one of our core values. A poor safety record or serious accidents could have a long-term impact on morale and on our reputation and productivity.	Our Safety and Occupational Health Strategy is based on four pillars: 1. Safety and health risk management: workers at all levels are able to identify hazards and controls, so that all jobs are carried out safely. 2. Leadership: all employees and contractors are health and safety leaders and we demonstrate our commitment through each individual's responsible behaviour. 3. Contractor management: our contractors are an integral part of our safety team and culture, and we work together to improve. 4. Reporting, research and learning from our accidents: we share good practices and learn from our mistakes. The Strategy strives to achieve four main goals of: zero fatalities, zero occupational illnesses, the development of a resilient culture and the automation of hazardous processes. As part of our efforts to improve our safety performance, we increased visible leadership, strengthened our management of train operators and reinforced the use of the Job Safety Analysis and the Yo Digo No (I Say No) tools in the second half of the year. Critical controls and verification tools are regularly strengthened through the verification programme and regular audits of critical controls for potentially high-risk activities.	Safety is our top priority. Regrettably, after almost three years, there was a fatal accident at Los Pelambres. This served to further reinforce our commitment to having outstanding risk management systems. A new digital safety and health tool was designed to monitor the effective implementation of our critical controls for our high-risk activities. The tool, based in our ARMSWORD risk management software, uses QR codes to allow all operators, supervisors and risk owners to verify the correct use of critical controls for all high-risk activities. In 2021, COVID-19 threatened the health of all employees, contractors and local communities. We focused on implementing controls to prevent and mitigate the impact of the virus, prioritising the health of our employees and contractors while minimising the impact on operational continuity. We are also addressing the mental stress related risks arising from the prolonged pandemic.
4. ENVIRONMENTAL MANAGEMENT		Risk appetite · Risk level · Outlook
An operating incident that damages the environment could affect both our relationship with local stakeholders and our reputation, reducing the social value we generate. We operate in challenging environments, including the largely agricultural Choapa Valley and the Atacama Desert, where water scarcity is a key issue. Environmental issues directly related to climate change are considered under our specific Climate Change principal risk below.	We have a comprehensive approach to incident prevention. Relevant risks are assessed, monitored and controlled in order to achieve our goal of zero incidents with significant environmental impact. We work to raise awareness among employees and contractors, providing training to promote operating excellence. The potential environmental impact of a project is a key consideration when assessing its viability, and we encourage the integration of innovative technology in the project design to mitigate such impacts. We prioritise the efficient use of natural renewable resources by using sea water, favouring the use of renewable power sources, achieving higher rates of reuse and recovery of water through the use of thickened tailings technology and reducing greenhouse gas emissions. We recognise that environmental sustainability is key to our ability to generate social value and we perform regular risk assessments in order to identify potential impacts and develop preventive and mitigating strategies. Each site maintains updated environmental emergency preparedness and detailed closure plans with appropriate financial provisions to ensure physical and chemical stability once operations have ceased.	We have strengthened the regulatory risk pillar of the environmental management model, incorporating monthly updates of environmental regulations. Also, a regular monitoring of the Environmental Authority inspection processes was included to assure compliance with our environmental commitments and action plans.

Description	Preventive and mitigation measures	Highlights
5. CLIMATE CHANGE		Risk appetite Risk level Outlook
The effects of climate change have had an increasing impact on our operations. The drought in central Chile is affecting water availability at Los Pelambres, while higher than expected rainfall in the northern part of the country is impacting the infrastructure in the region. The increasing severity of sea swells leads to delays in the delivery of key supply materials and the export of our concentrates and cathodes. We are committed to contributing to the reduction of the global problem of growing greenhouse gas emissions and water scarcity by reducing our own emissions. We can do this by increasing the amount of power and water we obtain from renewable and sustainable sources.	We recognise that climate change is a threat to human life and the planet as we know it today. We measure and report our Scope 1 and 2 greenhouse gas emissions and have committed to realistic reduction targets. As regards water scarcity, we are reducing our dependence on continental water through improved water use efficiency and the increased use of sea water as a proportion of our total water consumption. On completion of each phase of the Los Pelambres desalination plant construction, the proportion of continental water used will decrease, particularly after Phase 2 of the project, significantly lowering the potential impact of water scarcity on the Group while freeing up water for local communities. We seek constantly to identify risks associated with climate change and to implement actions to adapt and mitigate to their potential impact. For each risk evaluated as "High" or "Extreme" we produce specific action plans and strategies. As part of our regular communication with local stakeholders we discuss the material risks and our controls, action plans and related strategies.	Our Climate Change Strategy seeks to strengthen our capacity to adapt to and mitigate climate change. This enables us to take early action to manage the resulting risks and opportunities in such a way as to mitigate the effects of climate change and adapt to new scenarios. Having achieved our first emissions reduction target two years early, we announced two new targets in May. In the shorter term, we aim to reduce our Scope 1 and 2 emissions by 30% by 2025 compared to 2020, equivalent to a reduction of 730,000 tonnes of CO_2e. In addition, we are committed to achieving carbon neutrality by 2050, or sooner if technology permits, in line with Chile's national commitment. During 2021 precipitation levels at Los Pelambres were lower than expected so throughput had to be reduced to optimise water usage in the concentrator plant until the expected rains in the winter in 2022 and the completion of the desalination plant.
6. COMMUNITY RELATIONS		Risk appetite Risk level Outlook
Failure to identify and manage local concerns and expectations could negatively impact the Company. Relations with local communities and stakeholders affect our reputation and impede our ability to grow and generate social value.	We have a dedicated team that establishes and maintains relations with local communities. These relationships are based on trust and mutual benefit throughout the mining lifecycle, from exploration to final remediation on closure. We seek to anticipate any potentially negative operating impacts and minimise these through responsible behaviour. This means acting transparently and ethically, prioritising the safety and health of our employees and contractors, avoiding environmental incidents, promoting dialogue, complying with our commitments to stakeholders and establishing mechanisms to prevent or address a crisis. These steps are undertaken in the early stages of each project and continue throughout the lifecycle of each operation. We contribute to the development of communities in the areas in which we operate, starting with an assessment, undertaken together with the communities, of the existing situation and their specific needs, while looking to develop long-term, sustainable relations and evaluating the impact of our contributions. We also focus on developing the potential of members of local communities through education, training and employment. We work to communicate clearly and transparently with local communities in line with our Community Relations Plan. This includes a grievance management process, local perception surveys, and local media and community engagement.	We launched our digital connectivity programme "En Red - Digital Community" to enable communities in our areas of influence to integrate into the world of digitalisation. We reinforced community programmes related to water for human consumption and irrigation to mitigate the impact that the drought has had in the Province of Choapa. During the COVID-19 pandemic we have worked with local and regional government to support local communities, including establishing a community support fund that provided financial support, sanitary protection and testing equipment.

Principal risks continued

SAFETY AND SUSTAINABILITY CONTINUED

Description	Preventive and mitigation measures	Highlights
7. POLITICAL, LEGAL AND REGULATORY		Risk appetite · Risk level · Outlook
Political instability may affect our operations, projects and exploration activities in the countries in which we operate. Issues regarding the granting of permits, or amendments to permits already granted, and changes to the legal environment or regulations, could also adversely affect our operations and development projects.	We constantly monitor political, legal and regulatory developments affecting our operations and projects. We comply fully with existing laws, regulations, licences, permits and rights in each of the countries in which we operate. We assess political risk as part of our evaluation of potential projects, including the nature of any foreign investment agreements. We also monitor proposed changes in government policies and regulations, particularly in Chile, and belong to several associations that engage with governments on these matters. This helps to improve our internal processes and means we are prepared to meet any new regulatory requirements.	Monitoring changes to Chile's constitution, mining tax legislation and environmental regulations while supporting the Consejo Minero (Chilean mining association) in its representations and responses on behalf of the industry. The nature of the changes will be significantly clearer by the end of 2022 and we will evaluate the impact they may have on our activities and seek to mitigate any negative impacts.
8. CORRUPTION		Risk appetite · Risk level · Outlook
Our operations or projects around the world could be affected by risks related to corruption or bribery, including operating disruptions or delays resulting from a refusal to make "facilitation payments". The level of such risks depends, in part, on the economic or political stability of the country in which we are operating.	We have zero tolerance for any activity that would contravene anti-bribery and corruption legislation. We maintain a robust governance regime, including an Ethics Committee, open channels of communication, training and multiple layers of controls at all our operations, projects and exploration activities, as well as in our third-party relationships. Our Compliance Model seeks to prevent any activity which may involve us directly or indirectly in any irregular situation, to detect any potential risk in good time and to act accordingly. There are control procedures in place that help to prevent corruption, covering such issues as conflicts of interest, suitability of suppliers, the receiving and giving of gifts and hospitality, and facilitation payments. All our employees receive training on our Compliance Model, which is subject to external certification.	During 2021, a new offence was included in the Chilean anti-bribery and employment protection laws. This related to the non-observance of isolation or other preventive measures issued by the health authority in the event of an epidemic or pandemic. Our crime prevention model was updated accordingly and the related risk re-evaluated. The crime prevention model was recertified during the year. Whistleblowing investigations were centralised, guaranteeing independence and standardising the process.

COMPETITIVENESS

Description	Preventive and mitigation measures	Highlights
9. OPERATIONS		Risk appetite Risk level Outlook
Our operations are subject to a number of circumstances not wholly within our control. These include damage to or breakdown of equipment or infrastructure, unexpected geological variations or technical issues, any of which could adversely affect production and/or costs.	Principal risks relating to each operation are identified as part of the regular risk review process undertaken by each operation. This process also identifies appropriate mitigation measures for such risks. Monthly reports to the Board provide variance analysis of operating and financial performance, allowing potential issues to be identified in good time and any necessary monitoring or control activities to be implemented to prevent unplanned downtime. Our focus is on maximising the availability of equipment and infrastructure and ensuring the effective use of our assets in line with their design capability and technical limits. We keep the variation of processes within defined tolerance limits. We have Business Continuity and Disaster Recovery Plans for all key processes within our operations, in order to mitigate the consequences of a crisis or natural disaster. We also have property damage and business interruption insurance to provide protection from some, although not all, of the costs that may arise from such events.	COVID-related issues during the year impacted the timing of some deliveries and shipments, the availability of project labour and the scheduling of planned maintenance. Due to the Company's flexibility and resilience the overall impact on operations and projects was minor. After 12 years of drought at Los Pelambres this climate change risk has impacted operations reducing production in 2021 and in 2022. This impact will be mitigated on completion of the desalination plant in the second half of 2022.
10. TAILINGS STORAGE		Risk appetite Risk level Outlook
Ensuring the stability of our tailings storage facilities (TSFs) during their entire lifecycle is central to our operations. A failure or collapse of any of our TSFs could result in fatalities, damage to the environment, regulatory violations, reputational damage and the disruption of the quality of life of neighbouring communities as well as the running of our operations.	We manage our TSFs in a manner that allows the effectiveness of their design, operation and closure to be monitored at the highest level of the Company. Catastrophic failures of TSFs are unacceptable and their potential for failure is evaluated and addressed throughout the life of each facility. Our TSFs are constantly monitored and all relevant information is provided to the authorities, regulating bodies and the communities that could be affected. We manage our TSFs using data, modelling, and construction and operating methods validated and recorded by qualified technical teams and reviewed by independent international experts, whose recommendations we implement in order to strengthen the control environment. Risk management includes timely risk identification, control definition and verification. Controls are based on the consequences of the potential failure of the tailings facilities.	The Global Industry Standard on Tailings Management (GISTM) was published in 2020 and we have committed to adopting this standard at all our operations. We launched a new tailings policy during the year, based on the GISTM, reinforcing our commitment to the safety and health of our workforce, communities and the environment. In accordance with this new standard, we have updated our risk assessment methods with a focus on more detailed risk identification, failure modes and controls in order to avoid catastrophic failures. Our tailings policy ensures the stability of our TSFs throughout their lifecycles, managing any potential or actual impact on the environment with sound governance and open communication with stakeholders.

/ *Risk management* continued

Principal risks
continued

COMPETITIVENESS CONTINUED

Description	Preventive and mitigation measures	Highlights
11. STRATEGIC RESOURCES		Risk appetite Risk level Outlook
Disruption or restrictions to the supply of any of our key strategic inputs, such as electricity, water, fuel, sulphuric acid or mining equipment, could negatively impact production. In the longer term, restrictions to the availability of key strategic resources such as water and electricity could also affect our growth opportunities.	In order to maintain our security of supply, contingency plans are in place to address any short-term disruptions to strategic resources. We negotiate early with suppliers of key inputs to ensure continuity. Certain key supplies are purchased from several sources to mitigate potential disruption arising from exposure to a single supplier. To achieve cost competitiveness, we endeavour to buy the highest possible proportion of our key inputs, such as fuel and tyres, on as variable a price basis as possible and to link costs to underlying commodity indices where this option exists. We maintain a rigorous, risk-based supplier management framework to ensure that we engage solely with reputable product and service providers and keep in place the necessary controls to ensure the traceability of all supplies (including avoiding any conduct related to modern slavery). We are committed to incorporating sustainable technological and innovative solutions, such as using sea water and renewable power when economically viable, to mitigate exposure to potentially scarce resources.	During the year, the pandemic and prolonged sea swells impacted the supply of some key inputs, but this impact has been prevented or mitigated through constant monitoring, contingency planning and actions taken to improve the supply capability.
12. CYBER SECURITY		Risk appetite Risk level Outlook
Breaches in, or failures of, our information security management could adversely impact our business activities. Malicious interventions (hacking) of our information or operations' networks could affect our reputation and/or operational continuity.	Our Information Security Management Model is designed with defensive structural controls to prevent cyber risks and mitigate their effects. It employs a set of rules and procedures, including a Disaster Recovery Plan, to restore critical IT functions in the event of an attack. Our systems are regularly audited to identify any potential weaknesses or threats to operations, and specific systems are in place to protect our assets and data.	In 2021, preventive controls and constant communication with users were reinforced to prevent cyber attacks. Some "ethical phishing" exercises were conducted during the year.

Description	Preventive and mitigation measures	Highlights
13. LIQUIDITY		Risk appetite Risk level Outlook
Restrictions in financing sources for future growth could prevent us from taking advantage of growth or other opportunities available in the market.	Security, liquidity and return represent the order of priorities for our investment strategy. We maintain a strong and flexible balance sheet, consistently returning capital to shareholders while leaving sufficient funds to progress our short-, medium- and long-term growth plans and maintain the financial flexibility to take advantage of opportunities as they may arise. We have a risk-averse investment strategy, managing our liquidity by maintaining adequate cash reserves and financing facilities through the periodic review of forecast and actual cash flows. We choose to hold surplus cash in demand or term deposits or highly liquid investments.	The copper price cycle and the good performance of the Mining division resulted in a robust liquidity position. In addition, there was a high level of interest from financial institutions offering to provide finance on competitive terms.
14. COMMODITY PRICES AND EXCHANGE RATES		Risk appetite Risk level Outlook
Our results are heavily dependent on commodity prices – principally copper and, to a lesser extent, gold and molybdenum. The prices of these commodities are strongly influenced by a variety of external factors, including world economic growth, inventory balances, industry demand and supply, possible substitution, etc. Our sales are mainly denominated in US dollars, although some of our operating costs are in Chilean pesos. As a result, the strengthening of the Chilean peso may negatively affect our financial results.	We consider exposure to commodity price fluctuations an integral part of our business and our usual policy is to sell our products at prevailing market prices. We monitor the commodity markets closely to determine the effect of price fluctuations on earnings, capital expenditure and cash flows. Very occasionally, when we feel it is appropriate, we use derivative instruments to manage our exposure to commodity price fluctuations. We run our business plans through various commodity price scenarios and develop contingency plans as required. As copper exports account for over 50% of Chile's exports, there is a correlation between the copper price and the US dollar/Chilean peso exchange rate. This natural hedge partly mitigates our foreign exchange exposure. However, we monitor the foreign exchange markets and the macroeconomic variables that affect them and occasionally implement a focused currency-hedging programme to reduce short-term exposure to fluctuations in the US dollar against the Chilean peso.	Hedge positions taken out in 2020 were closed and no new positions were entered into.

/ *Risk management* continued

Principal risks continued

GROWTH

Description	Preventive and mitigation measures	Highlights
15. GROWTH OF MINERAL RESOURCE BASE AND OPPORTUNITIES		Risk appetite / Risk level / Outlook
We need to identify new mineral resources to ensure continued future growth, and we do this through exploration and acquisition. We may fail to identify attractive acquisition opportunities or select inappropriate targets. The long-term commodity price forecast, and other assumptions used when assessing potential projects and other investment opportunities, have a significant influence on the forecast return of investments. If incorrectly estimated, these could result in poor decision-making. As regards exploration, there is a risk that we may not identify sufficient viable mineral resources.	Our exploration and investment strategy prioritises exploration and investment in the Americas. We focus on growth opportunities in stable and secure countries, in order to reduce our risk exposure. We conduct rigorous assessment processes to evaluate and determine the risks associated with all potential business acquisitions and strategic exploration alliances, including conducting stress-test scenarios for sensitivity analysis. Each assessment includes a country risk analysis (including corruption) and analysis of our ability to operate in a new jurisdiction. At the very least, all joint ventures must operate in line with, or to the equivalent level of, our policies and technical standards. Our Business Development Committee reviews potential growth opportunities and transactions, approving or recommending them within authority levels set by the Board.	Our exploration activities continued to be focused mostly on the Americas and our risk exposure level remained at the same level as in 2020. The Company has discovered a significant greenfield manto type deposit in the coastal belt of the Antofagasta Region. The initial inferred resource of the Cachorro deposit is 142 million tonnes, with a copper grade of 1.2%, and represents just part of the potential resource. Two of Twin Metals' mining leases were cancelled in January 2022. Twin Metals believes it has a valid right to the leases and a strong case to defend its legal rights.
16. PROJECT EXECUTION		Risk appetite / Risk level / Outlook
Failure to effectively manage our development projects could result in delays to the start of production and cost overruns.	We have a project management system to ensure that best practices are applied at each phase of a project's development. The project management system provides a common language and standards to support the decision-making process by balancing risk with the benefit of growth. In addition, all geometallurgical models are reviewed by independent experts. During the project development lifecycle, quality checks for each of the standards applied are carried out by a panel of experts from within the Company. This panel reviews each completed feasibility study to assess the technical and commercial viability of the project. It also assesses how the project can be developed safely and considers any relevant risks or opportunities that could potentially impact the schedule, cost or future performance of the project. Detailed progress reports on current projects are regularly reviewed and include assessments of progress against key project milestones and performance against budget. Project robustness is stress-tested against a range of copper price scenarios. Joint project/operation teams are established early in the development project in order to ensure smooth transition of the project into operating mode once construction is completed.	Our growth projects' risks are being proactively managed and frequently evaluated by the project team according to a specific project risk management procedure to minimise the impact on costs and timing arising from COVID-related restrictions.

INNOVATION

Description	Preventive and mitigation measures	Highlights
17. INNOVATION AND DIGITALISATION		Risk appetite Risk level Outlook
Our ability to deliver on our strategy and performance targets may be undermined by missed opportunities or delays in adopting new technologies or innovations.	We seek value-capturing innovations that realise cost savings and/or improve the efficiency, reliability and safety of our processes while supporting our corporate strategic pillars. We evaluate the potential of all ideas using our stage-gate approval process and Innovation Board. We maintain partnerships with academic institutions and companies specialising in technology and engineering – including peers, where there is no competitive barrier to doing so – in order to maximise the potential for improvements in our processes and systems. A dedicated team monitors, identifies and analyses external innovation trends with potential application to our business, including those in non-operational areas such as product sales and purchasing. The team also maintains and manages a portfolio of ongoing innovation projects. We have a recognition and incentives programme to encourage all staff to suggest innovations to our day-to-day operating systems. We also dedicate resources to evaluating and implementing innovations which have the potential to positively impact our business and growth options.	During 2021, various automation projects such as the autonomous drills at Los Pelambres and Centinela's autonomous trucks and Integrated Remote Operations Centre were progressed. Also, advanced data analytics were used at our sites, focusing mainly on increasing throughput, ore recovery and predictive maintenance. Additionally, our Data Governance Programme and Data Platform were deployed across the organisation, generating benefits in data access, consistency and quality, thus accelerating our Advanced Analytics capabilities.

/ *Risk management* continued

Principal risks continued

TRANSVERSAL

Description	Preventive and mitigation measures	Highlights
18. EXTERNAL RISKS		Risk appetite · Risk level · Outlook
We must develop the ability to manage external threats that are complex to predict and can significantly impact the Group's strategic objectives and its operational continuity.	We promote the flexibility of our business and our labour force. We have defined a new structure for working both from home and at the workplace and have implemented many other measures as part of our New Ways of Working project. We incorporate lessons learned into our business, maintaining good practices and including potential improvements learned from responses and actions taken during periods of crisis. We annually challenge the risk strategies associated with each principal risk category, including the diversification of suppliers, routes, levels of autonomy, etc. We recognise the volatility of the markets and proactively seek new business models and work to expand our client base. We regularly review our Business Continuity Plan. We conduct scenario analysis to challenge the principles on which we base our financial planning, identifying potential risks and cost/benefits of feasible action plans.	This risk was updated to incorporate lessons learned during the COVID-19 pandemic. Control actions were implemented to guarantee the safety and health of our employees and provide support to local communities in order to maintain their wellbeing and the continuity of our operations.

Viability statement

To address the requirements of provision 31 of the 2018 UK Corporate Governance Code, the Directors have assessed the prospects of the Group over a period of five years.

Mining is a long-term business and timescales can run into decades. The Group maintains Life-of-Mine plans covering the full remaining mine life for each mining operation. More detailed medium-term planning is completed for a five-year time horizon (as well as very detailed annual budgets). Accordingly, five years has been selected as the appropriate period over which to assess the prospects of the Group.

When taking account of the impact of the Group's current position on this viability assessment, the Directors have considered in particular its financial position, including its significant balance of cash, cash equivalents and liquid investments and any borrowing facilities in place, including their terms and remaining durations. The Group had a strong financial position as at 31 December 2021, with combined cash, cash equivalents and liquid investments of $3,713.1 million. Total borrowings were $3,172.6 million, resulting in a net cash position of $540.5 million. Of the total borrowings, only 11% is repayable within one year, and 13% repayable between one and two years. 27% of the borrowings are repayable after more than 5 years, beyond the viability review period.

When assessing the prospects of the Group, the Directors have considered the Group's copper price forecasts, the Group's expected production levels, operating cost profile and capital expenditure. These forecasts are based on the Group's budgets and Life-of-Mine models, which are also used when assessing relevant accounting estimates. This analysis has focused on the existing asset base of the Group, without factoring in potential development projects, which is considered appropriate for an assessment of the Group's ability to manage the impact of a depressed economic environment. The analysis has only included the drawdown of existing committed borrowing facilities, and has not assumed that any new borrowing facilities will be put in place. The Directors have assessed the principal risks which could impact the prospects of the Group over this period and consider the most relevant to be risks to the copper price outlook, as this is the factor most likely to result in significant volatility in earnings and cash generation. Robust down-side sensitivity analyses have been performed, assessing the impact of:

- A significant deterioration in the future copper price forecasts by 10% throughout the five-year period
- In addition to the above deterioration in the copper price throughout the review period, an even more pronounced short-term reduction of 15% in the copper price for a period of three months
- The Group's most significant individual operational risks. In respect of the El Mauro tailings storage facility at Los Pelambres, the risk of a major failure is considered to be extremely low, principally because of the nature of its design and construction, as well as the rigorous ongoing monitoring and controls and its performance since it was built. Given this, it has not been considered appropriate to include a scenario incorporating the possible impact of a potential major failure within the sensitivity analyses
- A shut-down of the Group's operations for a period of three months as the result of COVID-19 or other issues
- The proposed new Chilean mining royalty, taking into account the Group's existing tax stability agreements

These stress-tests all indicated results which could be managed in the normal course of business. The analysis indicated that the Group is expected to remain in compliance with all of the covenant requirements of its borrowings throughout the review period and retain sufficient liquidity. Based on their assessment of the Group's prospects and viability, the Directors confirm that they have a reasonable expectation that the Group will be able to continue in operation and meet its liabilities as they fall due over the next five years.

Compliance and internal controls

How we achieve our objectives is crucial to the sustainable long-term development of the Company. We have zero tolerance for bribery and corruption, and are committed to working with integrity and transparency. We comply with all applicable anti-corruption and anti-bribery legislation and ensure that the necessary controls are in place to prevent any unethical behaviour.

Areas of focus and development during 2021

- Whistleblowing investigations were centralised, providing independence and standardising the process
- The due diligence process was automated and a new system to monitor potential conflicts of interest is under development
- The crime prevention model was recertified by Feller Rate
- The Code of Ethics and the Crime Prevention Manual were updated
- A new method for rating and classifying complaints according to their severity was implemented
- All Directors and executives completed compliance e-learning during the year
- In-depth training and briefings in ethics and compliance, particularly in higher-risk areas such as procurement and community relations
- New employees were trained in the Compliance Model as part of their induction programme
- All employees updated their conflict-of-interest disclosures
- We held an Integrity Week for all employees and contractors, and some key suppliers were invited to discuss the importance of our culture of ethics and integrity in the whole supply chain
- As part of our focus on Prevention in our Compliance Model, we conducted a strong communication campaign
- Compliance was included as a topic in the local Antofagasta supplier day
- A total of 459 allegations were received, of which 144 (31%) were ethics related and 315 (69%) were non-ethical concerns
- There were 15 Company Ethics Committee meetings during the year to consider the 144 ethical allegations which were classified: 57% (82) harassment, abuse and mistreatment, 1% (2) bribery and corruption, 22% (32) fraud or misuse of property, 11% (15) conflicts of interest, 0% modern slavery and 9% (13) other

Code of Ethics

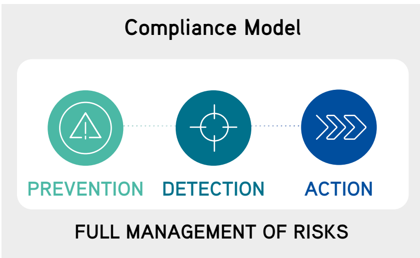
The Code of Ethics sets out our commitment to conducting business in a responsible and transparent manner. The Code requires honesty, integrity and accountability from all employees and contractors and includes guidelines for identifying and managing potential conflicts of interest. It is the basis for the Compliance Model and supports the implementation of all other related activities.

Compliance Model

Our Compliance Model applies to both employees and contractors. It is clearly defined and is communicated regularly through internal channels as well as being available on our website. All contracts include clauses relating to ethics, modern slavery and crime prevention to ensure contractors' adherence to our Model.

We actively promote open communication with all our employees, contractors and local communities. This helps ensure that our corporate and value creation objectives are achieved in an ethical and honest way.

The Compliance Model is reviewed regularly, both internally and by third parties, and on corruption-related matters it is certified under Chilean anti-corruption legislation.



Prevention: The main focus of the Compliance Model is to prevent any irregular situations arising. We provide a series of tools and training opportunities to all employees and contractors to support appropriate behaviour through:

- Internal procedures
- Anti-trust guidelines (Politically Exposed Persons, facilitation fees, etc)
- Due diligence, including the review of conflicts of interest and of potential business partners
- Inclusion of anti-corruption clauses in contracts
- Training and communication

Detection: We have several tools to detect any potentially irregular situations, including:

- Whistleblowing channels
- Data analysis
- Regular due diligence
- Internal controls
- Internal audit

Action: If an irregular situation is detected, it is investigated according to our procedures. Each of our operating companies has an internal Ethics Committee which reviews the conclusions of investigations and suggests action plans to the Company's Ethics Committee. The performance of the compliance programme is reported twice a year to the Audit and Risk Committee and to the Board. The anonymity of employees using the whistleblowing channels is guaranteed, which safeguards individuals and achieves greater transparency.

Our Crime Prevention Model ensures compliance with anti-bribery and anti-corruption laws in the United Kingdom and Chile and is certified by an external entity.

Due diligence highlights

During the year 6,533 suppliers were reviewed, of which 0.3% (22) were rejected and the others were approved. Of the rejected suppliers, 100% were national and 0% were international. The reasons for rejection were mainly due to high financial/tax risk, non-compliance with Law 20.393 (Criminal Responsibility of Legal Entities) or non-compliance with Group guidelines.

> “We are incorporating a digital focus in all our social programmes and projects to make a deeper and lasting contribution to communities.
>
> */ René Aguilar*
> *Vice President of Corporate Affairs and Sustainability*

/ *Case study*

Creating connected communities

The vital role of digitalisation for the wellbeing of communities was laid bare by the COVID-19 pandemic. From one day to the next many of our stakeholders were cut off from work, education and social interaction, either because of the absence of internet coverage in remote areas or the prohibitive costs of acquiring digital devices or data. Poor digital skills were another obstacle.

At Antofagasta, we are addressing this gap through our digital connectivity programme, En Red (Connected). This initiative, launched in July 2021, aims to integrate communities in our areas of influence into the Digital Age in order to promote new possible life paths and hasten access to the social and economic benefits offered by digitalisation. The strategy covers a range of existing and planned programmes and is focused on five areas: health and telemedicine, education, job training, water management and entrepreneurship.

En Red has three main lines of action:

- **Connectivity:** promoting projects to provide unconnected communities with internet access. For example, in 2021 we worked with a satellite internet provider to install an antenna in the Camisas Valley in the Choapa Province, allowing schoolchildren who previously had no access to the internet to connect to online classes. In María Elena and Michilla, in the Antofagasta Region, we are working with local authorities and communities to examine options to provide free wifi hotspots.
- **Digital Literacy:** fostering the skills to reap the benefits of digitalisation. In 2021, more than 600 people in our areas of influence in the Antofagasta Region took part in Connectivity and Digital Literacy workshops. In Michilla, Baquedano and Sierra Gorda we provided devices to schoolchildren.
- **Participation:** making sure no one is left behind in the digital transformation process. Initially driven by the pandemic, we have been using digital platforms to engage with communities, build community cohesion and strengthen socio-digital capital. In many cases, this has led to increased participation in our programmes.

Further information about the digital transformation initiatives underway can be found throughout the Stakeholder Review section of this report and in our Social Management Report.

Find out more online
antofagasta.co.uk/smr21

/ *Strategic Report*

STAKEHOLDER REVIEW

/ Our approach to sustainability

Committed to positive impact

At Antofagasta, we are committed to making a long-term positive impact on society, and sustainability considerations are central to how we make decisions and perform our work.

Governance

Dedication to safety and health and a commitment to sustainability are two of our six core values. Under this framework, we aim to identify and control safety and health risks, create economic value, manage our environmental impact and contribute to the development of communities in the areas where we operate. We recognise climate change as one of the greatest challenges of our times.

Our Sustainability Policy and our Human Rights Policy state the commitments behind our Purpose to develop mining for a better future, establishing the principles that guide our day-to-day actions on economic, social and environmental matters. The Board is responsible for leading and monitoring sustainability practices, assisted by the Sustainability and Stakeholder Management Committee whose recommendations ensure that these matters are included in the Board's deliberations.

We seek to ensure the whole organisation's alignment behind our commitment to sustainability. We do this through communications, regular training and the inclusion of sustainability targets in annual performance bonus agreements. In 2021, targets associated with safety, diversity and inclusion, environment and social performance accounted for 20% of the performance targets.

In 2021 we updated our Sustainability Policy, in order to incorporate the comments received in the evaluation and self-assessment processes of The Copper Mark. We are working on the update of our Human Rights Policy, which is expected to be approved in 2022.

ESG disclosure

At Antofagasta, we are committed to demonstrating how our strategies, policies and targets are supported by concrete actions and how we measure the impact of these activities. As part of this process, during the year, we complemented our regular Annual and Sustainability Reports with reports on specific topics to provide an extra level of disclosure.

In September, we published our first progress report on the implementation of the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) antofagasta.co.uk/tcfd21. This provided an overview of our TCFD-related work and climate change response. On pages 52-57 of this report, there is a summary of our disclosures.

Likewise, in the last quarter of the year, we published detailed reports on our community engagement and social investment practices antofagasta.co.uk/smr21 and how we are addressing climate change antofagasta.co.uk/ccr21 in response to requests for increased disclosure on these matters by analysts, investors and non-governmental organisations (NGOs).

As a demonstration of our transparency, in 2021 Centinela and Zaldívar received the Copper Mark, an independent external assurance of the sites' compliance with strict, internationally recognised, sustainable production standards. Los Pelambres and Antucoya began the voluntary accreditation processes at the end of the year.

Inspired by the UN's Sustainable Development Goals (SDGs), the Copper Mark was launched in March 2020 and involves the independent verification of activities at copper-producing sites based on 32 criteria in five categories: governance, labour rights, environment, community and human rights. It provides a simple and credible assurance process of sites' responsible mining practices.

Our four mining companies also completed the self-assessment against the International Council on Mining and Metals' Performance Expectations, ahead of the deadline of September 2022 for member companies. We expect the associated independent audits of the four sites to be carried out in 2022.

OUR PURPOSE

We believe in developing mining for a better future. As custodians of natural resources, we have a responsibility not only to manage these resources efficiently and responsibly, but also to harness copper's potential to contribute to the development of a greener and more sustainable world.

Materiality

At Antofagasta, we conduct a full materiality assessment every two years to identify the sustainability issues that are most important to our business and stakeholders. In 2021, we monitored the material issues raised in the 2020 exercise by reviewing specialist investor and analyst reports, perception surveys and the media. Our bottom-up approach to engaging with communities also alerts us to emerging issues.

The most significant issues, in terms of their importance to stakeholders and the potential size of their economic, social and environmental impact are: greenhouse gas emissions, water management, safety and health, ethics and compliance, creation of local jobs and capacity building, tailings and dust, and community relations.

2020-2021 Materiality matrix

INFLUENCE ON STAKEHOLDERS' ASSESSMENTS & DECISIONS	LOW	MEDIUM	HIGH
HIGH		• Human rights • Air quality • Responsible supply chain management • Transparency	• Renewable energy • GHG emissions • Water management • Safety and health • Ethics and compliance • Creation of local jobs and capacity building • Tailings and dust • Community relations
MEDIUM	• Higher-quality education in regions	• Corporate governance • Labour relations • Emergency planning • Indigenous peoples • COVID-19 • Heritage buildings (Transport division) • Extreme weather events • Traffic congestion	• Economic performance and contribution • Talent attraction, development and retention • Diversity and inclusion • Automation and digitalisation • Political outlook (elections, constitutional reform) • Regulatory changes • Project permitting
LOW	• Mine closure • Circular economy	• Biodiversity • Marine pollution • Non-mining waste management • Urban development plan (Transport division)	• Operational innovation

SIGNIFICANCE OF ORGANISATION'S ECONOMIC, ENVIRONMENTAL & SOCIAL IMPACT

Committed to positive impact continued

Details of our approach and activities in 2021 to address the challenges below are contained in the corresponding sections of the Stakeholder Review.

SUSTAINABLE GOVERNANCE

- In July and August respectively, our Centinela and Zaldívar operations were awarded the Copper Mark, the copper industry's new responsible production assurance framework.
- In 2021, we published four thematic reports providing more detail and transparency on how we manage our business, including a Climate Change Report in December.
- We update our Sustainability Policy to incorporate the comments received in the evaluation and self-assessment processes of The Copper Mark, ICMM Performance Expectations and the Global Industry Standard on Tailings Management (GISTM).

SAFETY AND HEALTH

- We conducted a thorough investigation into the tragic death in July of a contract company worker at Los Pelambres, communicated these learnings across the organisation and incorporated the findings into our safety management system.
- In 2021, we reduced the number of high potential incidents (HPIs) by 24%.
- We actively promoted the vaccination of our workers against COVID-19, reaching a vaccination rate of 97%.
- We approved a Control Strategy for Psychosocial Risks, which have increased due to the uncertainty caused by the pandemic.

PEOPLE

- By the end of 2021, we had surpassed, one year early, the target of doubling the proportion of women in our Mining division workforce, compared to our baseline of 8.6% at the beginning of 2018, achieving a participation rate of 17.4%.
- As part of our digital transformation plan we began training employees at Centinela to operate autonomous trucks and the integrated remote operations management centre in the city of Antofagasta.
- We provided training opportunities to 197 apprentices, mainly from the regions of Antofagasta and Coquimbo, of which 82% were women.

SUPPLIERS

- Our Procurement department began incorporating new ESG criteria, such as the internal carbon price, into our contract adjudication criteria.
- Our Mining division increased the number and value of contracts awarded to local suppliers by 4% and 24% respectively, as part of our commitment to foster economic development in the regions where we operate.
- We expect to complete measurement of Scope 3 emissions attributable to our suppliers in 2022 and identify ways of collaborating to jointly achieve reductions in their emissions.

COMMUNITY

- In July, we launched the En Red (Connected) digital connectivity programme to enable communities in our areas of influence to enjoy the benefits of digitalisation.
- We implemented a single data platform to register online all our social management data.
- A new community complaints management system was approved and will be implemented in 2022.
- As in 2020, in 2021 we maintained a Covid Fund of $6 million.
- For the second year running, we strengthened our two water management programmes to address the impact of the Choapa Province's acute drought on water for human consumption and irrigation.

ENVIRONMENT AND CLIMATE CHANGE

- After meeting our 2018-2022 GHG emissions reduction target in 2020, we have committed to carbon neutrality by 2050 at the latest and, in the shorter term, a 30% reduction in our emissions by 2025 (compared to 2020).
- During the year we made important progress on implementing our new Climate Change strategy, approved by the Board in late 2020.
- In 2021, we strengthened the regulatory risk management pillar of our Environmental Management Model.

René Aguilar
Vice President of Corporate Affairs and Sustainability

We have adapted our social management strategy to address emerging and growing societal concerns. These include, for example, climate change, human rights and indigenous peoples.

DISTRIBUTION OF ECONOMIC VALUE GENERATED

Our aim is to develop mining for a better future and we understand that generating economic value means more than making a profit.

We generate economic value for all of our stakeholders; distributed as wages to our employees, purchases of goods and services from our suppliers, contributions to local communities, taxes to governments, dividends to our shareholders and interest paid to our lenders.

In 2021, we distributed a total of $7,132 million.

For Antofagasta, creating economic value implies generating profits responsibly and with a long-term vision, incorporating unique and innovative solutions in business decisions to address challenges in the regions in which we operate, and working to tackle today's global challenges.

$7,132m

Total economic contribution

Suppliers

$4,359m

Payments made to suppliers for the purchase of utilities, goods and services

Communities

$48m

Economic and social contribution

Lenders

$83m

Interest payments

Shareholders

$711m

Dividends

Employees

$537m

Salaries, wages and incentives

Governments

$789m

Income taxes, royalties and other payments to governments

Subsidiaries´ non-controlling interests

$605m

Dividends to minority shareholders of subsidiary companies

Our commitment to the Sustainable Development Goals

The Sustainable Development Goals (SDGs) were adopted by all United Nations Member States in 2015 as a universal call to end poverty, protect the planet and ensure that all people enjoy peace and prosperity by 2030. At Antofagasta, we are committed to playing our part in achieving the SDGs through the creation of value for our different stakeholders and the approval of commitments, targets and programmes that seek to contribute to the sustainable development of the regions where we operate.

NO POVERTY

End poverty in all its forms everywhere

We contribute to the reduction of poverty through the distribution of the economic value generated (such as wages and taxes) and our social programmes. Antofagasta has an ethical monthly minimum wage for contractors of Ch$515,000, 53% above Chile's legal minimum wage. In response to COVID-19, we have focused on protecting jobs, alleviating social hardship and supporting local businesses with measures that range from relief in the form of vouchers to be spent in local shops to grants for small businesses.

GOOD HEALTH AND WELLBEING

Ensure healthy lives and promote wellbeing for all at all ages

For Antofagasta, the safety and health of our employees, contractors and nearby communities is non-negotiable and takes precedence over results. Our Safety and Health Strategy aims for zero fatal accidents and zero occupational health illnesses. Our Flexitime and Work-Life Balance Guidelines seek to improve our employees' work experience and quality of life. As in 2020, in 2021 we mantained a Covid Fund of $6 million to be used on community healthcare and prevention measures.

QUALITY EDUCATION

Ensure inclusive and equitable quality education and promote lifelong learning opportunities for all

We support inclusive access to quality education to improve job opportunities in the regions where we operate. Initiatives range from school and higher education scholarships to providing and strengthening technical-professional courses. We offer Young Graduate programmes as well as apprenticeships and internships to provide learning and work opportunities to local young people. In 2021, 162 new professionals graduated from the Choapa Technical Training Center, through a cooperation agreement between a local university and Minera Los Pelambres Foundation.

GENDER EQUALITY

Achieve gender equality and empower all women and girls

The Group's Diversity and Inclusion Strategy seeks to increase the participation and retention of women in the workforce. This is reflected in our recruitment and selection strategies, the promotion of inclusive workspaces and our zero tolerance policy on sexual harassment. In 2021, 98 female employees took part in career development programmes and women represented 82% of 197 new apprentices.

CLEAN WATER AND SANITATION

Ensure availability and sustainable management of water and sanitation for all

All our operations are in water-stressed areas. In a bid to protect this resource's availability for our own operations, local communities and the environment, we apply water management practices aligned with the International Council on Mining and Metals' (ICMM) Water Stewardship Framework. Our Antucoya and Centinela mines use mainly raw sea water and Los Pelambres will start using desalinated water in 2022. We anticipate that by 2025 reused, recycled and raw or desalinated sea water will account for more than 90% of the Mining division's operational water use. Our work with communities to ensure the provision of water for human consumption and irrigation is a key focus of our social contribution in the Choapa Province.

AFFORDABLE AND CLEAN ENERGY

Ensure access to affordable, reliable, sustainable and modern energy for all

As part of our Climate Change Strategy, our Mining division has renegotiated its power purchase agreements in order to switch from conventional to renewable energy sources. In 2020, Zaldívar became the first of our operations to use 100% renewables. In January 2022, Antucoya and Centinela switched to 100% renewably-generated electricity and, later in the year, Los Pelambres will follow, with the exact date depending on the ramp-up of a hydroelectric project being built by a third party. We anticipate that by the end of 2022 our mining operations will be using electricity solely from renewable sources.

DECENT WORK AND ECONOMIC GROWTH

Promote sustained, inclusive and sustainable economic growth, full and productive employment and decent work for all

The Group's Code of Ethics and Human Rights Policy aim to ensure a harassment-free, inclusive workplace that respects human rights and diversity. We are also governed by the UK Modern Slavery Act. Our People strategy seeks to promote a diverse and inclusive culture that allows employees to meet their full potential and prepares them for the future world of work. In 2021, we spent $1.6 million on training initiatives. Our Procurement department is working with suppliers to support the adoption of environmental, social and governance (ESG) best practice in the supply chain.

INDUSTRY, INNOVATION AND INFRASTRUCTURE

Build resilient infrastructure, promote inclusive and sustainable industrialisation and foster innovation

Innovation is one of the five pillars of our Strategy to develop mining for a better future. We foster innovation among stakeholders through our InnovaMinerals open platform, participation in the Industrial Weeks for Innovation in the city of Antofagasta and Pitch Days for technology companies at our operations. In 2021, as part of our Digital Transformation Programme, we began training programmes on Centinela's integrated remote management centre in Antofagasta, which will start full operations in 2022, and on the operation of autonomous trucks.

REDUCED INEQUALITIES

Ensure availability and sustainable management of water and sanitation for all

Antofagasta strives to promote educational opportunities, skills development and job openings for local people and businesses in the regions where we operate. We contribute to reducing inequality by providing help in the form of scholarships and educational support to promote social mobility in remote and vulnerable sectors. In 2021, we provided 197 scholarships to students in our areas of influence in the Antofagasta Region and the Choapa Province.

SUSTAINABLE CITIES AND COMMUNITIES

Make cities and human settlements inclusive, safe, resilient and sustainable

Through our Social Management Model, we choose, develop and implement social investment projects together with local communities, strengthening local leadership and the long-term impact of the initiatives. We work with local authorities, communities and third-party experts to improve public spaces and social cohesion in communities. Our Transport division plans to rehabilitate 48 hectares of industrial land in the centre of the city of Antofagasta as part of a broader urban development plan.

RESPONSIBLE CONSUMPTION AND PRODUCTION

Ensure sustainable consumption and production patterns

Our Sustainability Policy establishes the basis for the responsible management of the Group's activities. In 2021, our Centinela and Zaldívar operations were awarded the Copper Mark, the copper industry's new responsible production assurance framework, and Los Pelambres and Antucoya started the assessment process in late 2021. Our Procurement department is strengthening due diligence on suppliers to cover ESG topics more broadly and has started to include our internal carbon price in large contracts.

CLIMATE ACTION

Take urgent action to combat climate change and its impact

We recognise climate change as one of the greatest challenges facing the world today and acknowledge our responsibility to be part of the solution. As a copper producer, we supply an input that is critical for low-carbon technologies and, at the same time, we are working to decarbonise our operations. In 2021, we made important progress on implementing our Climate Change Strategy, approved in 2020, which sets ambitious goals for emissions and water use, as well as the resilience of our operations and their areas of influence. In May, we announced our target to achieve carbon neutrality by 2050, or sooner if the development of technology permits, and to cut our Scope 1 and 2 emissions by 30% by 2025.

LIFE BELOW WATER

Conserve and sustainably use the oceans, seas and marine resources for sustainable development

Our Biodiversity Standard is aligned with the ICMM's position statement on Mining and Protected Areas. It has three goals: to prevent or minimise impacts on biodiversity, to restore or provide appropriate compensation for any impact, and to generate additional benefits for the areas where we operate. Centinela and Los Pelambres monitor the marine environment in the vicinity of their port facilities, studying the water column, sediments and marine fauna. Through a public-private programme led by the Chilean government's economic development agency, CORFO, Los Pelambres participates in R&D projects to repopulate the area near its port and desalination plant facilities with sea urchins, abalone, red kingklip and other species.

LIFE ON LAND

Protect, restore and promote sustainable use of terrestrial ecosystems, sustainably manage forests, combat desertification, and halt and reverse land degradation and halt biodiversity loss

Biodiversity is a key part of our Climate Change Strategy, which seeks nature-based solutions (NbS) both for the capture of CO_2 and for adaption to physical risks. We implement programmes to protect animal, bird and plant species in both the Antofagasta and Coquimbo Regions and administer over 27,000 hectares of nature sanctuaries and protected areas in the Choapa Province, equivalent to seven times that used by Los Pelambres and its related installations.

PEACE, JUSTICE AND STRONG INSTITUTIONS

Promote peaceful and inclusive societies for sustainable development, provide access to justice for all and build effective, accountable and inclusive institutions at all levels

Antofagasta's activities conform to the UK's Bribery Act and Modern Slavery Act as well as Chilean Law No 20.393 on bribery and asset laundering. Our Code of Ethics, Compliance Model and Crime Prevention Manual define how we undertake our business in a responsible, accountable, honest and transparent manner and we conduct annual training for departments with higher exposure to risk on these matters.

PARTNERSHIPS FOR THE GOALS

Strengthen the means of implementation and revitalise the global partnership for sustainable development

We promote the creation of public-private alliances, taking advantage of our partners' experience and strategies to contribute to the achievement of the SDGs in the regions where we operate. Our partners include the state, Chilean and international trade associations, other mining companies and/or industry groups, civil society, academic institutions and NGOs. In particular, we use alliances, mostly with local or national foundations, to implement our social programmes which, in many cases, leverage or complement government programmes.

For more information on these initiatives, see the Safety and occupational health, Our people, Communities, Responsible supply, Climate change and Environment sections of this report.

How we engage with our stakeholders

To support the long-term success of our business, our engagement with stakeholders is open, transparent and collaborative. We use appropriate mechanisms to interact with them, provide them with information and learn about their interests and concerns.

OUR PEOPLE

Approximately 27,000 people (employees and contractors) work at our operations, projects, exploration programmes and corporate offices. They are almost all based in Chile.

Why we engage

Constructive relationships, anchored in mutual respect and transparency, are crucial for a good working environment and talent retention as well as for productivity and efficiency. Through our engagement with contractors, who are essential for operational continuity, we seek to transfer knowledge and ensure compliance with our own standards, particularly on safety and health.

How we engage

We have regular engagement with our workforce through a variety of channels including site visits by senior management, on-site reviews, surveys of the working environment and individual performance evaluations. We also offer technical training, provide career opportunities and foster a culture of knowledge. We meet regularly with union representatives and the managers of our contractors and discuss a range of specific topics including safety and health.

More information on P42

COMMUNITIES

We operate in Chile's Antofagasta and Coquimbo Regions, where our neighbours include a range of communities around our mines and transport business, as well as on the coast near our port facilities.

Why we engage

The wellbeing of local communities is directly related to the sustainable development and success of our business. Through a bottom-up approach to engagement, we seek together to grow with these communities and contribute to their long-term social and economic development, while taking care to prevent, mitigate and compensate for any adverse impact our activities may have.

How we engage

We engage with communities through different social programmes, often implemented in alliance with local foundations. Initiatives are selected and designed together with the community, through working groups on specific areas of community development or concerns.

More information on P46

SUPPLIERS

We work with over 2,000 suppliers of which 96% are based in Chile. They provide a broad range of products and services, from large mining equipment to catering and transport.

Why we engage

Suppliers play a critical role in our ability to operate sustainably and safely. Through our engagement with them we seek to improve their sustainability performance and ensure they meet our standards and guidelines on sustainability matters. We also work with suppliers to ensure that they offer us the most cost-effective and efficient solutions.

How we engage

The procurement team regularly meets with suppliers. Tenders take place through an online platform designed to guarantee fairness and transparency. To ensure the broadest possible access to tenders, we use an automated invitation system and participate in different external platforms. By prioritising local suppliers, we seek to foster the development of neighbouring communities.

More information on P60

S.172(1) STATEMENT

Antofagasta's purpose is to develop mining for a better future – to achieve this and continue to deliver sustainably, we rely on the support of a range of different stakeholders. This means always putting the safety of our people first as we seek to deliver value to our customers, suppliers, shareholders and the communities in which we operate.

The Directors of Antofagasta plc have acted in accordance with their duties to operate in the way that they consider, in good faith, is most likely to promote the success of the Company for the benefit of its members as a whole, particularly with regard to the stakeholders and matters set out in section 172(1) of the Companies Act 2006, including among other matters:

- The likely consequences of any decision in the long term
- The interests of the Company's employees
- The need to foster the Company's business relationships with suppliers, customers and others
- The impact of the Company's operations on the community and the environment
- The desirability of the Company maintaining a reputation for high standards of business conduct, and
- The need to act fairly as between members of the Company

Section 172 considerations are embedded in decision-making at Board level and throughout the Group. Throughout the Strategic Report we outline the way in which we engage with our stakeholders to create value throughout our operational activity. Within the Corporate Governance report on page 116 we discuss, in respect of the key decisions that the Board has taken in the year, how stakeholders were considered and how we engaged with them.

CUSTOMERS

We sell principally to industrial customers, smelters and fabricators, who further process our copper concentrate and cathodes.

Why we engage

Most sales are made under long-term framework agreements or annual contracts with sales volumes agreed for the following year. Without these long-term customer relationships we would have to sell a larger proportion of our concentrate and cathodes on the spot market, with greater uncertainty about pricing and volume.

How we engage

We also hold regular meetings with our customers around the world. Some of our major customers are also equity holders in our mining operations. The Chairman and several Directors visit Japan each year to meet our partners and we have a marketing office in Shanghai.

More information on P62

SHAREHOLDERS

Shareholders are the companies, financial institutions and individuals that hold a stake in the Company. They are entitled to receive dividends and to vote at shareholder meetings on certain matters, including the election of the Company's directors.

Why we engage

Shareholders, and particularly institutional investors, are constantly evaluating their holdings in the Company and require regular information about its strategy, projects and performance. We therefore pay special attention to our communications with them, maintaining fluent and transparent dialogue to ensure that they are treated fairly and receive all relevant information.

How we engage

We regularly meet with institutional investors and brokers' analysts at industry conferences and roadshows, as well as in one-on-one meetings. The Board attends the Company's Annual General Meeting, either physically or virtually, and its members are available to answer questions. The Company also provides regular production and financial reports and other ad hoc information, which are available on the Company's website.

More information on P63

GOVERNMENTS AND REGULATORS

Governments and regulators at national, regional and local levels, draft, implement and uphold legislation, rules and regulations, setting and enforcing the framework within which we operate.

Why we engage

Mining is a long-term business and timescales can run into decades. Political cycles are typically far shorter and material developments and changes to policy, legislation or regulations can have a major impact on the business.

How we engage

We work alongside mining associations and other industry-related bodies to engage with governments on public policy, laws, regulations and procedures that may affect our business. We interact with governments and regulators strictly within their engagement mechanisms which, in Chile, are clearly defined in Law N° 20.730 on lobbying.

More information on P64

Our people

Diversity and Inclusion remain a central focus as we embed a hybrid form of working across the organisation and train our employees for the future world of work.

The Group's People strategy is built around the four pillars of culture; organisational effectiveness; labour relations and engagement; and organisational capabilities and talent management. It is aligned with the six principles in our Charter of Values: Passionate about Safety and Health, Excellence in our Daily Performance, Respect for Others, Forward-Looking, Commitment to Sustainability, and Innovation as a Permanent Practice.

Inclusive culture

Our Diversity and Inclusion (D&I) Strategy, launched in 2018, seeks to attract and retain a broad range of talents. It initially focused on increasing the participation of women, people with disabilities and people with international experience in our workforce, but is now broadening out to incorporate other aspects of diversity. The aim is to become an organisation that values and respects diversity in all its forms and benefits from an inclusive culture.

In 2021, we continued to focus on embedding an inclusive culture across our organisation through webinars and communication activities on issues such as parental co-responsibility, balancing work with domestic demands and zero tolerance for sexual harassment in the workplace. In July, we approved a protocol to support employees in a process of gender transition. On average, 88% of our employees have a positive perception of our D&I culture, according to workforce surveys.

88%

of our employees have a positive perception of our D&I culture

As part of our strategy, we updated our Work-Life Balance Guidelines which include benefits that go beyond Chilean law, such as ten days of paternity leave, the possibility of taking a year off work for health or other reasons, and a flexitime system for employees in our corporate offices.

Gender balance

During the year, we increased the proportion of women in our workforce to 17.2% (1,221 out of 7,081), achieving our target one year early, of doubling their participation by the end of 2022 compared to our baseline of 8.6% at the beginning of 2018. By comparison, women represent 12.4% of the national mining industry. Targets for the inclusion of women are included in performance scorecards and a new target for the Company will be set in 2022.

In 2021, 36% of our new recruits were women.

	Executive Committee		Direct reports to the Executive Committee		Senior Management[1]	
Male	9	82%	51	82%	21	81%
Female	2	18%	11	18%	5	19%

1. Includes directors of subsidiaries as defined in The Companies Act 2006 (Strategic Report and Directors' Report) Regulations 2013

People with disabilities

People with disabilities account for 1.2% of our workforce, of which 60% are employed at our operations, exceeding the 1% requirement of Chile's Workplace Inclusion Law. Together with the Consejo Minero (Mining Council), an association of major mining companies in Chile, we worked with the authorities on the proposed regulation of universal access to mine sites for people with disabilities, a process that includes public consultation.

Organisational effectiveness

In 2021, we rolled out our New Ways of Working project, comprising a permanent hybrid system of remote and in-person working adapted to employees' roles. Corporate employees are required to work in-person 50% of the time, while jobs at the operations have been divided into three in-person models: 100% of the time (eg. truck operators), 50% of the time, and at least one week a month (all subject to COVID-19 restrictions).

The project builds on the successful trial in 2020 of extensive remote working to control the spread of COVID-19 and aims to:

- Build a resilient and flexible organisation with the capacity to respond to unexpected external events
- Capture opportunities to improve productivity and efficiency by, for example, reducing travel
- Offer a more attractive work-life balance as part of our Diversity and Inclusion (D&I) strategy

Regular Pulse surveys indicate that employees support the new model but have concerns related to managing working hours and fulfilling domestic requirements when remote working, especially in light of the pandemic, which prevented children in Chile from attending school for much of the year. In December, following a participative employee process, we drew up a list of good practices, such as not scheduling meetings over the lunch period, to address these challenges.

We have an area dedicated to the wellbeing of our workforce that provides support, communications and online resources for activities such as yoga and mindfulness. Employees can also access a 24/7 confidential, psychological helpline.

At the end of the year, we conducted an Engagement and Perception Survey at our corporate offices and Antucoya to assess employee satisfaction. The same study will also be conducted at our other operations in the first half of 2022.

Leadership brand

In 2021, we provided team-by-team communications and coaching on our Leadership Competencies Model, updated in 2019. Plans for a massive roll-out of the model across the organisation were postponed due to the COVID-19 pandemic. During the year, we reinforced our five leadership skills – I value all contributions, I act thinking of the future, I develop myself and others, I do things with conviction and commitment, and I create value in everything we do – to leverage the New Ways of Working project.

Building human capital

At Antofagasta, we seek to develop human capital and talent, not only internally but also in the local communities where we focus our recruitment efforts. In 2021, 55% of our workforce were resident in the Antofagasta and Coquimbo Regions where our operations are located.

We are committed to promoting a culture that fosters innovation, allows employees to develop their full potential and enables the digital transformation of the business. In 2021, we invested $1.6 million in employee training, the equivalent of 44 hours of training per employee.

26,991	25.5%	74.5%	17.2%	77%
People	Employees	Contractors	Women	Unionised employees

Digital Academy

Our Digital Academy was established in 2020 and aims to build the necessary skills to implement the Group's Digital Transformation Programme, as well as to enhance employees' future job opportunities. In 2021, 357 employees took courses on data-based decision-making and 401 new recruits took courses on digital literacy.

In addition, 79 operators and supervisors at Centinela began a pilot course on autonomous trucks. In September, we started upskilling 41 operators and supervisors, also at Centinela, to operate the mine's integrated remote operations management centre in the city of Antofagasta, due to begin full operations in 2022.

Diversity and Inclusion

A total of 98 women from executive, supervisor and operator positions took part in different career development and leadership programmes during the year. More than 60% of the female employees who have taken part in these programmes since 2018 were promoted internally during 2021.

We also run graduate programmes for our executive talent pool as well as apprenticeships and internships at our operations, all of which particularly seek to recruit women.

In 2021, our Transport division launched two apprenticeship programmes aimed solely at women, taking on 45 female apprentices in its maintenance and operations areas. Our four mining operations hired 152 apprentices, of which 77% were women. Members of the indigenous Peine and Socaire communities represent 27% of participants in Zaldívar's programmes.

Labour relations

At Antofagasta, we have 16 unions: 11 in the Mining division and five in the Transport division. Together they represent 77% of our direct employees.

We recognise employees' rights to union membership and collective bargaining, and in Chile freedom of association is protected by law. Chilean legislation also prohibits forced and child labour, limits working hours and includes 15 days' annual paid leave and a minimum wage.

In 2021, three-year labour agreements were successfully negotiated with two of the unions at Los Pelambres and one at Centinela, in a climate of mutual respect.

Employees and contractors can make complaints or raise issues on our confidential Tu Voz (Your Voice) whistleblowing line, details of which are published on our website, as well as at our operations. In 2021, we reinforced our contractors' awareness of this channel.

Contractors

Contractor companies perform key tasks in our businesses and their employees account for 74% of our total workforce. They are contractually required to meet Antofagasta's safety and health, environmental and ethical standards, and to comply with the UK Modern Slavery Act, and are monitored to ensure compliance.

The Group requires contractor companies to pay their employees an ethical monthly minimum wage of Ch$515,000 and provide them with health and life insurance. In the case of Los Pelambres and Centinela, they must also support the education of their employees' children.

More information on
P60

/ How we engage with our stakeholders continued

Safety and occupational health

Antofagasta's first priority is the safety and health of its employees, contractors and nearby communities. The Group continuously seeks to improve its performance in this area to achieve its goal of permanently eliminating fatalities at its operations.

Strategy

Our Safety and Occupational Health Strategy is based on four pillars: safety and health risk management; leadership; contractor management; and reporting, research and learning from our accidents. The Strategy strives to achieve four main goals of zero fatalities, zero occupational illnesses, the development of a resilient culture and the automation of hazardous processes.

Safety performance

We deeply regret that after 33 months without a fatality at Los Pelambres, a contractor, Fernando Silva López, lost his life on 20 July 2021 while operating a bulldozer in the open pit.

A senior team, with representatives from Antucoya, Centinela, Zaldívar and our corporate offices, conducted a thorough investigation into the event and the opportunities for improvement have been shared with all our operating sites to prevent other similar tragic incidents in the future.

This fatality occurred after a prolonged period of uninterrupted improvements in our key safety indicators and provoked a deep reflection process at each of our sites, led by senior management. We stressed that safety is paramount and reinforced the importance of adequate task planning, correct identification of risks and controls, supervision of all critical and high-risk tasks and the need for employees and contractors to feel secure enough to raise safety concerns.

In 2021, the Group recorded 65 high-potential incidents (HPIs), 24% less than the previous year, with improvements by both our Mining and Transport divisions. We began using HPIs as a key safety indicator in 2020, after tightening our classification of such incidents, as they allow us to learn through investigations about what failed and why, and to implement effective corrective actions to prevent the repetition of such events. HPI targets are included as a key performance indicator (KPI) in Performance Agreements to promote and reinforce a preventive and resilient safety culture.

The Group's Lost Time Injury Frequency Rate (LTIFR) rose by 56% to 1.34 per million hours worked, compared to 2020, mainly due to an increase in low-potential incidents during simple, routine train operations and maintenance tasks in our Transport division, which is exposed to a higher level of manual tasks than our mining operations. The transport business' LTIFR of 4.60 compares with an average of 8.46 for railway operations in Chile. The Mining division's LTIFR also slipped in 2021 as a result of increased construction activities at our growth projects, which typically register a higher number of low severity incidents.

As part of our efforts to improve our safety performance, we increased visible leadership, strengthened our management of train operators and reinforced the use of the Job Safety Analysis and the Yo Digo No (I Say No) tools in the second half of the year. We will start investigating low-potential lost time

Number of fatalities

	2021	2020	2019	2018	2017
Chilean mining industry	**N/A[4]**	13	14	16	14
Mining division	**1**	0	0	1	0
Transport division	**0**	0	0	0	0
Group	**1**	0	0	1	0

Lost Time Injury Frequency Rate (LTIFR)[1]

	2021	2020	2019	2018	2017
Chilean mining industry	**N/A[4]**	1.41	1.54	1.65	1.78
Mining division	**1.12**	0.73	0.75	1.10	0.99
Transport division	**4.60**	2.37	4.03	6.66	7.20
Group	**1.34**	0.86	1.01	1.59	1.53

Total Recordable Injury Frequency Rate (TRIFR)[2]

	2021	2020	2019	2018	2017
Mining division	**0.46**	0.55	0.54		
Transport division	**1.45**	1.51	1.71		
Group	**0.52**	0.63	0.63		

Occupational Illness Frequency Rate (OIFR)[3]

	2021	2020	2019	2018	2017
Mining division	**0.07**	0.00	0.08	0.09	0.00
Transport division	**0.00**	0.00	0.47	0.24	0.00
Group	**0.06**	0.00	0.11	0.10	0.00

1. Number of accidents with lost time during the year per million hours worked.
2. Number of accidents in the year with and without lost time per 200,000 hours worked.
3. Number of occupational illnesses during the year per million hours worked.
4. Not available.

injury events in 2022 and are addressing psychosocial factors raised by the prolonged pandemic that have affected concentration and our safety performance (see below).

We registered four permanent occupational illnesses during the year.

Safety risk management

Critical controls

During the year, we embedded the use of QR codes to check all critical controls prior to conducting a high-risk or critical task. As a result, we are registering around 80,000 verifications a week, compared to 4,000 in 2020. The automatic digital process registers in real time the correct management of critical controls in a database overseen by risk and control owners.

We continued to strengthen our Control Strategies and the identification of critical controls for high-risk and critical activities. By the end of 2021 we had updated or designed a total of 27 Control Strategies to prevent safety incidents and another seven to avoid occupational illnesses.

In 2021, we began a project to avoid collisions between heavy equipment and light vehicles at our mining operations, conducted pilot tests and began a tender process to acquire collision avoidance systems.

Visible leadership

Leadership is a key driver for improving safety performance and all members of the Executive Committee conducts regular on-site safety and health reviews to engage with employees and contractors on safety. In response to the fatal accident, senior leadership immediately conducted on-site reviews focusing on four key areas: safety culture, safety management systems and processes, available safety tools and contractor management. The results were shared with all the operations and each drew up action plans on each of the four pillars.

¡Yo DIGO NO!

SPEAKING UP

In 2021, we reinforced the use of the Yo Digo No (I Say No) tool to generate a more proactive safety culture. Management across our operations took steps to ensure all levels of the workforce feel safe and empowered to speak up about safety concerns and to stop tasks if they perceive there to be inadequate safety conditions.

Investigations

We strengthened our investigations of all HPIs by establishing investigation teams independent of the area involved in the incident, often involving representatives from other operations. Findings are shared across the organisation and used to continue closing risk management gaps.

Occupational health risk management

At Antofagasta, we are committed to providing a healthy workplace and contributing to the physical and mental wellbeing of everyone who works with us. In 2021, we continued to improve the application of critical controls for health risks and to investigate high potential health events. Over the year, the Group registered a near-miss and hazard to health frequency reporting rate of 106 per million hours worked, 6% more than our internal target which aims to stimulate awareness, reporting and the implementation of actions to address findings.

Psychosocial risks

In November, we completed our Control Strategy for psychological and social risks that have been heightened by the COVID-19 pandemic. We conducted a survey to measure psychosocial risks in our corporate offices and are implementing an action plan to address issues such as "double presence", or the need to respond simultaneously to the demands of paid and domestic/family work.

We have a confidential 24/7 helpline for employees and contractors who wish to seek help for mental health issues.

Contractor management

The employees of our contractor and subcontractor companies are included in our safety and health performance data, and they must fully comply with our standards and procedures.

In 2021, we continued to embed our updated contractor management manual across the organisation to ensure understanding of our requirements and supervision of contractor tasks.

COVID-19

The control of COVID-19 infection at our operations continued to be a priority during 2021, especially in the first half of the year, when the second wave of infections peaked in Chile. We focused on encouraging vaccination and adherence to preventive controls among all our employees and contractors.

The four most important preventive controls are:

- Health self-assessment questionnaires and health checks prior to each shift, including PCR or antigen tests for all employees throughout most of the year
- Obligatory use of masks in all common areas
- Physical distancing on buses, pick-up trucks, charter planes and common areas
- Personal hygiene such as hand cleansing

We continued to hire buses and charter planes to transfer employees and contractors to and from site at the start and end of each shift.

In coordination with the authorities, we offered vaccinations at our mine sites. By the end of the year, at least 97% of our employees, contractors and subcontractors were double vaccinated, a higher rate than the national average, and we were registering the take-up of booster shots. Only vaccinated personnel are allowed to work in-person, others must work remotely.

In 2021, we continued our intensive testing, tracing and isolation programme for people in the workplace who have COVID-19 symptoms. During the year, we traced and monitored 6,093 suspected cases of COVID-19, of which 3,811 were confirmed. We are sad to report that five of our contractors, who began showing symptoms on their rest days, died of COVID during the year.

Communities

In 2021, we continued to focus on alleviating the social and economic impacts of COVID-19 on communities but were also able to restart regular projects during the year.

Social management model

At Antofagasta, we have a Social Management Model designed to ensure that our engagement principles, methodologies and practices are applied consistently across our operations. The Model has four components: Engagement, Initiative Management, Impact Measurement and Socio-Territorial Alert Management, each with their corresponding standard.

For further information, see our Social Management Report: antofagasta.co.uk/smr21

In the second half of 2021, we set up a single data platform for all our social management data – including initiative management and alerts – to be registered online and in one place. This strengthens transparency, and the supervision and management of our interactions with communities.

We also began developing an Indigenous Peoples Engagement Standard, which will be completed in 2022. Relations with indigenous peoples are already aligned with local legislation, ILO Convention 169 and the guidelines of the International Council on Mining and Metals (ICMM).

Impact measurement

In 2021, we worked to measure the impact of three social investment programmes, one in the Coquimbo Region and two in the Antofagasta Region. All showed a positive social return on investment (SROI), with Los Pelambres' vocational training programme performing best with an SROI of 11.2.

In addition, we worked to design an Impact Ecosystem, an integrated model of data and impact indicators, that we expect to start using in 2022 for our social investment projects.

Complaints system

In July, we approved a community complaints management mechanism to be applied across all our operations to register community-related concerns, complaints or grievances. At the end of the year, we began training on the new system and piloting its implementation with a view to preparing and approving an associated standard in 2022.

Digital transformation

In July, we launched the En Red (Connected) programme to provide rural and underprivileged communities in our areas of influence with the infrastructure, connectivity, tools and skills to take part in the Digital Age. We are also incorporating a digital approach to all our social programmes.

COVID-19

The pandemic's second wave reached its peak in the first half of the year, leading to full lockdowns across most of the country and, for the first time, in the Choapa Province. As a result, we doubled our initial Covid Fund commitment of $6 million in 2020 to a total of $12 million.

As in 2020, our efforts focused on healthcare and prevention, economic reactivation and relief measures for local communities, in close co-ordination with local authorities. Like our regular social programmes, many initiatives were implemented jointly with local foundations.

Health measures

We facilitated more rapid test and trace measures through the donation of thermocyclers and by supporting campaigns to test people in rural areas and at local markets. Other measures involved funding the provision of specialists for intensive care units and donating ambulances, medical supplies and PPE to local hospitals. Our Transport division made its facilities in the centre of the city of Antofagasta available as an official Ministry of Health vaccination centre for eight months.

Economic reactivation

The Choapa Economic Support programme, implemented by Fundación Minera Los Pelambres, awarded 2,158 grants out of 3,325 applications, each of up to $2,500, for informal entrepreneurs and micro and small businesses.

In one key initiative, Centinela's Safe Return Plan (launched in September 2020) allowed the Sierra Gorda hospitality sector to reopen and receive the employees of the mine's contractor companies throughout the year. The plan included training on COVID-19 protocols, agreements with contractors to adhere to certain requirements, and monitoring to ensure their compliance. This was an important boost to the town's economy.

Relief measures

Efforts to alleviate social hardship in local communities focused on digital initiatives. In the Antofagasta Region, we joined the Locales Conectados (Connected Stores) programme, co-ordinated by the Urbanismo Social Foundation, in which locals used digital vouchers to buy goods from a network of neighbourhood shops, providing economic relief to families and boosting local businesses.

For the second year, we worked with the foundation Educación 2021 to support 17 schools in the Choapa Province in introducing project-based learning (PBL) methodologies which, in addition to developing active learning and research skills, can be done from home. Pupils were also provided with tablets containing information and tutorials.

$47.8m
Mining division

$0.5m
Transport division

$48.3m[1]

Economic social contribution in 2021

Flagship programmes

We use a bottom-up approach to ensure that local communities participate in the selection of our social investment projects through our Somos Choapa (We are Choapa) and Diálogos para el Desarrollo (Dialogues for Development) engagement mechanisms in the Choapa Province and the Antofagasta Region, respectively.

In the second half of the year, we began reactivating suspended projects as the country's comprehensive vaccination campaign took effect and COVID-19 cases lessened. Highlights include:

Community infrastructure: Los Pelambres moved ahead with previously approved projects to improve communal spaces and build social cohesion through our Recreo and Promueve programmes, implemented in alliance with Ciudad Emergente and Mi Parque Foundation, respectively.

- **Dental treatment:** With the support of Centinela, more than 40 Sierra Gorda residents benefited from dental care provided in December by volunteers from the University of Antofagasta's dental school.
- **Pharmacy:** Antucoya is funding the installation of a pharmacy in María Elena that will be supplied by the National Health Service Procurement Centre (CENABAST), allowing locals to get quality medicines at a low cost. The pharmacy will also serve as a distribution centre for other towns in the region and, in alliance with the Teledoc online health service, will provide telemedicine to locals.

As in 2020, we strengthened our two Somos Choapa water management programmes, APRoxima and Confluye, to address the impact of the Choapa Province's acute drought on water for human consumption and irrigation. Extra measures include an emergency service for repairs on rural drinking water services in the Salamanca municipal district and intensifying Confluye's work on relining irrigation canals to prevent water losses.

Our Transport division completed the community consultation about the future use of Estación Valdivia, a disused railway station in the city of Antofagasta, built in 1916. Also, an important milestone was achieved in the first half of 2021 with the approval of the project's Environmental Impact Assessment.

Restoration, including a linear park and new public spaces, is expected to start in 2023. The initiative builds on the agreement with the Antofagasta Fire Service to transform another of its iconic buildings, the former English School, into a community fire station that will include a museum. The projects are part of a broader plan to gradually vacate the division's 48 hectares of railway yards in the city for later urban development.

For further information, see our Social Management report: antofagasta.co.uk/smr21

Citizen participation processes

In October, we completed the mandatory Citizen Participation Process as part of the Environmental Impact Assessment (EIA) for phase two of the Los Pelambres Expansion project.

An indigenous community consultation process led by the Environmental Evaluation Service (SEA) is underway with the Atacameño community in Peine, to extend Zaldívar's water extraction permit from 2025 to 2031 as part of the operation's EIA on its mine life extension.

Building capabilities

An important pillar of our approach to building social value in host communities is promoting capacity development, education and employment opportunities.

In the Antofagasta Region, a key vehicle for this commitment is the Antofagasta Mining Cluster, a public-private alliance that seeks to foster the Region's economic development. We were the first mining company to join this initiative in 2018 and our efforts are focused on human capital creation and the development of innovative suppliers.

Under this framework, 299 people from the Region benefited from our efforts to promote human capital in 2021, including 47 scholarships for regional school and university students. In October, we joined Empleo Región (Regional Employment), a public-private partnership to further promote employment in the Region, executed by the Catholic University of the North (UCN), which involves the creation of a job portal and employment agency.

Our scholarship programme supported 394 young people from the Choapa Province undertaking technical or university studies in 2021. In addition, the first set of 162 students graduated from the province's first technical training centre, established in 2018 following an agreement between UCN and Los Pelambres, which funded construction of its two 3,300 m² buildings in Los Vilos.

394

young people from the Choapa Province were supported by our scholarship programme

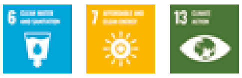
In 2021, our Transport division and four mining operations took on 197 apprentices, mainly from the Antofagasta and Coquimbo Regions. Members of the indigenous Peine and Socaire communities represent 27% of Zaldívar's programmes.

See page 60 for supplier development and innovation activities.

1. Includes community investment programmes (Somos Choapa, Dialogues for Development), social projects and programmes established as part of our legal obligations, as well as donations, sponsorships and contributions under the Caimanes, Salamanca and Cuncumén agreements and by Fundación Minera Los Pelambres.

/ How we engage with our stakeholders continued

Climate change



Under our new Climate Change Strategy, we have set ourselves ambitious goals not only for emissions and water use, but also for the resilience of our operations and their areas of influence.

As a Group, we recognise climate change as one of the greatest challenges facing the world today and acknowledge our responsibility to be part of the solution. As a copper producer, we supply an input that is critical for low-carbon technologies, and at the same time we are working to decarbonise our operations, putting climate change at the heart of how we manage our business.

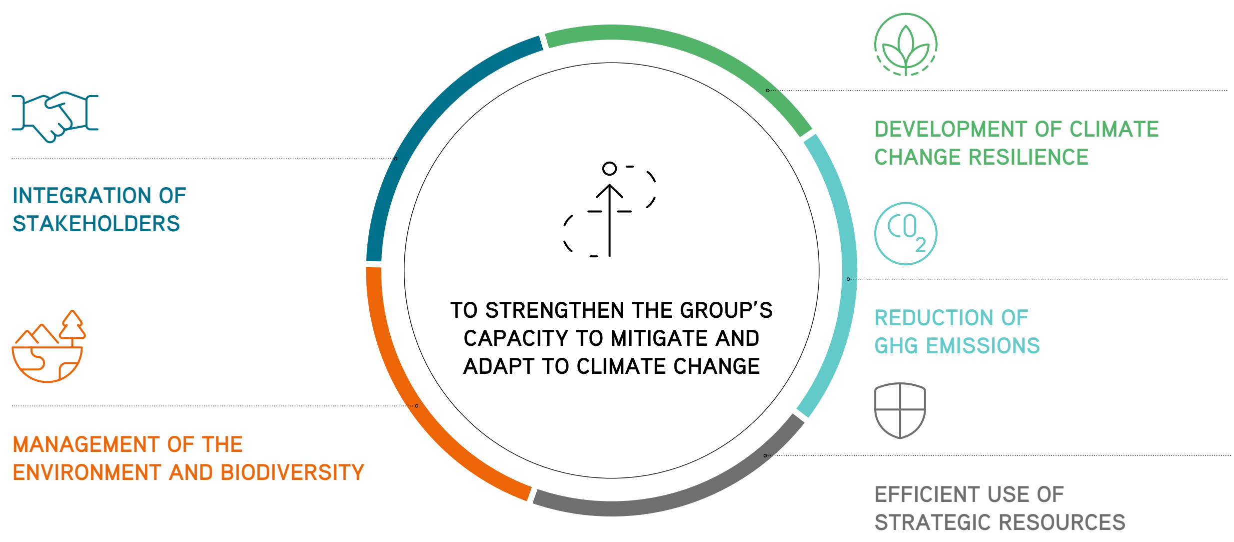
Our Climate Change Strategy, which was approved by the Group's Board of Directors in 2020, has five pillars: development of resilience to climate change, reduction of greenhouse gas (GHG) emissions, efficient use of strategic resources, management of the environment and biodiversity, and integration of stakeholders. For each pillar, different areas of action have been identified, accompanied by a plan of short-, medium- and long-term measures.

The Strategy is co-ordinated by a new Climate Change Committee, established in January 2021, which has enabled us to tighten co-ordination of the many initiatives already implemented by our operations and projects, and harness synergies between them. It has also helped us embed awareness of climate change more deeply into our decision-making processes.

The Board of Directors has ultimate responsibility for the Group's climate-related objectives and strategy. It recognises climate change as one of the principal risks facing the Group and has approved the associated risk appetite statement. In its oversight of climate-related matters, the Board is assisted by its Sustainability and Stakeholder Management Committee, Audit and Risk Committee and Remuneration and Talent Management Committee (see Board Committees section).

In 2019, we committed to implementing the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD) and in September, we published our first TCFD Progress Report, providing an overview of our TCFD-related work to date and climate resilience response. A summary can be found on pages 52-57 of this report.

The five pillars of our Climate Change Strategy



Greenhouse gas emissions

In 2017, our Mining division defined a series of emissions reduction projects and in 2018 went on to set a target of reducing its direct (Scope 1) and indirect (Scope 2) emissions by 300,000 tCO_2e[1] by 2022, compared to the 2017 baseline. We met this target in 2020, two years early, with emissions down by 581,355 tCO_2e and in 2021, reduced our emissions by a further 43,569 tCO_2e.

In May 2021, we announced new, more ambitious emissions reduction targets. In the framework of our Climate Change Strategy, we aim to cut our Scope 1 and 2 emissions by 30% by 2025, compared to 2020, equivalent to the avoidance of 730,000 tCO_2e. In addition, we have committed to achieving carbon neutrality by 2050, or sooner if the development of technology permits.

43,569 tCO_2e

emissions reduced in 2021

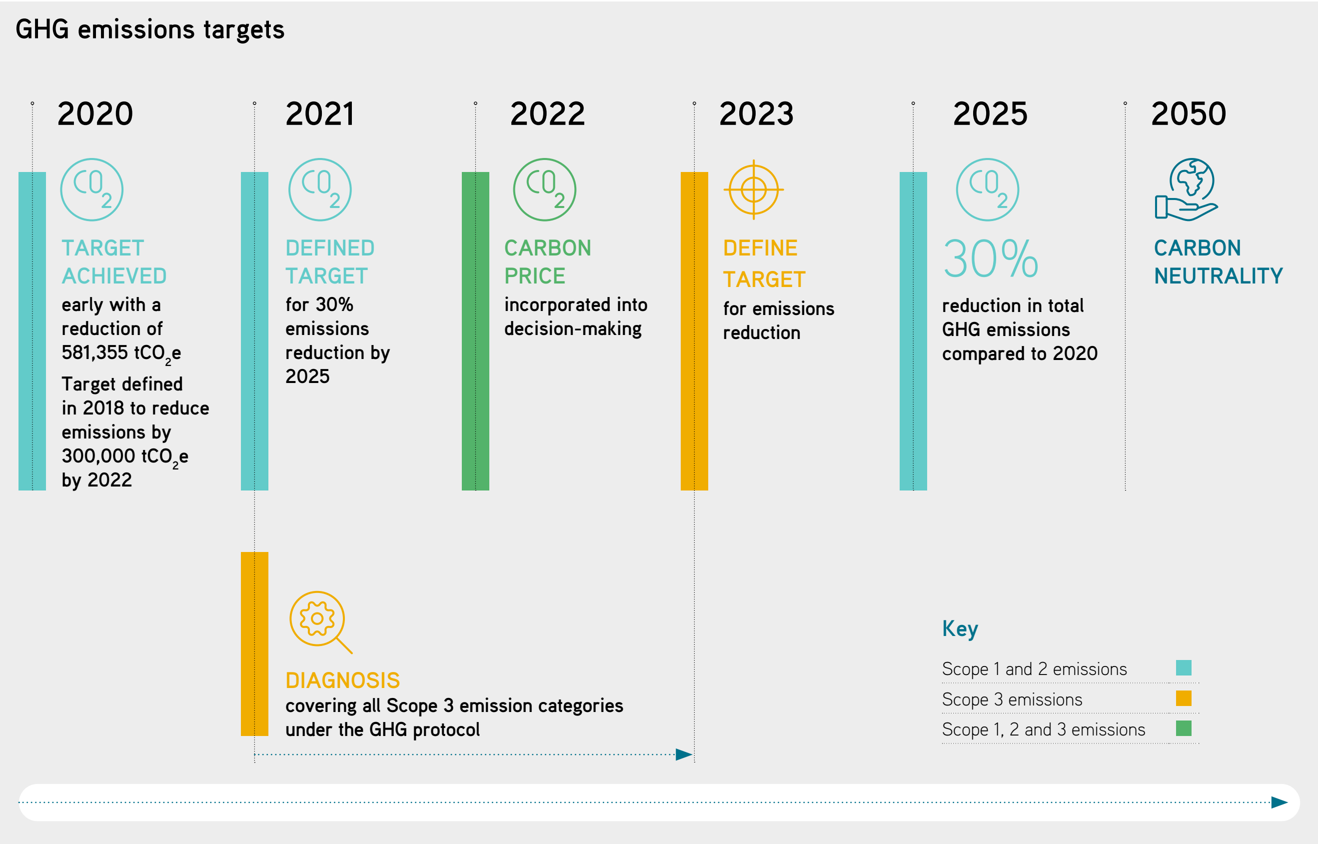
Operational CO_2e emissions (tCO_2e)[1, 2]

	Los Pelambres	Centinela	Zaldívar	Antucoya	Corporate Offices (Santiago and London)	**Mining division**	Transport division (FCAB)	**Total**
Scope 1 Direct emissions								
2021	**226,199**	**439,484**	**156,500**	**165,641**	**124**	**987,948**	**90,778**	**1,078,726**
2020	257,801	492,496	152,340	152,577	108	**1,055,322**	88,936	**1,144,258**
2019	251,580	448,890	140,623	152,231	106	**993,430**	96,854	**1,090,284**
2018	262,355	453,898	141,475	168,490	1[5]	**1,026,219**	99,400	**1,125,619**
Scope 2 Indirect emissions[3]								
2021	**466,381**	**556,616**	**163,530**	**124,467**	**894**	**1,311,888**	**823**	**1,312,711**
2020	464,492	542,020	162,688	120,087	603	**1,289,890**	858	**1,290,748**
2019	544,900	539,300	192,862	114,337	825	**1,392,224**	1,118	**1,393,342**
2018	523,942	563,101	180,109	123,353	1,189	**1,391,694**	1,224	**1,392,918**
Total emissions								
2021	**692,580**	**996,100**	**320,030**	**290,108**	**1,018**	**2,299,836**	**91,601**	**2,391,437**
2020	722,293	1,034,516	315,028	272,664	711	**2,345,212**	89,794	**2,435,006**
2019	796,480	988,190	333,485	266,568	931	**2,385,654**	97,972	**2,483,626**
2018	786,297	1,016,999	321,584	291,843	1,191	**2,417,914**	100,624	**2,518,538**
CO_2e emissions intensity tCO_2e/t[4]								
2021	**2.13**	**3.63**	**3.64**	**3.69**	**–**	**3.00**	**13.67**	**–**
2020	2.01	4.19	3.27	3.44	–	**3.00**[6]	13.93	**–**
2019	2.19	3.57	2.87	3.71	–	**3.10**	15.20	**–**
2018	2.20	4.10	3.40	4.04	–	**3.33**	16.59	**–**

1. Thousand tonnes of carbon dioxide equivalent.
2. Further information on our CO_2e emissions can be found on the Carbon Disclosure Project website (www.cdp.net).
3. To be consistent, all figures use average emission factors for the whole of Chile. By March 2022, the only annual certified emission factors received for operations using renewable energy was for Los Pelambres and Zaldívar's consumption in 2020 (giving a reduction of 209,046 tCO_2e).
4. Tonnes of CO_2 equivalent per tonne of copper produced or per tonne transported in the case of the Transport division.
5. The main category assessed for Scope 1 emissions in our corporate offices did not register activity during 2018.
6. The intensity of CO_2 emissions for the Mining division was overestimated at 3.19 tCO_2e/tCu and has been updated.

/ How we engage with our stakeholders continued

Climate change
continued



Renewable energy
In July 2020, Zaldívar became our first operation to use 100% renewable energy. Under the GHG Protocol Standard this consumption cannot be reflected until certified emissions factors for each operation are received from the relevant authority. These factors for Zaldívar and Los Pelambres for 2020 were provided by the national authority (Coordinador Eléctrico Nacional) in February 2022 and resulted in a reduction of 209,046 tCO_2e (relative to the amounts reported). However, we continue to report the emissions on the original basis so as to be consistent with the years before and after 2020. The estimated reduction in emissions at Zaldívar and Los Pelambres in 2021 was 375,110 tCO_2e but this cannot be reflected in our published emission figures until validation is received, and this is not expected until mid-2022.

In 2020 29.4% of the energy consumed by Los Pelambres was from renewable sources and this increased to 45% in 2021.

In January 2022, Antucoya and Centinela switched to 100% renewably-generated electricity and, later in the year, Los Pelambres will follow. As a result, we expect that by the end of 2022 our mining operations will be using electricity solely from renewable sources.

Streamlined energy and carbon reporting

	2021	2020	2019
Energy consumed (MWh)[1]			
• Outside the UK	**7,571,585**	7,339,151	7,154,015
• Within the UK	**17**	49	65

1. To calculate energy in kWh, multiply by one thousand.

Energy consumed is the sum of the electric energy consumed, measured in MWh, and total fuel consumption, measured in GJ. A conversion factor of 0.28 was used to convert GJ to MWh. Fuels include diesel, petrol and LNG.

Mine haulage

Our next key emissions challenge is to reduce and ultimately eliminate the use of diesel at our mining operations. This is the main source of our Scope 1 emissions, of which some two-thirds are generated by mine haulage trucks.

Measures we are exploring through an Electromobility Plan, look particularly at the use of green hydrogen fuel cells as a substitute for diesel, and a portfolio of energy efficiency initiatives.

We have also established an internal carbon price, a key tool for reducing energy use and fostering a shift to clean fuels, that we will use in planning and project evaluation and for financial purposes, including the selection of suppliers.

Water use

Water use and efficiency have long been at the forefront of our Mining division's concerns. Three of its four operations are in the Atacama Desert and the fourth, Los Pelambres, is in an area suffering from a severe, 12-year drought.

Under different climate scenarios, droughts such as that in the area around Los Pelambres will become more frequent and prolonged. Our Climate Change Strategy seeks to reduce our withdrawals of continental water and increase the efficiency with which we use this strategic resource.

Antofagasta has long been a pioneer of the use of sea water in the Chilean mining industry, having first used raw sea water in the 1990s. In 2021, sea water accounted for 45% of our Mining division's operational water withdrawals, led by Antucoya (96%) and Centinela (86%), and our target is for sea water and reused and recycled water to account for more than 90% of the division's operational water use[1] by 2025.

In the second half of 2022, Los Pelambres expects to complete construction of a 400 l/s desalination plant, which will subsequently be doubled to produce 800 l/s by 2025, subject to permits. This will ensure the operation's water supply security and will reduce withdrawals from the Choapa River and wells in the upper part of the Choapa Valley.

The 1.5% increase in the Mining division's operational water withdrawals in 2021 compared to 2020 was explained mainly by the increased ore throughput volumes at Centinela, Antucoya and Zaldívar.

In 2021, water reuse and recycling rates at our mining operations ranged from 77% at Centinela to 90% at Zaldívar and averaged 83% for the division. This is high compared to the average for Chile's copper mining industry, which reached 73% in 2020, according to the Chilean Copper Commission (COCHILCO).

Operational water withdrawals by source, 2018-21, Mining division (megalitres)

		2021	2020	2019	2018[2]
	Total	**26,817**	27,847	21,633	25,308
	Surface water	**15,790**	19,481	13,898	16,534
	Groundwater	**11,018**	8,358	7,726	8,766
Los Pelambres	Supplied by third parties	**9**	9	9	9
	Total	**29,223**	27,178	26,369	27,036
	Sea water	**25,251**	23,316	22,602	23,039
	Groundwater	**3,972**	3,862	3,356	3,136
Centinela	Supplied by third parties	**–**	–	410	861
	Total	**6,315**	5,923	5,804	6,129
	Sea water	**6,081**	5,720	5,623	5,910
Antucoya	Groundwater	**234**	204	181	219
	Total	**6,653**	7,015	7,015	7,229
Zaldívar	Groundwater	**6,653**	7,015	7,015	7,229
	Total	**69,008**	67,963	60,821	65,702
	Sea water	**31,332**	29,036	28,225	28,949
	Surface water	**15,790**	19,481	13,898	16,534
	Groundwater	**21,877**	19,438	18,279	19,350
	Supplied by third parties	**9**	9	419	870
Mining division	Sea water as a percentage of total	**45%**	43%	46%	44%

1. As defined by the ICMM, operational water is the volume of water used in operational tasks. Operational water use is, therefore, the actual volume of water required or used to sustain operational activities.
2. An overstatement of Centinela's sea water withdrawal in 2018 has been corrected. Due to double counting, it was originally reported as 24,538 ML. This also affected the sea water and total withdrawal figures for the Mining division in 2018.

Task Force on Climate-related Financial Disclosures

In accordance with the Financial Conduct Authority Listing Rule LR.9.8.6(8), Antofagasta has made disclosures in this report consistent with the Task Force on Climate-related Financial Disclosures (TCFD) recommendations, except in three areas. Our response to each of the TCFD recommendations is reported on the following pages. More detail can be found in our TCFD Progress Report and Climate Change Report, both of which were published in late 2021 and are available on our website (antofagasta.co.uk).

Antofagasta has assessed its disclosure against each recommendation based on a review of the TCFD guidance, associated annex and supporting best practice publications. To gain a complete understanding of our alignment against the recommendations, Antofagasta has undertaken gap analysis against over 50 disclosure alignment elements. This process was informed by interviews and includes a review of our public reports and internal systems and processes. We believe we fully comply with the recommendations, except in the three areas identified here, and we expect that our activity in all areas will continue to evolve and become more sophisticated. You will also find the results of our climate scenario analysis on page 57.

The three areas we have not yet complied with the TCFD recommendations and the steps we plan to take to achieve full disclosure in the future are:

- **Strategy, impact on business – Transition Plan:** We have identified a range of measures to achieve our 2050 carbon neutrality and 2025 30% emissions reduction targets as a part of our Energy Strategy and Electromobility Plan. However, further assessment to evaluate the feasibility and implementation of these measures at all operations is still underway. Following the completion of this assessment, we aim to report our plan on how we will make the transition, including milestones and investments that will support both our own operations and our value chain.
- **Metrics & Targets, climate-related metrics – Climate Metrics & Targets:** We track our performance against a range of climate-related metrics and targets, including several which align with the TCFD's newly launched 'cross-industry, climate-related metric categories', such as climate adjusted NPV impacts. We also plan to take the opportunity to develop additional metrics, where appropriate, to measure and manage our most material climate-related risks and opportunities as well as developing associated targets, eg indicate level of required capital deployed towards climate-related risks and opportunities.
- **Metrics & Targets, GHG emissions and related risks – Scope 3:** We are in the process of calculating our Scope 3 emissions and are working with suppliers to learn more about the measures they are implementing with regard to climate change. We expect to complete measurement of Scope 3 emissions in 2022 and set reduction targets by the end of 2023, in line with the ICMM's position statement for climate change.

Governance

TCFD Recommendation	Disclosure against recommendation	Progress in 2021
a. Board oversight b. Management's role	**Board responsibility for climate-related risks and opportunities:** Our Board of Directors has ultimate responsibility for the Group's climate-related objectives and strategy. Climate change is regularly discussed at Board and Board Committee meetings. Climate change is a principal risk, and the Board has assessed the Company's risk appetite for climate change as medium, as set out in our Principal risks section on page 23. An important part of our governance is to incorporate climate considerations into the way we allocate capital and we have recently updated our capital allocation framework to include climate resilience as part of our decision making processes. Climate change factors are considered by all our Board Committees in their deliberations and three in particular support the Board in monitoring and evaluating climate-related risks and opportunities. • The Sustainability and Stakeholder Management Committee considers climate change when reviewing and monitoring relevant strategy, policies and performance matters • The Audit and Risk Committee oversees the management of risk systems, including climate change risk • The Remuneration and Talent Management Committee set and monitor executives and managers' short- and long-term incentive scorecards which include climate change performance as regards compliance against climate targets, alignment to the Copper Mark and implementation of the Climate Change Strategy **Management's responsibility for climate-related risks and opportunities:** Climate-related responsibilities are assigned to specific management-level positions. The Chief Executive Officer is responsible for approving operations and senior management's targets, and monitoring the status of emissions-reduction initiatives. The Vice President of Corporate Affairs and Sustainability, the Chief Financial Officer and the Vice President of Strategy and Innovation are responsible for proposing targets and reporting on adaptation and mitigation issues. The Executive Committee oversees environmental matters including climate change, and has established new management committees to facilitate this including a Climate Change Committee that monitors the development and implementation of the climate change strategy and a Water, Energy and Emissions Committee.	• All Board Committees' terms of reference reviewed against best practice and climate change • A management Climate Change Committee was created in January 2021 • Climate change scenario analysis and conclusions presented to the Board in October 2021

Strategy

TCFD Recommendation	Disclosure against recommendation	Progress in 2021
a. Identified risks and opportunities b. Impact to business c. Business resilience	In 2021 we undertook climate change scenario analysis to inform our forward-looking view of the potential financial impact of climate-related risks and opportunities on our business. To align this potential impact to the lifetime and planning cycle of our mining operations we defined short term as 0-5 years, medium term as 5-15 years and long term as 15-50 years. We used two climate scenarios to capture the broadest possible spectrum of climate-related risks and opportunities, an aggressive mitigation scenario and a high warming scenario. This analysis was supplemented with local climate policy scenarios created by the Government of Chile's Ministry of Environment. Our climate scenario analysis looks at meta scenarios overlayed with mining sector observations and Chilean climate policy. Once the risks and opportunities were screened and qualified, the financial impact of the most material risks and opportunities were estimated at an operational level using assumptions from these scenarios to quantify the impact. **Transition risks and opportunities:** We have used the International Energy Agency's Sustainable Development Scenario (IEA's SDS), an ambitious and commonly cited scenario, to provide a global view and context of a low-carbon transition. In the IEA's SDS, fossil fuel prices decline due to low demand and lower costs are offset by the introduction of carbon taxes to incentivise the low-carbon transition. Aligned with this scenario we quantified the financial impact of the introduction of a carbon tax and changes in diesel price as increasing our direct operating costs in the short and medium term.	• Risks and opportunities screened to rank and prioritise most material risks • Quantified the financial impact of our most material transition and physical risks and opportunities • Adopted and implemented an internal carbon price into our 2022 financial planning cycle for procurement and project evaluation • Centinela and Zaldívar received the Copper Mark, and Los Pelambres and Antucoya have started the assessment process

/ *How we engage with our stakeholders* continued

Task Force on Climate-related Financial Disclosures continued

Strategy

TCFD Recommendation	Disclosure against recommendation	Progress in 2021
	We also assessed the financial impact of climate change across the lifetime of each mine and for a 25-year period for the Transport division (see page 57). In addition, when considering the opportunities we assessed the return on investment coming from the energy management plans we have implemented at each operation which will reduce our exposure to transition risks. This included analysis of core measures to decarbonise our mining operations and reduce our reliance on diesel, most important of which is switching to a low carbon intensive method of powering our mining trucks. By understanding the potential financial impact of our material risks and opportunities we can support the business case for directing capital towards the continued decarbonisation of our operations to ensure resilience during the transition to a low carbon economy. We are doing this by using an internal carbon price as part of our capital allocation process, in the evaluation of projects and in assessing procurement alternatives. Although it is difficult to isolate the effect of the increased transition-related demand for copper, preliminary analysis suggests that this represents a significant opportunity for our business. In all cases, the potential positive impact could significantly offset negative climate impacts. However, we have not fully quantified this positive impact and so have not included it in our financial analysis of the impact of climate change. **Physical risks:** This year the Intergovernmental Panel on Climate Change (IPCC) brought renewed focus globally to the urgency of the threat posed by global warming in its Sixth Assessment Report. To assess the full range of climate change anomalies we may be exposed to, we have used the IPCC's high-warming scenario RCP8.5.[1] In this scenario temperatures rise by up to 2.3°C, heatwaves become more frequent and annual rainfall decreases by nearly 20% in the area near Los Pelambres by 2050. Raising our awareness and understanding of physical risks has never been more important than at this time as we experience the effects of the prolonged 12-year drought in the Choapa Valley where Los Pelambres is located. To better understand how physical climate changes impact our business, we have focused on a set of climate change vectors including higher temperatures, water stress, extreme rainfall events, conditions that generate particulate matter, storm surges and wave events. Each operation analysed the potential effect of these on its production, cost performance, and the cost of adaptation measures and control options. **Resilience and transition planning:** Climate scenario analysis has challenged business-as-usual thinking when assessing risks and opportunities. Our vision is to minimise our emissions, enhance water security and have resilient operations that can withstand the effects of climate change. We have introduced an internal carbon price for financial planning, procurement and project evaluation. This supports the business case for the implementation of measures identified in our Energy Strategy and Electromobility Plan. In addition, we are investing in infrastructure to minimise risk and adapt to physical climate changes, for example the rollout of water efficiency measures and the construction of a desalination plant at Los Pelambres. Currently, we are developing a plan for the transition to a low-carbon economy, including milestones and investments that will support our operations and value chain. We are committed to accelerating the low-carbon transition process, adapting to physical climate changes while supporting our local communities and acting as a responsible copper producer. As a member of the ICMM, we adhere to its principles and commit to strengthen our capacity to mitigate and adapt to climate change. In 2021, Centinela and Zaldívar received the Copper Mark certification, evidencing our commitment to sustainable development and its positive social and environmental impact. Los Pelambres and Antucoya are currently undertaking the assurance process for the certification.	

1. Representative Concentration Pathway 8.5 assumes emissions continue to increase throughout the 21st Century. Although considered as very unlikely this scenario is widely regarded as a worst-case scenario in climate change modelling.

STRATEGY IN ACTION

ADAPTATION RESPONSE Actions taken by the Company to adapt to climate change	MITIGATION RESPONSE Actions taken by the Company to mitigate the impact of climate change
LOS PELAMBRES DESALINATION PLANT	**SWITCH TO RENEWABLE ENERGY**
Trigger	**Trigger**
• Prolonged drought with deteriorating conditions year-on-year • Climate models showing continuing downward trends in precipitation	• 2015 Paris Accord on climate change signed
Action	**Action**
• Decision to build 400 l/s desalination plant which is expected to come online in H2 2022 • Increase capacity of plant to 800 l/s by 2025	• Set carbon emissions reduction target of 300,000 tCO_2e • Renegotiated each mining operation's energy contract to be solely from renewable sources
Result	**Result**
• Decoupling water supply from continental sources • Ensuring our ability to deliver value throughout the life of the mine	• Carbon emissions target achieved in 2021, and new medium- and long-term targets set • Renewable energy contracts reduced total operating costs by 2%

Risk Management

TCFD Recommendation	Disclosure against recommendation	Progress in 2021
a. Identifying and assessing risks and opportunities b. Managing risks and opportunities c. Integrating climate change into overall risk management	Climate change risk is now fully integrated into our Risk Management System and is one of our 18 principal risks as outlined on page 23. As a principal risk, climate change risk is continually monitored, measured and reported. **Risk identification and assessment process:** Risks and opportunities were identified through multidisciplinary workshops to identify climate-related risks at each operation and to the organisation as a whole. A long list of risks and opportunities was built up from this engagement process and was cross-referenced to mining sector research, peer review, local climate policy and TCFD resources. Climate scenario analysis was used to better understand and assess the likelihood and impact of risks and opportunities and was integrated into our risk assessment processes using ISO 31000 and best practice methodology (Bow Tie which considers cause, consequences and controls). The estimated financial impact on operating costs and capital expenditure was calculated against three views 1) no mitigation or adaptation, 2) controls already in place, and 3) plans and actions implemented in the future. **Risk management process:** Risk owners were identified for each risk to ensure accountability for the monitoring and management of the risk, controls and action plans. Preventative and recovery controls are identified as part of the Bow Tie risk assessment. Estimation of financial impact with and without controls is used to build the business case for implementation of planned and future risk mitigation and adaptation measures. The outcomes of the assessment have stimulated us to continue to update and implement measures in our Energy Strategy and Electromobility Plan as well as to invest in adaptation infrastructure. For example, to build resilience against higher and stronger tidal events which can disrupt port activities, we have increased the capacity of our acid and diesel storage tanks to provide greater operational continuity.	• Risk appetite for climate change assessed as medium • Climate change risks incorporated into the existing Group's risk processes using ISO 31000 • Climate-related risk owners identified to ensure accountability • Adaptation controls implemented

Task Force on Climate-related Financial Disclosures continued

Metrics & Targets

TCFD Recommendation	Disclosure against recommendation	Progress in 2021
Disclose and describe: a. Climate-related metrics b. GHG emissions and related risks c. Targets and performance	**Emissions and climate metrics:** We use our Scope 1 and 2 emissions profile and emissions intensity (tCO_2e/tCu) to monitor our exposure to our most material transition risks related to power supply and the consumption of diesel (page 49). We recognise our responsibility for upstream and downstream emissions. We also track and monitor several other environmental indicators. Most importantly, measuring water withdrawal (page 51), which helps us manage water security risks at our operations and for our local communities, and motivates us to reduce our reliance on continental sources. **Climate-related targets:** To reduce our negative impact on the environment, and to encourage the low carbon transition and manage our risks associated with emissions we have set short- and long-term carbon reduction targets. During 2021 we committed to reduce our Scope 1 and 2 emissions by 30% by 2025 compared to 2020, and achieve carbon neutrality by 2050, in line with Chile's national target. We are also a signatory to the ICMM environmental stewardship standards and are committed to implementing the Climate Change Action Plan. In addition, all our operations are working to reduce their water use rates and their use of continental water. Also, by the end of 2022 all our mining operations are expected to be using power solely from renewable sources.	• In 2021 we set new carbon reduction targets as we achieved our initial short-term target a year early • Continuing collection of Scope 3 emissions data

We are developing our climate-related metrics in accordance with the revised guidance provided by the TCFD in October 2021. The table below describes these metrics in more detail.

Cross-industry, climate related metric categories	
✓ **GHG emissions**	We report our performance against Scope 1 and 2, and our emissions intensity (page 49). We will report our Scope 3 emissions for the first time in 2023.
✓ **Transition risks**	We report the potential financial impact over the Life-of-Mine for five transition value drivers including the change in diesel price and carbon tax, as well as the impact arising from the implementation of mitigation measures (page 57).
✓ **Physical risks**	We report the potential financial impact over the Life-of-Mine for five physical hazards including the change in water supply, rainfall, temperature and particulate matter, as well as the disruption to logistics (page 57).
✓ **Climate-related opportunities** (monitored internally)	The positive impact of climate change on copper demand or the copper price has been assessed internally. We are undertaking further analysis to better understand the correlation of increasing demand as a result of worldwide climate policy action and the positive implication for the copper price.
✓ **Capital deployment**	We report the impact of investment in mitigation and adaption in the results of the Climate Scenario Analysis. This is based on estimations and projections for the implementation of proposed measures in our Long-term Energy Reduction Plan. Since 2020 we have been investing in the development of a desalination plant at Los Pelambres. We intend to monitor these investments closely in the future.
✓ **Internal carbon prices** (monitored internally)	Antofagasta is using an internal carbon price in the economic evaluation of bids from suppliers, capital allocation decisions, and project evaluation, as well as incorporating it into our financial planning cycles.
✓ **Remuneration**	Short-term incentive for Executives includes a proportion associated with carbon emissions.

✓ Reported externally

✓ Monitored internally

Results of climate scenario analysis excluding copper market opportunity

Impact calculated over the Life-of-Mine (LOM)

We use the results of climate scenario analysis to build our understanding of how climate risks may develop and impact our operations, inform our investment plans and enhance prevention and recovery control measures.

The potential magnitude of our business' exposure is similar under both an extreme physical warming scenario and aggressive mitigation scenario. Although the likelihood of value at risk is uncertain, this provides a useful reference point against which to assess and prioritise mitigation and adaptation measures to reduce our exposure and strengthen our resilience.

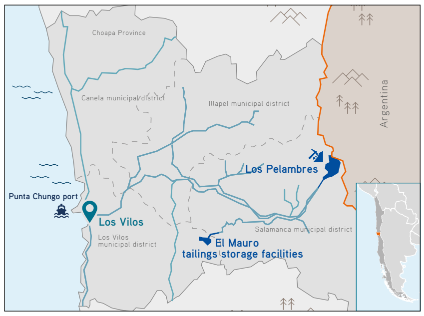
Transition[1]: IEA's SDS

Diesel price	$0 - 100m
Carbon tax	$200 - 500m
Investment in mitigation	$200 - 500m
Change in energy costs due to mitigation	$0 - 100m
Carbon tax avoided by mitigation	$200 - 500m

Physical[2]: IPCC's RCP8.5

Northern Zone
(Centinela, Antucoya, Zaldívar, FCAB)

Central Zone
(Los Pelambres)



	Northern Zone	Central Zone
Decrease and/or loss of water supply	$0 - 50m	$100 - 200m
Extreme rainfall events	$100 - 200m	$100 - 200m
High and/or sustained temperatures	$50 - 100m	Not applicable
Particulate matter	$50 - 100m	$50 - 100m
Logistics disruption	$50 - 100m	$0 - 50m

● Net Present Value Positive Exposure ● Net Present Value Negative Exposure

1. The positive impact of climate change on copper demand or the copper price, has not been quantified.
2. Physical changes in climate and the associated impacts vary by geography and will impact Antofagasta's operations in different ways.

TCFD Progress Report
antofagasta.co.uk/tcfd21

Climate Change Report
antofagasta.co.uk/ccr21

/ How we engage with our stakeholders continued

Environment

Through our environmental practices, we seek to ensure the sustainable development of our operations and projects and their areas of influence.

Our Environmental Management Model has four pillars: leadership, incident reporting, operating risk management, and regulatory risk management. Environmental performance is reported to the Executive Committee monthly.

In 2021, we strengthened the Model's regulatory risk management pillar. The measures taken include the development of a new platform to monitor the different processes through which the Superintendency of the Environment (SMA) monitors our compliance with regulations, and an alert system to ensure that our operations are fully informed about any new regulatory requirements that may affect them.

The Internal Audit area performed environmental audits on all our operations in 2021, reporting no significant negative findings.

Environmental compliance

In Chile, large-scale projects are subject to strict environmental and social impact assessments by the Environmental Evaluation Service (SEA) in order to obtain a Resolution of Environmental Approval (RCA). These RCAs include legally binding commitments on matters related to project development, the prevention and mitigation of the project's impact on the environment and any necessary compensation measures. Compliance with commitments is verified by the SMA.

Antofagasta has a total of 72 RCAs, entailing over 10,000 commitments on matters that include regulations associated with a project's construction, operation and closure as well as measures related to water use, air quality and biodiversity. In 2021, the Group obtained three new RCAs:

- In June, the Transport division obtained the RCA for its plan to rehabilitate land in the city of Antofagasta, used historically to stockpile products such as copper and lead concentrate. This plan is part of a broader redevelopment plan for the site.
- In July, the SEA approved the Declaration of Environmental Impact (DIA) for the exploitation of Polo Sur, an oxides ore body in the Centinela Mining District.
- In November, Centinela also obtained DIA approval for its Alternative Disposal of Tailings In-Pit project (see Tailings section below).

In April, Los Pelambres submitted the Environmental Impact Assessment (EIA) for Phase 2 of the Los Pelambres Expansion project. This covers mainly the expansion of the operation's desalination plant from 400 l/s to 800 l/s.

Zaldívar is currently seeking EIA approval for its mine life extension project. The evaluation process has advanced through its different stages and is currently awaiting completion of an indigenous consultation process with the nearby Peine community.

Reporting of operating events with environmental consequences

Operating events with environmental consequences are reported, evaluated and managed through an online system. Actual high or medium-severity incidents are investigated by a committee established specifically for this purpose.

One incident of higher significance has been reported to the SMA. During works relating to the Los Pelambres Expansion project industrial water was discharged into a storage pond that leaked into the surrounding area. Although there has been no measured impact on water quality in the area, it continues to be monitored.

Under the criteria established in the environmental assessment of each operation or project, 45 other events, with no severe environmental consequences, were also reported to the SMA.

Training

Environmental training programmes for both our operations and projects continued in 2021. They included workshops on environmental matters relevant to each operation, including the Copper Mark assurance system, biodiversity and heritage. These workshops are part of a training and communications programme, implemented at the corporate level and at each operation, as part of the Environmental Management Model.

Responsible production

In line with the UN Sustainable Development Goals and after a voluntary and independent evaluation process, Centinela and Zaldívar have obtained the Copper Mark, a global standard for the copper industry that certifies responsible and sustainable production. Los Pelambres and Antucoya are in the process of seeking this assurance. In addition, Antofagasta was one of the first nine companies to register with LMEpassport, the London Metal Exchange's new sustainability credentials register. It was launched in August and serves as a vehicle for companies to report their environmental, social and governance certifications and metrics.

Tailings

Our mining operations have three main tailings storage facilities (TSFs): the El Mauro and Los Quillayes conventional TSFs at Los Pelambres and a thickened TSF at Centinela. In addition, Zaldívar has a small TSF from the flotation of some of its sulphides. Los Quillayes, the original TSF at Los Pelambres, has limited remaining capacity, is partially closed and would only be used in emergencies or when required for operational reasons.

All our TSFs are built using the downstream construction method and are designed to withstand severe earthquakes and extreme weather. Each has a designated Engineer of Record. For the TSFs at Los Pelambres and Centinela, we have an independent Review Board and, for Zaldívar, an external reviewer. In 2021, the respective Engineers of Record once again confirmed the TSFs' compliance with international criteria.

Regular TSF inspections are also carried out by the Chilean government's National Geology and Mining Service (SERNAGEOMIN). In 2021, there were no significant negative findings.

The Superintendency of the Environment (SMA) approved the plan presented by Zaldívar to remedy seepage from its TSF, detected by the authority in 2020. In line with the results of field studies, the plan envisages the installation of a hydraulic barrier to extract water from the TSF for reuse by the operation.

In 2021, we published a Tailings Policy. It sets out our guiding principles for the management of our TSFs and their environmental impact, their governance and communication with stakeholders.

Alejandra Vial
Environmental Manager

Our interest and concern about environmental issues goes beyond just fulfilling our commitments under the Environmental Qualification Resolutions (RCAs) and the regulations, but also includes implementing international guidelines on sustainability.

We are working to implement the Global Industry Standard on Tailings Management. It was launched in August 2020 following the completion of the Global Tailings Review, co-convened by the International Council on Mining and Metals (ICMM), the United Nations Environment Programme (UNEP) and the Principles for Responsible Investment (PRI) in the wake of the failure of two TSFs in Brazil.

We have completed detailed planning for the Standard's implementation at Los Pelambres and Centinela and expect to complete planning for Zaldívar in 2022. This is in preparation for complying with our undertaking to implement the Standard at Los Pelambres by August 2023 and at Centinela and Zaldívar by August 2025.

The El Mauro TSF is serving as a pilot for Programa Tranque (Tailings Programme), a public-private initiative managed by Fundación Chile, a Santiago-based technology transfer institute, to develop an online system for monitoring a TSF's physical and chemical stability. After a delay in 2020, work resumed in 2021, with a view to the programme's completion in 2022.

In 2021, Centinela completed pre-feasibility studies for a project to use abandoned mine pits to store tailings, complementing the operation's thickened tailings storage capacity. This received environmental approval in November and will move to the feasibility stage in 2022. As well as its safety and environmental advantages, in-pit storage would extend the life of the thickened tailings deposit.

Air quality

All our mining operations have robust programmes to control dust emissions (PM10 and 2.5). They are monitored constantly, in some cases with the participation of the local community. In addition, air quality data is reported monthly to the regional authority.

At Los Pelambres, climate change in the form of a prolonged drought and an intensification of wind patterns has posed new challenges regarding dust from the mine itself and the El Mauro TSF. Air quality norms have not been breached, but concern about air quality has increased in nearby communities.

In the case of the El Mauro TSF, we have voluntarily implemented a series of additional controls in conjunction with the SMA, while at the mine we have established a working group advised by an external consultancy company. This is designed to deepen our understanding of the phenomenon, review the effectiveness of existing measures and adjust our predictive model accordingly.

Biodiversity

Our Biodiversity Standard, which we are currently updating, is aligned with the ICMM's position statement on Mining and Protected Areas. The update forms part of the implementation of our Climate Change Strategy and will mean an increased focus on adaptation and mitigation measures as well as nature-based solutions.

In addition to managing four nature sanctuaries and other extensive protected areas, we have a portfolio of biodiversity initiatives at our operations and projects. They include activities to protect species, as well as outreach and research initiatives.

Mine closure

As required under Chilean law, all our operations have closure plans approved by SERNAGEOMIN. In addition, we have our own Integrated Mine Closure Standard.

In 2021, Antucoya presented the required five-year update of its closure plan for review by SERNAGEOMIN. The authority is also reviewing a modification of Centinela's closure plan, presented in late 2020, to incorporate new installations.

/ How we engage with our stakeholders continued

Responsible supply

Successful management of our relationships with our suppliers contributes to our long-term success.

Governance

Suppliers play a critical role in our ability to operate continuously, safely and efficiently and provide a range of goods and services, from heavy equipment to catering. In 2021, our Mining and Transport divisions worked with 2,184 suppliers, of whom 96% were based in Chile.

All procurement must be done using a digital sourcing platform (Ariba) to make acquisition processes traceable, transparent and fair. In addition, a minimum number of companies are required to participate in large tenders to ensure a competitive process.

At Antofagasta, due diligence is conducted on all potential suppliers prior to awarding a contract using various tools that include an automated system which raises red flags and, for high-risk cases, analysis by a special senior management committee. We assess company ownership, participation of politically-exposed persons, antitrust issues, commercial behaviour, legal cases and conflicts of interest, as well as compliance models and procedures for the prevention of slavery and human trafficking. In 2021, we updated our Sustainability Policy to formalise our commitment to the OECD Due Diligence Guidance on Conflict-Affected and High-Risk Areas for copper and will also be incorporating the OECD 5-step framework into contracts.

Our Compliance Model applies to both employees and contractors. It is clearly defined and is communicated regularly through internal channels, as well as being described in our Crime Prevention Manual. All contracts include clauses relating to ethics, Chilean Law N° 20.393 on bribery and asset laundering, and the UK's Bribery Act and Modern Slavery Act.

We conduct audits to ensure compliance with our requirements. In 2021, no major compliance gaps were identified.

In 2021, our Procurement team received annual refresher training on the Group's Compliance Model, Code of Ethics and Crime Prevention Manual and updated their declaration of Conflicts of Interest.

Suppliers can use the Tu Voz (Your Voice) whistleblowing channel on the Group's website to make complaints anonymously. In 2021, we began reinforcing awareness among our contractor workers of this mechanism in meetings and written communications.

For more information, see our Crime Prevention Manual: antofagasta.co.uk/cpm

For more information, see our 2021 UK Modern Slavery Act Statement: antofagasta.co.uk/mss

ESG focus

When awarding contracts, we consider health, safety and energy efficiency criteria as well as the technical and economic aspects of bids and we have begun incorporating other ESG parameters, such as our internal carbon price, into large contracts. We are training local suppliers and service provides on ESG concepts to support the adoption of rigorous sustainability standards.

In 2021, as part of our Climate Change Strategy, we began deepening our expectations regarding emissions in the supply chain and working with specific Original Equipment Manufacturers (OEMs) on the development of low-emission explosives and mining trucks.

Climate Change Report
antofagasta.co.uk/ccr21

For more information, see pages 58-59 in Environment and our 2021 Climate Change Report: antofagasta.co.uk/ccr21.

Promoting local growth

At Antofagasta, we seek to foster economic development in the regions where we operate by improving access to opportunities to supply the Group for businesses headquartered in the Antofagasta and Coquimbo Regions. Likewise, we strive to enhance their business capabilities and encourage local recruitment.

In 2021, this focus helped us meet our objectives of increasing the number of tender invitations, and the number and value of tenders awarded, to local suppliers. In 2021, our Mining division increased the number and value of contracts awarded to local suppliers by 4% and 24% respectively, as part of our commitment to foster economic development in the regions where we operate and 95% of these companies were paid within 15 days or less.

Improving opportunities

Our guidelines on regional procurement and recruitment promote the sourcing of local goods and services by reducing administrative and financial barriers for SMEs in these regions.

As part of these efforts, in 2021 we held online meetings for Antofagasta and Coquimbo-based businesses during which we announced 16 upcoming tenders to connect potential suppliers with opportunities. There were also three in-person discussion forums with SMEs on strengthening capabilities, governance and local employability to identify improvement opportunities. In a new initiative, we met with micro and small suppliers in María Elena, Sierra Gorda and the Atacama Salt Flat to learn about their businesses and connect them to larger suppliers with a view to boosting the local supply chain.

We renewed our agreement with the Antofagasta Industrialists' Association (AIA) to use its digital database of certified suppliers (SICEP) to publicise upcoming tenders and update our register of potential local suppliers. Los Pelambres conducted a similar updating exercise.

Developing suppliers

As founding members of the Antofagasta Mining Cluster, we are committed to promoting the development of the Region's human capital and suppliers, the latter with a focus on innovation.

In 2021, we held a Regional Suppliers' Academy to help SMEs in the Antofagasta Region participate in tenders. A total of 250 people from 96 SMEs took part in the 18-hour course covering matters such as compliance, supply policies, use of digital platforms, and safety and health standards.

In September, Los Pelambres launched an 18-month Gap Closure Programme to develop, implement and evaluate a plan to train suppliers in Choapa Province on administration, technical and legal matters. More than 60 local suppliers were also trained to use the Ariba procurement platform.

We continued to participate in the Industrial Weeks for Innovation in Antofagasta, during which operational challenges are proposed to local technology companies. In 2021, two cycles of workshops were held in which 13 solutions were presented to address specific operational challenges.

Through an alliance with Expande, an open innovation programme, the Mining division held 22 online Pitch Days for suppliers to present solutions to operational challenges. This included a "hackaminerals" event to encourage companies to develop mathematical models to improve operational efficiencies. To date, more than 70% of pitches have led to a pilot or service contract. In 2021, we also participated in a regional fair organised by Expande in which seven prominent regional technological suppliers presented prototypes that were at an advanced stage of development or had been tested.

The Group's main operational challenges are published on the Innovaminerals open platform to capture ideas from inside and outside the Company with a focus on internal innovation. In 2021, we reinforced this by creating sections of this platform to present challenges specifically for Antucoya and Zaldívar.

We also provide secondary school and further education scholarships to support the development of skills in the regions where we operate.

Fostering local employment

Since being launched in 2015, Los Pelambres' employment programme has increased the share of local people hired by its contractor companies from 15% to 45.7% in 2021. The programme comprises a trades training programme, a job portal aimed at locals and a KPI for contractors to recruit at least 30% of their workforce locally.

In 2021, we ramped up a similar employment programme in the Antofagasta Region. A total of 19 large suppliers are now advertising job openings on our pilot job portal for vacancies at Centinela, Zaldívar and Antucoya.

For more information, see page 46 in Communities.

ETHICAL MINIMUM WAGE

Our contractor companies are required to pay employees an ethical monthly minimum wage of Ch$515,000, which is more than 50% higher than Chile's legal minimum wage of Ch$337,000.

/ How we engage with our stakeholders continued

Customers

Successful management of our relationships with our customers contributes to our long-term success.

Customers

Most copper and molybdenum sales are made under annual contracts or longer-term framework agreements, with sales volumes agreed for the coming year. Gold and silver are contained in the copper concentrates and are therefore part of copper concentrates sales.

Most sales are to industrial customers who further process the copper into more value-added products – smelters, in the case of copper concentrate production, and copper fabricators and trading companies in the case of cathode production. We build long-term relationships with these key smelters and fabricators, while ensuring customer diversification. We also maintain relationships with trading companies that participate in shorter-term sales agreements, or in the spot market.

About 70% of our mining sales are under contracts of a year or longer and metals sales pricing is generally based on prevailing market prices.

Structure of sales contracts

Typically, our sales contracts set out the annual volumes to be supplied and the main terms for the sale of each payable metal, with the pricing of the contained copper in line with LME prices.

In the case of concentrates, a deduction is made from LME prices to reflect TC/RCs, the smelting and refining costs to process the concentrate into refined copper. These TC/RCs are typically determined annually, in line with market developments and the parties' assessments of the copper concentrate market at the time of the negotiation of the terms.

In the case of copper cathode transactions, a premium, or in some cases a discount, on the LME price is negotiated to reflect differences in quality, logistics and financing compared with the metal exchange's standard copper contract specifications.

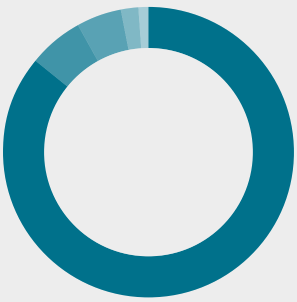
Similarly, our molybdenum contracts are made under medium- and long-term framework agreements, with pricing usually based on Platts' average prices for Technical Molybdenum Oxide with a deduction to reflect the cost of converting molybdenum sulphide concentrate into molybdenum oxide.

Across the industry, neither copper producers nor consumers tend to make annual commitments for 100% of their respective sales or purchases, and normally retain a portion to be sold or purchased on the spot market during the year.

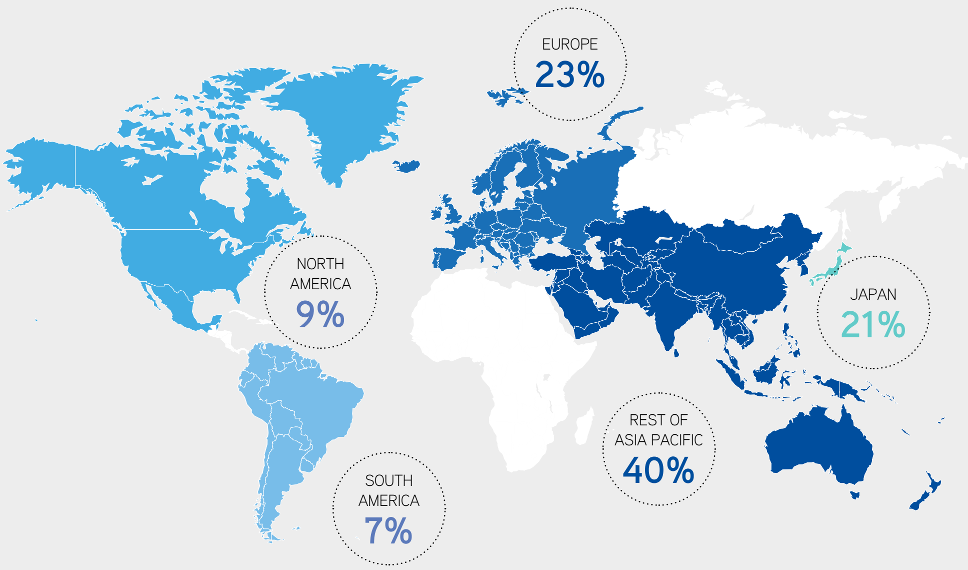
In line with industry practice, our sales agreements generally provide for provisional pricing at the time of shipment, with final pricing based on the average market price in the month in which settlement takes place.

For copper concentrates, the final price remains open until settlement occurs, on average four months from the shipment month. Settlement for the gold and silver contained in the copper concentrates occurs approximately one month after shipment. Copper cathode sales remain open for an average of one month from the month of shipment. Settlement for copper in concentrate sales is later than for copper cathode sales, as copper in concentrate requires more processing to produce refined copper for sale. Molybdenum sales generally remain open for two or three months after the month of shipment.

Revenue by product and customer location



Copper	86%
Gold	6%
Molybdenum	5%
Transport	2%
Silver	1%



Shareholders

The shares of Antofagasta plc are listed on the main market of the London Stock Exchange. As explained in the Directors' Report on page 161, the controlling shareholders of the Company hold approximately 65% of the Company's ordinary shares. The majority of the Company's remaining ordinary shares are held by institutional investors, mainly based in the UK and North America.

We maintain an active dialogue with institutional shareholders and sell-side analysts, as well as with potential shareholders. This communication is managed by our investor relations team in London and includes a formal programme of presentations and roadshows to update institutional shareholders and analysts on developments at Antofagasta.

Throughout 2021, as travel restrictions imposed by the COVID-19 pandemic continued, we have held virtual meetings with institutional investors and sell-side analysts, including international investor roadshows and presentations at industry conferences. These were attended by the CEO and various members of the management team, including the CFO and the Vice President of Corporate Affairs and Sustainability.

We publish quarterly production figures as well as half-year and full-year financial results. Copies of these production reports, financial results, presentations and press releases are available on our website. During 2021 we also published separately Sustainability Reports for our Mining division and Transport division, a Climate Change Report, a Social Management Report and a TCFD Progress Report. All of these reports are available on our website.

What investors focused on most in 2021

- Our ability to achieve our full-year production and cost guidance
- Impact of COVID-19 on our operations, our workers and neighbouring communities
- ESG factors and our response to climate change, especially its impact on water availability
- Free cash flow generation and capital allocation
- Our capital expenditure programme and the potential of our longer-term growth projects
- Progress on the Los Pelambres Expansion, Esperanza Sur pit and Zaldívar Chloride Leach growth projects
- Supply and demand factors in the world copper market
- Potential impact on the Company of the planned rewriting of Chile's constitution and the proposed new mining royalty

Capital Markets Day

In December 2021, we hosted a virtual capital markets event for investors and analysts, to provide an update on our operating, financial and ESG performance and to discuss our growth opportunities.

The key themes of the event were that Antofagasta is a responsible and reliable producer, creating real social value and unlocking embedded growth and we highlighted our:

- Very large mineral resource inventory
- New proprietary primary sulphide leach technology
- Key value-accretive brownfields and incremental growth potential within our asset portfolio
- Five-year production plan which could potentially reach approximately 900,000 tonnes in 2026
- Recently expanded capital allocation framework that now includes climate risk mitigation as a factor and applies an internal carbon price
- Environmental commitments to reduce our freshwater consumption and emissions by 2025 or earlier
- Strong social commitments to our communities

A replay of the event, the transcript and the presentations are available on our website antofagasta.co.uk/investors.

2021 SHAREHOLDER ENGAGEMENT CALENDAR	
Q1	CEO presented at a virtual industry conference for institutional investors
	In-person and virtual one-on-one and small group meetings with some 55 investors, of which senior management participated in 60%
	Virtual presentation of full-year 2020 results by the CFO followed by a question and answer session open to all investors
	Investor relations team attended two virtual investor conferences
Q2	CEO presented at a virtual industry conference for institutional investors
	Virtual one-on-one and small group meetings with some 130 investors, of which senior management participated in 55%
	A recorded presentation by CEO at the virtual Annual General Meeting
	Investor relations team attended four virtual investor conferences
Q3	Virtual presentation of half-year 2021 results by the CEO, CFO and Vice President of Corporate Affairs and Sustainability followed by a question and answer session open to all investors, and a virtual roadshow with investors in Europe and the US
	Virtual one-on-one and small group meetings with some 80 investors, of which senior management participated in 60%
	Investor relations team attended four virtual investor conferences
Q4	Video conference question and answer call by the CEO, CFO and Vice President of Corporate Affairs and Sustainability with investors following the release of the 3Q production report
	Virtual Capital Markets Day event for investors and analysts
	Virtual one-on-one and small group meetings with some 60 investors, of which senior management participated in 15%
	Investor relations team attended six virtual investor conferences

Governments and regulators

Mining is a long-term business in which timescales can run into decades. Political cycles are typically far shorter and material developments and changes to policy, legislation or regulations can have a major impact on our business.

Governments and regulators engagement

Our operations, projects and exploration are mainly located in Chile, where we interact with both the central government and the governments of the Antofagasta and Coquimbo Regions, as well as with the municipalities that are part of our areas of direct influence.

The relationship with governments and regulators is subject to their strict engagement mechanisms, which in Chile are clearly defined under Lobby Law No. 20.730. This Law seeks to regulate the activity of lobbying and other efforts to represent particular interests, in order to strengthen transparency and honesty. It applies to the officials of central and local administrations who regulate activities such as the issue, modification and repeal of administrative acts and laws, and the decisions of the authorities and officials.

Outside Chile, we comply with our own policies and the laws and regulations of the host countries, at all times maintaining high standards of engagement.

Payments to governments

Antofagasta makes payments to governments relating to our activities involving the exploration, discovery, development and extraction of minerals, and our Transport division.

These payments are primarily taxes paid to the Chilean government and mineral licence fees, which in 2021 totalled $789 million of which 99.5% was paid in Chile.

Chilean law allows political donations to be made subject to certain requirements, but Antofagasta made no political donations in 2021. However, we often contribute towards the financing of projects benefiting local communities, in alliance with local municipalities and the government. These contributions are regulated by specific laws and are reviewed by the Chilean Internal Revenue Service (SII).

Public-private alliances

Since mining is a long-term business, we seek to contribute to Chile's development and prosperity, including through public-private alliances with local government. Examples include our active participation in a workshop jointly organised by the Mining Ministry and the Women and Gender Equality Ministry to encourage female participation in the mining industry, and our commitment to the Mining Cluster in northern Chile, a public-private alliance to promote local employment, technology and skills development.

Another example of our active participation in a public-private alliance is the Provincial Water Working Group. This is organised by the Coquimbo Region government to identify and implement collective solutions that can contribute to the area's water security in the short, medium and long term.

Chilean Constitutional reform process

In a referendum in October 2020, the Chilean people voted in favour of rewriting the country's Constitution. This process is being conducted through a Constitutional Convention of 155 members elected in a national vote in May 2021.

The Constitutional Convention has a maximum of 12 months, to July 2022, to discuss and agree the text of a new Constitution, which then must be ratified through the means of another national referendum within 60 days of its approval by the Convention. If approved, the new Constitution will be enacted and replace the current Constitution. If it is not approved the current Constitution will remain in force.

Proposed mining royalty

A proposed new mining royalty was approved by the lower house of Congress in May and, as at the end of the year, is being considered by the Senate. The Senate is not restricted to the specific terms of the proposal presented by the lower house and has received evidence from a broad base of interested parties including academics, union leaders and mining industry representatives. It is now assessing these representations prior to proposing amendments to the draft legislation which will then be returned to the lower house for their further consideration.

Non-financial information statement

The table below sets out where stakeholders can find information in the Strategic Report on non-financial matters, as required under the Non-Financial Reporting Directive requirements. As described in this report, the effective application of these Policies and Standards underpins the Group's management of the risks in relation to these matters.

Reporting requirement	Relevant policies and standards	Content	Page		Page
Sustainability	Value Chart Sustainability Policy ICMM Guidelines	Letter from the Chairman Letter from the CEO Committed to positive impact	6 8 34	How we engage with our stakeholders Sustainability and Stakeholder Management Committee	40 139
Safety and health	Safety and Occupational Health Strategy Special Corporate Safety and Health Regulation for Contractors and Subcontractors (RECCS) Fatal Risk Standard (ERFT) Occupational Health Standard (ESO)	Safety and Occupational Health Strategy Safety risk management	44 45	Health risk management Performance	45 44
Environmental matters	Environmental Management Model Integral closure of mining operations standard Climate change standard Water management standard Biodiversity standard	Environmental management Environmental compliance Water management Mining waste Responsible production Climate change	58 58 51 58 58 48	Carbon footprint Energy management Biodiversity Air quality Mine closure TCFD	49 50 59 59 59 52
Our people	People Strategy Diversity and Inclusion Strategy	Inclusive culture Building human capital Labour relations	42 42 43	Aligning contractors Employee wellbeing	43 42
Social matters	Social Management Model Engagement Standard Management of initiatives standard	Social Management Model Flagship programmes Engagement mechanisms Open social innovation	46 47 47 47	Culture and heritage Local jobs Addressing social concerns Impact measurement	46 47 and 61 46 46
Suppliers	Code of Ethics Purchase and contracts guidelines Direct award procedure Material management policy	Responsible supply Local suppliers Supplier development	60 61 61	Local alliances Energy efficiency in suppliers	61 60
Human Rights	Code of Ethics	Respectful, diverse and inclusive work culture	42	Modern Slavery Act	31
Anti-corruption and anti-bribery	Code of Ethics Compliance Model Anti-Corruption Model Antitrust Protocol	Business integrity and compliance Code of Ethics	31 31	Management of Compliance	31
Description of principal risks and impact on business activity		Risk Management Framework Principal risks	18 20		
Description of the business model		The mining lifecycle	12		
Non-financial Key Performance Indicators		2021 highlights Total economic contribution Key Performance Indicators	3 37 16		

> We are very well-positioned to unlock copper from our primary sulphide resources.
>
> */ Alan Muchnik*
> *Vice President of Strategy and Innovation*

/ Case study

Cuprochlor®-T

At Antofagasta, we understand that the future depends on our ability to innovate and adapt to the new challenges facing mining.

As such, we have been investing for many years in research and development to produce copper from low grade primary sulphide minerals that traditionally have been uneconomic using existing technologies. One such technology is called Cuprochlor®-T, a proprietary process developed by Antofagasta. We believe Cuprochlor®-T will allow us, over time, to produce copper cathodes from low grade primary sulphide minerals at reduced operating and capital costs, and with a smaller water and carbon footprint. If successful, it could allow us to bring forward the processing of ore otherwise scheduled to be mined in many years' time or will allow ore that was previously considered to be uneconomic, to be profitably processed.

As we mine deeper, an increasing proportion of our copper resources are chalcopyrite – a copper iron sulphide mineral – and much of this material is lower grade and cannot be processed economically.

With Cuprochlor®-T, Antofagasta has developed a new solution that allows us to leach these primary sulphides, specifically chalcopyrite, and obtain economic recoveries of 70% or more, after approximately 200 days of leaching.

The process involves using chloride at a controlled temperature and results in the economic production of copper cathodes. Cuprochlor®-T is expected to deliver faster kinetics than alternative processes, such as flotation and bacterial leaching, and uses raw sea water in the process, consuming significantly less freshwater and energy than a conventional concentrator plant.

Test work was initially carried out in a laboratory before moving on to pilot testing, followed by a range of semi-industrial tests. Finally, we conducted an industrial-sized leaching of 40,000 tonnes of ore of which more than 90% was chalcopyrite. We applied sulphuric acid and a combination of chlorinated reagents and temperature.

This technology breaks the bond between sulphur and copper, allowing copper extraction to occur. First, in the agglomeration stage, the necessary reagents are added, and the ore is left to rest with constant aeration at a specific temperature. Second, the ore is irrigated intermittently with continued aeration and maintained at a constant temperature. Finally, after approximately 200 days, the ore completes its leaching cycle.

We are currently progressing the studies on the primary sulphide ore body near some of our SX-EW operations.

This is another example of how Antofagasta develops mining for a better future. The Cuprochlor®-T technology will allow us to take advantage of our already installed capacity of existing heap leach and SX-EW facilities to produce copper cathodes from lower grade copper resources using less water and reducing our carbon footprint.

Find out more online
antofagasta.co.uk/cuprochlor

/ Strategic Report

OPERATING REVIEW

/ Operating review

Mining division

Antofagasta owns and operates four mines. Los Pelambres is located in the Coquimbo Region of central Chile and Centinela, Antucoya and Zaldívar are in the Antofagasta Region of northern Chile.

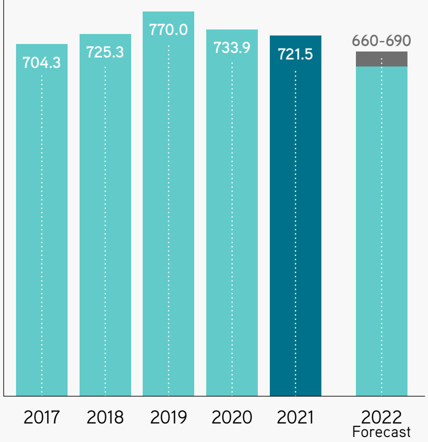
Mauricio Larraín
Vice President of Northern Operations

Despite the challenges during the year, including COVID-19 and the continued drought conditions in central Chile, our mines and plants performed as planned and we have successfully achieved our production and cost guidance for the year. We have the resources and technology to grow, to ensure we are a sustainable partner and we have the people and talent to deliver reliably and responsibly.

Production highlights

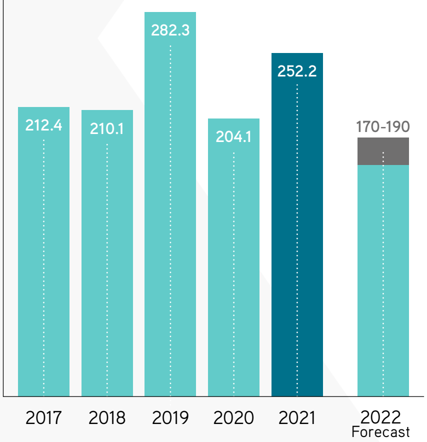
721.5k tonnes

of copper produced



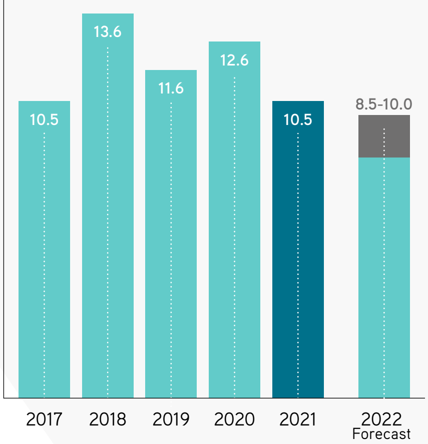
252.2k ounces

of gold produced



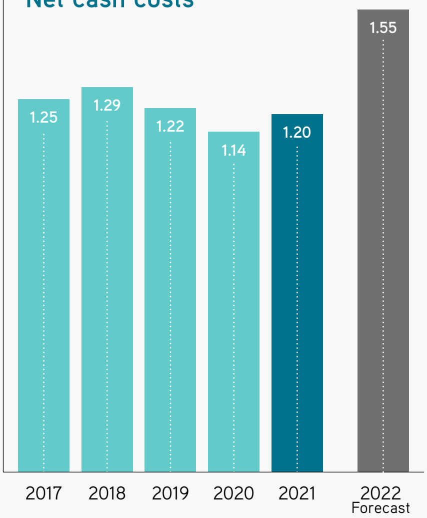
10.5k tonnes

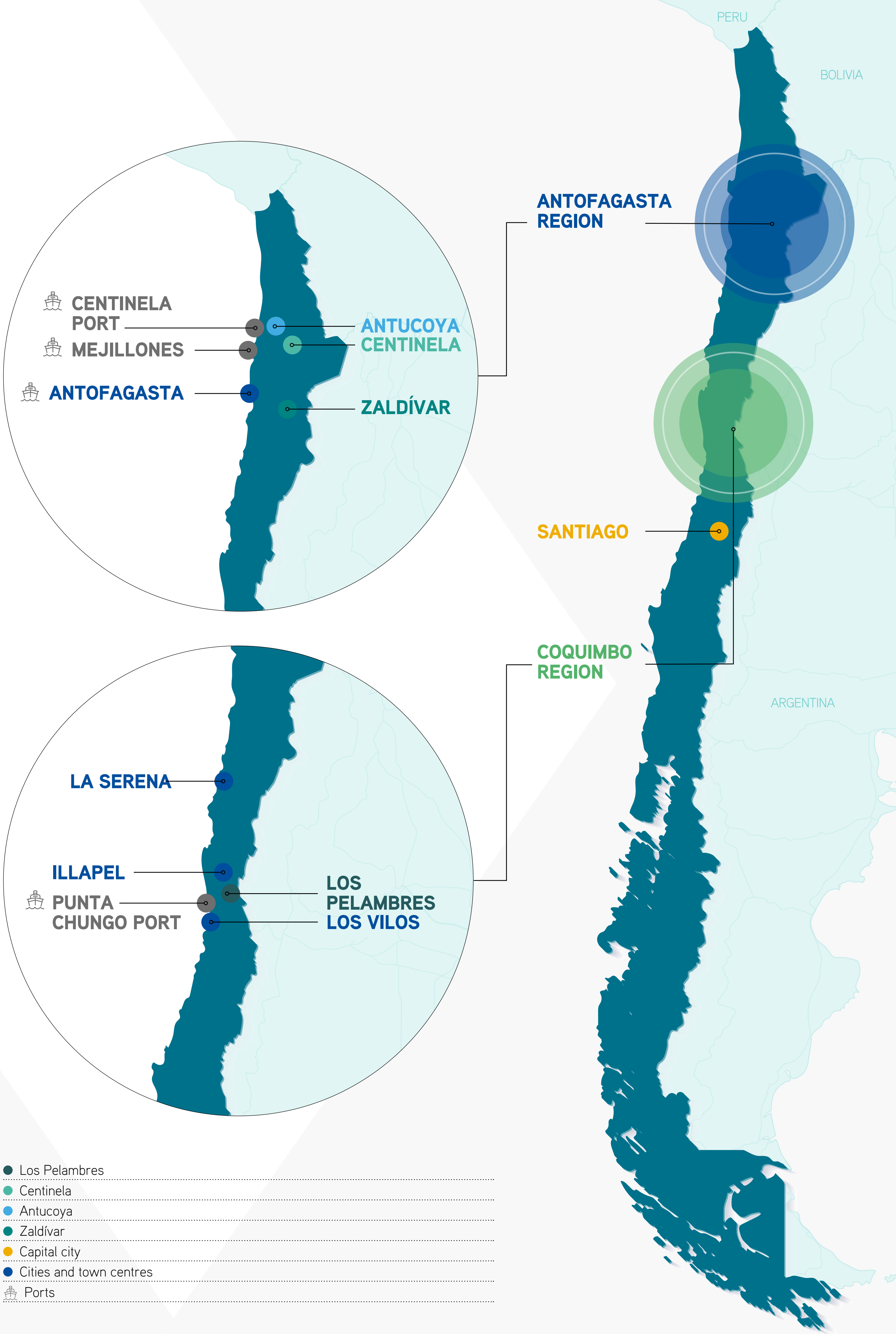
of molybdenum produced



$1.20/lb

Net cash costs





- Los Pelambres
- Centinela
- Antucoya
- Zaldívar
- Capital city
- Cities and town centres
- Ports

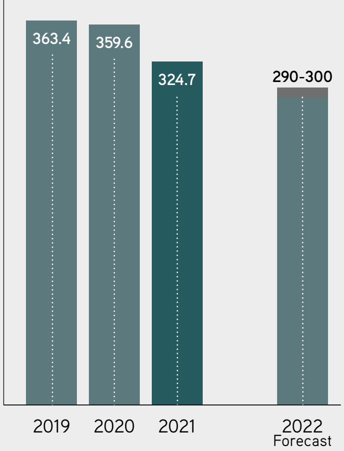
Mining division

Los Pelambres

Los Pelambres is a sulphide deposit in Chile's Coquimbo Region, 240 km north of Santiago. It produces copper concentrate (containing gold and silver) and molybdenum concentrate through a milling and flotation process.

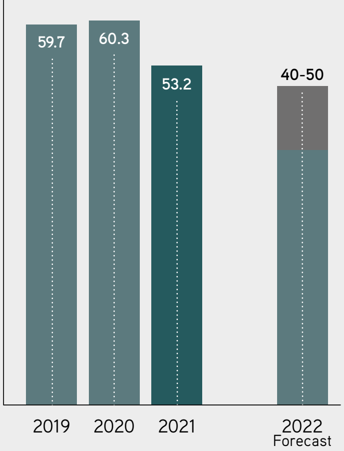
Copper production

324.7k tonnes



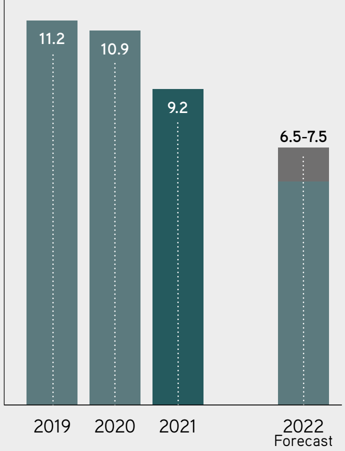
Gold production

53.2k ounces



Molybdenum production

9.2k tonnes



2021 financials

$3,621m

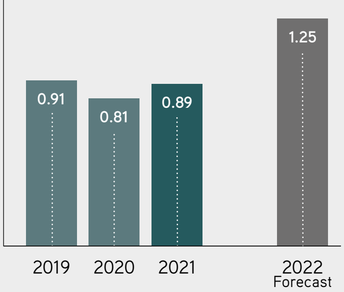
Revenue +36.4%

$2,526m

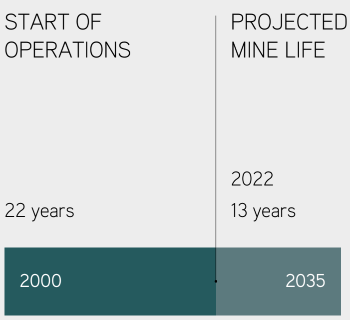
EBITDA +51.9%

Net cash costs

$0.89/lb



Lifecycle of the mine



2021 Performance

Operating performance

There has been a worsening drought at Los Pelambres for 12 years, but this year, for the first time and despite strict water management protocols, the water shortage impacted copper production.

EBITDA was $2,526 million, compared with $1,663 million in 2020, reflecting higher copper and molybdenum realised prices, partly offset by lower copper and gold sales volumes and higher operating costs.

Production

Copper production for the year decreased by 9.7% to 324,700 tonnes, mainly due to the lower throughput due to water optimisation and expected lower copper grade.

Molybdenum production in 2021 was 9,200 tonnes, 1,700 tonnes lower than in 2020 as a result of the lower throughput, grades and recoveries. Gold production was 53,200 ounces, 11.8% lower than the previous year.

Cash costs

Cash costs before by-product credits at $1.59/lb were 25.2%, or 32c/lb, higher than in 2020, reflecting the lower production due to water restrictions, the stronger Chilean peso and higher input prices. Net cash costs for the full year were $0.89/lb, or 9.9% lower than in 2020 due to higher by-product prices as Los Pelambres benefits from the sale of gold, molybdenum and silver.

Capital expenditure

Capital expenditure during 2021 was $880 million, including $219 million on sustaining and $575 million on growth projects.

As at the end of 2021 the Los Pelambres Expansion project was 68% complete (design, procurement and construction). Currently, the final estimated project costs are under review, considering the impact of COVID-19, higher input and logistics costs and project worker absenteeism.

Outlook for 2022

The forecast production for 2022 is 290–300,000 tonnes of copper, 6.5–7,500 tonnes of molybdenum and 40–50,000 ounces of gold. Lower production is due to temporary water supply restrictions which are expected to end once the desalinated water supply system is commissioned in second half 2022.

Cash costs before by-product credits are forecast to be approximately $1.75/lb and net cash costs $1.25/lb, as throughput is temporarily reduced because of the drought.

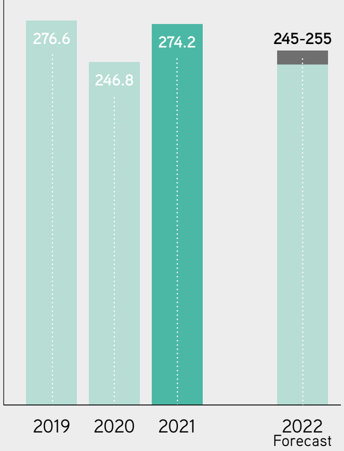
Mining division

Centinela

Centinela mines sulphide and oxide deposits 1,350 km north of Santiago in the Antofagasta Region, one of Chile's most important mining areas. Centinela produces copper concentrate (containing gold and silver) through a milling and flotation process, and molybdenum concentrate. It also produces copper cathodes, using the solvent extraction and electrowinning (SX-EW) process.

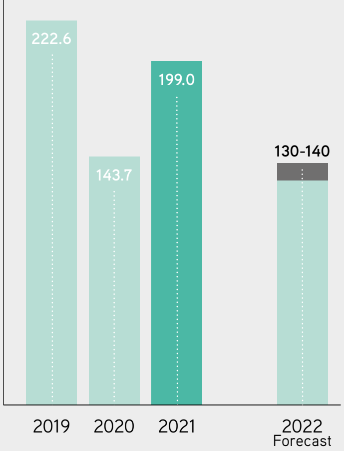
Copper production

274.2k tonnes



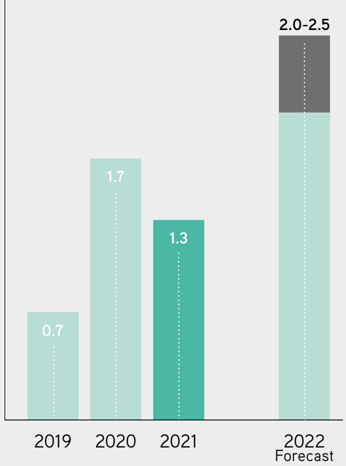
Gold production

199.0k ounces



Molybdenum production

1.3k tonnes



2021 financials

$2,981m

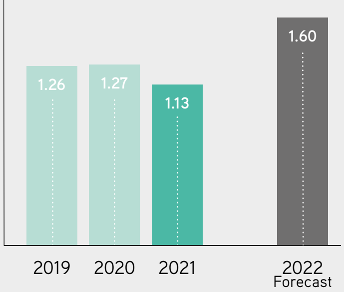
Revenue +61.6%

$1,919m

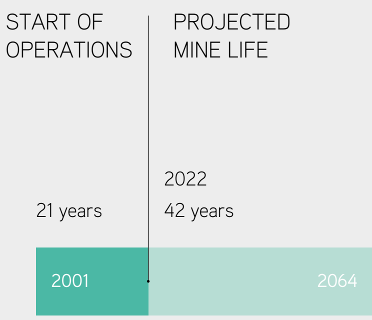
EBITDA +110.5%

Net cash costs

$1.13/lb



Lifecycle of the mine



2021 Performance

Operating performance

Centinela had a very solid year in 2021 with increased production and lower costs with higher sulphide ore grades and increased throughput.

EBITDA at Centinela was $1,919 million, compared with $912 million in 2020, on higher copper and gold sales volumes and higher copper realised prices, partly offset by higher unit costs.

Production

Copper production was 274,200 tonnes, 11.1% higher than in 2020 due to higher grades and increased throughput at Centinela Concentrates, which operated consistently at, or above, design capacity for the full year.

Production of copper in concentrate was 185,400 tonnes, 20.7% higher than in 2020, reflecting expected higher ore grades and throughput above the design capacity of 105,000 tonnes of ore per day.

Copper cathode production during the year was 88,800 tonnes, 4.8% lower than in 2020 mainly due to expected lower grades and recoveries, despite higher throughput and consistently higher performance at all the plants.

Gold production was 199,000 ounces, 38.5% higher than in 2020, due to higher throughput and grades. Molybdenum production was 1,300 tonnes on decreased grades.

Cash costs

Cash costs before by-product credits in 2021 were $1.87/lb, 2c/lb higher than in 2020 as the impact of higher copper production was offset by the stronger Chilean peso and higher input costs.

By-product credits were 74c/lb, 16c/lb higher than in 2020 due to higher gold production and the improved molybdenum price.

Net cash costs for the year were $1.13/lb, 11.0% lower than in 2020.

Capital expenditure

Capital expenditure was $792 million, including $394 million on mine development and $308 million on development capital expenditure, which includes the Esperanza Sur pit project and new autonomous trucks.

Outlook for 2022

Production is forecast at 245–255,000 tonnes of copper, 130–140,000 ounces of gold and 2–2,500 tonnes of molybdenum. Copper production will decrease compared to 2021 as grades fall at Centinela Concentrates to an expected 0.50%, before increasing again in 2023.

Cash costs before by-product credits are forecast to be approximately $2.30/lb and net cash costs $1.60/lb.

/ Operating review continued

Mining division

Antucoya

Antucoya is approximately 1,400 km north of Santiago and 125 km north-east of the city of Antofagasta. Antucoya mines and leaches oxide ore to produce copper cathodes using the solvent extraction and electrowinning (SX-EW) process.

2021 Performance

Operating performance

Antucoya continued to improve its operational reliability and consistency during the year with daily ore throughput increasing by 12.5% compared to 2020.

EBITDA was $337 million compared with $166 million in 2020, reflecting higher sales volumes and realised prices, partially offset by higher operating costs.

Production

Antucoya produced 78,600 tonnes, 0.9% lower than last year due to higher throughput, offset by expected lower grades and resulting lower recoveries.

Cash costs

Cash costs for 2021 were $2.04/lb, 12.1% higher than in 2020 due to a stronger Chilean peso, and higher input costs and maintenance expenditure.

Capital expenditure

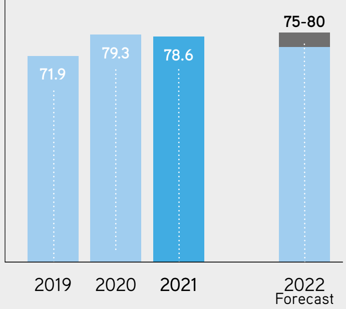
Capital expenditure was $50 million, including $28 million on sustaining capital expenditure.

Outlook for 2022

Production is forecast to be 75–80,000 tonnes of copper and cash costs are expected to be approximately $2.30/lb.

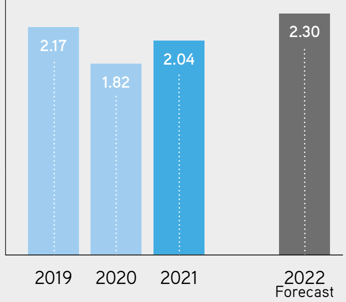
Copper production

78.6k tonnes



Net cash costs

$2.04/lb



2021 financials

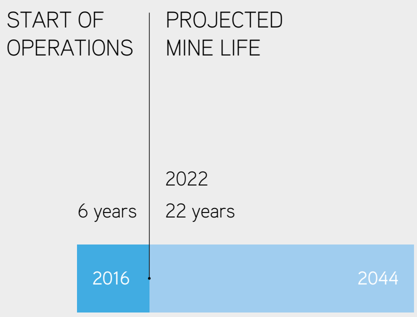
$698m

Revenue +45.3%

$337m

EBITDA +103.3%

Lifecycle of the mine



Mining division

Zaldívar

Zaldívar is an open-pit, heap-leach copper mine which produces copper cathodes using the solvent extraction and electrowinning (SX-EW) process. The mine is 3,000 metres above sea level, approximately 1,400 km north of Santiago and 175 km south-east of the city of Antofagasta.

2021 Performance

Operating performance

Zaldívar had a challenging 2021 with grades declining compared to 2020, however it improved its operational reliability during the year with daily ore throughput increasing by 12.9% compared to 2020.

Attributable EBITDA was $173 million compared with $96 million in 2020.

Production

Attributable copper production was 44,000 tonnes, 8.7% lower than in 2020 mainly due to lower than planned recoveries and expected lower grades, partially offset by higher throughput.

Cash costs

Cash costs were $2.39/lb, compared with $1.80/lb in 2020, mainly due to lower grades, higher maintenance costs and the stronger Chilean peso.

Capital expenditure

Attributable capital expenditure in 2021 was $87 million, of which $49 million was development capital expenditure, mainly on the Chloride Leach project.

Outlook for 2022

Attributable copper production is forecast to be 50–55,000 tonnes at a cash costs of approximately $2.20/lb.

Other matters

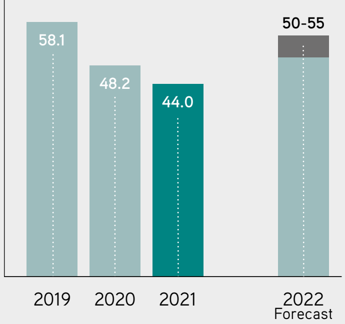
In 2018, Zaldívar submitted an Environmental Impact Assessment (EIA), which included an application to extend its water permit from 2025 to 2031 and the mining lease. This has involved government agencies reviewing the application and a consultation process with the indigenous community, led by the environmental authority. The final stages of the review are expected to be completed in H1 2022.

Zaldívar's final pit phase, which represents approximately 20% of current ore reserves, impacts a portion of Minera Escondida's mine property, as well as infrastructure owned by third parties (road, railway, powerline and pipelines). Mining of the final pit phase is subject to agreements or easements to access these areas and relocate this infrastructure.

Zaldívar's updated mine life now extends to 2036. Looking beyond this date, field work and studies are underway on further extending the life of the mine by exploiting the primary sulphide ore body that lies below the current ore reserves. Water planning beyond the extension to 2031 is being evaluated as part of these studies.

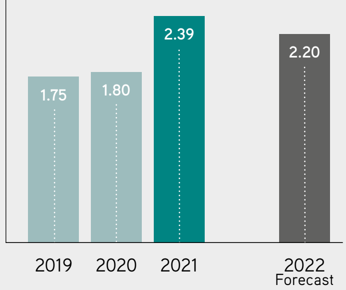
Copper production

44.0k tonnes



Net cash costs

$2.39/lb

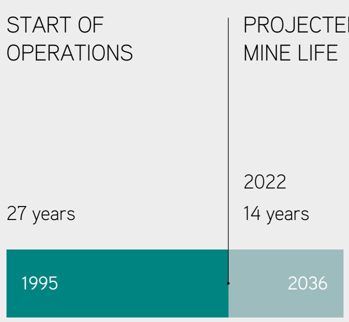


2021 financials

$173m

EBITDA +80.9%

Lifecycle of the mine



/ Operating review continued

Transport division

Our Transport division is known as Ferrocarril de Antofagasta a Bolivia (FCAB) and provides rail and truck services to the mining industry in the Antofagasta Region, including our own mining operations.

2021 financials

$170m

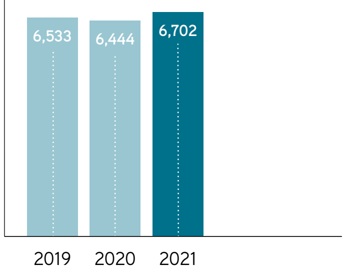
Revenue +13.8%

$68m

EBITDA +11.8%

2021 Tonnage transported

6,702k tonnes



Customer map

Road route
Rail route
FCAB customers

2021 Performance

The Transport division continued to improve its operating activity through the implementation of its Management Model, which is based on five key pillars: operating excellence, growth, transformation, community affairs and urban development.

Operating performance

Tonnage transported in 2021 was 4.0% higher than in the previous year as a new transport contract started.

EBITDA was $68 million, 11.8% higher than in 2020, reflecting the higher revenue from increased volumes and better contracted sales prices.

Costs and operating efficiency

Management is focused on optimising the division's business processes to ensure its long-term competitiveness. The Group's Cost and Competitiveness Programme continued to be applied at the division during 2021 to improve its cost structure, revenue stream and operating standards and achieved benefits of some $8 million during the year.

Sustainability

The maturity of the safety processes applied at the division continued to show improvement, with the division recording its fifth year with no fatalities and an LTIFR (Lost Time Injury Frequency Rate) significantly lower than the average in the Chilean rail and truck transport industries.

In the occupational health area, the operation successfully met the challenge of managing the impact of COVID-19 with minimal disruptions to its operations.

Also, in line with the Group's Diversity and Inclusion Policy, the number of women and people with disabilities in the division increased to 16.4% and 1.1% of the total workforce respectively.

Outlook for 2022

The division has recently strengthened its commercial area in order to ensure the successful renewal of various sales contracts and capture new ones in the medium and long term. Over the next few years, the division will transport an increasing quantity of bulk materials.

The division continues to advance its plans to convert its land in the centre of the city of Antofagasta from industrial to urban use. This has involved extensive consultation with communities, neighbours and other stakeholders. An important milestone was achieved in the first half of 2021 with the approval of the project's Environmental Impact Assessment.

/ *Operating review* continued

Growth projects and opportunities

Our approach to considered growth means that we focus on value, which includes controlling capital costs and optimising production at our existing operations and the development of new mining operations to deliver replacement and new production in the future. We achieve this through careful project management and constant monitoring of the efficiency of our mines, plants and transport infrastructure.

During 2021, development of our growth projects at Los Pelambres, Centinela and Zaldívar was impacted by COVID-19. Work at the concentrator site of the Los Pelambres Expansion project was temporarily suspended in May, while the construction of the desalination plant progressed according to plan. Work on the Esperanza Sur pit and the Zaldívar Chloride Leach projects also progressed according to plan, despite the COVID restrictions.

All projects are proceeding with fully integrated COVID-19 health protocols in place. These are expected to continue during 2022, but as a managed health risk consistent with the high levels of vaccination achieved in Chile. The Zaldívar Chloride Leach project was completed in January 2022 and the Los Pelambres desalination plant and Esperanza Sur pit will be completed in 2022. The concentrator expansion at Los Pelambres will be completed in early 2023.

Los Pelambres Expansion

This expansion project is divided into two phases.

Phase 1

This phase is designed to optimise throughput within the limits of the existing operating, environmental and water extraction permits.

During 2020, the decision was made to change the scope of the project and double the planned capacity of the desalination plant that is part of Phase 1 from 400 litres per second to 800 litres per second. Enabling works for this expansion are being carried out at the same time as the Phase 1 works but are limited in extent by what is allowed under the permits that have already been issued.

Following the change of scope and delays due to COVID-19, the project reached 68% overall completion by the end of the year.

As mining progresses at Los Pelambres, ore hardness will increase. The expansion is designed to compensate for this, increasing plant throughput from the current capacity of 175,000 tonnes of ore per day to an average of 190,000 tonnes of ore per day. The project has two components: the expansion of the concentrator, including an additional SAG mill, ball mill and six cells in the flotation circuit, and the construction of a desalination plant. We expect the desalination plant to be commissioned in the second half of 2022 and the concentrator plant early in 2023.

Annual copper production will increase by an average of 60,000 tonnes per year over 15 years, starting at approximately 40,000 tonnes per year for the first four to five years and rising to 70,000 tonnes for the rest of the period as the hardness of the ore increases and the benefit of higher milling capacity is fully realised.

The 400 litres per second desalination plant includes a 62 km pipeline from the coast to the El Mauro tailings storage facility, where it will connect with the existing recycling circuit that returns water to the Los Pelambres concentrator plant.

Additional permits will be needed to complete the expansion of the desalination plant to 800 litres per second, but some preparatory work is being carried out as part of Phase 1 of the Los Pelambres Expansion project. The planned investment to enable the future expansion will be limited to what is allowed under the existing permits and includes changes to the marine works associated with the inlet and outlet pipes, expanding the plant footprint and changes in the piping, cabling and civil works.

The capital cost of the project is $1.7 billion but is under final review, given the challenges of higher absenteeism and worker rotation as well as higher logistics costs experienced this year due to the COVID-19 pandemic.

PHASE 1

+60,000 tonnes

of annual copper production

+400 litres per second

of desalinated water

Phase 2 – Future expansion

Following the decision in 2020 to increase the size of the desalination plant, Phase 2 of the expansion requires two separate EIA applications:

Desalination plant expansion

This project is to protect Los Pelambres from the future impact of climate change and the deteriorating availability of water in the region, and to free up continental water for use by local communities.

The additional works required, beyond those being completed as part of Phase 1, include the expansion of the desalination plant and the construction of a new water pipeline from the El Mauro tailings storage facility to the concentrator plant. This project requires a new EIA application, which was submitted in the first half of 2021. The EIA also includes two sustaining capital infrastructure projects; the replacement of the concentrate pipeline, which is approaching the end of its useful life, and the construction of certain long-term infrastructure at the El Mauro tailings storage facility. The EIA is expected to be approved in 2023, with the project completed in 2025 when desalinated and recirculated water will account for at least 90% of Los Pelambres' operational water use.

Mine life extension

The current mine life of Los Pelambres is 13 years and is limited by the capacity of the El Mauro tailings storage facility. The scope of the second EIA will include increasing the capacity of the tailings storage facility, extending the pit's pushback plan and expanding the existing waste dumps. This will extend the mine's life by a minimum of 15 years, with a significant portion of Los Pelambres' six billion tonne mineral resources converting to new mine reserves. The EIA will also include the option to increase throughput to 205,000 tonnes of ore per day by adding a new ball mill and repowering the conveyor that runs from the primary crusher in the pit to the concentrator plant. This option would increase copper production by 35,000 tonnes per year.

Key studies on tailings and waste storage capacity have been completed, and the environmental and social studies are now being prepared for submission to the authorities during 2022.

The capital expenditure to extend the mine life was estimated in a pre-feasibility study in 2014 at approximately $500 million, with most of the expenditure on mining equipment and increasing the capacity of the concentrator plant and the El Mauro tailings facility.

PHASE 2

+15 years

mine life extension

+35,000 tonnes

of annual copper production

+400 litres per second

of desalinated water

Centinela Second Concentrator

We are currently evaluating the construction of a second concentrator and tailings deposit some 7 km from the existing concentrator, to take place in two phases. Phase 1 would have an ore throughput capacity of approximately 90,000 tonnes per day, producing copper, and gold and molybdenum as by-products, with an annual production of approximately 180,000 tonnes of copper equivalent. Once Phase 1 is operating successfully, a further expansion is possible and would involve increasing the capacity of the concentrator to 150,000 tonnes of ore per day, with annual production increasing to 250,000 tonnes of copper equivalent, maximising the potential of Centinela's large resource base.

Ore for the second concentrator would be sourced initially from the Esperanza Sur deposit and later from Encuentro Sulphides. The latter lies under the Encuentro Oxides reserves, which are expected to be depleted by 2026.

The EIA for both phases of the project was approved in 2016 and the initial feasibility study for Phase 1 was completed during 2020, with further detailed and supplier engineering progressing during 2021 ahead of an expected decision by the Board by the end of 2022. The capital cost estimated in the 2015 pre-feasibility study for Phase 1 was $2.7 billion, which included capitalised stripping, mining equipment, a concentrator plant, a new tailings storage facility, a water pipeline and other infrastructure, plus the owner's and other costs.

Growth projects and opportunities continued

During 2021, a tender process to invite third parties to provide water for Centinela's current operations, by acquiring the existing water supply system and building the new water pipeline, progressed and is expected to be completed during 2022.

Esperanza Sur pit

The Esperanza Sur pit at Centinela is 4 km south of the Esperanza pit and is close to Centinela's concentrator plant. The deposit contains 1.4 billion tonnes of reserves with a grade of 0.4% copper, 0.13 g/t of gold and 0.012% of molybdenum.

Stripping advanced in 2021 and is expected to be completed in the first half of 2022. The stripping cost is being capitalised and is being carried out by a contractor. Once completed, autonomous trucks operated by Centinela will be used to mine the deposit.

Opening the Esperanza Sur pit will improve Centinela's flexibility in how it supplies ore to its concentrator. Over the initial years, the higher-grade material from the pit will increase production by some 10-15,000 tonnes of copper per year, compared to the amount that would be produced if material was solely supplied by the Esperanza pit. This greater flexibility will allow Centinela to smooth and optimise its year-on-year production profile, which has in the past been variable.

Zaldívar Chloride Leach

The project includes an upgrade of the Solvent Extraction (SX) plant, and the construction of new reagents facilities and additional washing ponds for controlling chlorine levels. It was completed in January 2022.

The project will increase copper recoveries by approximately 10 percentage points, with further improvement possible depending on the type of ore being processed. This will increase copper production at Zaldívar by approximately 10-15,000 tonnes per annum over the remaining life of the mine.

As the Group equity accounts for its interest in Zaldívar, capital expenditure at the operation is not included in Group total capital expenditure amounts.

Twin Metals Minnesota

Twin Metals Minnesota (Twin Metals) is a wholly owned copper, nickel and platinum group metals (PGM) underground mining project, which holds copper, nickel, cobalt-PGM deposits in north-eastern Minnesota, US. The project envisages mining and processing 18,000 tonnes of ore per day for 25 years and producing three separate concentrates – copper, nickel/cobalt and PGM.

Twin Metals has been progressing its Mine Plan of Operations (MPO) and Scoping Environmental Assessment Worksheet Data Submittal, submitted in December 2019 to the US Bureau of Land Management (BLM) and Minnesota Department of Natural Resources (DNR), respectively. However, over the past year, while the Twin Metals project was advancing its environmental review, several actions were taken by the federal government that have changed the potential scenarios for the project.

In 2021, the US Forest Service (USFS) and BLM initiated an up to two-year study regarding the potential withdrawal of lands within the Superior National Forest (SNF), which could ultimately lead to an effective ban on mining for 20 years. This action alone would not have impacted Twin Metals' valid existing rights in the area or the project.

BLM also rejected advancing Twin Metals' preference right lease applications (PRLAs) and prospecting permit applications (PPAs), using the potential withdrawal as a rationale. Twin Metals is appealing that decision but made minor changes to its project configuration to address this decision.

In early 2022, BLM took an additional action through a legal opinion issued by the Office of the Solicitor (M-Opinion). This action arbitrarily cancelled Twin Metals' federal leases 1352 and 1353, citing concerns with the reinstatement and renewal process, Twin Metals considers the lease cancellation to be contrary to the terms of the leases and in violation of its existing valid rights.

These actions, taken collectively, create risk to Twin Metals' ability to continue the project as configured in the MPO. Considering the time and uncertainty related to any legal action to challenge the government decisions, an impairment has been recognised as at 31 December 2021 in respect of the intangible assets and property, plant and equipment relating to the Twin Metals project. Twin Metals is currently evaluating its options to protect its mineral rights and to respond to these legal challenges.

Reko Diq project

In July 2019, the World Bank Group's International Centre for Settlement of Investment Disputes ("ICSID") awarded $5.84 billion in damages (compensation and accumulated interest as at the date of the award) to Tethyan Copper Company Pty Limited ("Tethyan"), the joint venture held equally by the Company and Barrick Gold Corporation, in relation to an arbitration claim filed against the Islamic Republic of Pakistan ("Pakistan") following the unlawful denial of a mining lease for the Reko Diq project in Pakistan in 2011. As at 31 December 2021, the outstanding award amount, including interest, was approximately $6.45 billion.

In March 2022 the Company reached an agreement in principle with Barrick Gold and the Governments of Pakistan and Balochistan on a framework that provides for the reconstitution of the Reko Diq project, and a pathway for the Company to exit the project. If definitive agreements are executed and the conditions to closing are satisfied, a consortium comprising various Pakistani state-owned enterprises will acquire an interest in the project for consideration of approximately $900m to jointly develop the project with Barrick, and Antofagasta would exit. If all the conditions are satisfied during 2022, we would expect to receive the proceeds in 2023.

Exploration activities

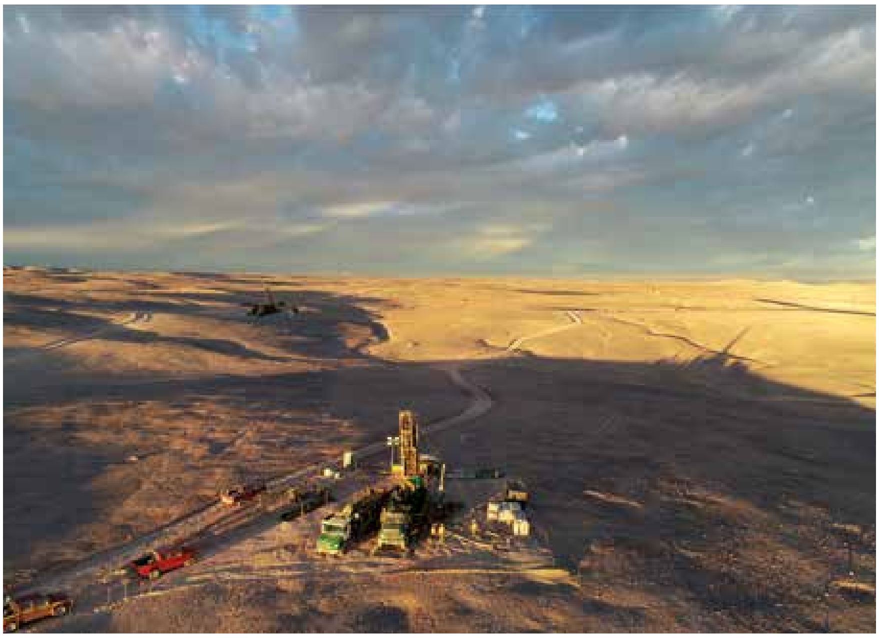
Our aim is to at least replace the mineral resources mined at our operations each year and ensure Antofagasta's sustainable and long-term growth.

Exploration remains a key contributor to the sustainable and long-term embedded growth of the Group's copper business.

Following reduced activity during 2020 due to COVID-19 restrictions, exploration has accelerated in 2021. We continue to focus on favourable jurisdictions in the Americas, particularly Chile, Peru, Canada and the USA. In Chile we are pursuing brownfield and greenfield projects and in the other countries we have generative programmes, identifying early-stage projects while remaining open to M&A opportunities.

Exploration activity in Chile and Peru is managed from our Santiago and Lima offices, and in North America from our Toronto office. Exploration was conducted using these in-house teams, utilising a well-balanced portfolio of land holdings in Chile and Peru while pursuing third-party opportunities in the rest of the Americas, with the aim of building a portfolio of long-term copper projects.

The Group's exploration and evaluation expenditure, which includes expenditure on pre-feasibility studies, increased by 21.3%, compared to 2020, to $103 million.



Chile

The Group's exploration programmes are in the copper belts of northern-central Chile, particularly in areas with high prospectivity for porphyry copper, as well as manto and IOCG (Iron Oxide Copper Gold) type deposits.

During 2021, exploration activity included 63,000 metres of drilling, 55% more than in 2020, mainly at two advanced projects, one of which is included in our mineral resources statement this year for the first time and the other is expected to report in 2022.

The Company has discovered a significant greenfield manto type deposit in the coastal belt of the Antofagasta Region. The initial inferred resource of the Cachorro deposit is 142 million tonnes, with a copper grade of 1.2%, and represents just part of the potential resource.

In addition, we advanced drilling evaluation at several projects in the Centinela Mining District brownfield programme, maintaining our focus on identifying new high-quality projects with leachable oxide mineralisation in our properties and in third-party areas.

International

Our international programme has a strong focus on Peru, including the development of a diversified land portfolio with long-term and massive potential in the prospective coastal and miocene belts.

Exploration efforts in North America remain concentrated on the key copper belts in British Columbia and Arizona – Nevada, looking for joint venture opportunities with companies with attractive holdings, local knowledge and resources.

/ *Operating review* continued

Key inputs and cost base

Our mining operations depend on many inputs, from energy and water to labour and fuel, the most important of which are reviewed below.

Contractor services, maintenance and spare parts account for 48% of the Mining division's total production costs, and energy and labour are the largest direct costs, accounting for 13% and 14% respectively. As concentrate producers, Los Pelambres and Centinela require reagents and grinding media. As cathode producers using the SX-EW process, Centinela, Antucoya and Zaldívar require sulphuric acid. The availability, cost and reliability of these inputs are central to our cost management strategy, which focuses on cost control and security of supply.

Energy

Energy is a strategic resource for our Group and supply is maintained through a strategy that considers four factors: safety, cost, efficiency and source. For this reason, in addition to reducing the cost of our electricity, we are working on improving our energy consumption efficiency and reducing our emissions.

To achieve this, we have strengthened our Energy Management System, based on international standard ISO 50.001, in line with the new Energy Efficiency Law in Chile published at the beginning of 2021. We are currently preparing our Energy Policy, with objectives and goals that will guide our actions in the short, medium and long term.

We have created specific management structures to manage our energy usage and through exhaustive analysis of gaps and opportunities have identified a set of energy efficiency initiatives that we will implement from 2022.

Our operations are on the country's main grid, the National Electrical System (SEN) and each of our operations sources power under medium- and long-term contracts called Power Purchase Agreements (PPAs).

In recent years, renewable technologies have significantly reduced in cost and many renewable power plants are being built in Chile, mainly in the north. The cost of renewable power is significantly lower than power from conventional sources.

Zaldívar started operating on 100% renewable power in July 2020 and Centinela and Antucoya did the same from early 2022.

Los Pelambres increased its use of renewable power in 2021, and during 2022 should start to use power only from renewable sources. As a result, all our mining operations are expected to use energy solely from renewable sources by the end of 2022.

This transition to solely using renewable power, with its lower costs and lower emissions, is important for both the Company's carbon footprint and its costs. Energy accounted for 13% of our production costs in 2021.

Water

Water is a strategic resource and we are committed to:

- Increasing our water efficiency by improving recirculation, recovery and reuse rates, and progressively reducing our consumption of continental water.
- Managing our water usage in an environmentally responsible and sustainable way, in agreement with the communities where we operate.
- Applying strong and transparent water governance practices and reporting our performance, risks, opportunities and outcomes both internally and externally.

At Los Pelambres and Zaldívar we use water from continental sources. At Centinela we mainly use raw sea water and at Antucoya we only use raw sea water.

In 2021, sea water accounted for 45% of our Mining division's operational water withdrawal and our efficiency metric (reuse and recycling, as defined by the ICMM) at each operation ranges from 77% to 90%, depending on the operation's characteristics.

In the second half of 2022, Los Pelambres expects to complete the construction of a 400 litre per second desalination plant, which, subject to permitting, will double to 800 litres per second by 2025. This will ensure the operation's security of supply and will mean that the operation will no longer need to withdraw water from the Choapa River and its wells in the upper part of the Choapa Valley. From 2025, sea water and reused and recycled water will account for more than 90% of the Mining division's total operational water use.

Centinela is a pioneer in efficient water management, becoming the world's first large-scale mining operation to use raw sea water and thickened tailings, which allow more water to be recycled than conventional thickening technology. Centinela currently obtains 14% of its water withdrawal from nearby wells. However, by the end of 2022 the capacity of its sea water pumping system will have been increased and water extraction from these wells will cease.

Antucoya uses only raw sea water, as will Centinela's second concentrator if its construction is approved by the Board.

Zaldívar obtains continental water from wells in the Atacama Salt Flat. Its current water extraction permits expire in 2025 and an application to extend them to 2031 is part of the Environmental Impact Assessment (EIA) application to extend the mine's life.

In reporting our water metrics, we apply the ICMM's "Water Reporting – Good Practice Guide (2nd Edition)". In addition, we also report our water risk exposure in accordance with the requirements of the Water Security Programme of the Carbon Disclosure Project (CDP), and to the relevant local authorities and other national bodies.

83%

Water reused and recycled

Labour

Antofagasta's total workforce during 2021 was 26,991 employees and contractors. Accessing a diverse and talented workforce is key to our success.

Labour agreements are in place with each of the 11 unions at our mining operations and generally last for a period of three years, when they are renegotiated. However, we maintain good working relationships with our employees and unions throughout the contract periods, so that issues are not left for discussion only during formal negotiations. During 2021, three negotiations were successfully concluded, two at Los Pelambres and one at Centinela.

Contractors account for approximately 74% of our workforce and contractor companies are responsible for labour negotiations with their own employees. We maintain strong relations with all contractors to ensure operating continuity and require all contractors to adhere to the same key standards as we maintain for our own employees, particularly in the areas of safety and health.

26,991

People

74%

Contractors

Key inputs and cost base continued

Service contracts and key supplies

Negotiations for key commercial contracts, such as mining equipment, fuels, lubricants, critical spares, tyres, reagents, grinding balls, explosives and mine maintenance, are managed centrally to generate synergies and economies of scale. This achieves significant savings and allows us to implement new controls that improve competitiveness and productivity from our contractor companies. We have linked our supply prices to the respective underlying commodity, to minimize the impact on our margins.

We have a challenging optimisation programme at the corporate and operations levels to improve the administration, control and risk management of our service contracts. The procurement team has a standardised way of working and considerable technical knowledge and has developed effective approaches to managing the purchase of goods and services. Depending on the strategic position of the supplier, these range from pure price competition with e-auctions to long-term Group-wide agreements with mechanisms and incentives that provide benefits for both parties. In 2021, we started strategic review meetings with our key suppliers in order to address operational challenges while simultaneously taking a long-term view.

With the global disruption of the supply chain caused by COVID-19, we implemented contingency plans to maintain the quality and timely delivery of spare parts and materials, ensuring operational continuity and cost containment.

Following the introduction of a purchasing assistant robot in 2020, to help with some stages of the purchase process and integrate new technologies, approximately 88% of the Group's material stock purchases were done through this automated process.

On average we have around 2,184 suppliers of goods and services, of which 96% are based in Chile.

Fuel and lubricants

Fuel and lubricants represent approximately 7% of production costs and are used mainly by mine haulage trucks. Improving fuel efficiency remains a priority, with the amount of fuel consumed per tonne of material mined being a key measure. Variations in the oil price affect not only the price of fuel but also the spot price of energy, shipping rates for supplies and products, and the cost of items such as tyres and conveyor belts, which contain oil-based products. The oil price increased by approximately 40% during 2021.

Explosives

The explosives market is experiencing high prices following the reactivation of the fertiliser market after the peak of the COVID-19 pandemic. During the year we renegotiated the explosives supply and service contracts at Los Pelambres and Antucoya in order to contain costs and incorporated new explosives technologies at Centinela that will allow consumption to be optimised while maintaining good fragmentation results.

Grinding balls and mill liners

Steel is used in the grinding balls and mill liners which account for approximately 12% of a concentrator plant's costs and 4% of the Group's production costs. Steel prices fell in 2020 but increased significantly in 2021, raising the price of grinding balls and liners, and shipping costs have also increased. We have been working on circular economy initiatives to contain escalating costs, and reusing liners and balls.

Sulphuric acid

Sulphuric acid is one of the main inputs for the SX/EW leaching process used to produce cathodes and in 2021 it accounted for approximately 4% of the Group's production costs. Together Centinela, Antucoya and Zaldívar use approximately 1.5 million tonnes of sulphuric acid per year, mainly contracted under one-year agreements to secure supply.

During 2021, the acid price increased significantly, starting the year at about $75 per tonne in Chile and reaching around $255 per tonne by the end of the year. This was an increase of over three times, to a level not seen since 2008.

This price rise followed the revival of global industrial and agricultural activity during the year, the delayed recovery of some sectors, such as the refining of fossil fuels, which is an important producer of sulphur, and significant increases in maritime freight costs.

The high price of acid will have a significant impact at our SX-EW operations, where it accounts for about 23% of production costs.

During 2022 the spot price of acid is expected to remain relatively high, but trending downwards during the year.

Exchange rate

The Chilean peso/US dollar exchange rate generally has a strong correlation with the copper price as copper exports generate over 50% of Chile's foreign exchange earnings, so if the copper price strengthens so does the Chilean peso, and vice versa. This provides a natural hedge for the Company as approximately half of our operating costs are in Chilean pesos. However, during 2021 although the copper price strengthened, the Chilean peso weakened closing the year at Ch$845/$1 as the impact of local political events and the liquidity injection as part of the response to the pandemic outweighed the strength of the copper price.

/ Operating review continued

Operating excellence and innovation

Innovation is one of our five strategic pillars, designed to create and add value across the Group by enabling the progress and fulfilment of our strategic priorities.

Our innovation programme has two key objectives. The first is to improve and achieve the full potential of our operations by seeking new ways of using best-in-class digital technology. We are doing this through the integration of data with advanced analytics and by improving operational performance with automation and robotics. The second is a longer-term objective; to enable growth in our business and develop the next generation of mining practices, including game-changing process technology and the reduction of our environmental footprint.

$130.7m

of savings achieved in 2021

45%

through productivity improvements

55%

through more efficient contract negotiations, reducing consumption rates and better use of maintenance resources

Operating excellence

During 2021, our operating excellence strategy focused on rigorously improving our production processes throughout the Group. We achieved this by implementing the initiatives that are key to successfully creating value, the most important of which were the use of advanced analytics to improve data-driven decision-making and the development or adoption of new solutions to improve or transform our existing operational practices. In doing this, we also reduced our cost base, improving our competitiveness within the industry.

Data analytics

During 2021, we created and deployed a Data Governance Programme throughout the organisation, generating gains in data access, consistency and quality, and accelerating the development of our advanced analytics capabilities. Data analytics tools and the use of case study solutions contributed to the improvement of our performance.

Operational innovation

Our open innovation model is effective in enabling our employees, collaborators and external parties, such as suppliers, to understand our main operational challenges. They can then propose their own ideas and solutions through an online collaborative platform called Innovaminerals and at the Pitch Days we organise. During the year we tackled 17 operational challenges and hosted 22 Pitch Days, which led to us doing further work with the proposers on 11 of the suggested solutions.

Cost and Competitiveness Programme

The Cost and Competitiveness Programme (CCP) was introduced in 2014 to capture the gains from our initiatives to reduce our cost base and improve our competitiveness. Now, after seven years, the scope of the CCP has evolved to reflect the greater maturity level it has achieved.

The programme focuses on five areas in order to deliver sustainable cost reductions and productivity increases: streamlining goods and services procurement; improving operating efficiency and asset reliability; energy efficiency; corporate and organisational effectiveness; and working capital, capital expenditure and services efficiency.

During 2021, we achieved savings of $131 million, equivalent to $8.2c/lb for the year.

For 2022, the target is at least $50 million of further savings.

New ways to operate

Our digital roadmap consists of transformational strategic programmes that draw on the adoption of new technologies to improve productivity and safety.

Integrated Remote Operations Centre (IROC)

Centinela's Integrated Remote Operations Centre (IROC) is in the city of Antofagasta. It went live in December 2021 and will be completed during 2022. The implementation of this project allows not only for remote operations and improved process control but also better decision-making and greater efficiency and productivity of operations from the mine to the port.

An IROC for Los Pelambres is also under construction and is expected to go live in the second half of 2022.

Autonomous systems

The increasing use of autonomous equipment at Los Pelambres and at Centinela's Esperanza Sur pit continued during the year.

Los Pelambres has successfully deployed five autonomous production drill rigs, significantly improving productivity. During the year they drilled 180,000 metres, operating autonomously from a control room located more than a mile away.

Meanwhile, at Centinela, we completed the testing stage for the new autonomous trucks and drills at Esperanza Sur, with eight autonomous trucks and two autonomous production drills in operation by the end of the year. Three further trucks will be added to the fleet during 2022.

Next generation in mining technologies

The following examples show how we continue to advance the development and validation of new technologies that could enable new growth and mining practices:

Cuprochlor®-T – our patented primary sulphide leaching technology

During 2021 we conducted an industrial-scale trial at Centinela, using a 40,000-tonne heap of primary sulphide ore (chalcopyrite). The results are consistent with previous test work. This technology could allow us to bring forward the processing of ore or could allow ore previously considered to be uneconomic to be profitably processed. We are now incorporating this technology as an option in our planning for the medium- and long-term development of mineral resources at our operations.

Green hydrogen

In 2021, we became the first mining company to join the Chilean Hydrogen Association (H2 Chile), which promotes the development of green hydrogen, a promising clean fuel alternative that could replace the diesel consumed by our haulage trucks. We are also participating in Hydra, a project that seeks to build a hydrogen-based hybrid engine prototype with batteries and cells that could be used in mining trucks. A pilot project is planned at Centinela.

Case study at Los Pelambres: Mineral tracking

During 2021 Los Pelambres implemented an advanced analytics web application that provides recommendations on how to increase ore recoveries during the flotation process. This is based on real-time information on minerals being fed into the plant.

Case study at Centinela: Drilling and blasting management platform

The Drilling and Blasting Management Platform at Centinela has an integrated data system that improves the management of the drilling and blasting processes, generating a 5% improvement in metres drilled and a cost reduction of 3% in 2021.

Case study at Centinela: Underflow pumps restriction model

Centinela developed a predictive maintenance programme using technological enablers and analytics tools to anticipate failures and equipment defects. This improved plant maintenance, which is one of the main restrictions in plant performance.

/ Operating review continued

The copper market: supplying metals for a better future

As the world becomes ever more environmentally aware, demand for copper increases. We are responding by continuing to supply the copper needed for a more sustainable world in a sustainable way.

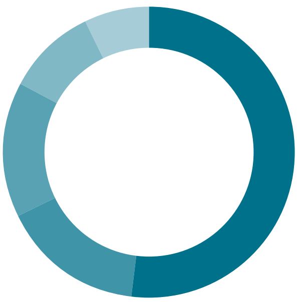
During 2021 our Centinela and Zaldívar operations received the Copper Mark, an independent verification that they produce copper according to the highest international sustainability standards. Los Pelambres and Antucoya have begun the accreditation process, which is expected to conclude during 2022.

The Copper Mark is also expected to enable companies to comply with the London Metal Exchange's (LME) Responsible Sourcing requirements that come into force at the end of 2023. This is currently going through an OECD Alignment Assessment and, once completed, we will apply to the LME for formal approval.

Market comment

The year started with the continued upward trend in the copper price seen in the second half of 2020, with the price reaching a peak of $4.86/lb in May. This was an all-time high and for the rest of the year the copper price stabilised, trading in a range above $4.20/lb. This has continued in 2022.

Copper consumption by region in 2021



China	52%
Other Asia	16%
Europe	15%
North America	10%
Rest of the world	7%

Source: Wood Mackenzie, Copper Outlook December 2021

Due to strong copper demand growth in 2021 and the limited capacity of copper supply to respond quickly, the exchange stocks have dropped to their lowest level since 2008, ending the year at less than 0.6 weeks of consumption. This has consolidated the price at historically high levels and moved the copper forward curve into backwardation, where the uncertainty of having enough copper for prompt delivery leads to the cash price being higher than the forward price, reflecting exceptionally tight availability.

This situation is expected to ease during the second half of 2022, when several major greenfield and brownfield projects are scheduled to come into production. However, we expect part, or all of the additional production will be offset by continued falling grades, COVID-19, political instability, water restrictions, communities' unrest, and logistical and supply constraints.

Looking further ahead, the outlook for copper remains positive, thanks to the continued decarbonisation of industrial activity and the growth of the clean energy sector and electromobility. Demand is expected to grow more slowly during 2022 than in 2021, but still at a high rate of about 2.5-3.0%, requiring an additional 600 to 700,000 tonnes of refined copper per year.

Over the year the LME copper price averaged $4.23/lb, 51% higher than in 2020.

Refined copper

Copper cathode inventories in exchanges and China bonded warehouses fell by 29% during 2021, reaching a historical low of 440,000 tonnes. China bonded stocks halved to 190,000 tonnes, prompting the Chinese State Reserves Bureau (SRB) to release some 110,000 tonnes of copper from its strategic stocks in an attempt to stabilise prices at lower levels and control inflationary pressure. Bonded stocks in China are at their lowest level since records have been available.

This demand for cathodes, combined with low inventories, drove up cathode premiums in China from $20-30/tonne to $90-100/tonne, before weakening to a level of about $80/tonne towards the end of the year.

Also, the recovery in world trade has been impaired by shipping delays due to COVID-19 sanitary restrictions and congestion at major Asian and North American ports. The additional time required for vessels to be cleared for docking and unloading has significantly impacted efficiency and shipping capacity.

Logistical constraints are expected to lessen during 2022.

Copper concentrate

Some 71% of our copper production is in the form of copper concentrates, and the amount miners pay smelters as treatment and refining charges ("TC/RCs") is dependant on the dynamics of the concentrate market. These charges account for about 6% of our cash costs before by-product credits.

Most of the new copper production in the world is in the form of concentrates and these volumes are largely being absorbed by new smelter capacity in China, while over the coming years more smelter capacity is expected in Indonesia, India and Africa. In the medium term, therefore, there is not expected to be a lack of smelting capacity for processing all the new production in the form of concentrates.

2021 was a volatile year for TC/RCs. Soon after the conclusion of the annual terms for the year at $59.5 per dry tonne of concentrate and 5.95c/lb of refined copper, the spot TC/RCs started trending downward, reaching an historic low of $20/t and 2c/lb in April, a level not seen since 2011. From April onwards TC/RCs recovered, closing the year at $56/t and 5.6c/lb.

Annual benchmark terms for 2022 were agreed in December at $65/t and 6.5c/lb, reflecting some expected easing in concentrate supply during the year.

Gold

After gold prices reached the highest level in the last 20 years in August 2020 at $2,061/oz, the price followed a downward trend until April 2021, when it reached a low for the year of $1,681/oz before ending the year at $1,820/oz.

The market price of gold averaged $1,799/oz in 2021, compared with $1,770/oz in 2020.

If global economic uncertainty and the high inflationary environment continues in 2022, the gold price is expected to remain strong.

Molybdenum

Our molybdenum is a by-product of the production of copper concentrates at Los Pelambres and Centinela, where in a separate flotation process we concentrate the molybdenum sulphide that is sold to third parties who then roast it to produce molybdenum oxide.

This is used mainly in the production of stainless steel and special alloy steels that require hardness and resistance to corrosion, abrasion and/or high temperatures. To a lesser extent, it is used as a component in the production of catalysts, lubricants and pigments.

During 2021, the molybdenum price increased following the significant increase in stainless steel production during the year. The price started the year at $10.1/lb, and moved upwards strongly as the stocks built up in 2020 were run down, with the price reaching daily highs in June and September of slightly above $20/lb. After September the price softened slightly but continued to trade at or above $18.5/lb. The average over 2021 was $15.9/lb, 83% higher than in 2020.

The molybdenum market is expected to remain strong in 2022, with the market balanced or slightly in deficit. Supply is expected to be relatively weak while demand remains strong due to increasing industrial activity in Europe and the USA, and higher oil and energy prices.

> We have introduced an internal carbon price, which we will use in the assessment of projects and in the day-to-day procurement process.
>
> */ Mauricio Ortiz*
> *Chief Financial Officer*

/ Case study

Internal carbon price

The internal carbon price (ICP) is a key management tool to reduce the emission of greenhouse gas (GHG) in organisations. Its value is set internally and applied in decision-making processes, to allow decision-makers to account for the impact of their decisions on a company's GHG emissions.

Using an ICP has many different objectives. These include managing the risks and opportunities associated with climate change, encouraging investments to reduce carbon emissions, sourcing low-emission supplies and services, increasing the number of energy efficient initiatives, changing internal organisational behaviour, identifying and capitalising on low-carbon opportunities, anticipating changes in the regulatory framework, and influencing the rest of the value chain, both suppliers and customers.

In March 2021, a multidisciplinary team was formed from the energy, environment, supply, planning, projects and finance areas to define our ICP. The team reviewed the national context of climate change and the relevant laws, as well as the carbon prices used internationally and by other companies in the mining industry. The results of the study were presented to the Energy, Water and Emissions Management Executive Committee who approved the ICP to be used for planning in 2022.

We also used the ICP to prepare the Group's 2022 budget and in the evaluation of supplier bids, and going forward we will also use it in project planning and evaluation.

We know that some of our local suppliers are likely to require support to adapt to the requirement to measure their GHG emissions, so we are engaging with them to help them do this. Although in any event, we believe that they will see the incorporation of an ICP as an opportunity, as it will give them an advantage over more distant suppliers with larger transport-related carbon footprints.

By incorporating an ICP into our decision-making processes, we are taking an important step towards reducing our carbon footprint and reaching our goal of carbon neutrality by 2050, or sooner if technology permits.

Find out more online
antofagasta.co.uk/ccr21

/ Strategic Report

FINANCIAL REVIEW

/ Financial Review

Record earnings reflecting a strong copper price environment

Underlying EPS of 142.5 cents per share increased by 161% compared to 2020. Further strengthening of the balance sheet with net cash of $540 million at the end of 2021, an improvement of $622 million from the net debt position at the end of 2020.

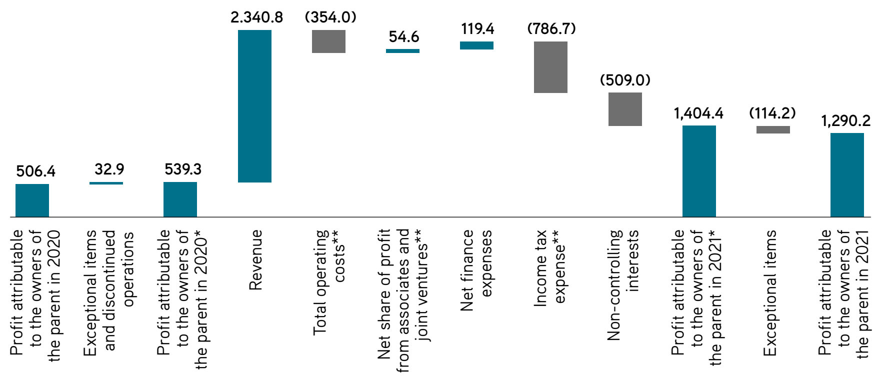
Financial review for the year ended 31 December 2021

	Before exceptional items $m	Exceptional items $m	Year ended 31.12.2021 Total $m	Before exceptional items $m	Exceptional items $m	Year ended 31.12.2020 Total $m
Revenue	7,470.1	-	**7,470.1**	5,129.3	-	5,129.3
EBITDA (including share of EBITDA from associates and joint ventures)	4,836.2	-	**4,836.2**	2,739.2	-	2,739.2
Total operating costs	(3,891.1)	(177.6)	**(4,068.7)**	(3,537.1)	-	(3,537.1)
Operating profit from subsidiaries	3,579.0	(177.6)	**3,401.4**	1,592.2	-	1,592.2
Net share of results from associates and joint ventures	59.7	-	**59.7**	5.1	-	5.1
Impairment of investment in associate	-	-	**-**	-	(80.8)	(80.8)
Total profit from operations, associates and joint ventures	3,638.7	(177.6)	**3,461.1**	1,597.3	(80.8)	1,516.5
Net finance expense	16.0	-	**16.0**	(103.4)	-	(103.4)
Profit before tax	3,654.7	(177.6)	**3,477.1**	1,493.9	(80.8)	1,413.1
Income tax expense	(1,332.9)	90.6	**(1,242.3)**	(546.2)	19.7	(526.5)
Profit from continuing operations	2,321.8	(87.0)	**2,234.8**	947.7	(61.1)	886.6
Profit from discontinued operations	-	-	**-**	7.3	-	7.3
Profit for the year	2,321.8	(87.0)	**2,234.8**	955.0	(61.1)	893.9
Attributable to:						
Non-controlling interests	917.4	27.2	**944.6**	408.4	(20.9)	387.5
Profit attributable to the owners of the parent	1,404.4	(114.2)	**1,290.2**	546.6	(40.2)	506.4

Basic earnings per share	cents	cents	**cents**	cents	cents	cents
From continuing operations	142.5	(11.6)	**130.9**	54.7	(4.1)	50.6
From discontinued operations	-	-	**-**	0.7	-	0.7
Total continuing and discontinued operations	142.5	(11.6)	**130.9**	55.4	(4.1)	51.3

The profit for the financial year attributable to the owners of the parent (including exceptional items and discontinued operations) increased from $506.4 million in 2020 to $1,290.2 million in the current year. Excluding exceptional items and discontinued operations the profit attributable to the owners of the parent increased by $539.3 million to $1,404.4 million.

The full reconciliation between 2020 and 2021, including exceptional items, is as follows:



*Excluding exceptional items and discontinued operations
**Excluding exceptional items

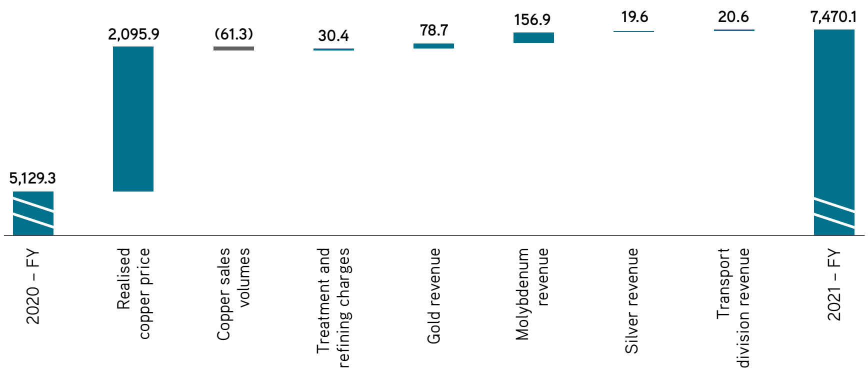
COVID-19

The Group has continued to proactively manage the risks of COVID-19 on its operations and projects, allowing its operations to continue to operate without interruption throughout the year. The Group incurred $60 million of operational expenses (including the 50% attributable share of Zaldívar's expenditure) during the year in respect of COVID-19 measures, including costs relating to testing, additional travel expenses for its employees travelling to and from the mine sites, hygiene supplies and additional costs for third-party services. This compares with $40 million incurred during 2020.

The Group has capitalised $32 million of additional project costs during 2021 linked to the impact of COVID-19, mainly relating to the additional costs of third-party contractors, testing, and increased travel for employees and project contractors travelling to the sites.
This compares with $31 million capitalised during 2020.

Revenue

The $2,340.8 million increase in revenue from $5,129.3 million in 2020 to $7,470.1 million in the current year reflected the following factors:



Revenue from the Mining division

Revenue from the Mining division increased by $2,320.2 million, or 47%, to $7,300.1 million, compared with $4,979.9 million in 2020. The increase reflected a $2,065.0 million improvement in copper sales and $255.2 million increase in by-product revenue.

Revenue from copper sales

Revenue from copper concentrate and copper cathode sales increased by $2,065.0 million, or 47%, to $6,413.2 million, compared with $4,348.2 million in 2020. The increase reflected the impact of $2,095.9 million from higher realised prices and $30.4 million from lower treatment and refining charges, partly offset by $61.3 million from lower sales volumes.

(i) Realised copper price

The average realised price increased by 47% to $4.37/lb in 2021 (2020 – $2.98/lb), resulting in a $2,095.9 million increase in revenue. The increase in the realised price reflected the higher LME average market price, which increased by 51% to $4.23/lb in 2021 (2020 – $2.80/lb), and a positive provisional pricing adjustment of $352.7 million. The provisional pricing adjustment mainly reflected the increase in the year-end mark-to-market copper price to $4.42/lb at 31 December 2021, compared with $3.52/lb at 31 December 2020. In addition, there was a negative impact of $126.8 million in respect of realised losses from commodity hedging instruments which matured during the year (2020 – $3.4 million negative impact).

Realised copper prices are determined by comparing revenue (before treatment and refining charges for concentrate sales) with sales volumes in the period. Realised copper prices differ from market prices mainly because, in line with industry practice, concentrate and cathode sales agreements generally provide for provisional pricing at the time of shipment with final pricing based on the average market price in future periods (normally around one month after delivery to the customer in the case of cathode sales and normally four months after delivery to the customer in the case of concentrate sales).

Further details of provisional pricing adjustments are given in Note 7 to the financial statements.

(ii) Copper volumes

Copper sales volumes reflected within revenue decreased by 1.3% from 690,200 tonnes in 2020 to 681,000 tonnes in 2021, decreasing revenue by $61.3 million.
This decrease was due to lower copper sales volumes at Los Pelambres (41,500 tonnes decrease) mainly as a result of its decreased production volumes, partly offset by higher sales volumes at Centinela (28,400 tonnes increase) due to increased production volumes as a result of higher grades and increased throughput at Centinela Concentrates.

/ *Financial Review* continued

(iii) Treatment and refining charges

Treatment and refining charges (TC/RCs) for copper concentrate decreased by $30.4 million to $152.0 million in 2021, compared with $182.4 million in 2020, reflecting lower average TC/RC rates as well as the decrease in the concentrate sales volumes at Los Pelambres.

With sales of concentrates at Los Pelambres and Centinela, which are sold to smelters and roasting plants for further processing into fully refined metal, the price of the concentrate invoiced to the customer reflects the market value of the fully refined metal less a "treatment and refining charge" deduction, to reflect the lower value of this partially processed material compared with the fully refined metal. For accounting purposes, the revenue amount is the net of the market value of fully refined metal less the treatment and refining charges. Under the standard industry definition of cash costs, treatment and refining charges are regarded as an expense and part of the total cash cost figure.

Accordingly, the decrease in these charges has had a positive impact on revenue in the year.

Revenue from molybdenum, gold and other by-product sales

Revenue from by-product sales at Los Pelambres and Centinela relate mainly to molybdenum and gold and, to a lesser extent, silver. Revenue from by-products increased by $255.2 million or 40.3% to $886.9 million in 2021, compared with $631.7 million in 2020.

Revenue from gold sales (net of treatment and refining charges) was $436.4 million (2020 – $357.7 million), an increase of $78.7 million which reflected an increase in volumes slightly offset by a lower realised price. Gold sales volumes increased by 22.6% from 199,600 ounces in 2020 to 244,700 ounces in 2021, mainly due to higher throughput and grades at Centinela. The realised gold price was $1,787.6/oz in 2021 compared with $1,796.8/oz in 2020, reflecting the average market price for 2021 of $1,798.9/oz (2020 – $1,770.1/oz) and a negative provisional pricing adjustment of $10.8 million.

Revenue from molybdenum sales (net of roasting charges) was $366.4 million (2020 – $209.5 million), an increase of $156.9 million. The increase was due to the higher realised price of $17.4/lb (2020 – $8.8/lb), partially offset by decreased sales volumes of 10,400 tonnes (2020 – 12,500 tonnes).

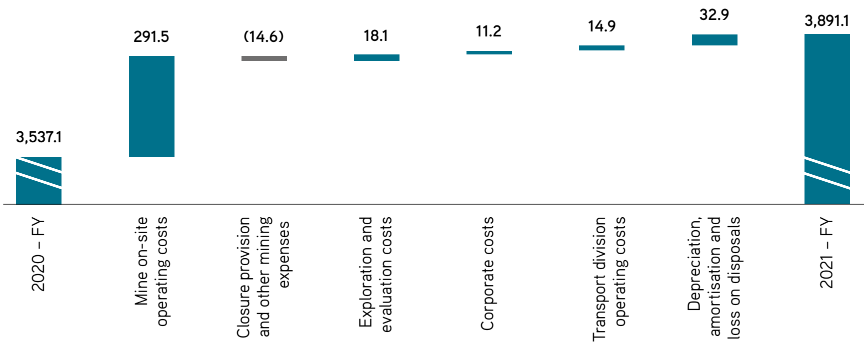
Revenue from silver sales increased by $19.6 million to $84.1 million (2020 – $64.5 million). The increase was due to a higher realised silver price of $24.9/oz (2020 – $21.3/oz) and higher sales volumes of 3.4 million ounces (2020 – 3.1 million ounces).

Revenue from the Transport division

Revenue from the Transport division (FCAB) increased by $20.6 million or 13.8% to $170.0 million (2020 – $149.4 million), as a result of increased volumes and better prices in sales contracts and the impact of the stronger Chilean peso on sales denominated in the local currency.

Total operating costs (excluding exceptional items)

The $354.0 million increase in total operating costs (excluding exceptional items) from $3,537.1 million in 2020 to $3,891.1 million in the current year reflected the following factors:



Operating costs (excluding depreciation, amortisation, loss on disposals and impairments) at the Mining division

Operating costs (excluding depreciation, amortisation, loss on disposals and impairments) at the Mining division increased by $306.1 million to $2,696.8 million in 2021, an increase of 12.8%. Of this increase, $291.5 million was attributable to higher mine-site operating costs. This increase in mine-site costs reflected higher key input prices, the stronger Chilean peso and the cost impact of the expected lower ore grades and lower throughput due to water optimisation at Los Pelambres, partly offset by the cost savings from the Group's Cost and Competitiveness Programme and the lower sale volumes. On a unit cost basis, weighted average cash costs excluding by-product credits (which for accounting purposes are part of revenue) and treatment and refining charges for concentrates (which are also part of revenue for accounting purposes), increased from $1.43/lb in 2020 to $1.68/lb in 2021 (see the alternative performance measures on page 229 for further details in respect of the definition of cash costs).

The Cost and Competitiveness Programme was implemented to reduce the Group's cost base and improve its competitiveness within the industry. During 2021 the programme achieved benefits of $130.7 million, of which $72.1 million reflected cost savings and $58.6 million reflected the value of productivity improvements. Of the $72.1 million of cost savings, $54.5 million related to Los Pelambres, Centinela and Antucoya, and therefore impacted the Group's operating costs, and $17.6 million related to Zaldívar (on a 100% basis) and therefore impacted the share of results from associates and joint ventures.

Closure provisions and other mining expenses decreased by $14.6 million. Exploration and evaluation costs increased by $18.1 million to $103.2 million (2020 – $85.1 million), reflecting increased exploration expenditure principally in Chile, the ongoing evaluation and review work at Twin Metals, and drilling in relation to the reserve and resource estimates at Centinela and Antucoya. Corporate costs increased by $11.2 million.

Operating costs (excluding depreciation, amortisation and loss on disposals) at the Transport division

Operating costs (excluding depreciation, amortisation and loss on disposals) at the Transport division increased by $14.9 million to $106.3 million (2020 – $91.4 million), mainly due to the effect of the stronger Chilean peso, higher diesel prices and inflation, and to a lesser degree non-recurrent COVID-19 costs.

Depreciation, amortisation and disposals (excluding impairments)

The depreciation and amortisation charge increased by $32.9 million from $1,055.0 million in 2020 to $1,087.9 million. This increase is mainly due to inventory variation impacts at Centinela and higher depreciation at Centinela and Los Pelambres, largely offset by lower amortisation of IFRIC 20 stripping cost at Centinela. The loss on disposal of property, plant and equipment was $9.2 million, an increase of $2.9 million (2020 – $6.3 million).

Operating profit from subsidiaries

As a result of the above factors, operating profit from subsidiaries increased by $1,986.8 million or 124.8% in 2021 to $3,579.0 million (2020 – $1,592.2 million).

Share of results from associates and joint ventures

The Group's share of results from associates and joint ventures was a profit of $59.7 million in 2021, compared to $5.1 million in 2020. Of this increase, $56.3 million was due to the higher profit from Zaldívar.

EBITDA

EBITDA (earnings before interest, tax, depreciation and amortisation, and impairments) increased by $2,097.0 million or 76.6% to $4,836.2 million (2020 – $2,739.2 million). EBITDA includes the Group's proportional share of EBITDA from associates and joint ventures.

EBITDA from the Mining division increased by 78.0% from $2,678.2 million in 2020 to $4,768.0 million this year. This reflected the higher revenue and higher EBITDA from associates and joint ventures partly offset by higher mine-site costs and increased exploration and evaluation expenditure.

EBITDA at the Transport division increased by $7.2 million to $68.2 million in 2021 ($61.0 million – 2020), reflecting the higher revenue and slightly increased EBITDA from associates and joint ventures, partly offset by higher operating costs.

Commodity price and exchange rate sensitivities

The following sensitivities show the estimated approximate impact on EBITDA for 2021 of a 10% movement in the average copper, molybdenum and gold prices and a 10% movement in the average US dollar/Chilean peso exchange rate.

The impact of the movement in the average commodity prices reflects the estimated impact on the relevant revenues during 2021, and the impact of the movement in the average exchange rate reflects the estimated impact on Chilean peso denominated operating costs during the year. These estimates do not reflect any impact in respect of provisional pricing or hedging instruments, any potential inter-relationship between commodity price and exchange rate movements, or any impact from the retranslation or changes in valuations of assets or liabilities held on the balance sheet at the year-end.

	Average market commodity price/ average exchange rate during the year ended 31.12.21	Impact of a 10% movement in the commodity price/ exchange rate on EBITDA for the year ended 31.12.21 $m
Copper price	$4.23/lb	676
Molybdenum price	$15.9/lb	36
Gold price	$1,799/oz	44
US dollar/Chilean peso exchange rate	760	154

Net finance expense

Net finance expense decreased by $119.4 million to $16.0 million, compared with $103.4 million in 2020.

	Year ended 31.12.21 $m	Year ended 31.12.20 $m
Investment income	**5.0**	18.9
Interest expense	**(63.4)**	(77.1)
Other finance items	**74.4**	(45.2)
Net finance expense	**16.0**	(103.4)

Interest income decreased from $18.9 million in 2020 to $5.0 million in 2021, mainly due to a decrease in average interest rates partially offset by higher average cash and liquid investment balances.

Interest expense decreased from $77.1 million in 2020 to $63.4 million in 2021, reflecting the decrease in the average interest rates and also a reduction in the average relevant borrowing balances, partially offset by interest expenses related to the bond issue in October 2020.

Other finance items were a net gain of $74.4 million, compared with a net loss of $45.2 million in 2020, a variance of $119.6 million. This was mainly due to the foreign exchange impact of the retranslation of Chilean peso denominated assets and liabilities, which resulted in a $49.7 million gain in 2021 compared with a $28.4 million loss in 2020. Also, there was a positive variance of $41.5 million related to the discounting of long-term provisions, with the increase in the relevant year-end interest rates resulting in a decrease in the net present value of the provisions and a corresponding credit recognised in other finance items.

Profit before tax

As a result of the factors set out above, profit before tax increased by 146.1% to $3,477.1 million (2020 – $1,413.1 million).

Income tax expense

The tax charge for 2021 excluding exceptional items increased by $786.7 million to $1,332.9 million (2020 – $546.2 million) and the effective tax rate for the year was 36.5% (2020 – 36.6%). Including exceptional items the tax charge for 2021 was $1,242.3 million and the effective tax rate was 35.7%.

	Year ended 31.12.2021 Excluding exceptional items $m	%	Year ended 31.12.2021 Including exceptional items $m	%	Year ended 31.12.2020 Excluding exceptional items $m	%	Year ended 31.12.2020 Including exceptional items $m	%
Profit before tax	**3,654.7**		**3,477.1**		1,493.9		1,413.1	
Tax at the Chilean corporate tax rate of 27%	**(986.8)**	**27.0**	**(938.8)**	**27.0**	(403.4)	27.0	(381.5)	27.0
Mining tax (royalty)	**(243.8)**	**6.7**	**(243.8)**	**7.0**	(101.3)	6.8	(101.3)	7.2
Deduction of mining royalty as an allowable expense in determination of first category tax	**67.8**	**(1.9)**	**67.8**	**(1.9)**	28.1	(1.9)	28.1	(2.0)
Items not deductible from first category tax	**(31.6)**	**0.9**	**(31.6)**	**0.9**	(9.8)	0.7	(9.8)	0.6
Adjustment in respect of prior years	**(12.1)**	**0.3**	**(12.1)**	**0.3**	(1.6)	0.1	(1.6)	0.1
Withholding tax	**(195.0)**	**5.3**	**(195.0)**	**5.6**	(70.0)	4.7	(70.0)	5.0
Tax effect of share of profit of associates and joint ventures	**16.1**	**(0.4)**	**16.1**	**(0.5)**	1.4	(0.1)	1.4	(0.1)
Impact of previously unrecognised tax losses on current tax	**52.5**	**(1.4)**	**52.5**	**(1.5)**	10.5	(0.7)	10.5	(0.7)
Impact of recognition of previously unrecognised tax losses on deferred tax	**-**	**-**	**90.6**	**(2.6)**	-	-	-	-
Impairment of investment in associate	**-**	**-**	**-**	**-**	-	-	(2.2)	0.2
Provision against carrying value of assets	**-**	**-**	**(48.0)**	**1.4**	-	-	-	-
Net other items	**-**	**-**	**-**	**-**	(0.1)	-	(0.1)	-
Tax expense and effective tax rate for the year ended	**(1,332.9)**	**36.5**	**(1.242.3)**	**35.7**	(546.2)	36.6	(526.5)	37.3

The effective tax rate excluding exceptional items of 36.5% varied from the statutory rate principally due to the mining tax (royalty) (net impact of $176.0 million/4.8% including the deduction of the mining tax (royalty) as an allowable expense in the determination of first category tax), the withholding tax relating to the remittance of profits from Chile (impact of $195.0 million/5.3%), items not deductible for Chilean corporate tax purposes, principally the funding of expenses outside of Chile (impact of $31.6 million/0.9%) and adjustments in respect of prior years (impact of $12.1 million/0.3%), partly offset by the impact of unrecognised tax losses (impact of $52.5 million/1.4%) and the impact of the recognition of the Group's share of profit from associates and joint ventures, which are included in the Group's profit before tax net of their respective tax charges (impact of $16.1 million/0.4%).

The impact of the exceptional items on the effective tax rate including exceptional items was $42.6 million/1.2%.

Exceptional items

Exceptional items are material items of income and expense which are non-regular or non-operating and typically non-cash, including impairments and profits or losses on disposals. The tax effect of items presented as exceptional is also classified as exceptional, as are material deferred tax adjustments that relate to more than one reporting period. The classification of these types of items as exceptional is considered to be useful as it provides an indication of the earnings generated by the ongoing businesses of the Group.

2021 – Impairment of Twin Metals' assets

Twin Metals Minnesota (Twin Metals) is a wholly owned copper, nickel and platinum group metals (PGM) underground mining project, which holds copper, nickel, cobalt-PGM deposits in north-eastern Minnesota, US. In recent years Twin Metals has been progressing its Mine Plan of Operations (MPO) and Scoping Environmental Assessment Worksheet Data Submittal, submitted in December 2019 to the US Bureau of Land Management (BLM) and Minnesota Department of Natural Resources (DNR), respectively. However, over the past year, while the Twin Metals project was advancing through environmental review, several actions were taken by the federal government that have changed the potential scenarios for the project.

In September 2021 the United States Forest Service (USFS) submitted an application to withdraw approximately 225,000 acres of land in the Superior National Forest from the scope of federal mineral leasing laws, subject to valid existing rights. In October 2021, the United States Bureau of Land Management (BLM) rejected Twin Metals' Preference Right Lease Applications (PRLAs) and Prospecting Permit Applications (PPAs). In January 2022 the United States Department of the Interior cancelled Twin Metals' MNES-1352 and MNES-1353 federal mineral leases. The PRLAs and federal mineral leases form a significant proportion of the mineral resources contained within Twin Metals' current project plan and, accordingly, it was determined that these events collectively represented an impairment trigger as at the balance sheet date.

Prior to the resulting impairment assessment being performed, as at 31 December 2021 the Group had recognised an intangible asset of $150.1 million and property, plant and equipment of $27.5 million relating to the Twin Metals project. The intangible asset arose upon the acquisition in 2015 of Duluth Metals, which owned a 60% stake in the Twin Metals project, with the carrying value of the intangible asset reflecting the consideration paid for that acquisition. The property, plant and equipment balances reflected the historical cost of acquiring those assets. These carrying values prior to the impairment did not, therefore, reflect an estimate of the commercial potential of the project as at 31 December 2021.

The Group believes that Twin Metals has a valid legal right to the mining leases and a strong case to defend its legal rights. Although the Group intends to pursue validation of those rights, considering the time and uncertainty related to any legal action to challenge the government decisions, an impairment has been recognised as at 31 December 2021 in respect of the $177.6 million of intangible assets and property, plant and equipment relating to the Twin Metals project.

2021 – Recognition of previously unrecognised deferred tax assets

At 31 December 2021 the Group recognised $90.6 million of previously unrecognised deferred tax assets relating to tax losses available for offset against future profits. In previous periods the Group had reviewed these tax losses for potential recognition, and concluded that it was not probable that future taxable profits would be available against which the losses could be utilised, and accordingly had not recognised a deferred tax asset in respect of these losses. In making this assessment in previous periods the Group had taken into account that the relevant Group entity (Antucoya) had consistently generated taxable losses in recent years, was continuing to generate taxable losses in the then current period, and was forecast to continue generating taxable losses in future periods.

During 2021 there has been a significant improvement in the current copper price (with the copper price reaching record levels in nominal terms during the year) and also the near-term copper price outlook. As a result of this improvement in the copper price environment the relevant Group entity began to generate taxable profits in 2021. The improved near-term outlook for the copper price also means that the entity is now forecast to generate sufficient future taxable profits to fully utilise its remaining tax losses.

2020 – Impairment of the investment in Hornitos

On 31 March 2020 the Group agreed to dispose of its 40% interest in the Hornitos coal-fired power station to ENGIE Energía Chile S.A. ("ENGIE"), the owner of the remaining 60% interest. This was part of the value accretive renegotiation of Centinela's power purchase agreement which as a result will be wholly supplied from lower cost renewable sources from the beginning of 2022. In accordance with the terms of the agreement the Group disposed of its investment to ENGIE in December 2021 for a nominal consideration and has not been be entitled to receive any further dividend income from Hornitos from the date of the agreement. Accordingly, the Group no longer had any effective economic interest in the results or assets of Hornitos from 31 March 2020 onwards, and therefore recognised an impairment of $80.8 million in respect of its investment in associate balance during 2020, and no longer recognised any share of Hornitos' results. The post-tax impact of the impairment was $61.1 million, of which $40.2 million was attributable to the equity owners of the Company.

Non-controlling interests

Profit for 2021 attributable to non-controlling interests (excluding exceptional items) was $917.4 million, compared with $408.4 million in 2020, an increase of $509.0 million. This reflected the increase in earnings analysed above.

Earnings per share

	Year ended 31.12.21 $ cents	Year ended 31.12.20 $ cents
Underlying earnings per share (excluding exceptional items and discontinued operations)	**142.5**	54.7
Earnings per share (exceptional items)	**(11.6)**	(4.1)
Earnings per share (discontinued operations)	**-**	0.7
Earnings per share (including exceptional items and discontinued operations)	**130.9**	51.3

Earnings per share calculations are based on 985,856,695 ordinary shares.

As a result of the factors set out above, the underlying profit attributable to equity shareholders of the Company (excluding exceptional items and discontinued operations) was $1,404.4 million compared with $539.3 million in 2020, giving underlying earnings per share of 142.5 cents per share (2020 – 54.7 cents per share). The profit attributable to equity shareholders (including exceptional items and discontinued operations) was $1,290.2 million, resulting in earnings per share of 130.9 cents per share (2020 – 51.3 cents per share).

Dividends

Dividends per share proposed in relation to the period are as follows:

	Year ended 31.12.21 $ cents	Year ended 31.12.20 $ cents
Ordinary dividends:		
Interim	**23.6**	6.2
Final	**118.9**	48.5
Total dividends to ordinary shareholders	**142.5**	54.7

The Board determines the appropriate dividend each year based on consideration of the Group's cash balance, the level of free cash flow and underlying earnings generated during the year and significant known or expected funding commitments. It is expected that the total annual dividend for each year would represent a payout ratio based on underlying net earnings for that year of at least 35%.

The Board has recommended a final dividend for 2021 of 118.9 cents per ordinary share, which amounts to $1,172.1 million and will be paid on 13 May 2022 to shareholders on the share register at the close of business on 22 April 2022.

The Board declared an interim dividend for the first half of 2021 of 23.6 cents per ordinary share, which amounted to $232.7 million.

This gives total dividends proposed in relation to 2021 (including the interim dividend) of 142.5 cents per share or $1,404.8 million in total (2020 – 54.7 cents per ordinary share or $539.3 million in total) equivalent to a payout ratio of 100% of underlying earnings.

Capital expenditure

Capital expenditure increased by $470.1 million from $1,307.4 million in 2020 to $1,777.5 million in the current year, mainly due to expenditure on the Los Pelambres Expansion project, work on the Esperanza Sur pit at Centinela, including the completion of the pre-stripping, and increased mine development at Centinela.

NB: capital expenditure figures quoted in this report are on a cash flow basis, unless stated otherwise.

Derivative financial instruments

The Group periodically uses derivative financial instruments to reduce its exposure to commodity price, foreign exchange and interest rate movements. The Group does not use such derivative instruments for speculative trading purposes. At 31 December 2021 the derivative financial instruments are nil (2020 – negative $36.0 million).

/ Financial Review continued

Cash flows

The key features of the cash flow statement are summarised in the following table.

	Year ended 31.12.21 $m	Year ended 31.12.20 $m
Cash flows from continuing operations	**4,507.7**	2,431.1
Income tax paid	(776.9)	(319.7)
Net interest paid	(53.3)	(40.1)
Capital contributions and loans to associates	(33.5)	(7.2)
Purchases of property, plant and equipment	(1,777.5)	(1,307.4)
Dividends paid to equity holders of the Company	(710.8)	(131.1)
Dividends paid to non-controlling interests	(604.5)	(280.0)
Capital increase from non-controlling interest	-	210.0
Dividends from associates and joint ventures	142.5	-
Other items	1.4	2.3
Changes in net debt relating to cash flows	**695.1**	557.9
Other non-cash movements	(73.8)	(68.0)
Effects of changes in foreign exchange rates	1.2	(8.5)
Movement in net debt in the period	**622.5**	481.4
Net debt at the beginning of the year	(82.0)	(563.4)
Net cash/(net debt) at the end of the year	**540.5**	(82.0)

Cash flows from continuing operations were $4,507.7 million in 2021 compared with $2,431.1 million in 2020. This reflected EBITDA from subsidiaries for the year of $4,666.9 million (2020 – $2,647.2 million) adjusted for the negative impact of a net working capital increase of $140.2 million (2020 – working capital increase of $242.5 million) and a non-cash decrease in provisions of $19.4 million (2020 – increase of $26.4 million).

The working capital increase in 2021 was mainly due to an increase in receivables, predominantly due to the higher sales volumes in December 2021 compared with December 2020 and the higher average mark-to-market price at 31 December 2021 of $4.42/lb (31 December 2020 – $3.52/lb).

The net cash outflow in respect of tax in 2021 was $776.9 million (2020 – $319.7 million). This amount differs from the current tax charge in the consolidated income statement (including exceptional items) of $1,035.5 million (2020 – $515.3 million) mainly because cash tax payments for corporate tax and the mining tax include the settlement of outstanding balances in respect of the previous year's tax charge of $30.9 million (2020 – $8.0 million), withholding tax payments of $222.9 million, payments on account for the current year based on the prior year's profit levels of $569.6 million, as well as the recovery of $46.5 million in 2021 relating to prior years.

Contributions and loans to associates and joint ventures of $33.5 million (2020 – $7.2 million) relate to Hornitos and Tethyan.

Capital expenditure in 2021 was $1,777.5 million compared with $1,307.4 million in 2020. This included expenditure of $880.4 million at Los Pelambres (2020 – $782.6 million), $791.8 million at Centinela (2020 – $441.5 million), $49.6 million at Antucoya (2020 – $41.9 million), $24.4 million at the corporate centre (2020 – $8.3 million) and $31.3 million at the Transport division (2020 – $33.1 million). The increase at Centinela reflects work on the Esperanza Sur pit, including the completion of the pre-stripping, and increased mine development, and at Los Pelambres reflects expenditure on the Expansion project.

Dividends paid to equity holders of the Company were $710.8 million (2020 – $131.1 million) of which $478.1 million related to the payment of the final element of the previous year's dividend and $232.7 million to the interim dividend declared in respect of the current year.

Dividends paid by subsidiaries to non-controlling shareholders were $604.5 million (2020 – $280.0 million).

Dividends received from associates and joint ventures was $142.5 million for 2021 (2020 – nil).

A capital contribution of $210.0 million was received from Marubeni during 2020, the minority partner at Antucoya, in order to replace part of the subordinated debt financing with equity.

Financial position

	Year ended 31.12.21 $m	Year ended 31.12.20 $m
Cash, cash equivalents and liquid investments	**3,713.1**	3,672.8
Total borrowings	**(3,172.6)**	(3,754.8)
Net cash/(net debt) at the end of the period	**540.5**	(82.0)

At 31 December 2021 the Group had combined cash, cash equivalents and liquid investments of $3,713.1 million (31 December 2020 – $3,672.8). Excluding the non-controlling interest share in each partly-owned operation, the Group's attributable share of cash, cash equivalents and liquid investments was $3,299.9 million (31 December 2020 – $3,046.9 million).

Total Group borrowings at 31 December 2021 were $3,172.6 million, a decrease of $582.2 million on the prior year (31 December 2020 – $3,754.8 million). The decrease was mainly due to the $222.8 million subordinated debt repayment by Centinela and Antucoya to Marubeni, repayment of the senior loan by Los Pelambres of $209.3 million, repayment of the senior loan by Centinela of $111.1 million and the $141.0 million repayment of Antucoya's senior loan and short term loan, and a net decrease of lease liabilities of $27.1 million, partly offset by the $114.1 million refinancing of the senior loan at Los Pelambres and the $35.0 million increase of the short term loan at Antucoya.

Excluding the non-controlling interest share in each partly-owned operation, the Group's attributable share of the borrowings was $2,409.6 million (31 December 2020 – $2,805.4 million).

This resulted in net cash at 31 December 2021 of $540.5 million (31 December 2020 – net debt $82.0 million). Excluding the non-controlling interest share in each partly-owned operation, the Group had an attributable net cash position of $890.3 million (31 December 2020 – net cash $241.5 million).

Going concern

The financial information contained in the financial statements has been prepared on the going concern basis. Details of the factors which have been taken into account in assessing the Group's going concern status are set out in Note 1 to the financial statements.

Cautionary statement about forward-looking statements

This Annual Report contains certain forward-looking statements. All statements other than historical facts are forward-looking statements. Examples of forward-looking statements include those regarding the Group's strategy, plans, objectives or future operating or financial performance, reserve and resource estimates, commodity demand and trends in commodity prices, growth opportunities, and any assumptions underlying or relating to any of the foregoing. Words such as "intend", "aim", "project", "anticipate", "estimate", "plan", "believe", "expect", "may", "should", "will", "continue" and similar expressions identify forward-looking statements.

Forward-looking statements involve known and unknown risks, uncertainties, assumptions and other factors that are beyond the Group's control. Given these risks, uncertainties and assumptions, actual results could differ materially from any future results expressed or implied by these forward-looking statements, which apply only as at the date of this report. Important factors that could cause actual results to differ from those in the forward-looking statements include: global economic conditions, demand, supply and prices for copper and other long-term commodity price assumptions (as they materially affect the timing and feasibility of future projects and developments), trends in the copper mining industry and conditions of the international copper markets, the effect of currency exchange rates on commodity prices and operating costs, the availability and costs associated with mining inputs and labour, operating or technical difficulties in connection with mining or development activities, employee relations, litigation, and actions and activities of governmental authorities, including changes in laws, regulations or taxation. Except as required by applicable law, rule or regulation, the Group does not undertake any obligation to publicly update or revise any forward-looking statements, whether as a result of new information, future events or otherwise.

Past performance cannot be relied on as a guide to future performance.

The Strategic Report has been approved by the Board and signed on its behalf by:

Jean-Paul Luksic
Chairman

Tony Jensen
Senior Independent Director

The Board is responsible for Antofagasta plc's long-term, sustainable success, generating value for shareholders and contributing to wider society.

The Board's governance structures ensure independent oversight and constructive challenge. The Board promotes the Group's culture and core values of respect, responsibility for safety and health, commitment to sustainability, excellence in daily work, innovation and forward thinking. It is committed to international best practice and continuing success as an international mining company.

Find out more online
antofagasta.co.uk/board

/ Corporate Governance

GOVERNANCE

/ Applying the Code in 2021

How we apply the Code

UK Corporate Governance Code compliance statement

The UK Corporate Governance Code issued by the Financial Reporting Council in July 2018 sets out the governance principles and provisions that applied to the Company during 2021.

The Code is not a rigid set of rules, it consists of principles and provisions. The Listing Rules require companies to apply the principles and report to shareholders on how they have done so. This Corporate Governance Report shows how these principles have been considered and applied to the Company's specific circumstances.

The Company complied with all the principles and detailed provisions of the Code in 2021 except for Code Provision 19. This Code Provision recommends that the Chairman should not remain in post beyond nine years from the date of first appointment to the board. The Company's Chairman, Jean-Paul Luksic, was appointed to the Board in 1990. He served as Chief Executive Officer of the Group's Mining division from 1998 until 2004 and was appointed Executive Chairman in 2004. In 2014, he stepped back from executive responsibilities to become Non-Executive Chairman. Mr Luksic's longstanding UK corporate governance and Chilean mining and business experience, coupled with his knowledge of the Group's businesses have been for many years, and continue to be, a cornerstone of the Company's continuing growth and success.

Mr Luksic is also a member of the family that is interested in the E. Abaroa Foundation, a controlling shareholder of the Company for the purposes of the UK Listing Rules and is therefore uniquely positioned to promote governance that the Board is convinced is best for the Company's particular circumstances in the long term.

Mr Luksic is committed to wider succession and diversity planning and, in his role as Chairman of the Board and Chair of the Nomination and Governance Committee, he has overseen the design and implementation of succession plans to facilitate increased diversity, including gender and continual refreshment of the Board.

The Board considers that Mr Luksic continues to demonstrate objective judgement and provides constructive challenge and believes that his continued appointment is appropriate without fixing a limit to his service. The Company's major shareholders were invited by the then Senior Independent Director to discuss this subject ahead of the 2020 AGM and unanimously expressed their support for Mr Luksic's continued service as Chairman of the Board.

The composition of the Board and its Committees is entirely in line with the Code provisions and the Chairman is fully supported by the Board, the Nomination and Governance Committee and the Senior Independent Director in ensuring that, despite non-compliance with Code Provision 19, good governance is maintained.

Further details on the composition of the Board and its Committees are set out on page 122 and further details of the role of the Senior Independent Director are set out on pages 110 and 125.

The UK Corporate Governance Code is available on the Financial Reporting Council website at www.frc.org.uk.

Jean-Paul Luksic
Chairman

> We apply the Code to our circumstances as a leading international mining company.

/ *Applying the Code in 2021* continued

How the Code principles were applied in 2021

Board leadership and Company purpose

The role of the Board

- The Company is led by an effective and entrepreneurial Board, which is collectively responsible for promoting the Company's long-term sustainable success, generating value for shareholders and contributing to wider society as shown throughout this Corporate Governance Report.
- The Board has adopted and actively promotes the Group's purpose, vision, values and strategy and has satisfied itself that they are aligned with its culture. This is explained further in the Chairman's introduction – pages 108-109.
- The Board has ensured that the necessary resources are in place for the Company to meet its objectives and measure performance against them. It has established both its risk appetite and a framework of prudent and effective controls, which enable risk to be appropriately assessed and managed – pages 18-30.
- The Board ensures effective engagement with, and encourages participation from, shareholders and other stakeholders to ensure that its responsibilities are met – pages 32-65, 110, 116-121 and 156-157.
- The Board ensures that workforce policies and practices are consistent with the Company's purpose, vision and values and support its long-term sustainable success. The workforce is able to raise any matters of concern anonymously through the Group's whistleblowing channels – pages 31, 42-43, 120-121 and 138.
- The Board considers the matters set out in section 172 of the Companies Act 2006 in Board discussions and decision-making. Examples can be found on pages 116-119.

Division of responsibilities

- The Board is structured to ensure that there is limited scope for an individual or small group of individuals to dominate its decision-making, as demonstrated throughout this Corporate Governance Report.
- The CEO is not a Director of the Company and therefore not a member of the Board – page 125.
- There is a clear division of responsibilities between the Board and the executive leadership of the Company's business – page 125.
- The division of responsibilities between the Chairman, the CEO and the Senior Independent Director is recorded in writing and is available on the Company's website at antofagasta.co.uk.
- The roles of the Board and the Board Committees are recorded in the Schedule of Matters Reserved for the Board and the Terms of Reference for each of the Board's Committees, which are available on the Company's website at antofagasta.co.uk.
- The Board, supported by the Company Secretary, has the policies, processes, information, time and resources it needs in order to function effectively and efficiently – pages 113 and 130.

The Chairman

- The Chairman leads the Board and is responsible for its overall effectiveness in directing the Company. His responsibilities are set out on page 125.
- The Board considers that the Chairman demonstrates objective judgement and promotes a culture of openness, healthy challenge and debate – pages 104 and 110.
- The Chairman facilitates constructive Board relations and the effective contribution of all Directors. He is responsible for setting the Board's agenda and ensures that Directors receive accurate, timely, relevant and clear information – pages 113, 125 and 130.

Non-Executive Directors

- The Non-Executive Directors provide constructive challenge and strategic guidance, offer perspectives across various specialisms and hold management to account – pages 122-124.

Commitment

- All Directors have confirmed they are able to allocate enough time to meet the expectations of their role – page 122.
- Directors do not undertake additional external appointments without the Board's prior approval – page 122.
- Time commitment is considered during Board effectiveness reviews and when electing and re-electing Directors – page 133.
- A review of Directors' external directorships is carried out annually – pages 111 and 162.

Information and support

- The Board is provided with appropriate information, in form and quality, to discharge its duties – page 113.
- The Board has access to independent professional advice and to the advice and services of the Company Secretary – pages 125 and 130.
- The Board is regularly updated on the Group's performance between scheduled Board meetings – page 113.

Composition, succession and evaluation

Composition of the Board and Committees

- The Board has 10 Directors, comprising a Non-Executive Chairman and nine other Non-Executive Directors, six of whom are independent – pages 122-125.
- All members of the Audit and Risk and Remuneration and Talent Management Committees are independent and two of the three Nomination and Governance Committee members are independent – page 122.
- The Board and its Committees comprise Directors with the requisite combination of skills, experience and knowledge to fulfil their roles – pages 122-125.
- There is a diverse pipeline for succession. Consideration is given to the length of service of the Board as a whole and membership is regularly refreshed – pages 124 and 130-131.

Appointments to the Board and succession planning

- There is a formal, rigorous and transparent process, led by the Nomination and Governance Committee, to identify and appoint new Directors – pages 130-131.
- An independent external search consultancy was used for the appointment of Eugenia Parot to the Board as a Non-Executive Director during the year – page 130.
- An effective succession plan is maintained for Board and senior management appointments – pages 130-131 and 157.
- Appointments and succession plans are based on merit and objective criteria and promote diversity of gender, social and ethnic backgrounds, cognitive and personal strengths and experience – pages 130-131.

Development

- New Directors receive a thorough induction upon joining the Board – pages 130 and 132.
- Directors are regularly updated with information and training and, as a minimum, receive an annual briefing on legal, regulatory, market and other developments that are relevant to directors of UK-listed companies – page 130.

Evaluation

- Annual evaluation of the Board considers composition, diversity and how effectively members work together to achieve objectives – page 133.
- Individual evaluation is part of the annual Board evaluation and assesses whether each Director continues to contribute effectively – page 133.
- The Board has agreed an action plan to close gaps identified by Board and Committee effectiveness reviews – page 133.
- An internally facilitated Board and Committee effectiveness review was conducted in 2021 – page 133.
- The Board has arranged an externally facilitated Board and Committee effectiveness review for 2022 – page 133.

Re-election

- All Directors stand for re-election annually.

Audit, risk and internal control

Governance

- The Board has established formal and transparent policies and procedures to ensure the independence and effectiveness of internal and external audit functions and to satisfy itself on the integrity of financial and narrative statements – pages 134-138 and 163.

Financial and business reporting

- The Board considers that the Annual Report presents a fair, balanced and understandable assessment of the Company's position and prospects – page 163.

Risk and internal control

- The Board has established procedures to manage risk, oversee the internal control framework and determine the nature and extent of the key risks that the Company is willing to take in order to achieve its long-term strategic objectives – pages 18-19 and 137-138.

Experience and competence

- All Audit and Risk Committee members are considered to have recent and relevant financial experience and have competence relevant to the mining industry – pages 122-124.

Remuneration

Policy

- The Company has no executive directors; however, the CEO's remuneration is disclosed as if he were a director.
- The Directors' and CEO's Remuneration Policy, approved at the 2020 AGM, is aligned to the Company's purpose, vision and values and is clearly linked to the successful delivery of the Company's long-term strategy – pages 144-145, 147 and 154.
- The Remuneration and Talent Management Committee Chair, Francisca Castro, served as a member of the Committee for more than 12 months before being appointed as Chair.
- The CEO's remuneration includes transparent, stretching and rigorously applied performance-related elements designed to promote the Company's long-term sustainable success – pages 148-159.

Procedure

- The Board has a formal and transparent procedure for developing policy on executive remuneration and determining Director and senior management remuneration – pages 134-160.
- No Director, nor the CEO, is involved in deciding his or her own remuneration.
- Directors exercise independent judgement and discretion when authorising remuneration outcomes, taking account of Company and individual performance and wider circumstances including internal and external factors – pages 144-147.

/ Chairman's introduction

Our governance framework

Jean-Paul Luksic
Chairman

Dear fellow shareholders

Some of you may have noticed that my letters in this section have tended to cover similar topics and themes, like how the Board thinks about Antofagasta's culture and values, long-term strategy, stakeholder engagement and succession-planning. This recurrence reflects our belief that these are the foundations upon which a responsible, reliable business is built. Such focus feels especially important in a time of constant change and historic challenges, particularly those presented by COVID-19 and climate change.

The broad categories and topics may appear familiar, but in this letter – and in this Annual Report – you will find much that is new, reflecting the progress we've made and actions we've taken on a number of important fronts, from climate change to diversity and inclusion, over this past year.

Purpose, strategy, culture and vision

Three years ago, the Board approved the Company's purpose: "Developing mining for a better future." That purpose informed – and informs still – Antofagasta's strategic framework, to which all the Board's activities continue to be aligned.

The Board also continues to work to set the tone for Antofagasta's culture and core values. In 2021, following the implementation of our "New Ways of Working" project, the Board commissioned a workforce engagement survey to monitor the progress being made in connecting and empowering our people. When safe and feasible, Board members also made site visits to get a first-hand sense of our operating companies' culture and values.

Purpose, values, culture – stewarding these is an important responsibility of our Board, which is why these topics regularly shape decisions and influence conversations. We know that great people are the heartbeat of a great company and that they want to be part of modern, safe and values-inclusive cultures.

Climate change

One issue in particular that demonstrates how Antofagasta's purpose informs the Board's decision-making is climate change. A number of important medium- and long-term decisions made this year highlight the link between action and purpose. Those range from the Board approving the Group's carbon-emissions-reduction target for 2025 and net-zero target for 2050, to initiatives exploring the viability of mining haulage trucks being powered by electricity or green hydrogen.

Water management remains an area of critical focus. The drought in central Chile – now entering its 13th year – continues to affect local communities, as well as our operations. In 2018, the Board approved a $500 million project to develop a desalination plant and pipeline and more recently approved an investment to double the capacity of that plant. The plant is on track to be completed in the second half of 2022 and the expansion is expected to be completed in 2025. Water management remains an issue for which the Board continues to oversee the near-term operational challenges and longer-term strategic shifts.

We know that addressing climate change is vital for the world, for Chile and for Antofagasta. Since 2019, the Board's risk matrix has specifically included climate change and in 2020 the Board approved a comprehensive Climate Change Strategy comprised of five pillars:

1. Development of resilience to climate change
2. Reduction of greenhouse gas emissions
3. Efficient use of strategic resources
4. Management of the environment and biodiversity
5. Integration of stakeholders

You can read about our progress and approach to climate change in our Climate Change Report, which is available on our website, as well as our progress on applying the TCFD recommendations on pages 52 to 57 of this Annual Report.

Engaging with stakeholders

Mining is a long-term business. Our operations, the relationships we build with local communities, suppliers, employees, contractors and governments – they last for decades and decades.

The Board's ability to continue to deliver long-term sustainable success relies on a detailed understanding of the views of our workforce and other stakeholders in Chile, where our corporate headquarters, senior management team and our operating companies are located. I, along with other Directors, visit the Group's operations and projects to build personal relationships and ensure the Board can see the situation on the ground and is hearing directly from our workforce.

A particular priority is ensuring that our senior management team is engaging with our workforce in open, ongoing dialogue to maintain good relations and the trust that has been built up between the Company and its employees. It is a testament to these relationships that wage negotiations were satisfactorily completed with unions at Los Pelambres and Centinela during the year. Details of our workforce engagement mechanisms are on pages 120-121.

The pandemic has revealed, whether in logistical disruptions or supply-chain pressures, just how important it is to work in partnership with our stakeholders, particularly suppliers and customers. The Board continues to ensure that those processes are aligned through our ongoing monitoring.

And finally, the Group's governance structures include a network of arrangements to ensure that the views and interests of

Jean-Paul Luksic
Chairman

Our operations, the relationships we build with local communities, suppliers, employees, contractors and governments—they last for decades and decades.

stakeholders are represented in the boardroom and considered as part of the Board's deliberations. You can see a few examples of Board decisions made during the year that were shaped by stakeholder engagement on pages 116-119.

Workforce safety

It goes without saying that safety is our top priority and in 2021 we achieved further improvements in our safety performance including a consistent reduction in high-potential incidents, which serve as an important leading indicator to where more serious incidents might occur. Despite this performance we were incredibly saddened by a fatal accident involving one of our contractors at Los Pelambres in July. Our condolences go to the family of our colleague. The Board commissioned a full investigation and the actions identified during the review are being implemented under the direct oversight of senior management to ensure this does not happen again. Safety remains the Group's top priority and the Board will continue to closely monitor our safety performance in 2022 so that we continue to became a stronger and safer Company.

Risk management

The Board oversees a framework of internal controls as well as a system to identify and manage risk. As part of this process the Board decides the nature and extent of the significant risks the Group is willing to accept in achieving its strategic objectives.

The framework provides structure to policies and practices throughout the business and enables the Board to focus on key issues. An update of the Company's risk management framework was reviewed by the Board during the year and updates were made to the Company's Talent Management and Labour Relations, Tailings and Cybersecurity risk areas.

Further details can be found on pages 18-19 and 135-138.

Board changes and succession planning

We were delighted to appoint Eugenia Parot to the Board on 20 April 2021 and she was subsequently elected by shareholders at the 2021 AGM. Eugenia's strong leadership experience and technical background, particularly in its emphasis on environmental and sustainability matters, are an asset for our Board and for Antofagasta. Following a thorough induction process (as described on page 132), she joined two committees in August, the Projects Committee and the Sustainability and Stakeholder Management Committee. Eugenia has also been incorporated into the Board's succession plans.

Following the retirement of Ollie Oliveira from the Board in July, Tony Jensen assumed the role of Senior Independent Director and Audit and Risk Committee Chair. Tony, who had served on that Committee as a member for more than 12 months, also joined the Nomination and Governance Committee.

Michael Anglin assumed the role of Projects Committee Chair and joined the Sustainability and Stakeholder Management Committee in place of Tony Jensen, who rotated off that Committee in line with the Company's policy that Directors should not serve concurrently on more than three Committees except where this is a temporary arrangement as part of the Board's succession plan. That succession plan – and the act of succession planning – is one we take seriously as a Board and revisit regularly.

I'd like to add a final point about our Board. The pandemic has meant that we haven't been able to all meet in person, as a group, for two years. Nevertheless, I'm proud of the way we've been able to stay connected and I'm looking forward to the opportunity, when it's safe, to get together once more to deepen our camaraderie.

Diversity and Inclusion

We believe that diverse companies outperform and attract better talent than their peers. The Board has met the Parker Review target for ethnic diversity and following Eugenia's appointment, 30% of the Board are now women. The Board's Nomination and Governance Committee continues to work with an independent external search consultancy to improve the Board's gender diversity and build a strong talent pipeline.

Gender and ethnicity are two crucial components of diversity, yet in setting policies and making appointments, the Board considers diversity through a broader lens that includes disabilities, educational and professional experience, culture, personality type, skills and perspective. In short, we look to build a team that is richly diverse in ways that quotas alone might fail to account for.

Details on the Board's diversity policy can be found on pages 130-132.

Shareholder engagement

In another year that saw COVID-19 limit our ability to meet in person, the Board ensured that shareholders could engage with the Board digitally. Shareholders approved changes to the Company's articles of association at the 2021 AGM that will allow them to attend and vote at future general meetings remotely.

As Tony Jensen transitioned to his role as Senior Independent Director, I know some of you were able to meet him and I hope this year it is possible for you to safely meet our newest director, Eugenia and connect with other members of the Board. Your views and voices are important to us.

I'd like to thank you all for your ongoing engagement and support and look forward to connecting with you at our AGM.

Jean-Paul Luksic
Chairman

/ Senior Independent Director's introduction

Board balance

Tony Jensen
Senior Independent Director

"My role is to ensure that the Chairman, the Board and the management team receive a balanced view of issues that are relevant and important for our shareholders.

Q. What are your responsibilities as Senior Independent Director?

I have three main responsibilities as Senior Independent Director. First, I must be available to shareholders to ensure that the Board considers their views, interests and concerns. Second, I provide support to the Chairman, ranging from advice on corporate governance matters to presiding over potential conflict of interest decisions by the Board, and making sure that the views of the other Directors are conveyed to him and reflected in Board discussions. Third, I lead the annual review of the Chairman's performance and steward the closure of any gaps identified by internal and externally facilitated reviews of Board and Committees' performance.

I discharge these responsibilities through close co-ordination with the Chairman, Directors and the management team. While the COVID-19 pandemic has been challenging in terms of organising face-to-face meetings, I met virtually with various shareholders during the year to understand their views. This has helped me ensure that the Chairman, the Board and the management team receive a balanced view of issues that are relevant and important for our shareholders.

Q. What impact does the controlling shareholding have on Company decisions?

Members of the Luksic family have been involved in the Company for over 40 years. During this time, the Company has demonstrated an excellent track record in terms of safety, operational performance and financial strength.

I have discussed the role of the controlling shareholders with other shareholders. The widely held view is that the substantial controlling interest is positive, with shareholders satisfied that the interests of the controlling shareholder are aligned with theirs. They have expressed their appreciation of the members of the Luksic family who serve on the Board, commending their long-term vision, which has contributed to the Company's prudent operating, financial and growth strategy, as well as its stability.

Shareholder support is, of course, conditional on the strength of the current corporate governance framework, which rigorously protects the interests of all shareholders equally.

I, and all the other Independent Directors, guard our independence and place a strong emphasis on maintaining this governance and protection regime. We are supported and encouraged by the other Directors who – like the Independent Directors – bring their own perspectives and opinions and are committed to the long-term sustainable success of the Company.

The controlling shareholders and the members of the Luksic family who serve on the Board (including the Chairman), actively support this framework and encourage the Independent Directors to provide the independent input and challenge that, we are convinced, proves valuable in Board decision-making.

Tony Jensen
Senior Independent Director

Relationship agreement

The E. Abaroa Foundation is a controlling shareholder of the Company for the purposes of the Listing Rules and certain other shareholders of the Company (including Aureberg Establishment) are also treated as controlling shareholders. Details of the Company's substantial shareholders are set out on page 162.

In 2014, the Company entered into relationship agreements in respect of each controlling shareholder, which contain the mandatory independence provisions required by the Listing Rules. The Company complied with and, so far as the Directors are aware, each controlling shareholder and its associates (including Metalinvest Establishment and Kupferberg Establishment) also complied with the mandatory independence provisions throughout 2021.

Related party transactions

Certain related party transactions outside the ordinary course of business must be subject to independent assessment and approval. The Company has for many years presented all such related party transactions between the Company and the controlling shareholders or their associates to a committee of Directors independent from the controlling shareholders, to make an assessment as to whether the Company should enter into such transactions and, if so, to steward the corresponding negotiation process. In most cases, transactions of this nature will also be subject to independent review by third-party shareholders in each of the Group's mining operations.

Any proposed related party transaction over $25 million, whether or not in the ordinary course of business, is also tabled for Board approval. Any Director with a potential conflict or connection with the related party does not take part in the decision on that transaction.

Related party governance in practice

There are several checks and balances to ensure that there is full transparency in the way that related party transactions are handled by the Board. The following diagram summarises the approach taken to identify and manage related party transactions and actual or potential conflicts of interest.

Identifying Directors' interests

PROCESS	HOW THIS IS MANAGED	RESPONSIBILITY
MONITORING OF DIRECTORS' INTERESTS	If a Director has an interest in any other entity, the Board will normally consider that interest under its arrangements for authorising conflicts of interest under section 175 of the Companies Act. See page 162 for more information.	Directors

Managing related party transactions

PROCESS	HOW THIS IS MANAGED	RESPONSIBILITY
PROPOSED TRANSACTION	Ongoing monitoring of Directors' interests and the Company's related parties provides information to determine if a related party approval is required for a proposed transaction.	Company Secretary, senior management and the Executive Committee
CONTRACT NEGOTIATION AND VERIFICATION	The Executive Committee seeks to ensure that the best possible terms are achieved for a proposed transaction and, where appropriate or necessary, that they are verified by industry benchmarking reports or independent third-party valuation or assessment. If the potential transaction is between the Group and a controlling shareholder or its associates and is a transaction to which the UK Listing Rules related party transaction rules apply, a committee of Directors independent from the controlling shareholder and its associates is formed to oversee and support management with this process and to ensure compliance with the corresponding Relationship Agreement.	Senior management and the Executive Committee and, if involving a controlling shareholder, Independent Directors
APPROVAL BY INDEPENDENT DIRECTORS	Potential related party transactions outside the ordinary course of business that involve a controlling shareholder, or its associates, are reviewed and if appropriate, approved by Directors independent from the controlling shareholders. All potential related party transactions over $25 million, whether or not in the ordinary course of business, are approved by the Board. Any Director with a potential conflict or connection with the related party will not take part in that decision. Transactions within the ordinary course of business that are below $25 million require approval by the relevant operating company board. All the operating company boards in the Mining division have directors representing third party shareholders.	Independent Directors

/ Group corporate governance overview

Our structure for effective decision-making

Antofagasta plc Board

The Board's role is to promote the long-term, sustainable success of the Company, generating value for shareholders and contributing to wider society. The Board has established the Company's purpose, values, strategy and risk appetite and monitors the culture of the Group as well as its performance against defined measures.

The schedule of matters reserved for the Board is available on the Company's website at antofagasta.co.uk.

Key responsibilities

- Culture
- Strategy and management
- Governance
- Shareholder engagement
- Internal controls, risk management and compliance
- Financial and performance reporting
- Structure and capital
- Approving material transactions

Board Committees

The Board has delegated authority to these Committees to perform certain activities as set out in their terms of reference, which are available on the Company's website at antofagasta.co.uk.

The Chair of each Committee reports to the Board following each Committee meeting, allowing the Board to understand and, if necessary, discuss matters in detail and to consider the Committee's recommendations.

The Board is assisted in discharging its responsibilities by five Board Committees:

- NOMINATION AND GOVERNANCE
- AUDIT AND RISK
- SUSTAINABILITY AND STAKEHOLDER MANAGEMENT
- PROJECTS
- REMUNERATION AND TALENT MANAGEMENT

Key responsibilities

The key responsibilities of each Committee and their focus areas for 2021 are set out on page 128.

CEO and Executive Committee

The Board has delegated day-to-day responsibility for implementing the Group's strategy and fostering the corresponding organisational culture to the Company's CEO, Iván Arriagada.

Mr Arriagada is not a Director of the Company but is invited to attend all Board and Committee meetings and is supported by the members of the Executive Committee, each of whom has executive responsibility for his or her respective function.

Mr Arriagada chairs the Executive Committee.

The Executive Committee reviews significant matters and approves expenditure within designated authority levels.

The Executive Committee leads the annual budgeting and planning processes, monitors the performance of the Group's operations and investments, evaluates risk and establishes internal controls, promoting the sharing of best practices across the Group.

Subcommittees of the Executive Committee

Members of the Executive Committee also sit on the boards of the Group's operating companies and report on the activities of those companies to the Board, Mr Arriagada and the Executive Committee.

The Board has delegated to the Disclosure Committee primary internal responsibility for identifying information that may need to be disclosed to the market and for managing its disclosure in line with the Group's current Disclosure Procedures Manual.

The Executive Committee is assisted in its responsibilities by the following Subcommittees:

- BUSINESS DEVELOPMENT
- CLIMATE CHANGE
- DISCLOSURE
- ETHICS
- OPERATING PERFORMANCE REVIEW
- PROJECT STEERING
- WATER, ENERGY & EMISSIONS MANAGEMENT

Board and Board Committee information flows

01

Chairman agrees agenda with Directors

The Chairman, in consultation with the Senior Independent Director and the CEO, maintains an agenda of standing topics to be considered by the Board and Committees each year, which is then supplemented, during the year, with agreed key topics and events requiring consideration.

02

Papers circulated in advance of meetings

Materials are sent to Board and Committee members a week in advance of each meeting.

Each presentation has a summary sheet setting out the objective, background, proposal, justification, risk analysis and next steps. Materials include the CEO's report, which is an open and candid summary of his views on evolving strategic challenges, changes in risk assessments and emerging issues, as well as the management report with detailed information on the Group's performance against key safety, health, environmental, community, financial, project development and organisational culture indicators.

03

Board and Committee meetings

Each Board and Committee meeting has one or more in-camera sessions without management present to allow Directors to set expectations for the meeting and to reflect on and evaluate the meeting's progress. During regular sessions, the CEO provides timely updates to the Board on emerging issues, while executives present to the Board and its Committees on operating and development matters, allowing close interaction between Directors and a wide range of executive management.

04

Minutes prepared, circulated and approved

The Company Secretary minutes all Board and Committee meetings, which are circulated and reviewed by the Board and management, updated as necessary and tabled for approval at the following session.

05

Action lists prepared and updated as key actions are implemented

The Board and each Committee maintain an action list that is reviewed at the beginning of each meeting to ensure that Directors' enquiries and concerns are clearly identified and timely addressed.

06

Information between meetings

Between Board meetings, Directors receive flash reports with monthly and year-to-date production and financial results, including key metrics in respect of safety, health, environmental and community relations performance, ensuring that the Board is regularly updated on the Group's progress.

Where appropriate, Directors may receive general information on the commodity markets and additional reports highlighting key developments in the Group's exploration, projects, business development and innovation activities.

The Group's management team, led by Iván Arriagada, performs an essential role in ensuring that the Board has the information required to make effective decisions, reporting in real time on the implementation of the Group's strategy and the Company's performance.

/ *Board activities*

Strategic vision

The Board's activities in 2021 addressed the challenges posed by the COVID-19 pandemic, protecting the health and safety of the workforce and local communities while ensuring operational continuity. In addition, the Board provided oversight on the pursuit of the Group's strategy, addressed critical issues in a timely manner and advised management on the development of strategic priorities and plans, all while seeking to align with the values of the Group and stakeholders' best interests.

Our strategic framework

The COVID-19 pandemic has tested not only the flexibility of our organisation, but also the resilience of our strategy and governance framework. As we have faced the daily challenges of the pandemic, we have strengthened our commitment to **Developing Mining for a Better Future** as the purpose that mobilises us and gives meaning to everything we do.

We are an international mining company, focused on copper and its by-products, known and respected for its operating efficiency, creation of sustainable value, high profitability and as a preferred and reliable partner in the global mining industry.

We want to generate a diverse and inclusive culture, with key values shared by all. We have a Code of Ethics and our own way of doing things, while managing our risks. To achieve this, we rely on the talent and capabilities of our workforce. Our flexible organisation allows us to overcome current and future challenges, as demonstrated during the pandemic.

Below are examples of how the Board's activities in 2021 have furthered the Group's strategy.

COVID-19 pandemic
- Monitored developments and supported management in addressing challenges arising from the COVID-19 pandemic with particular focus on safety and health, people, sustainability and stakeholder management, project development and operational continuity.
- Approved a new $6 million fund (complementing the $6 million fund established in 2020) to aid neighbouring communities including the provision of health infrastructure and medical equipment.

Culture
- Monitored operational and projects performance and their link with the Group's culture, particularly concerning safety and health.
- Oversaw the continued implementation of the Group's strategic framework, including the Group's purpose, vision, values and culture.
- Monitored progress on the implementation of the Group's Diversity and Inclusion Strategy.
- Monitored the implementation of behavioural guidelines which connect specific expected behaviours to the Group's culture.
- Reviewed workforce engagement survey results and meetings with representatives of the Group's labour unions.

Governance and engagement
- Reviewed Board and Executive Committee succession plans.
- Appointed Eugenia Parot to the Board.
- Approved changes to the membership of several of the Board Committees.
- Reviewed Directors' independence.
- Reviewed Directors' conflict of interest declarations.
- Reviewed and approved requests by Directors to undertake additional external appointments.
- Reviewed Committees' terms of reference and approved a change to one of them.
- Reviewed corporate governance arrangements in the context of recommendations issued by the Task Force on Climate-related Financial Disclosures (TCFD), determining that no amendments related to climate change were required.
- Oversaw the implementation of key recommendations arising from the 2020 internally facilitated Board effectiveness review.
- Monitored feedback from investors and proxy agencies regarding the Group's corporate governance arrangements.
- Reviewed the results of a perception study on the views of existing and potential shareholders, investors and bank equity research analysts.

Internal controls, risk management and compliance
- Reviewed the risk management system's maturity level.
- Reviewed key and emerging risks; conducted the annual review of the Group's risk appetite statements, which are aligned with the Group's strategic pillars and adjusted three risk appetite declarations.
- Reviewed and updated the Group's risk matrix, materialised risks and risk mitigation.
- Reviewed budgets for initiatives designed to mitigate material identified risks.
- Reviewed physical and transition risks associated with climate change in the context of the TCFD review.
- Addressed representations and confirmations which the Board are required to provide, attesting to the effectiveness of the risk management and internal control systems.
- Reviewed actions planned for 2022 to prepare for a potential future requirement for the Board to confirm the effectiveness of internal controls over financial reporting.
- Reviewed half-yearly compliance reports.
- Reviewed results of the Group's whistle-blowing processes.
- Certified the Group's compliance and crime prevention models.
- Reviewed Internal Audit's progress and 2022 Audit plan.

Financial and performance reporting
- Approved the Group's 2020 full-year and 2021 half-year results and corresponding announcements.
- Proposed the dividends paid to shareholders during 2021.
- Reviewed and approved going concern and viability statements and conducted stress tests related to a potential future resilience statement.
- Monitored progress towards achieving the accelerated audit timetable to enable a February 2022 results announcement.

Our strategy is designed to enable us to achieve our purpose. The strategy is supported by five pillars; each has defined short- and medium-term goals.

People

People are central to our business. We want our employees to feel recognised and to have the maximum opportunities for personal and professional growth. We seek to generate a culture of diversity and inclusion in which our employees can achieve their full potential. Our goal is to be the best employer in the mining industry in Chile. To achieve this, we understand the importance of creating an environment of trust and collaboration focused on the long term.

- Implemented the "New Ways of Working" initiatives to facilitate flexible on-site, home-based and hybrid working arrangements, with the goal of creating a more flexible and adaptable organisation.
- Reviewed the annual talent management exercise, including succession plans for the CEO and the Executive Committee.
- Reviewed employee performance including short-term and long-term scorecards.
- Monitored progress on the implementation of the Group's Diversity and Inclusion Strategy.
- Monitored labour relations at the Group's mining and transport operations and reviewed the results of collective bargaining negotiations.
- Monitored the implementation of behavioural guidelines which connect specific expected behaviours to the Group's culture.
- Monitored the progress of the annual Human Resources plan.

Safety and Sustainability

The safety and health of our employees and contractors is non-negotiable. We are committed to achieving zero fatalities at our operations and continuing to reduce the number and seriousness of accidents and occupational health issues. We view sustainability as a source of value creation that is an integral part of our decision-making processes.

- Implemented and monitored COVID-19 protocols aimed at protecting the Group's workforce and neighbouring communities.
- Reviewed and monitored the Group's safety and health performance.
- Reviewed the Group's compliance with environmental commitments.
- Monitored the Group's implementation of its Climate Change Strategy.
- Continued to monitor the independent review of tailings dam safety and assessed it versus industry best practice and the ICMM's standard.
- Continued to monitor the progress of local community interactions at Los Pelambres.

Competitiveness

Our key focus as regards competitiveness is to achieve productivity gains through cost control and streamlining our processes.

- Monitored results of the Group's Cost and Competitiveness Programme, including estimated future savings.
- Approved key procurement and sales contracts.
- Reviewed and monitored the Group's operating and financial performance.
- Reviewed and approved the Group's copper concentrate and copper cathode sales strategy.
- Reviewed the progress of proposed legislation which could affect the Group.

Growth

We have a portfolio of growth projects that allows us to remain competitive and develop sustainable operations in the long term.

- Reviewed execution progress on the Los Pelambres Expansion project, Zaldívar's Chloride Leach project and Centinela's Esperanza Sur project.
- Reviewed progress on the Centinela Second Concentrator project.
- Reviewed progress on the Twin Metals Minnesota project.
- Reviewed development and exploration activities, including an assessment of business development opportunities.
- Reviewed progress on the Group's material Environmental Impact Assessments.
- Reviewed and approved the acquisition and divestment of mining properties in Chile.
- Reviewed and approved the Group's long-term price assumptions.
- Reviewed and approved the base case and development case for the Group's assets.
- Reviewed and approved the Group's 2022 budget.
- Reviewed the Group's reserves and resources statements.

Innovation

We innovate as a means of improving social, environmental and economic performance while, at the same time, delivering strong returns for our shareholders. Innovation is key to improving productivity and efficiency and promoting growth, especially in the medium and longer term.

- Stewarded progress on the Group's portfolio of innovation initiatives.
- Reviewed progress on the implementation of the Group's digital transformation programme.
- Monitored progress on Centinela's and Los Pelambres' remote operations centre projects.
- Monitored construction progress for the Zaldívar Chloride Leaching project.
- Monitored the development of autonomous haulage and drilling systems.
- Reviewed the development of the Group's proprietary Cuprochlor®-T primary sulphide leach technology.

/ Stakeholder engagement

Engaging with stakeholders to make decisions for a better future

The Group maintains ongoing dialogue with stakeholders to understand their expectations and concerns, and their views are considered in the Board's deliberations. A description of the Group's key stakeholders, their importance to the Group's long-term sustainable success and the key initiatives that are in place to recognise their interests and concerns is set out in detail within the Strategic Report on pages 32-65.

Further details on the Board's workforce engagement mechanisms are set out on pages 120-121.

Jean-Paul Luksic
Chairman

In 2018, Antofagasta set emissions reductions targets for 2022. This year we achieved – and surpassed – those targets and set two new ones.

Three of the principal 2021 Board decisions are explained here as examples of how stakeholder considerations, and the factors set out in section 172(1) of the Companies Act 2006, were central to the decision-making processes. As part of its decision-making, the Board had regard to the different interests of stakeholders but with an overarching focus, as required by section 172(1), on acting in the way that would be most likely to promote the success of the Company for the benefit of its members as a whole. Among other things, the likely consequences of the decision in the long term were key considerations for the Board.

Approval of new greenhouse gas emissions reduction targets:

In May, the Board approved two new greenhouse gas (GHG) emissions reduction targets as part of our Climate Change Strategy and our wider commitment to operate sustainably as a leading copper producer. The first target is to reduce our direct (Scope 1) and indirect (Scope 2) GHG emissions by 30%, or by 730,000 tonnes of CO_2e by 2025, relative to 2020. The other, longer-term, target is to achieve carbon neutrality by 2050, in line with Chile's own national target, or earlier if technologies are developed over the coming years that would allow this goal to be achieved sooner.

In 2018, the Board approved the Company's previous GHG emissions reduction target to reduce both its Scope 1 and Scope 2 CO_2e emissions by 300,000 tonnes of CO_2e by 2022. This target was achieved two years early with emissions reduced by over 580,000 tonnes of CO_2e by the end of 2020.

How the Board considered, and had regard to, the interests of key stakeholders and the requirements of section 172(1)

The decision to approve new emissions reduction targets was taken following extensive discussions between the Board and management over several years and taking into account the broad impact that climate change could have on the long-term success of the Company.

- The reduction of GHG emissions is one of the five pillars of the Climate Change Strategy that was approved by the Board in 2020. The five pillars are: (1) the development of climate change resilience; (2) the reduction of greenhouse gas emissions; (3) the efficient use of strategic resources; (4) environmental and biodiversity management; and (5) stakeholder integration. Stakeholder integration ensures that decisions made pursuant to the climate change strategy reflect shifting societal expectations of the extent and pace of climate change mitigation, government and regulatory expectations, ways to meet existing investors' expectations and what would be needed to attract new investors in the future, and strategic partnerships, including with customers and suppliers.
- In developing the Climate Change Strategy and GHG emissions reduction targets, the Board was regularly updated on the views, expectations and challenges facing our local communities, suppliers and customers to understand the current and future impact of climate change on these stakeholders and their own objectives to address this global challenge.
- The Board considered the specific actions that would allow the emissions reduction targets to be achieved and the impact on stakeholders including suppliers. These actions included plans to move all power supply contracts to renewable energy by the end of 2022 as the fundamental enabler for the 30% reduction target. The Board also considered the importance of technology in allowing the Group to achieve carbon neutrality by 2050 and the interests of stakeholders including communities, employees, contractors and suppliers in identifying and deploying this technology.
- The Board monitors technological advances in electromobility, green hydrogen and electric batteries and has supported active investment in technology. In January 2021, we became the first mining company to join the Chilean Hydrogen Association (H2 Chile), an organisation that promotes the development of green hydrogen. As a fuel, green hydrogen has the potential to reduce carbon emissions by replacing the diesel used by our mine haulage trucks. According to estimates by the Chilean energy industry, green hydrogen solutions could begin to be implemented as early as the end of this decade.
- The Board's objective is to position the Company as a leader in the implementation of an integrated climate change strategy, managing mitigation factors and adaptability throughout the business' value chain. We are aligned with the ICMM members' approach to climate change and are committed to implementing the recommendations set out by the Task Force on Climate-related Financial Disclosures (TCFD).
- In considering the financial implications of climate-related risks and opportunities under the TCFD recommendations, the Board considered transition risks as well as physical risks, including such risks as:
  - an increase in the maximum daily temperature would:
    - » require increased maintenance and equipment replacement;
    - » increase evaporation rates, impacting tailings and water storage systems;
    - » require changes in work conditions and shifts; and
    - » increase pollution as lower humidity would increase airborne dust.
  - a reduction in annual rainfall would:
    - » reduce continental water flows, impacting production and creating community issues;
    - » increase pollution with higher airborne dust particles; and
    - » increase the risk of forest fires.
  - extreme rainfall events would:
    - » damage transport and local infrastructure due to flooding;
    - » increase flooding risk to our processing plants and infrastructure; and
    - » force our operations to be suspended or restricted due to weather conditions.
  - an increase in daily wind speed would:
    - » trigger dust events which may require operations to be suspended; and
    - » restrict or lower the efficiency of certain activities including transport and logistics.
  - changes in sea conditions, including sea levels, wave surges and extreme events, would:
    - » restrict or suspend port operations;
    - » impact product stockpiles or supplies; and
    - » require repairs and infrastructure maintenance (e.g. to docks and water capture installations).
- The Board considered the impact of these physical risks on our stakeholders including communities, employees, contractors and suppliers.
- The Board also considered that copper will be a key enabler of a modern low carbon economy and the importance of working with stakeholders to produce it in a sustainable and responsible way.
- Under the Board's supervision, we are currently in the process of evaluating our Scope 3 emissions which includes working with suppliers to learn more about the measures they are implementing regarding climate change. We expect to complete measurement of Scope 3 emissions in 2022 and set reduction target by the end of 2023, in line with the ICMM's position statement for climate change.
- The expectations of shareholders and the impact of any decision on them were a key consideration for the Board, with a view to balancing investor priorities given the importance of protecting the environment and contributing to the resolution of this global challenge, while generating sustainable returns for shareholders.

/ *Stakeholder engagement* continued

Engaging with stakeholders to make decisions for a better future continued

Los Pelambres' drought response

2021 was the driest year of the ongoing 12-year drought in Chile, with precipitation significantly less than in 2019, which had been the driest year of the drought. Strict water management protocols are in place at Los Pelambres and various actions to mitigate the continued impact of reduced rainfall and higher temperatures continue to be evaluated. Production at Los Pelambres was impacted in 2021 and it is expected that up to approximately 50,000 tonnes of copper is at risk in 2022. The next rainy season is in the Chilean winter and Los Pelambres' desalination plant is expected to be completed in the second-half of 2022, which will mitigate any further water shortages.

How the Board considered, and had regard to, the interests of key stakeholders and the requirements of section 172(1)

Los Pelambres formulated a drought response plan focusing on 2021 as an extraordinarily dry year which had to be managed, while also strengthening long-term relationships with neighbouring communities.

- The Board recognised the threat to water availability years ago and Los Pelambres submitted an Environmental Impact Study (EIA) for the Los Pelambres Expansion project in 2016, which included a 400 l/s desalination plant. The environmental permit (RCA) was received in 2018 and in 2021 Los Pelambres submitted a new EIA which included an application to double the capacity of its desalination plant to 800 l/s.
- The decision to use desalinated water is a solution generated by the dialogue with neighbouring communities and local authorities.
- The Board accepts that the current situation is ongoing and is a part of expected long-term climate change. Forecasts set out in the Chilean Government's climate change model estimate a sharp increase in the drought threat in the Coquimbo Region, where Los Pelambres is located, projecting a drought lasting from 2025 to 2060. The model indicates a high increase in the probability of sustained drought conditions with river flows significantly lower than historical averages. It is forecast that the Choapa River flow would be as low as in 2019 and 2021, some 7% of the maximum potential flow.
- The Board analysed Los Pelambres' water balance, which only considers a 15% intake of continental water, as 85% of the water used by the operation is reused or recirculated. The 15% intake equals 850 l/s, 59% of which comes from surface sources, primarily from the Choapa River and 41% from underground, mainly from two wells in Cuncumén and from the pit.
- The Board monitored the 2019-2021 water management plan, designed to improve intake, increase efficiency in water use and support neighbouring communities.
- The Board monitored Los Pelambres' initiatives focused on enabling water consumption by neighbouring communities. They include the APRoxima Programme which benefits four municipalities and 54,000 people in the Choapa province, collaboration agreements in Illapel and Salamanca, emergency plans, and the design and construction of new rural water systems. The Confluye Programme focuses on supporting the availability of water and improving its use for farming. An emergency drought fund has been set up to support human water consumption.
- The limited availability of water also has an impact on air quality. Although water continues to be used at the tailings storage facility and the mine to suppress dust, the dry surface area that is prone to emitting dust has increased.
- The Board requested an evaluation of the drought's impact and the Company communicated the results to shareholders in the 2021 Half Year Results announcement with 2021 guidance being revised downward from 730-760,000 tonnes to 710-740,000 tonnes and indicating that up to approximately 50,000 tonnes of production could be at risk at Los Pelambres in 2022.
- The expanded desalination plant will enable Los Pelambres to source over 90% of its water needs from sea, reused or recirculated water, and to reduce extraction from the Choapa River and underground wells. Los Pelambres will be the first mining company in central Chile operating essentially with only sea water.

Jean-Paul Luksic
Chairman

In considering the implications of the proposed royalty, the Board considered and had regard to the interests of key stakeholders.

Board oversight of mining royalty discussions in Chile

The total tax rate for Chilean companies that remit profits to shareholders abroad is 35%, which comprises a standard corporate tax at 27%, which is payable as profits are earned, and a withholding tax payable on profits distributed out of Chile (at 35% less first category tax already paid).

There is also a separate, additional, mining-specific tax of 5–14% of operating profits based on the operating margin.

In May 2021, the lower house of Congress approved a proposal to establish a new mining royalty to fund social needs, which is now being considered by the Senate. The Senate is not restricted to the specific terms of the proposal presented by the lower house and has received evidence from a much broader base of interested parties including academics and mining industry representatives. It is now assessing these representations before proposing amendments to the draft legislation.

The terms of the proposal are: (1) a 3% royalty of copper sales; plus (2) an additional royalty on a progressive scale of: (a) 15% for copper sales between $2.00/lb and $2.50/lb; (b) 30% for copper sales between $2.50/lb and $3.00/lb; (c) 50% for copper sales between $3.00/lb and $3.50/lb; (d) 65% for copper sales between $3.50/lb and $4.00/lb; and (e) 75% for copper sales above $4.00/lb; minus (3) a refining cost deduction for refined products (cathodes).

As at the end of 2021 the Senate has indicated that it will revise the proposal to reduce the proposed royalty percentages substantially. However, formal debate in the full Senate has not yet started and final approval by both houses of Congress is not expected until after March 2022.

All the Group's operating companies have tax invariability agreements; Los Pelambres and Zaldívar's agreements run until the end of 2023, Centinela's agreement runs until 2029 (2031 for Encuentro Oxides) and Antucoya's agreement runs until 2030. Any impact from a change in the royalty tax would take effect after the end of the invariability period.

How the Board considered, and had regard to, the interests of key stakeholders and the requirements of section 172(1)

- The Board has monitored closely the progress of this proposed legislation.
- The Board held a special meeting in June 2021 to discuss, with an external facilitator, the current political context in Chile and the potential implications of the proposed mining royalty.
- In considering the implications of the proposed royalty, the Board considered and had regard to the interests of key stakeholders, noting that:
  - Between 2013 and 2019, approximately 80% of copper industry revenue was used to pay salaries, services, materials and supplies to operations and projects. The remaining 20% covered, in almost equal parts, dividends paid to shareholders and taxes.
  - Mining has a multiplier effect. For every $100 produced by mining an additional $78 is generated in other sectors of the economy.
  - There is already a mining-specific tax in addition to corporate and withholding tax, and if a company distributes 100% of its profits, the effective tax rate is currently 44.5%.
  - The lower house's royalty proposal would increase the effective tax rate to over 75% at copper prices of over $4.00/lb, which would be the highest rate in the world, by a significant margin.
  - 90% of Chile's copper is produced by 22 companies. Five are in the third quartile of the industry's cost curve and 12 are in the fourth quartile, and so their profitability is more sensitive to copper price variations. In 2019, the 12 companies in the fourth quartile had losses of approximately $700m after having spent over $4.8 billion in salaries, and purchases of goods and services.
  - Under the proposed royalty scheme, a company in the third or fourth quartile, with 20 years of reserves, will be able to recover only 60% of its initial investment before all its reserves have been mined. This would have a significant impact on mining investment in Chile, favouring other countries.
  - The proposed royalty would especially harm companies and projects in the fourth quartile, reducing Chile's share of the world's copper production, reducing employment and negatively impacting suppliers and contractors.
- The Board authorised management to communicate these impacts on stakeholders in the relevant forums to allow for these considerations to be taken into account in the development of this legislation.
- The Board is also taking these potential impacts into account in its broader decision-making.

/ Employee engagement

Fostering a collaborative dialogue and working environment

Mining is a long-term business whose timescales often run into decades. Our relationships with our stakeholders are central to our long-term success and to our purpose of developing mining for a better future. The Group's governance structures include a network of arrangements to ensure that the views and interests of stakeholders, including our employees and contractors, are discussed in the boardroom and considered as part of the Board's deliberations.

The Group maintains strong relations with its workforce based on trust, continuous dialogue and favourable working conditions. The Board has carefully considered and thoroughly reviewed the mechanisms that are in place to allow the Board to understand the views of the Group's workforce. Ultimately, the Board has decided not to adopt any of the three workforce engagement mechanisms that are recommended in the UK Corporate Governance Code (a Director appointed from the workforce, a formal worforce advisory panel or a designated non-executive director). The Board considers that adopting any of these mechanisms would interfere with the effective, structured and formal combination of mechanisms that the Board already has in place.

The Group's workforce comprises of 26,991 people. More than 99% are in Chile and more than 50% come from communities in the Antofagasta and Coquimbo Regions, where all of the Group's operating companies are located. Approximately 26% of the workforce are Group employees and 74% are employees of contractor or subcontractor companies.

Approximately 77% of the Group's employees are unionised. This number is close to 100% at the operator level. The Group maintains ongoing dialogue with labour unions and all key issues are raised with and discussed by, the Remuneration and Talent Management Committee and the Board.

The Group has established control mechanisms to ensure that contractors and subcontractors, who are often members of their own labour unions, meet the Group's standards and guidelines on labour, environmental, social and ethical matters and adopt good practices with regard to safe workplaces and the quality of employment. Contractors and subcontractors receive the same protections as the Group's employees under Chilean labour law and the Group requires contractors to pay their employees ethical wages at least two thirds higher than Chile's legal minimum and to provide other basic benefits including life and health insurance. These protections are reinforced through bank guarantees and contractors and subcontractors are subject to regular audits by independent third parties to ensure full compliance with these standards.

Below is a selection of the workforce engagement mechanisms that the Board currently has in place:

- Directors visit the Group's operations individually or in small groups throughout the year where they engage informally with the workforce. Impressions and views arising from these visits are reported to the Board and related questions are raised with the management team.
- Labour relations matters and the feedback from labour negotiations are reported directly to the Board and the Remuneration and Talent Management Committee throughout the year and typically form a key part of the CEO's general update to the Board.
- The CEO, Vice President of Operations, Vice President of Human Resources, and the General Managers and HR Managers of each relevant operation meet with unions at least annually to share relevant information and listen to concerns and suggestions, the results of which are shared with the Remuneration and Talent Management Committee and the Board. Additional meetings with union

26,991

Total Group's workforce

99%

Are based in Chile

50%

Come from communities in the Antofagasta and Coquimbo Regions

Jean-Paul Luksic
Chairman

The Board's ability to continue to deliver long-term sustainable success relies on a detailed understanding of the views of our workforce and other stakeholders.

representatives took place during the year, enabling the CEO to share business performance, the main challenges associated with the Group's strategic framework, reinforce shared culture and values and listen to concerns and ideas. The purpose of these meetings is to foster a collaborative dialogue and working environment.

- Group-wide employee engagement surveys are conducted every two or three years. These surveys are conducted by independent third parties on behalf of the Group and the results are reported to the Remuneration and Talent Management Committee and the Board. Engagement surveys were conducted at the mining division's corporate headquarters and Antucoya during the year and the results were shared with the Remuneration and Talent Management Committee and the Board. Further engagement surveys are scheduled to be conducted at Los Pelambres, Centinela and Zaldívar during 2022.
- More targeted and specific ad hoc workforce surveys are conducted and/or focus groups are convened throughout the year in relation to specific areas of interest such as the Group's response to the COVID-19 pandemic and employee wellbeing and the Diversity and Inclusion Strategy. The results of these activities are overseen by the Executive Committee and reported to the Remuneration and Talent Management Committee and the Board.
- The workforce is engaged in the design and development of programmes that impact the Company's culture or have a high impact on working conditions. In 2021 this resulted in the Board overseeing the implementation of the New Ways of Working project (see extract).
- The Group's workforce is encouraged to report any concerns to the Ethics Committee through the confidential whistleblowing hotline. Reports may be made anonymously. All reports are investigated and reported to the Audit and Risk Committee and the Board.

New Ways of Working project

During 2019 the Remuneration and Talent Management Committee and the Board oversaw the development of a new employee Total Rewards Programme which was designed with the input of employees through working groups and staff surveys to enable the Group to provide the flexibility required by a changing workforce. This included a flexitime system to allow employees to fit working hours around their individual needs, giving them more flexibility, particularly as regards shifts and allowing employees to take up to a year off work for family or other reasons.

As a consequence of the COVID-19 pandemic, fully flexible working arrangements were implemented simultaneously across the Group in 2020 to meet health protocols and safety requirements. The implementation of these arrangements demonstrated that remote and flexible working arrangements were feasible for the Group. They also reflected increased productivity, stronger engagement, commitment with the Group's Diversity and Inclusion Strategy, talent attraction and better work-life balance. The Board received regular feedback on views and experiences of employees during the pandemic through regular staff surveys and events hosted by the CEO where questions were asked and feedback provided directly by employees. This feedback was used to design the Group's New Ways of Working project which enables permanent flexible on-site, home-based and hybrid working arrangements following the pandemic, with the goal of creating a more flexible and adaptable organisation. The design of this project was reviewed and approved by the Board. The implementation of the project and experience of our employees was monitored through the use of surveys and events during the year.

/ Directors' biographies

Members of the Board

Biographical details for each Director are set out below. All Directors have confirmed that their other commitments do not prevent them from devoting sufficient time to fulfilling their roles and the Board acknowledges that the skills and experience gained by the Directors from these external appointments are of benefit to the Group. Additional external appointments cannot be undertaken without the prior approval of the Board. The availability of Directors to attend the significant number of ad hoc informal meetings in response to the challenges arising from the COVID-19 pandemic throughout the year demonstrated that all Directors are able to devote sufficient time to fulfilling their roles. Ages are as at the date of the 2022 AGM.

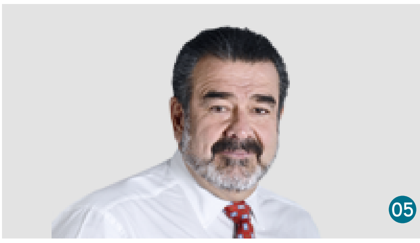
KEY TO COMMITTEES

- NG Nomination and Governance
- AR Audit and Risk
- ST Sustainability and Stakeholder Management
- PC Projects
- RT Remuneration and Talent Management
- ● Chairman

ANTOFAGASTA PLC DIRECTORS' BOARD MEETING ATTENDANCE

	Number attended
Jean-Paul Luksic	9/9
Tony Jensen[1]	9/9
Ollie Oliveira[2]	6/6
Ramón Jara	9/9
Juan Claro	9/9
Andrónico Luksic C	7/9
Vivianne Blanlot	9/9
Jorge Bande	9/9
Francisca Castro	9/9
Michael Anglin	9/9
Eugenia Parot[3]	7/7

1. Tony Jensen became Senior Independent Director on 1 August 2021.
2. Ollie Oliveira retired from the Board on 31 July 2021.
3. Eugenia Parot joined the Board on 20 April 2021.



01 Jean-Paul Luksic
Chairman, 57

Independent: No

Appointed to the Board: 1990

Appointed Chairman: 2004 (Non-Executive since 2014)

Over 30 years' experience with Antofagasta, including responsibility for overseeing development of the Los Pelambres and El Tesoro (Centinela Cathodes) mines

Previous roles
- Chairman of Consejo Minero, the industry body representing the largest mining companies operating in Chile
- CEO of the Group's Mining division

Current positions
- Member of the board of Consejo Minero
- Non-Executive Director of Quiñenco SA and Quiñenco group listed companies Banco de Chile and Sociedad Matriz SAAM SA
- Member of the board of Centro de Estudios Públicos, a not-for-profit academic foundation in Chile

02 Tony Jensen
Non-Executive Director, 60

Independent: Yes

Appointed to the Board: 2020

Mining engineer with over 35 years of mining experience in the United States and Chile in operational, financial, business development and management roles.

Previous roles
- Director of Golden Star Resources Limited
- President, CEO and Director of Royal Gold Inc
- Mine General Manager of the Cortez joint venture in Nevada and in treasury, business development and a wide range of other operating roles with Placer Dome in the USA and Chile

Current positions
- Director of Black Hills Corporation
- Member of the University Advisory Board for the South Dakota School of Mines and Technology

03 Ramón Jara
Non-Executive Director, 69

Independent: No

Appointed to the Board: 2003

Lawyer with considerable legal and commercial experience in Chile

Previous roles
- Partner, Jara del Favero Abogados
- Director of Empresa Nacional del Petróleo (ENAP)
- Vice President, SONAMI (National Mining Association)

Current positions
- Chairman of Fundación Minera Los Pelambres (charitable foundation)
- Director of Fundación Andrónico Luksic A (charitable foundation)
- Member of the Advisory Council of Centro de Estudios Públicos, not-for-profit academic foundation in Chile
- Member of the board of the Centre of Arbitration of the Chilean Chamber of Commerce

04 Juan Claro
Non-Executive Director, 71

Independent: No

Appointed to the Board: 2005

Extensive industrial experience in Chile, including an active role representing Chilean industrial interests nationally and internationally

Previous roles
- Chairman of the Sociedad de Fomento Fabril (Chilean Industrial Council)
- Chairman of the Confederación de la Producción y del Comercio (Chilean Business Confederation)
- Chairman of the Consejo Binacional de Negocios Chile-China (Council for Bilateral Chile-China Business)

Current positions
- Chairman of Coca-Cola Andina SA and Energía Coyanco SA
- Director of Melón SA and Agrosuper SA
- Member of the board of Centro de Estudios Públicos, not-for-profit academic foundation in Chile
- Country Adviser, Goldman Sachs

05 Andrónico Luksic C
Non-Executive Director, 68

Independent: No

Appointed to the Board: 2013

Extensive experience across a range of business sectors throughout Chile, Latin America and Europe

Current positions
- Chairman of Quiñenco SA and of Compañía Cervecerías Unidas SA; Vice Chairman of Banco de Chile and Compañía Sudamericana de Vapores SA, all of which are listed companies in the Quiñenco group
- Director of Nexans SA, a company listed on NYSE Euronext Paris
- Member of the International Business Leaders' Advisory Council for the Mayor of Shanghai; the Chairman's International Advisory Council at the Council of the Americas

06 Vivianne Blanlot
Non-Executive Director, 67

Independent: Yes

Appointed to the Board: 2014

Economist with extensive experience in public and private energy, mining, water and environmental sectors in Chile

Previous roles
- Executive Director of the Comisión Nacional de Medio Ambiente (Chile's Environmental Agency)
- Undersecretary of the Comisión Nacional de Energía (Chile's National Energy Commission)
- Chile's Minister of Defence
- Director of Scotiabank Chile
- Member of Consejo para la Transparencia (Transparency Council), the Chilean body responsible for enforcing transparency in the public sector

Current positions
- Director of Empresas CMPC SA, a pulp, paper and packaging company listed in Chile
- Director of Colbún SA, an energy company listed in Chile
- Director of Instituto Chileno de Administración Racional de Empresas (ICARE), a business think tank in Chile

07 Jorge Bande
Non-Executive Director, 69

Independent: Yes

Appointed to the Board: 2014

Economist with over 40 years' experience in the mining, energy and water industries in Chile

Previous roles
- Co-founder and Executive Director of Copper and Mining Studies CESCO, an independent not-for-profit think tank focused on mining policy issues
- Vice President of Development and later Director of Codelco
- CEO of AMP Chile
- Adviser to the World Bank
- Member of the Global Agenda Council for Responsible Minerals Resource Management at the World Economic Forum
- Director of Edelnor SA, Electroandina SA (now E-CL SA) and Bupa Chile SA
- Member of the Experts Committee for Copper Prices for Chile's Ministry of Finance

Current positions
- Director of CESCO
- Director of NextMinerals SA
- Professor of the International Postgraduate Programme in Mineral Economics at the University of Chile
- Member of the Advisory Council of the School of Economics and Business at the University of Chile

08 Francisca Castro
Non-Executive Director, 59

Independent: Yes

Appointed to the Board: 2016

Commercial engineer with over 25 years' experience in industry, including mining, energy, finance and public/private infrastructure projects in the United States and Chile

Previous roles
- Strategic Business Manager at Codelco
- General Co-ordinator of Concessions at Chile's Ministry of Public Works
- Held various roles within Chile's Finance Ministry and the World Bank, Washington DC
- Member of the independent Technical Panel of Chile's Public Works Concessions

Current positions
- Member of the Chilean Pension Funds Risk Classification Committee
- Director of SalfaCorp SA
- Director of the Fraunhofer Chile Research Foundation

09 Michael Anglin
Non-Executive Director, 66

Independent: Yes

Appointed to the Board: 2019

Mining engineer with over 30 years' experience in base metals, including the development, construction and operation of large-scale mining operations in the Americas.

Previous roles
- Vice President Operations and Chief Operating Officer of BHP Base Metals
- Director of EmberClear Corp

Current positions
- Chairman of SSR Mining Inc
- Adviser to IntelliSense.io
- Director of Tulla Resources, Australia

10 Eugenia Parot
Non-Executive Director, 62

Independent: Yes

Appointed to the Board: 2021

Civil biochemical engineer with over 35 years' experience working for leading engineering and consulting companies providing services to some of the largest mining projects in Latin America in the areas of environment, sustainability and mine waste management.

Previous roles
- Vice President of Latin America, Regional President for South America and Managing Director for Chile, Golder Associates
- Director on Golder's holding company board, member of the Audit and Finance and Investments Committees.
- Member of the boards of Golder South America, Chile, Peru and Argentina.

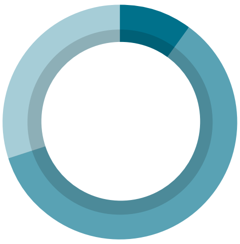
/ Board balance and skills

A balance of skills and experience

The Board comprises 10 Directors with a broad and complementary set of technical skills, educational and professional experience, nationalities, personalities, cultures and perspectives.

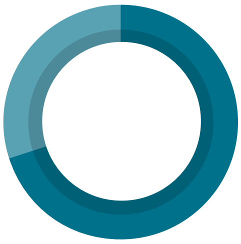
Board balance

Independence[1]



Chairman	1
Independent	6
Non-Independent	3

Gender diversity[2]

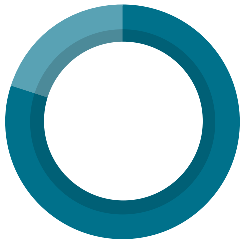


Male	7
Female	3

Tenure

1-5 years	4
6-10 years	3
10+ years	3

Nationality[3]



Chile	8
USA	2

1. The Board reviews the independence of Directors annually. The Board has carefully considered the independence of all Directors and is satisfied that Vivianne Blanlot, Jorge Bande, Francisca Castro, Mike Anglin, Tony Jensen and Eugenia Parot continue to be independent in character and judgement and that there are no relationships or circumstances that are likely to affect, or could appear to affect, their judgement.
2. The Board's Nomination and Governance Committee continues to work with an independent external search consultancy to identify potential female candidates who could provide an important contribution to the Board in the future. Further details on the Board's diversity policy can be found on pages 130-132.
3. The Company has met the Parker Review target and in 2021, more than half the Board identified as being from an ethnic minority background according to the criteria in the Parker Review survey. As noted throughout this Annual Report, the Group's footprint is primarily in Chile where ethnicity profiles and representation in society differ significantly from those in the UK. Nevertheless, the Board recognises that the mining industry is international and the Board includes several Directors from outside Chile in support of its vision and strategy.

Board skills matrix

Director	Independence	CEO experience	Mining industry experience	Mining operations experience	Board governance	Financial	Legal	Executive compensation	Latin American experience	UK market	Project management	Sustainability	Energy experience	Government relations	Communication
Jean-Paul Luksic		✓	✓		✓	✓		✓	✓	✓	✓			✓	
Ramón Jara			✓		✓	✓	✓		✓			✓	✓	✓	✓
Juan Claro		✓			✓			✓	✓			✓	✓	✓	✓
Andrónico Luksic C		✓			✓	✓		✓	✓					✓	✓
Vivianne Blanlot	✓				✓	✓		✓	✓		✓	✓	✓	✓	✓
Jorge Bande	✓	✓	✓		✓	✓		✓	✓		✓	✓	✓	✓	✓
Francisca Castro	✓		✓		✓	✓		✓	✓		✓		✓	✓	
Michael Anglin	✓	✓	✓	✓	✓			✓	✓		✓	✓			
Tony Jensen	✓	✓	✓	✓	✓	✓		✓	✓		✓	✓	✓	✓	✓
Eugenia Parot	✓	✓			✓	✓		✓	✓		✓	✓		✓	✓

Board and senior management's roles and responsibilities

The Group's CEO, Iván Arriagada, is not a Director, which reflects law and practice in Chile[1]. Despite this, interaction between the Board and executive management is as expected between Non-Executive Directors and management in a typical UK-listed company. The Board considers that there are considerable benefits associated with having a Board comprising exclusively Non-Executive Directors, as not only does it provide a broad range of perspectives, but it also encourages robust debate with, and independent oversight of, the Group's executive management.

Non-Executive Chairman

Jean-Paul Luksic

Leads the Board and ensures its effectiveness overall.

- Promotes the highest standards of integrity, probity and corporate governance.
- Sets the agenda for Board meetings in consultation with other Directors, members of senior management and the Company Secretary.
- Chairs meetings and ensures that there is adequate time for discussion of all agenda items, focusing on strategic, rather than routine, issues.
- Promotes a culture of openness and debate within the Board by facilitating the effective contribution by all Directors.
- Oversees Director induction, development and performance reviews.
- Leads relations with shareholders.

Non-Executive Directors

Juan Claro

Ramón Jara

Andrónico Luksic C

Provide a range of outside perspectives to the Group and encourage robust debate with, and challenge of, the Group's executive management.

- The Board does not consider these Directors to be independent because they do not meet one or more of the independence criteria set out in the UK Corporate Governance Code.[3]
- Ensure that no individual or small group of individuals can dominate the Board's decision-making.

Independent Non-Executive Directors

Tony Jensen

Michael Anglin

Jorge Bande

Vivianne Blanlot

Francisca Castro

Eugenia Parot

Ensure that no individual or small group of individuals can dominate the Board's decision-making.

- Meet the independence criteria set out in the UK Corporate Governance Code.[2]
- No connection with the Group or any other Director which could be perceived to compromise independence.
- Provide a range of outside perspectives to the Group and encourage robust debate with, and challenge of, the Group's executive management.

Senior Independent Director

Tony Jensen

Provides a sounding board for the Chairman and supports the Chairman in the delivery of his objectives as required.

- Where necessary, acts as an intermediary between the Chairman and the other members of the Board or the CEO.
- Acts as an additional point of contact for shareholders, focusing on the Group's governance and strategy and gives shareholders an alternative means of raising concerns other than with the Chairman or senior management.

CEO

Iván Arriagada

Leads the implementation of the Group's strategy set by the Board.

- Manages the overall operations and resources of the Group.
- Leads the Executive Committee and ensures its effectiveness in all aspects of its duties.
- Provides information and makes recommendations to the Board regarding the Group's day-to-day activities and long-term plans.

Executive Committee members

Present proposals, recommendations and information to the Board within their areas of responsibility.

- Support the CEO in the implementation of the Group's strategy set by the Board.

Company Secretary

Julian Anderson

Ensures that Directors have access to the information they need to perform their roles.

- Provides a conduit between Board and Committee communications and a link between the Board and management.
- Advises the Board on corporate governance and supports the Board in applying the UK Corporate Governance Code and complying with the UK listing regime and obligations.

The division of responsibilities between the Chairman, the CEO, and the Senior Independent Director is recorded in writing and is available on the Company's website at antofagasta.co.uk.

1. Chilean law prohibits CEOs of listed companies from being directors of those companies. The CEO and CFO are invited to attend all Board meetings. The CEO is also invited to attend all Board Committee meetings and there is regular formal and informal dialogue between management and the Board.
2. The Board reviews the independence of Directors annually. The Board has carefully considered the independence of all Directors and is satisfied that Vivianne Blanlot, Jorge Bande, Francisca Castro, Mike Anglin, Tony Jensen and Eugenia Parot continue to be independent in character and judgement and that there are no relationships or circumstances that are likely to affect, or could appear to affect, their judgement.
3. Ramón Jara provides advisory services to the Group. Andrónico Luksic C is the brother of Jean-Paul Luksic, the Chairman of the Company, and is Chairman of Quiñenco SA and Chairman or Director of Quiñenco's other listed subsidiaries. Jean-Paul Luksic is also a Non-Executive Director of Quiñenco and some of its listed subsidiaries. Like Antofagasta plc, Quiñenco is controlled by a foundation in which members of the Luksic family are interested. Ramón Jara and Juan Claro have served on the Board for more than nine years from the date of their first election.

/ Executive Committee biographies

Members of the Executive Committee

01 Iván Arriagada
CEO appointed in 2016

Joined the Group in 2015

- Commercial engineer and economist with almost 30 years' international experience in the mining and oil and gas industries

Previous roles

- Chief Financial Officer of Codelco
- Various positions over six years at BHP, including President of Pampa Norte (Spence and Cerro Colorado), Vice President Operations and Chief Financial Officer of the Base Metals division
- Almost 15 years' experience with Shell in Chile, the United Kingdom, Argentina and the United States

02 Mauricio Ortiz
CFO appointed in 2020

Joined the Group in 2015

- Electrical engineer and two Master of Science degrees (Metals and Energy Finance and Electrical Engineering) with 15 years' experience in the energy, mining and railway industries

Previous roles

- General Manager of FCAB (Transport division)
- Business Development Manager of Antofagasta Minerals
- Finance Manager at Codelco – Chuquicamata
- Business Development Principal at Rio Tinto plc, London
- Various operating project roles at BHP

03 Mauricio Larraín
Vice President of Northern Operations appointed in 2022

Joined the Group in 2017

- Civil mining engineer and Master of Science (Mineral Economics) with over 25 years' experience in mining

Previous roles

- General Manager of Los Pelambres
- General Manager at Codelco's El Teniente Division
- Operations Manager at El Teniente
- Mine Planning Corporate Manager of Codelco
- Various positions at Codelco and Los Pelambres

04 Alejandro Vásquez
Vice President of Los Pelambres Operations appointed in 2022

Joined the Group in 2022

- Civil mining engineer with over 30 years' experience in mining

Previous roles

- Vice President, South America of Teck
- President of Pampa Norte (BHP's Spence and Cerro Colorado operations)
- General Manager of the Yandi iron ore operation in Australia
- Vice President of Operations for Minera Escondida

05 Georgeanne Barceló
Vice President of Human Resources appointed in 2022

Joined the Group in 2021

- Human resources specialist with a degree in Law and Masters in Strategic Management of Human Resources, with more than 20 years' experience in international and national companies across a range of sectors, including insurance and industry

Previous roles

- Labour Relations Manager of Antofagasta Minerals
- Corporate Director of People at Bupa Chile
- Human Resources Vicepresident at Komatsu Latin America

06 Gonzalo Sánchez
Vice President of Sales appointed in 2004

Joined the Group in 1996

- Civil engineer with over 25 years' experience in marketing and metals hedging

Previous roles

- Deputy Commercial Director of Antofagasta Minerals
- Copper sales at Codelco

07 Francisco Walther
Vice President of Projects appointed in 2018

Joined the Group in 2007

- Mining engineer with over 25 years' experience in open pit and underground mining and engineering

Previous roles

- Corporate Project Manager of Antofagasta Minerals
- Project Director of Reko Diq
- Director of Codelco's Chuquicamata underground mine project
- Head of Engineering for Codelco's Ministro Hales project

08 René Aguilar
Vice President of Corporate Affairs and Sustainability appointed in 2017

Joined the Group in 2017

- Industrial psychologist with 20 years' experience in mining, including in sustainability, safety, human resources and corporate affairs

Previous roles

- Group Head of Safety at Anglo American, London
- Vice President of Corporate Affairs and Sustainability at Codelco
- Health and Safety Director of the International Council on Mining and Metals (ICMM), London

09 Patricio Enei
Vice President of Legal appointed in 2014

Joined the Group in 2014

- Lawyer and MBA, with over 20 years' experience in mining

Previous roles

- General Counsel at Codelco
- Corporate Affairs Manager at Minera Escondida
- Senior lawyer at BHP Billiton in Chile
- Chief Legal Counsel at Minera Doña Inés de Collahuasi
- Lawyer at the Instituto de Normalización Previsional and in private practice

10 Andrónico Luksic L
Vice President of Development appointed in 2015

Joined the Group in 2006

- Business administrator with broad mining experience in sales, exploration, business development and general management

Previous roles

- Corporate Manager in the Mining division
- Director, Antofagasta Minerals, Toronto Office
- Various positions at Banco de Chile

11 Alan Muchnik
Vice President of Strategy and Innovation appointed in 2021

Joined the Group in 2016

- Civil engineer, Master's degree in engineering and MBA

Previous roles

- Group Innovation and Energy Manager, and Growth Assets, Energy and Innovation Portfolio Manager of Antofagasta Minerals
- Several positions in strategy, planning, studies and business development over 10 years at BHP (Chile and the USA)

12 Katharina Jenny
General Manager – FCAB (Transport division) appointed in 2019

Joined the Group in 2016

- Mining engineer and MBA, with over 15 years' experience in mining

Previous roles

- Safety and Health Manager at Antofagasta Minerals
- Productivity and Costs Manager, and Safety Manager at Codelco
- Various roles at BHP, including mine planning, safety and health and environment

/ Introduction to the Committees

Active Board committees

The Board's Committees ensure that Board deliberations are focused on key issues and that proposals are submitted after specialist review, thorough debate and rigorous challenge.

Each Committee provides a forum to allow the views and perspectives of stakeholders to be discussed, so that they are represented in the Board's deliberations.

Nomination and Governance Committee

Key responsibilities

- Corporate governance framework
- Succession planning for the CEO and the Board
- Board and Committee composition
- Nomination to the Board
- Board effectiveness reviews

Focus areas for 2021

- Succession planning for Board and Committee roles
- Appointment of new Directors
- Board Committee composition
- Monitoring shareholder feedback on Governance
- Board and Committee evaluation

Find out more online
antofagasta.co.uk/bc

Audit and Risk Committee

Key responsibilities

- Financial reporting
- External audit
- Internal audit
- Risk management and internal control
- Compliance

Focus areas for 2021

- Monitoring the impact of the COVID-19 pandemic on the Group's internal controls, audit and risk management capabilities
- Assessing financial controls and reporting
- Monitoring risk management and compliance
- Assisting the Board with updates to the Group's risk appetite assessment

Find out more online
antofagasta.co.uk/bc

Sustainability and Stakeholder Management Committee

Key responsibilities

- Policies and commitments
- Safety and health
- Community relations
- Environmental and social matters
- Stakeholder engagement

Focus areas for 2021

- Overseeing measures to protect the health and safety of employees, contractors and local communities in response to the COVID-19 pandemic
- Endorsing key policies for the Group's long-term sustainable success
- Reviewing climate change strategy implementation

Find out more online
antofagasta.co.uk/bc

Projects Committee

Key responsibilities

- Oversight of project standards, guidelines and best practices
- Project development lifecycle matters
- Project reviews
- Lessons learned from completed projects

Focus areas for 2021

- Monitoring progress in the execution of the Los Pelambres Expansion and Zaldívar Chloride Leach projects
- Monitoring development of the Group's organic growth opportunities

Find out more online
antofagasta.co.uk/bc

Remuneration and Talent Management Committee

Key responsibilities

- Remuneration governance
- Directors' remuneration
- Executive remuneration
- Group pay structures
- Talent management and succession planning for the Executive Committee
- Employee engagement
- Talent retention
- Diversity and inclusion
- HR Planning

Focus areas for 2021

- Determining the application of the Group's executive remuneration framework in response to the COVID-19 pandemic
- Considering feedback from shareholders in relation to the 2020 Directors' and CEO Remuneration Policy that was approved at the 2020 AGM
- Monitoring Directors' and CEO remuneration
- Reviewing talent management and Executive Committee succession plans

Find out more online
antofagasta.co.uk/bc

Planning for the future

Jean-Paul Luksic
Chair of the Nomination and Governance Committee

2021 MEMBERSHIP AND MEETING ATTENDANCE

	Number attended
Jean-Paul Luksic (Chair)	5/5
Vivianne Blanlot	5/5
Tony Jensen [1]	1/1
Ollie Oliveira [2]	4/4

1. Tony Jensen joined the Committee on 1 August 2021.
2. Ollie Oliveira retired from the Board on 31 July 2021.

- Other regular attendees included the CEO and the Company Secretary.
- The Committee meets as necessary and at least twice per year.
- Except for the Chairman, all Committee members are independent.

Key responsibilities

The Nomination and Governance Committee supports the Board in ensuring that the Group has effective governance structures in place and that the Board and its Committees are appropriately staffed and operate effectively. The Committee identifies qualified individuals to join the Board, recommends any changes to the composition of the Board and its Committees and monitors an annual process to assess Board effectiveness.

This involves:

- monitoring trends, initiatives and proposals in relation to corporate governance
- overseeing and facilitating annual reviews of the Chairman, the Board, its Committees and individual Directors, including externally-facilitated reviews
- evaluating and overseeing the balance of skills, knowledge and experience on the Board and its Committees
- monitoring the independence of Directors
- overseeing Board succession plans and leading the process to identify suitable candidates to fill vacancies, nominating such candidates for approval by the Board and ensuring that appointments are made on merit and against objective criteria
- overseeing the induction of new Directors and the development of all Directors
- overseeing CEO succession plans

“

The Committee identifies qualified individuals to join the Board, recommends any changes to the composition of the Board and its Committees and monitors an annual process to assess Board effectiveness.

Key activities in 2021

Corporate governance

- Monitored the fulfilment of Code requirements.
- Reviewed Directors' declarations on potential conflicts of interest.
- Reviewed requests by Directors to undertake additional appointments.
- Reviewed the Governance section of the 2020 Annual Report and recommended it to the Board for approval.
- Reviewed the 2021 AGM Notice.
- Reviewed arrangements for the 2021 AGM in response to the COVID-19 pandemic.
- Reviewed feedback from investors and proxy advisers on the shareholder resolutions tabled at the 2021 AGM.

Succession planning

- Reviewed and endorsed detailed succession plans for the Board and its Committees.
- Reviewed and endorsed the succession plan for the Senior Independent Director.
- Continued to provide input to the Remuneration and Talent Management Committee in relation to succession plans for the Executive Committee (excluding the CEO) and the Group's diversity and inclusion programme.

Board and Committee composition

- Reviewed the independence of all Directors, making recommendations to the Board.
- Monitored the global search carried out by Spencer Stuart for an Independent Non-Executive Director.
- Interviewed and considered potential Board candidates.
- Recommended that Eugenia Parot be appointed to the Board.
- Recommended that Tony Jensen assume the roles of Senior Independent Director and Chair of Audit and Risk Committee, join the Nomination and Governance Committee and step down from the Sustainability and Stakeholder Management Committee.
- Recommended that Michael Anglin assume the Chair of the Projects Committee and join the Sustainability and Stakeholder Management Committee.
- Recommended that Eugenia Parot join the Projects Committee and the Sustainability and Stakeholder Management Committee.
- Reviewed and endorsed updates to the Board's skills matrix.

Board effectiveness reviews

- Oversaw the implementation of recommendations arising from the 2020 internal evaluation of Board and Committees' performance.
- Oversaw the 2021 internal evaluation of the Board and Committees' performance.
- Requested a performance review of the Chairman by Directors, led by the Senior Independent Director, and of individual Directors, led by the Chairman.
- Recommended that Clare Chalmers Limited be appointed to perform the 2022 externally-facilitated evaluation of the Board and Committees.

/ Nomination and Governance Committee report continued

Diversity, inclusion and succession planning

Q. What is the scope of the Board's succession planning?

The Board's succession plan is reviewed formally at least once per year and addresses Board size, Committee structure and composition, skills on the Board, Board and Committee members' tenure, independence of Directors, diversity (including gender), Board roles, Board policies and individual succession plans for all Board and Committee positions. Succession plans include contingency plans in the event of an unexpected departure, medium-term plans for orderly replacement of current Board members and long-term plans linking strategy with the skills needed on the Board in the future.

Q. How does the Board identify desirable skills for new Board candidates?

The Board maintains a Board skills matrix and the Committee reviews the balance of skills, experience and expertise at least annually. This process enables the Board and the Committee to identify the desirable skills required of new Board candidates and to instruct search firms to identify the candidates who fit these criteria when making new appointments to the Board.

Q. What steps does the Committee take to identify and appoint new Directors?

The Committee discusses relevant profiles for future appointments and potential candidates, taking into account the results of Board effectiveness reviews, as shown on page 133, the Group's purpose, vision, values and strategy, as shown on pages 114-115, the Board's diversity policy (below) and the core competencies and areas of expertise on the Board, as shown on page 124. When making new appointments of Directors to the Board, the Committee has appointed independent external search consultancies with no connection to the Group to assist with searches for Board candidates. During 2019 to 2021 the Committee appointed Spencer Stuart to assist with the search for new independent Non-Executive Directors. Spencer Stuart was briefed on the skills and experience of the existing Directors and was asked to identify potential candidates who would best meet a number of criteria, including relevant experience, skills, leadership capabilities, contribution to Board diversity and whether they had sufficient time to devote to the role. Members of the Committee interviewed short-listed candidates and collectively selected Eugenia Parot to be recommended to the Board for appointment in 2021.

Q. What support does the Company provide to facilitate induction and assist with professional development?

Induction

New Directors receive a thorough induction on joining the Board. This includes: meetings with the Chairman, other Directors, the CEO and Executive Committee members; briefings on the Group's strategy, UK corporate governance, operations, projects and exploration activities; and visits to the Group's operating companies.

The induction process for Eugenia Parot is explained in more detail on page 132.

Continuing personal development

Directors receive an annual briefing on governance, legal, regulatory and market developments that are relevant to directors of UK-listed companies, complemented by discussions on Board-related matters.

Directors have access to, and are encouraged to regularly attend, round-table discussions, seminars and other events that cover topics relevant to the Group and their roles.

Resources

The Company provides Directors with the necessary resources to maintain and enhance their knowledge and capabilities.

All Directors have access to management and to such information as they need to discharge their duties and responsibilities fully and effectively.

Directors are also entitled to seek independent professional advice concerning the affairs of the Group at the Company's expense.

Q. What is the Board's position in relation to diversity?

The Board's Diversity and Inclusion Policy reflects the Board's belief in the benefits of diversity and that more diverse companies attract and maintain the best talent and achieve stronger overall performance. The Board considers a broad definition of diversity when setting policies and appointing Directors, including gender, disability, nationality, educational and professional experience, personality type, culture and perspective.

The Committee has worked hard to ensure that the Board is suitably diverse according to these criteria. The Board reviews its effectiveness in meeting diversity goals each year as part of the annual Board and Committees' evaluation process.

The Company has met the Parker Review target and in 2021 more than half the Board identified as being from an ethnic minority background according to the criteria in the Parker Review survey. As noted throughout this Annual Report, the Group's activities are focused in Chile where ethnicity profiles and representation in society differ significantly from those in the UK. Nevertheless, the Board recognises that the mining industry is international, and the Board includes several Directors from outside Chile in support of its vision and strategy. It is important for overall Board effectiveness that potential candidates are proficient in Spanish and it is preferable for candidates to have relevant mining or extractive industry experience.

Gender diversity is a fundamental pillar of the Group's diversity and inclusion strategy, and the Board recognises and supports the important work performed by the Hampton-Alexander Review in pursuing a 33% target for women on FTSE 350 boards and on executive committees and their direct reports.

Three of the six Board appointees since 2014 (50%) have been women and the Board actively seeks to increase female representation beyond the current level, while ensuring that appointments continue to be made on merit.

As at the date of this report, there are three women on our Board of ten Directors (30%). Vivianne Blanlot joined the Board in 2014 and has chaired the Board's Sustainability and Stakeholder Management Committee since January 2017. Francisca Castro joined the Board in 2016 and has chaired the Board's Remuneration and Talent Management Committee since May 2019. Eugenia Parot joined the Board in 2021 and sits on the Sustainability and Stakeholder Management Committee and the Projects Committee.

The two searches performed in 2019 and 2020 aimed to identify candidates with mining operations experience (to cover the valuable skill set of a departing Director) and recent and relevant financial experience (as part of the succession plan for the role of chair of the Audit and Risk Committee). An external search consultancy was instructed to access the widest possible talent pool and, as has been the case for many years, instructions were given to specifically identify potential female candidates. For example, for the March 2020 appointment several hundred potential candidates were considered as part of a global search, from which a short list of seven were interviewed, four of whom were female. The search performed in 2021 concluded with the appointment of a female Director. The Group is committed to developing a pipeline of diverse talent for the future.

The Committee, with the support of an independent external search consultancy, continues to search for potential female candidates who could make an important contribution to the Board in the future.

We are committed to increasing the percentage of women on our Board, in senior management positions and, importantly, in the Group's workforce. We believe that this will support the Group, the industry and Chile in increasing the percentage of women in leadership roles.

Q. What policies are in place to promote a diverse pipeline of talent for the future?

The Group is committed to developing a pipeline of female talent that will widen the pool of female candidates for board and leadership positions in the future. In this, the Group is leading the way in Chile, where female participation in the workforce remains well behind more developed economies such as the United Kingdom.

In 2019, we sponsored the creation of a Chilean chapter of the 30% Club, the campaign launched in the UK in 2010 to foster gender balance on companies' boards and in senior management positions. To further promote diversity at the Executive Committee level and below, the current Diversity and Inclusion strategy was approved following an in-depth exercise to assess whether the Group's existing diversity and inclusion model was appropriate, which included interviews with stakeholders, a benchmarking exercise and a comprehensive review of the Group's policies and processes. This review identified structural impediments that needed to be addressed to achieve a sustained improvement in the Group's diversity and inclusion model and these issues were addressed in the first years following approval of the new strategy.

Metrics associated with the development of the Diversity and Inclusion strategy form part of the Group's Annual Bonus Plan and formal talent management and succession planning exercise, and performance is assessed by the Remuneration and Talent Management Committee at the end of each year. The Remuneration and Talent Management Committee is also responsible for succession planning for the Executive Committee, which allows for ongoing monitoring of the impact of the Diversity and Inclusion strategy on appointments that are made and their progress within the Company, including at the level of those who report to the Executive Committee.

As part of the Diversity and Inclusion strategy, female senior executives have been appointed to the boards of all our operating companies and we have two women in the Senior Management team: the General Manager of our Transport division and the Vice President of Human Resources.

Historically it has been difficult for the mining industry to attract female talent, as has been the case in Chile. However, we are pleased to report that this is beginning to change. The Group has not only committed to doubling the percentage of women in the Group's workforce by 2022 compared with the 2018 baseline (this was achieved in 2021), but for these improvements to be embedded, sustained and improved upon from that point. The gender balance of the Group's Executive Committee and direct reports is set out on page 42. In 2018, 8.6% of the workforce was female, but by the end of 2021 this figure had increased to 17.2%, compared with 12.4% on average for the Chilean mining industry, with women in supervisory roles (the level immediately below management) now at 25.2%. To track this metric, progress is reported monthly to the Executive Committee, and we have taken steps to create more opportunities for women to work at our operating companies. These are our largest employers, but they have found the challenge of attracting female talent particularly acute.

In our Mining division, female recruitment has included apprentice programmes specifically for women and the launch of a relief workers' programme under which residents of local communities are employed to cover breaks during mining shift work, such as lunch periods. This programme provides opportunities mainly for women, but also for other residents who, for family or other reasons, are unable to work a full shift.

/ Nomination and Governance Committee report continued

Jean-Paul Luksic
Chairman

We are committed to increasing the percentage of women on our Board, in senior management positions and, importantly, in the Group's workforce.

In our Transport division, we launched a programme in 2018 to incorporate women into maintenance roles and this has now been expanded to other parts of the division.

We are also promoting the professional development of women in both our Mining and Transport divisions. In 2021, 27.4% of the talent pool were women, 11.4% more than in 2020, and 98 women participated in coaching, leadership and mentoring programmes. We have also enrolled 7 women in the "Promociona" programme, a local initiative that supports women in reaching senior leadership positions. Similarly, we have sponsored the participation of four of our women in the Inter-American Development Bank Programme that empowers, makes visible and strengthens the leadership skills of women with high potential in the mining industry.

It is important to acknowledge that culture plays a key role in this and we have therefore implemented actions and programmes to strengthen an inclusive culture, encompassing unconscious bias training, work-life balance measures, sexual harassment and domestic violence prevention, and information campaigns. Human resources processes, such as recruitment and the individual performance management system, have been reviewed and adjusted to assure their inclusiveness and lack of bias.

These initiatives are producing results. The Mining division expects to reach more than 19% female participation during 2022, surpassing its 17.2% goal. Mining division female executive participation has increased from the baseline of 8% to 18.5%; female supervisory participation has increased from a base 17% to 26.1% and the number of women workers had increased from the baseline 5% to 12.8% by the end of 2021.

The Board will continue to monitor developments in 2022.

Jean-Paul Luksic
Chair of the Nomination and Governance Committee

18.5%

of executives in the Mining division in 2021 were women

26.1%

of supervisors in the Mining division in 2021 were women

New Director Eugenia Parot's Induction

Eugenia Parot joined the Board in 2021. Her induction included an introductory meeting with the Chairman to discuss Board and Directors' responsibilities. The Company Secretary briefed her on the UK listing framework and UK Corporate Governance Code, Board and Committee composition and the Board's calendar and protocols. The Senior Independent Director briefed her on Board dynamics. The Chairs of each of the Board Committees described the functioning of the Committees, their Terms of Reference and current areas of focus.

The CEO outlined the Group's purpose and strategy. The CFO outlined the operating companies' financing status and the risk and compliance management model. The Vice President of Operations provided a general overview of the operations and the operating model. The Vice President of Corporate Affairs and Sustainability briefed her on the safety and health model, Los Pelambres' community relationship plan and the current application to extend Zaldívar's water rights. The Vice President of Development described the exploration programme in Chile and abroad. The Vice President of Projects outlined the Group's growth strategy, describing projects at each operation and at Twin Metals. The Vice President of Strategy and Innovation briefed her on the digital transformation plan. The Vice President of Legal presented the status of legal matters. The Vice President of Sales described the cathode and concentrate sales strategy and sulphuric acid purchase plans. The Vice President of Human Resources discussed talent management, diversity and inclusion, labour relations and the New Ways of Working project.

The General Managers of the mining operating companies provided an overview, outlining the challenges and opportunities of each of their operations. The General Manager of the Transport division described the operation and the new contracts and projects to renew equipment. The Internal Audit Manager outlined the internal audit plan and audit initiatives.

Ms Parot visited the Los Pelambres and the Los Pelambres Expansion project, and, once travel restrictions are lifted, will visit the Group's operations in the north of Chile.

New Senior Independent Director Tony Jensen's Induction

The handover of the role of Senior Independent Director from Ollie Oliveira to Tony Jensen in 2021 consisted of a series of meetings, including those with the Chairman and the Nomination and Governance Committee. Mr Jensen and Mr Oliveira met with three of the Company's largest free-float investors. They also met with one of the Company's corporate brokers and with the Group's external legal and external affairs advisers.

Investors commented that they appreciated the opportunity to meet the new Senior Independent Director, who noted that while the principal channels of communication would remain through management contacts, he would be available as a permanent point of contact for investors and proxy agencies.

Board effectiveness reviews

During 2021, the Committee oversaw an internal evaluation of the Board and its Committees, focusing on the areas identified in the 2019 externally-facilitated evaluation and the 2020 internal evaluation. Led by the Senior Independent Director, the other Directors also met without the Chairman present to evaluate the Chairman's performance and, separately, the Chairman evaluated the performance of Directors.

In accordance with the Code, the Board undertakes an externally-facilitated effectiveness review at least once every three years. In 2019, the effectiveness review was facilitated by an external consultant, Clare Chalmers, who is independent and has no other connection with the Group. Ms Chalmers interviewed Directors and Executive Committee members who regularly attend Board and Committee meetings. She also observed a Board meeting, visited Chile twice and participated in a safety leadership site visit to Los Pelambres. The review was designed to recognise and raise key themes identified collectively by the Directors and for the Directors to reflect on how these themes should be addressed going forward.

Ms Chalmers discussed her report initially with the Chairman and the Senior Independent Director and then presented it to the full Board in October 2019.

Ms Chalmers highlighted the Board's strengths as its diversity, the experience and balance of skills of the Directors, its collegiate working environment and the contribution of each Director at meetings. The Group's strong safety culture and relations with local communities were also highlighted as key strengths. She recommended opportunities for further improvement which formed the basis for a gap closure plan facilitated by the Company Secretary and monitored by the Chairman and the Senior Independent Director.

In 2020 and 2021, internal evaluations of the Board and its Committees were carried out to monitor progress and identify further opportunities for improvement, using targeted anonymous surveys of the Directors. The survey results demonstrated how recommendations made in the 2019 external review had been addressed despite the challenges associated with the pandemic.

The 2021 survey was prepared by Ms Chalmers and she will conduct her second externally-facilitated review in 2022. Strengths identified included: the Chairman's engagement with the Board; effective definition of key roles and Committees' roles; effective leadership of the Board; strong interaction with management; productive management of meetings; quality of Board papers; strong stewardship of purpose, people, culture, risk management; and interaction with shareholders and stakeholders. Areas for improvement included enhancing strategic discussions, focusing on market developments and peers' initiatives and further strengthening succession planning.

Based on the results of the 2021 internal review, the Directors were satisfied that the Board and its Committees operated effectively in 2021.

Jean-Paul Luksic
Chair of the Nomination and Governance Committee

2019

The external review focused on evaluating the following key areas:

- Board focus and prioritisation
- alignment of the Company's purpose, strategy, values, and culture with its vision
- the nature and quality of the information and support provided by management to the Board
- the visibility of the Board within the organisation
- the interests of shareholders and stakeholders
- the composition of the Board and its Committees, including balance of skills, size, succession and dynamics
- the Chairman's leadership

2020

The Board focused on a number of areas to improve effectiveness:

- greater strategic scene-setting in executive summaries provided to the Board before Board meetings, to ensure that appropriate time is spent on strategic discussions
- the requirement for more information to be presented to the Board in relation to talent management and succession planning
- continuing to keep diversity targets in mind regarding the appointment of women to Board and Executive Committee positions
- paying special attention to emerging risks

2021

The Board focused on a number of areas to improve Board and Committees' effectiveness:

- continue to keep diversity targets in mind regarding the appointment of women to Board and Executive Committee positions
- Directors to visit each of the Group's operations at least once a year after the lifting of COVID-19 travel restrictions
- complete the formal induction process for Tony Jensen and Eugenia Parot after the lifting of COVID-19 travel restrictions
- maintain some dedicated virtual meetings during the year
- maintain the practice of co-ordinating ad hoc sessions to cover specific key issues under discussion during the year

/ Audit and Risk Committee report

Robust internal and external controls

Tony Jensen
Chair of the Audit and Risk Committee

2021 MEMBERSHIP AND MEETING ATTENDANCE

	Number attended
Tony Jensen (Chair) [1]	5/5
Jorge Bande	5/5
Francisca Castro	5/5
Ollie Oliveira [2]	2/2

1. Tony Jensen became Chair of the Committee on 1 August 2021.
2. Ollie Oliveira retired from the Board on 31 July 2021.

- Other regular attendees included representatives from PricewaterhouseCoopers (PwC), the Group's external auditor, the CEO, the CFO, the Group Financial Controller, the Head of Internal Audit, the Head of Risk, Compliance and Internal Control and the Company Secretary.
- Committee members participate in the other Board Committees, allowing the Committee to consider the full spectrum of risks faced by the Group.
- The Committee meets as necessary and at least twice a year.
- All Committee members are independent.
- All Committee members are considered to have recent and relevant financial experience.
- The Committee as a whole has significant experience relevant to the mining sector.

Key responsibilities

The Audit and Risk Committee assists the Board in meeting its responsibilities relating to financial reporting and control and risk management. The Committee's main responsibilities cover:

- monitoring the overall financial reporting process, which includes responsibility for reviewing the year-end and half-year financial reports
- overseeing the external audit process and managing the relationship with PwC, the Group's external auditor
- reviewing and monitoring PwC's independence and objectivity
- overseeing internal audit, including monitoring and reviewing the effectiveness of the Group's internal audit function, plans, processes and findings
- assisting the Board with its responsibilities in respect of risk management, including reviews of the Group's risk appetite and key risks
- monitoring the performance of the Group's compliance and crime prevention models.

"

As a Committee we sought to ensure that the travel and social distancing restrictions due to the COVID-19 pandemic and ensuing remote working arrangements did not reduce the robustness of the external and internal audit functions, internal control and risk management capabilities and results.

Key activities in 2021

Financial reporting

- Responded to queries raised by the Financial Reporting Council's corporate reporting review team ("CRRT") following their review of our 2020 Annual Report, with the CRRT confirming we had provided satisfactory explanations in respect of their queries.
- Reviewed the 2020 year-end and 2021 half-year financial reports, focusing on significant accounting issues relating to the Group's results. Reviewed accounting matters which were likely to impact 2021 year-end results.
- Reviewed the Group's 2020 ore reserves and mineral resources statement and corresponding audits. Reviewed highlights of the 2021 statement.
- Assisted the Board in ensuring that the 2020 Annual Report was fair, balanced and understandable.
- Reviewed preparation for the 2021 going concern and long-term viability statements, including tests for an eventual future resilience statement.
- Reviewed plans to accelerate the financial reporting cycle, enabling a February 2022 results announcement.
- Reviewed action plans to prepare for a potential future requirement for the Board to confirm the effectiveness of internal controls over financial reporting.
- Reviewed the Group's tax position, including the effective tax rate, recovery of tax refunds, tax-disallowed expenses and proposed changes to tax laws.

External audit

- Reviewed and approved the 2021 audit plan, including fees.
- Assessed the effectiveness of the external audit process.
- Reviewed PwC's independence.
- Reviewed the key audit findings in respect of the 2020 audit and reviewed PwC's progress reports in respect of the 2021 audit.
- Reviewed plans to accelerate the audit timetable for a February 2022 results announcement.

Internal audit

- Reviewed key findings from the internal audit reviews conducted during 2021.
- Reviewed the quality, experience and expertise of the internal audit function, confirming its suitability to the business.
- Reviewed methodological enhancements to the internal audit function.
- Agreed the scope and focus areas for the 2022 internal audit plan.

Key role in overseeing financial reporting and control and risk management

Risk and internal control

- Assisted the Board with its assessment of the Group's key risks and its review of the effectiveness of the risk management and internal control processes.
- Assisted the Board in conducting the annual review of risk appetite statements, including updates to three declarations (talent management and labour relations, tailings and cybersecurity).
- Conducted detailed reviews with General Managers of each of the Group's operations, covering the operations' key risks.
- Reviewed the activities undertaken during the year to further develop the maturity of the Group's risk management processes.
- Reviewed an action plan to address the requirements of the Task Force on Climate-related Financial Disclosures (TCFD).

Compliance

- Reviewed the Group's whistleblowing arrangements, including details of the most significant reports and actions taken, along with plans to strengthen the function.
- Reviewed the process to identify and manage Group employees' potential conflicts of interest.
- Reviewed the due diligence process conducted in respect of the Group's suppliers.
- Reviewed the Group's compliance model, crime prevention manual and activities undertaken during the year to develop their maturity.
- Monitored the functioning of the Group's crime prevention model, in accordance with Chilean and UK anti-corruption legislation.
- Reviewed and proposed a change to the Committee's terms of reference.

Q. What were the key areas of focus for the Committee in 2021?

As noted throughout this Annual Report, the COVID-19 pandemic generated a range of health, operational and financial challenges for the Group during the year. As a Committee we sought to ensure that the travel and social distancing restrictions due to the COVID-19 pandemic and ensuing remote working arrangements did not reduce the robustness of the external and internal audit functions, internal control and risk management capabilities and results.

Our work with management was proactive during the year. We monitored action plans to accelerate the financial reporting cycle, enabling us to make a February 2022 results announcement, three weeks earlier than in 2021. Secondly, we published a TCFD progress report prior to the 2022 UK Listing Rules requirement. And third, we began to prepare a process for new potential regulations regarding Board confirmation of the effectiveness of internal controls over financial reporting.

We also worked closely with PwC to ensure that external audit quality was maintained throughout the year.

We continue to assess the maturity of our risk management processes. We conducted the annual review of risk appetite, updating three declarations covering talent management and labour relations, tailings and cybersecurity.

Financial reporting

Q. What are the Committee's main activities in respect of the Group's financial reporting?

The Committee reviews the year-end financial statements and half-year financial reports and ensures that the key accounting policies, estimates and judgements applied in those financial statements are reasonable.

We also monitor the overall financial reporting process to ensure it is robust and well-controlled. This includes: ensuring that the Group's accounting and finance function is adequately resourced, with the appropriate segregation of duties and internal review processes; that the Group's accounting policies and procedures are appropriate and clearly communicated; and that the Group's accounting and consolidation systems operate effectively.

The Committee assists the Board in undertaking its assessment that the Annual Report is, when taken as a whole, fair, balanced and understandable and provides the necessary information to allow shareholders to assess the Group's position and performance, business model and strategy. As part of this assessment, we use our detailed knowledge of the Company, its financial results and the key accounting judgements applied in the financial statements to ensure that the tone and content of the narrative reporting fairly reflect the financial results for the year.

The Committee reviews the ore reserves and mineral resources statement included in the Annual Report and reviews the corresponding reserve and resource independent audits.

We also review the going concern basis adopted in the financial statements, as well as the detailed long-term viability statement in the Annual Report. We have considered tests for an eventual future resilience statement.

The Committee reviews the Group's tax position, including the effective tax rate, the status of the recovery of tax refunds, tax-disallowed expenses and the impact of any regulatory changes.

Q. What were the significant accounting issues in relation to the financial statements considered by the Committee during 2021?

The main accounting issues we considered were:

- Twin Metals: we concluded that the United States federal government's cancellation of a number of the mining leases relating to the Twin Metals project was an impairment indicator as at 31 December 2021. Following the resulting impairment test we determined that an impairment in respect of the full value of the intangible assets and property, plant and equipment relating to the project was appropriate. In reaching this conclusion, considerations included the time and uncertainty related to any legal action to challenge the government decisions.
- Asset valuations: we have considered and concluded that there are no indicators of impairment (or reversal of previous impairments) at the Group's operations. Accordingly, we have not performed any impairment reviews in respect of the Group's operations at the 2021 year end.

1. Committee of Sponsoring Organizations of the Treadway Commission

However, in order to assess the sensitivities of the indicative valuations of the Group's mining operations, and to make appropriate disclosures within the financial statements in respect of this, an indicative valuation and sensitivity analysis has been performed. As part of this analysis, we considered the appropriate copper price forecasts to use in these indicative valuation models, with reference to the forward curve as at 31 December 2021 and consensus analyst forecasts of the long-term copper price. We have also reviewed the key operating assumptions in the indicative valuation models. We considered the estimates of the potential future costs relating to climate risks (consistent with the TCFD scenario analyses) which were incorporated into the indicative valuations. In the case of Zaldívar, we considered the relevance of the renewal of the permits for water extraction and general mining activities to the indicative valuation. We also reviewed the additional sensitivity disclosures included in the financial statements.

- Deferred tax asset recognition at Antucoya: we concluded that it was appropriate to recognise a deferred tax asset in respect of Antucoya's accumulated tax losses as at 31 December 2021. In reaching that conclusion, we considered the current performance and future forecasts of the operation and the strong current copper price environment and future outlook.
- Provision for decommissioning and restoration costs at the Group's mining operations: we have reviewed updates to the mine closure provisions, including changes to the financial parameters used in calculating the provision balance.
- Going concern and viability: we reviewed the going concern and viability assessments and related disclosures. In particular, we considered the Group's current strong financial position, its forecast future performance, the key risks which could impact the future results and the robust down-side sensitivity analyses which indicated results which could be managed in the normal course of business.

External audit

Q. What are the Committee's activities in respect of the external audit process?

The Committee is responsible for overseeing the Company's relationship with PwC, the Group's external auditor. As the new Chairman of the Audit and Risk Committee, I worked during the year to establish an effective direct relationship with Simon Morley, who is our lead audit partner at PwC.

The Committee reviews and approves the scope of the external audit, the terms of engagement and fees. The Committee monitors the effectiveness of the audit process and is responsible for ensuring the independence of the external auditor. The Committee informs the Board of the outcome of the external audit and explains how the external audit contributes to the integrity of the Group's financial reporting. We also make recommendations to the Board in respect of the appointment, reappointment, or removal of the external auditor. The Committee formally meets with PwC without management present at least once a year.

During 2021 we discussed in detail with PwC how to manage the external audit process, considering the COVID-19 related restrictions and the need to accelerate audit timing to enable a February 2022 results announcement. We are satisfied that PwC have implemented an appropriate mix of remote checks and on-site reviews, preserving the robustness of the audit process.

Q. How long has PwC been the Group's auditor?

We carried out a tender process during 2014, which resulted in PwC replacing the previous auditor and being appointed with effect from 2015 onwards. In line with relevant regulatory guidance, we expect to undertake a tender process in respect of the external audit at least every ten years which would see us complete a competitive tender process no later than 2024. This will allow the Committee to understand the capabilities and coverage that external audit firms can offer the Company and further promote the independence and objectivity of the external auditor. In addition, Jason Burkitt was the lead audit partner at PwC for five years from 2015 to 2019 and, in line with normal regulatory requirements rotated off the engagement, with Simon Morley assuming the role as lead audit partner from 2020 onwards.

Q. How do you assess the effectiveness of the external audit process?

The Committee considered the following factors as part of its review of the effectiveness of the external audit process during the year:

- the appropriateness of the proposed audit plan, the significant risk areas and areas of focus and the effective performance of the audit
- the technical skills and industry experience of the audit engagement partner and the wider audit team
- the quality of the external auditor's reporting to the Committee
- the effectiveness of the co-ordination between the UK and Chilean audit teams
- the effectiveness of the interaction and relationship between the Group's management and the external auditor
- feedback from management in respect of the effectiveness of the audit processes for the individual operations and the Group overall
- the review of reports from the external auditor detailing its own internal quality control procedures, as well as its annual transparency report
- the review of the FRC's annual Quality Inspection Report for PwC.

In light of this assessment, the Committee considers it appropriate that PwC be reappointed as external auditor.

Q. How do you assess the independence and objectivity of the external auditor?

The Committee regularly monitors the external auditor's independence and objectivity in line with Group policy, which was updated in 2020.

New regulatory requirements applied from 2020 onwards in respect of prohibited non-audit services. The FRC issued an updated Ethical Standard which introduces a "white list" of specifically-permitted services, with all other services prohibited. Permitted services relate to specific activities which are required by law or regulation and a limited number of types of review or verification work, such as half-year reviews, verification of additional information contained within the Annual Report or cross-referenced from the Annual Report, and work as a reporting accountant on transactions or debt issues. The provision of non-audit services is also subject to a cap, so that the total annual fees from non-audit services may not exceed 70% of the average audit fee over the prior three years.

A breakdown of the audit and non-audit fees is disclosed in Note 8 to the financial statements. PwC has provided non-audit services (excluding audit-related services) which amounted to $nil, or 0% of the fees for audit and audit-related services.

In general, where the external auditor is selected to provide non-audit services, it is because it has specific expertise or experience in the relevant area and is considered to be the most suitable provider. The Committee has reviewed the level of these services over the year and is confident that the objectivity and independence of the auditor are not impaired by such non-audit work.

The external auditor provides a report to the Committee at least once a year, setting out its firm's policies and procedures for maintaining its independence.

The Committee considers that PwC remained independent and objective throughout 2021.

The UK regulatory requirements in respect of competitive audit tendering and other related audit committee responsibilities in

Tony Jensen
Chair of the Audit and Risk Committee

In 2021 we assisted the Board with its annual update of the Group's risk appetite assessment and assessment of emerging and principal risks.

respect of the external auditor are set out in the Competition & Markets Authority's "The Statutory Audit Services for Large Companies Market Investigation (Mandatory Use of Competitive Tender Processes and Audit Committee Responsibilities) Order 2014" ("the Order"). The Company has complied with the provisions of the Order during 2021.

Internal audit

Q. What are the Committee's main activities in relation to internal audit?

The Committee monitors and reviews the effectiveness of the Group's internal audit function. The Head of Internal Audit reports directly to the Committee and meets with us without management present at least once a year.

The Committee reviews and approves Internal Audit's work plan for the coming year, including its focus areas as well as budget, headcount and other resources. We ensure the plan is flexible and has sufficient resources to allow for special reviews that may be required during the year.

We also monitor the resources available to the Internal Audit team so that it has an appropriate mix of skills and experience for the Group's businesses. Internal Audit utilises a mix of permanent team members, temporary secondees from elsewhere in the Group and third parties, particularly for areas such as IT-related reviews. The permanent team includes members with specific expertise in some of the most relevant areas for the Group, including mining technical experience, IT, risk, compliance, internal control and sustainability.

Internal Audit presents to the Committee summaries of the key findings from the reviews conducted during the year and any actions that have been taken or proposed. All Internal Audit reports, when finalised, are distributed to Committee members.

The Committee monitors the interaction between Internal Audit and PwC, to ensure an efficient relationship between the internal and external audit processes, to avoid duplication of work and achieve the effective and timely sharing of findings.

During 2021, Internal Audit performed part of its work remotely due to the COVID-19 pandemic. The Committee monitored the quality of the audit work and is comfortable that an appropriate controls environment has been maintained.

Risk management and internal control

Q. What are the Committee's main activities in relation to risk management and internal control?

The Committee plays an important role in assisting the Board with its responsibilities with regard to risk management and related controls. The Board has ultimate responsibility for overseeing the Group's emerging and principal risks and its risk appetite, as well as maintaining adequate control systems which were in place throughout the year and up to the date of this report. The Committee's terms of reference incorporate the FRC's Guidance on Risk Management and Internal Control and the Board is satisfied that the Company's risk management and internal control systems accord with this guidance. In order to achieve our business objectives, internal control systems are designed to identify and manage, rather than eliminate, the risk of failure, but can only provide reasonable, not absolute, assurance against material misstatement or loss.

Q. What were the Committee's main activities in 2021 relating to risk?

We assisted the Board with its annual update of the Group's risk appetite assessment and assessment of emerging and principal risks. Emerging risks are identified through the reporting of events that have had an impact on the Group's operations and budgets during the year and whether and by how much the risk has impeded the budget for each risk mitigation objective and through a benchmarking review of emerging and principal risks that have been identified by our peers. During 2021, the Board approved updates to the risk appetite statements for Talent Management and Labour Relations, Tailings and Cybersecurity.

The Committee reviewed the ongoing activities undertaken by the Group during the year to further develop the maturity of its risk management processes and to identify emerging risks. Principal risks were updated.

The risk, compliance and internal control function presented to the Committee several times during the year on developments in the Group's risk management processes and Group-level strategic risks. The General Managers of the Group's operations presented to the Committee their assessments of their respective operations' material potential risks, trends, residual risks and any significant materialised risks as well as operational opportunities.

The analysis of emerging and principal risks includes an assessment of the significance of the risks based on the probability of the risk materialising and the potential impact of the risk, as well as an evaluation of the quality of the controls in place in respect of those specific risks. The evaluation of the potential impact is not limited to economic factors but includes issues such as safety, health, environmental, regulatory, community and reputational issues. We also examine whether those risks have been increasing or decreasing in significance and the budget for each risk mitigation objective to assist with the identification of emerging risks. The General Managers present their forecasts of any expected change in principal risks over the coming 12 months. If there is a specific issue at one of the operations that requires more detailed understanding, we ask the General Manager to attend the next meeting to discuss that issue. This direct interaction between the Committee and the General Managers is extremely valuable – not just in terms of the direct insight into each operation it affords the Committee, but also in allowing us to emphasise the importance we attach to strong risk management processes.

The Committee closely monitored the assessments relating to the COVID-19 pandemic during the year.

Q. How does the Committee interact with the Board and other Committees?

I report to the Board following each Committee meeting, summarising the main matters reviewed by the Committee. These regular reports allow Directors to understand the main issues under consideration and, when relevant, to discuss them in more detail with the Board.

The Risk Management function presents directly to the Board, providing updates of the analysis of the Group's principal risks and relevant developments in the risk management and compliance processes.

We try to ensure that the review of risk by the Board is not compartmentalised into isolated sessions but is integrated into everything that the Board considers. To this end, the operating update provided by the CEO to the Board at each meeting covers any significant materialised risks and each proposal presented to the Board incorporates an analysis of its impact on the principal risks.

These processes have assisted the Board in carrying out a robust assessment of the emerging and principal risks facing the Company, including those that could threaten its business model, future performance, solvency, or liquidity and to assess the acceptability of the level of risks that arise from the Group's operations and development activities.

Each year the Board, with the support of the Committee, reviews the effectiveness of the Group's risk management and internal control systems. The review covers all material controls, including financial, operating and compliance controls. The 2021 review confirmed the effectiveness of the Group's risk management and internal control systems, with no significant failures or weaknesses being identified.

Members of the Audit and Risk Committee participate on all the other Board Committees, allowing the Committee a good understanding of risks being considered by these Committees and the full spectrum of risks faced by the Group. This year, the Sustainability and Stakeholder Management Committee held a joint session with the Audit and Risk Committee to review the methodology and risks associated with the Group's climate change case, aligned with the requirements of the Task Force on Climate-related Financial Disclosures (TCFD). Under the UK Listing Rules, from 2022 the Company is required to report against the TCFD recommendations, as set out on pages 52 to 57 of this Annual Report. Transition and physical risks and opportunities were identified and their impact on the Group was assessed. Each General Manager presented an evaluation of physical risks, including more frequent heatwaves, permanent reduction in annual precipitation and an increase in extreme rainfall events. The net present value impact of the physical risks on the Group was determined and is reported as part of the Group's TCFD report and action plans were reviewed and agreed.

Compliance

Q. What are the Committee's main responsibilities relating to compliance?

The Committee ensures that appropriate compliance policies and procedures are observed throughout the Group. The risk, compliance and internal control function makes regular presentations to the Committee covering developments in the Group's compliance processes and significant compliance issues. Chilean law requires the Mining division's holding company, Antofagasta Minerals SA, and each of the operations, to appoint a Crime Prevention Officer. The Committee makes recommendations regarding these appointments as well as monitoring and overseeing the performance of these roles. The Crime Prevention Officer for Antofagasta Minerals SA is currently Patricio Enei, the Vice President of Legal. As the compliance function resides in the Finance Vice Presidency, this arrangement provides for the appropriate segregation of duties.

The Committee receives reports from the risk, compliance and internal control function in respect of the Group's crime prevention model, in accordance with Chilean and UK anti-corruption legislation.

Q. What were the Committee's main activities in 2021 relating to compliance?

The Committee reviewed the Group's whistleblowing arrangements, which encourage employees and contractors to raise concerns in confidence about possible improprieties or non-compliance with the Group's Code of Ethics. We received regular reports on reported whistleblowing incidents, detailing the number and type of incidents, along with details of the most significant issues and the actions resulting from their investigation.

As approved by the Committee, a centralised whitsleblowing investigation process was implemented, providing greater independence and standardising processes.

The crime prevention model was recertified and compliance e-learning training was completed by all directors and executives.

We reviewed the process to identify and manage Group employees' potential conflicts of interest and the due diligence process conducted in respect of the Group's suppliers. We also reviewed the Group's compliance model and details of the preventative compliance activities that were conducted during the year.

Tony Jensen
Chair of the Audit and Risk Committee

Audit and Risk Committee, Board, and risk management function interaction

BOARD
The Chair of the Audit and Risk Committee reports to the Board following each Committee meeting, allowing a wider discussion of the risk and compliance issues reviewed in detail by the Committee. The Board also provides feedback on the analysis of emerging and key risks for Board agenda items which is incorporated into the Board's review of the effectiveness of the Group's risk management and internal control systems.

AUDIT AND RISK COMMITTEE
The Committee supports the Board in its review of the effectiveness of the Group's risk management and internal control systems.

GENERAL MANAGERS OF THE OPERATIONS
General Managers are responsible for the risks relating to their operation and give detailed presentations to the Committee at least once a year, including on each operation's emerging, key and materialised risks.

RISK MANAGEMENT FUNCTION
The risk management function provides regular presentations covering changes in the Group's emerging and key risks, major materialised risks and updates on risk management and compliance processes.

There are detailed presentations at each Committee meeting covering the risk management process, significant whistleblowing reports and updates on compliance processes and activities.

Sustainability and stakeholder management

Vivianne Blanlot
Chair of the Sustainability and Stakeholder Management Committee

2021 MEMBERSHIP AND MEETING ATTENDANCE

	Number attended
Vivianne Blanlot (Chair)	4/5
Jorge Bande	4/5
Juan Claro	4/5
Ramón Jara	4/5
Michael Anglin [1]	2/3
Eugenia Parot [2]	3/3
Tony Jensen [3]	2/2

1. Michael Anglin joined the Committee on 1 August 2021.
2. Eugenia Parot joined the Committee on 1 August 2021.
3. Tony Jensen stepped down from the Committee on 31 July 2021.

- Other regular attendees included the CEO, the Vice President of External Affairs and Sustainability and the Company Secretary.
- Sessions were also regularly attended by Directors who were not Committee members.
- The Committee meets as necessary and at least twice per year.

Key responsibilities

- The Sustainability and Stakeholder Management Committee supports the Board in the stewardship of the Group's safety, health, environmental and social responsibility programmes and makes recommendations to the Board to ensure the views and interests of the Group's stakeholders are considered in the Board's deliberations.
- The Committee reviews the Group's framework of safety, health, environmental, human rights and social policies, monitors the Group's performance in setting and meeting environmental, social, safety and occupational health commitments and provides guidance on how the Company should reflect the views and interests of stakeholders in relation to potential projects and other business matters.

"Committee meetings provide a forum for the detailed discussion of many of the key issues that matter to our workforce (such as safety and health), local communities, national and local governments, regulators and other stakeholders.

Key activities in 2021

Policies and commitments

- Reviewed the Group's Sustainability Report, TCFD Progress Report and Climate Change Report.
- Reviewed the environmental and social aspects of the Group's expansion projects.
- Reviewed the Committee's terms of reference.

Safety and health

- Reviewed the Group's 2021 safety and occupational health performance and strategy and plans for 2022.
- Reviewed the Group's strategy and monitored the effectiveness of protocols in response to the COVID-19 pandemic.
- Monitored Group safety performance, including high-potential incidents.
- Reviewed the 2021 report issued by the independent technical review board appointed to advise the Group on the operation of its tailings storage facilities.

Community relations

- Reviewed the Group's Social Management Model.
- Monitored the implementation of a second \$6 million community support fund (following the implementation of the first \$6 million community support fund in 2020) designed to provide healthcare equipment, community initiatives and economic support to local entrepreneurs and businesses during the COVID-19 pandemic.
- Reviewed the Group's communications strategy and monitored results from the Group's communications activities.

Environment

- Reviewed environmental management reports.
- Reviewed environmental events and monitored mitigation steps.
- Reviewed jointly with the Audit and Risk Committee an assessment of the physical and transition risks of climate change and their impact on the net present value of the Group.
- Reviewed environmental reviews related to Zaldívar's water rights extension.
- Reviewed the Climate Change Report.

Q. How was the safety performance in 2021?

Sadly, after 33 months without a fatality, a contractor suffered a fatal accident at Los Pelambres in July. Our condolences go to the family of our colleague. Following a full investigation, we strengthened our commitment to a fatality-free work environment and have shared the learnings from the internal independent investigation widely. Reflection meetings were held at Los Pelambres by the General Manager and his executive committee and were followed by virtual and physical gatherings of the Los Pelambres workforce in October. Similar events were also held at the corporate level (led by the CEO) and at our other operations (led by their General Managers).

Due to the importance of this matter, the subject, including the results of the independent investigation, were reviewed by the full Board.

The main learnings shared throughout the organisation were: the importance of effective planning to allow for the even better identification of risks and controls needed to execute tasks effectively and safely; the relevance of ensuring even better supervision of the execution of high and critical risk tasks at all times to ensure controls are consistently applied; the use of the task risk assessment tool; and the individual responsibility of the workforce to speak up and highlight risks.

The Group is working hard to ensure safe operations, including the systematic and thorough application of safety standards and high levels of near-miss reporting for the full spectrum of risks. In 2021, the Group had 65 high-potential incidents, 24% fewer than in 2020. The Lost Time Injury Frequency Rate was 1.34. The Total Recordable Injury Frequency Rate was 17% lower than in 2020.

Q. What was the Committee's role in relation to the COVID-19 pandemic?

Along with the Board, the Committee played an important role in overseeing the development and implementation of the Group's strategy and protocols in response to the pandemic and monitored results regularly. The protocols that were implemented were designed to protect the safety and health of our employees, contract workers and local communities while ensuring operational continuity to support the livelihoods of some of our key stakeholders. Procedures that were implemented included office staff working from home, dedicated air and land transport services to and from the operations, the implementation of social distancing measures, strict personal and facilities hygiene measures, mandatory self-evaluations before entering the Group's facilities, thorough cleaning, physical separation in lodging facilities, a flu vaccination campaign and the provision of safe places to stay for members of the workforce requiring isolation or who needed to be cared for. Agreements were signed to support PCR testing, and the evolution of COVID-19 cases in the communities close to the Group's operations continues to be closely monitored.

The Committee also monitored the implementation of a second $6 million community support fund (in addition to the $6 million fund established in 2020) set up by the Group to address needs related to the COVID-19 pandemic. This fund has been used to support medical, educational, local entrepreneurs and local businesses, and provide humanitarian assistance to neighbouring communities. Further details are set out on page 46.

Q. How did the Committee consider climate change during the year?

As noted by the Chairman on page 108, climate change is a global issue and Chile is particularly vulnerable to its consequences.

The Committee assisted the Board in considering various climate change-related initiatives during the year including and assessment of the physical and transition risks of climate change and their impact on the net present value of the Group, the Group's climate change report, environmental management reports and new emissions reduction target. The Group's Climate Change Strategy, reviewed by the Committee and approved by the Board in 2020, takes a multidisciplinary approach to the challenges posed by climate change.

This strategy focuses on:

1. Development of resilience to climate change
2. Reduction of greenhouse gas emissions
3. Efficient use of strategic resources
4. Management of the environment and biodiversity
5. Integration of stakeholders

Q. How does the Committee ensure that the Board considers the views and interests of stakeholders?

Committee meetings provide a forum for the detailed discussion of many of the key issues that matter to our workforce (such as safety and health), local communities, national and local governments, regulators and other stakeholders. These issues are identified as part of the risk management and community engagement processes and are submitted by management to the Committee for review. Communicating with our stakeholders during difficult times has been key to strengthening mutual trust and understanding. We work hard to understand their interests and ensure that they understand our ambitious safety, occupational health, environmental and social commitments.

As Chair of the Committee, I report to the Board following each Committee meeting, summarising the main matters reviewed by the Committee.

“

Vivianne Blanlot
Chair of the Sustainability and Stakeholder Management Committee

The Committee makes recommendations to the Board to ensure the views and interests of the Group's stakeholders are considered in the Board's deliberations.

Q. How does the Committee ensure that the Group's tailings facilities are safe?

The stability and safety of tailings storage facilities is a primary concern for us and many of our stakeholders and the Committee and the Board are focused on ensuring that appropriate monitoring and management are in place to ensure that they continue to be stable and safe.

Chile experiences a significant amount of seismic activity and as a consequence there are strict regulations governing construction in the country. These regulations apply to all mining and other construction, including the storage facilities where tailings are deposited. Chilean standards have prohibited the construction of tailings storage facilities using the upstream method, which is commonly used in other countries but can pose significant safety risks. Current Chilean legislation also requires stability analysis of dam walls, a review of safety measures and the development of detailed emergency plans in the event of a major incident.

The Group's governance structures are designed to encourage the independent management and monitoring of our tailings facilities. This includes internal teams with reporting lines not linked to the mine operation teams and an independent tailings review board (ITRB) that visits our tailings facilities regularly, assessing risks and making recommendations to continue to ensure their safety. The Committee and the Board review these reports and challenge management on any recommendations made.

During the year, the Committee and the Board reviewed the 2021 report issued by ITRB, which noted that Los Pelambres and Centinela's tailings deposits represent 'state of practice' in modern tailings impoundment design and construction in seismically active regions. They fully accommodate extreme loading from floods and earthquakes, have been tested in recent years and performed well. The ITRB is satisfied that the dams are being operated according to good practice and are moving to full compliance with The Global Industry Standard on Tailings Management requirements.

The Committee and the Board receive regular reports on the operation of the Group's tailings storage facilities and following the Group's adoption of a tailings management policy aligned with the Global Industry Standard on Tailings Management in 2020, the Committee will monitor the implementation and compliance with this policy along with reports from management and the ITRB.

Further information on our tailings facilities, including the risks and the governance measures in place, can be found on pages 58-59.

Q. How are community relations managed throughout the Group?

Dialogue with local communities is crucial for aligning views, preventing disputes and addressing concerns. To strengthen such dialogue we use various engagement mechanisms, including conversations with members of the community, round tables, community meetings, participatory environmental monitoring with the community and site visits to our operations, as well as communicating through the media and on websites and social networks.

The subjects and results of this engagement are reported to the Committee periodically through standalone reports and as part of broader Committee discussions.

Q. What are the Committee's priorities in 2022?

Our number one priority continues to be the safety and health of our employees, contractors and local communities as we continue to respond to the COVID-19 pandemic. We will also strive to work during 2022 without fatal accidents.

The Committee will continue to monitor the implementation of the Group's environmental management system at our operations and we will continue to deploy our Climate Change Strategy, aimed at meeting our greenhouse gas target for reduced carbon dioxide emissions. The Group has contracted power supply agreements that, by the end of 2022, will provide all the Mining division's power requirements from renewable sources. The Committee will continue to oversee the implementation of the Group's Climate Change Strategy during the year.

The Committee will continue to monitor the implementation of the Group's social programmes and the work done with communities close to our operations in accordance with the Group's Social Management Model.

Vivianne Blanlot
Chair of the Sustainability and Stakeholder Management Committee

/ Projects Committee report

Project pipeline advanced during the year

Michael Anglin
Chair of the Projects Committee

2021 MEMBERSHIP AND MEETING ATTENDANCE

	Number attended
Michael Anglin (Chair) [1]	6/6
Jorge Bande	6/6
Ramón Jara	6/6
Eugenia Parot [2]	3/3
Ollie Oliveira [3]	3/3

1. Michael Anglin became Chair of the Committee on 1 August 2021.
2. Eugenia Parot joined the Committee on 1 August 2021.
3. Ollie Oliveira retired from the Board on 31 July 2021.

- Other regular attendees included the CEO, the CFO, the Vice President of Projects, the Vice President of Operations, the Projects Finance Manager and the Company Secretary.
- Sessions were also regularly attended by Directors who were not Committee members.
- The Committee meets as necessary and at least twice per year.

Key responsibilities

- The Projects Committee reviews all aspects of projects to be submitted for Board approval, highlighting key matters throughout the project development lifecycle for the Board's consideration and making recommendations to management to ensure that all projects submitted to the Board are aligned with the Group's strategy and risk appetite.
- The Committee adds an important level of governance and control to the evaluation of the Group's projects and plays a key role in providing the Board with additional oversight of the projects portfolio. This includes overview of the establishment of project development guidelines, which draw from best practice, industry experience and lessons learned from other Group projects.

> "The Committee reviews all aspects of projects to be submitted for Board approval, highlighting key matters for the Board's consideration.

Key activities in 2021

Policies and commitments

- Reviewed the Group's projects portfolio, including budgets and schedules.
- Reviewed the Committee's terms of reference.
- Reviewed Centinela's minor capital projects governance.

Project reviews – studies phase

- Reviewed Phase 2 of the Los Pelambres Expansion Project involving the expansion of the desalinated water system and mine life extension.
- Reviewed progress with Centinela's Second Concentrator project's commitment phase and activities in the 2021 work plan and reviewed the award of the project's concentrator, camps and infrastructure contracts.
- Reviewed the Polo Sur project's pre-feasibility study.
- Reviewed the Twin Metals project.

Project reviews – execution phase

- Monitored progress in the execution of Phase 1 of the Los Pelambres Expansion project and the Zaldívar Chloride Leach project.
- Reviewed an update of Antucoya's Dust Suppression project.
- Reviewed progress on Los Pelambres' replacement concentrate pipeline project.

Project reviews – lessons learned

- Reviewed the performance of Centinela's molybdenum plant.

Q. What is the Projects Committee's approval authority?

The Committee is not responsible for approving projects – that is for the Board to decide. Our role is to assist the Board by ensuring that projects follow a standard, structured process with consistent analysis, execution and evaluation practices. The Committee oversees the full project lifecycle, from the early stages to the start of operations, carefully assessing and robustly challenging investment proposals prior to submission to the Board, monitoring development and construction progress and ensuring lessons learned are applied to future proposals. The Committee invites management to consider different perspectives, ideas and improvements to enhance the value of the Group's projects, enabling focused deliberation when the project is presented to the Board.

Q. What tools does the Committee use?

The Committee provides guidance to each project manager, from the early stages of project planning through to completion, to ensure that policies, strategies and the Group's standard Asset Delivery System (ADS) implementation framework are applied.

ADS is a project management system whose processes and practices are widely used in the mining industry. ADS sets standards and common criteria, including governance by a steering committee, functional quality assurance reviews and risk management.

In some cases, the Committee may recommend additional measures, including independent peer reviews, trade-off studies or further analysis in relation to the incorporation of potential new technologies or processes.

Michael Anglin
Chair of the Projects Committee

The Committee supports the Board by ensuring that the Group's projects portfolio follows approved and consistent guidelines and that project execution decisions have been thoroughly reviewed before being put forward for Board approval.

Q. What were the Committee's key activities in 2021?

Execution – Phase 1 of the Los Pelambres Expansion project

In December 2020, a new timeline and capital estimate of $1.7 billion were approved, addressing the impact of the COVID-19 pandemic, incorporating changes in the marine works of the desalinated water system and early works for the planned expansion of the desalinated water system from 400 l/s to 800 l/s.

During 2021, the Committee reviewed the project's progress, which was impacted by COVID-19's second and third waves during the year. The desalinated water system commissioning was scheduled for the second half of 2022 and the concentrator plant for early 2023.

The Committee also reviewed the proposed renegotiated terms of Bechtel's EPC/CM contract.

See page 78 for more information on Phase 1 of the Los Pelambres Expansion project

Execution – Zaldívar Chloride Leach project

In December 2020, a revised timetable for the project was approved, reflecting the impact of the delayed start of construction activities for some four months due to the pandemic. During 2021, the Committee reviewed project progress and how it was impacted by the COVID-19 pandemic.

See page 80 for more information on the Zaldívar Chloride Leach project

Studies – Future development of Los Pelambres

The Committee reviewed progress of the separate EIA applications for Phase 2 of the Los Pelambres Expansion project involving the desalinated water system expansion and mine life extension.

See page 79 for more information on Phase 2 of the Los Pelambres Expansion project

Studies – Centinela Second Concentrator project

The Committee reviewed progress on Centinela's Second Concentrator project and endorsed work continuing in the commitment phase leading up to the investment decision, with the purpose of progressing project development with detailed engineering and construction permitting and mitigating risks. The investment decision is planned by the end of 2022 with the start of production in late 2025. The Committee also reviewed the concentrator EPC, camp and infrastructure contracts. The Committee noted that the project has been under analysis since 2014 and solutions have been incorporated over this period to enhance its technical profile, ensure flexibility and maximise the project's financial returns.

See page 79 for more information on Centinela's Second Concentrator project

Studies – Polo Sur project

The Committee reviewed the results of the Polo Sur prefeasibility study. Polo Sur is located 21 km south of Encuentro Oxides and is an oxide deposit that could be leached on the leach pads at Encuentro Oxides, providing feed to Centinela Cathode's SX/EW plant. Next steps include completing the drilling campaign for the feasibility study, permitting, engineering and preparing a detailed execution plan.

Studies – Twin Metals project

The Committee reviewed progress at the Twin Metals project. The project has a small footprint and includes an 18ktpd underground mine with a simple flotation flowsheet, dry stack tailings and paste backfill producing three concentrates, copper, nickel and PGMs.

See page 80 for more information on Twin Metals project

Lessons Learned – Centinela's molybdenum plant review

The Committee reviewed the performance of Centinela's molybdenum plant, which came into operation in 2018. During the first two years the plant was unable to operate continuously and did not meet design parameters, principally due to feed grade variability and bottlenecks. In 2020, an operational improvement plan was implemented, which enabled a significant increase in molybdenum production.

Q. What are the Committee's priorities in 2022?

The Committee will continue to ensure that project activities continue to follow strict safety and health protocols.

The Committee will continue to oversee the progress of construction at Phase 1 of the Los Pelambres Expansion project.

The Committee plans to review the investment decisions for Centinela's Second Concentrator project and the Polo Sur project.

The Committee will review the progress of studies for Phase 2 of the Los Pelambres Expansion project.

Michael Anglin
Chair of the Projects Committee

/ *Remuneration and Talent Management Committee Chair's introduction*

Ensuring alignment between pay and performance

Francisca Castro
Chair of the Remuneration and Talent Management Committee

2021 MEMBERSHIP AND MEETING ATTENDANCE[1]

	Number attended
Francisca Castro (Chair)	5/5
Michael Anglin	5/5
Vivianne Blanlot	4/5
Tony Jensen	5/5

1. The Committee also met with independent remuneration consultants Willis Towers Watson during the year outside formal meetings to receive an update on global remuneration and talent management strategies and implementation, and on investor and proxy adviser advice ahead of the voting season. Willis Towers Watson also provided feedback after the 2021 AGM.

- Other regular attendees include the CEO, the Vice President of Human Resources and the Company Secretary.
- At least one Committee member serves on each of the other Board Committees, which allows the Committee to consider strategic priorities and the views of all stakeholders in its deliberations.
- The Committee meets as necessary and at least twice per year.
- All Committee members are independent.

Key report sections:

"The Committee is focused on attracting and retaining talent to deliver strong shareholder returns. The Committee makes pay decisions considering the views of stakeholders and overall business performance.

Dear shareholders

I am delighted to present the 2021 Directors' and CEO Remuneration Report.

- This year's report has been reconfigured to make it simpler for our shareholders to read. We have followed the reporting format set out in the UK remuneration reporting regulations and included a new 'at a glance' section.
- This report is comprised of this letter, an 'at a glance' section, and the 2021 annual report on remuneration, which details the implementation of our pay policy in 2021 and our plans for 2022. We will be seeking approval from shareholders for this report at the AGM on 11 May 2022.
- The current Directors' and CEO Remuneration Policy was approved by shareholders at the AGM on 20 May 2020 and is available on the Company's website (antofagasta.co.uk).

Remuneration in context

- The Committee considered a range of factors when making decisions on remuneration this year, including the views of our stakeholders (including shareholders and employees) and the Company's performance. A summary of these factors is set out in the 'at a glance' section.
- I am proud of our CEO and leadership team for prioritising the safety and wellbeing of our employees and contractors during the year while contributing to the Chilean economy and supporting local communities. Our hardworking and skilled workforce has also demonstrated remarkable resilience over the past year. I am grateful for their efforts and proud of their collective achievements.
- Despite challenges, the Group has reported record results in 2021 including EBITDA of $4.8 billion and a 65% EBITDA margin, while making excellent progress in unlocking the growth options embedded in our portfolio.
- Responsibility for health and safety is one of the Company's core values. Sadly, a fatal accident involving one of our contractors occurred at Los Pelambres in July. This, along with causing deep reflection by management and the Board, caused the Committee to support adjusting (down) by 15% the Mining division's performance score for the 2021 annual bonus.
- The Committee is keenly aware of the impact of the pandemic on our workforce and on broader society and has carefully considered the fairness of CEO pay decisions and overall pay levels in this context. The Committee is comfortable that the outcomes documented here are fair and appropriate.
- In 2021, a Group-wide employee engagement survey was launched, focussed on improving productivity and work quality – keys to the success of our business. The survey will be completed in 2022 and the Committee will apply this very important feedback in its decisions moving forward.

Our approach to the CEO's remuneration in 2021

Base salary

The CEO's annual base salary as at 1 January 2022 was $795,214 (2021: $663,908). As disclosed in the 2020 Annual Report, the CEO's base salary is paid in Chilean pesos and was increased by 25% from 1 April 2021 following a market review, the CEO's performance and changes in the Chilean peso/US dollar exchange rate since 2017. The CEO's base salary was again reviewed in December 2021 where a further 6.7% increase was applied to reflect further depreciation in the exchange rate over the year.

Annual bonus outturn

The overall bonus outturn for the CEO was 72% of the maximum. The result for core business objectives was 60% of the maximum. The EBITDA targets were met in full and Copper Production and Cost targets were partially met. The result for Business Development was 65% of the maximum, with all targets being partially met. The outturn for Sustainability was 85% of the maximum with Safety (measure according to a reduction in high-potential incidents), People (Diversity and Inclusion Strategy) and Social performance being met in full with Environmental performance targets partially met. The following adjustments were made, in line with our Plan's policy:

- Adjustment for not meeting zero fatality target: A standalone downwards adjustment trigger amounting to 15% of the performance score outcome was applied to the Annual Bonus Plan.
- Adjustment for COVID-19 management and record results: In recognition of the extraordinary handling of the COVID-19 pandemic and the Company's record results during the year, the Committee applied its discretion to increase the Annual Bonus Plan outturn by 13% of the performance score after the application of the adjustment for not meeting the zero fatality target.

Find out more
P149

LTIP outturn

The overall anticipated LTIP vesting level is 99% of the maximum. 100% of the targets were achieved for Mineral Resources Increase, and Social and Environmental KPIs. Project portfolio progress achieved 92% of the maximum. Targets were achieved in relation to the Zaldívar Chloride Leach project and Phase 2 of the Los Pelambres Expansion project but the maximum target was not achieved for construction of Phase 1 of the Los Pelambres Expansion project. The Relative TSR outcome is expected to be 100% of maximum, however, performance will be assessed after this report is published. The actual vesting result will be included in next year's report.

Find out more
P151

Our approach to the CEO's remuneration for 2022

Base salary

The Committee does not expect to increase the CEO's base salary for 2022 outside of the inflationary adjustments that automatically apply to the CEO and employees' base salaries, and due to exchange rate variation, if applicable. The CEO receives a base salary and benefits in line with market conditions in Chile, and the Committee will continue to also take into consideration the pay levels for international comparators, as appropriate.

Find out more
P158

Annual bonus for 2022

The 2022 annual bonus will continue to operate in line with the policy. The performance measures and targets for 2022 have been updated in response to a review of our strategic priorities for the forthcoming year.

Find out more
P158

LTIP for 2022

The LTIP will continue to operate in line with the policy. However, some adjustments have been made to the Performance Award metrics for this year. In addition, the TSR performance period for Performance Awards granted in 2022 has been adjusted so that the end of the performance period aligns to the financial year end rather than the third anniversary of the date of grant. This change is intended to simplify and add clarity to the LTIP and to make reporting more efficient.

Find out more
P159

Directors' fees

No fee changes are anticipated for Directors in 2022.

Find out more
P160

We hope that you find the new report format useful and we look forward to your continued support at the AGM in May 2022.

Francisca Castro
Chair of the Remuneration and Talent Management Committee

Remuneration at a glance

Group financial and strategic performance outcomes in 2021

721.5k tonnes
Copper production

$1.20/lb
Net cash costs

19.1bn tonnes
Mineral resources

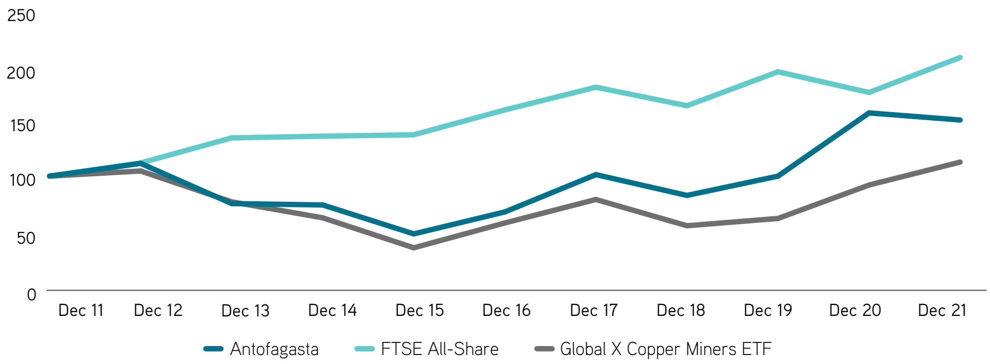
$4.8bn
EBITDA (Non IFRS)

$1.425/share
Underlying EPS

1
Fatality

3.00 tCO_2e /tCu
CO_2e emissions intensity

Indexed Total Shareholder Returns



$1.425/share
Total dividend for 2021. Equivalent to a 100% payout ratio

Rewards, benefits and the work experience of our employees in Mining division in 2021

100%
of employees received a salary increase in 2021

100%
of eligible employees received a performance-related bonus in 2021

0
COVID-19 related redundancies

17.4%
Percentage of female employees[1]

Group ESG objectives

30%
Reduction in Scope 1 and 2 emissions by 2025

2050
Carbon neutrality target

CEO remuneration in 2021

72%
Bonus outturn (as a % of the maximum)

99%
Performance Award outturn (as a % of the maximum)

$3,775k
Single figure total remuneration for the CEO

1. As at December 2021

Our remuneration philosophy

Our remuneration philosophy reflects local regulations and market practice, while also reflecting UK best practices and governance.

- Local regulations, market practice and remuneration structures available in Chile are a central consideration when structuring the CEO's remuneration. Real share awards have not been part of the executive remuneration structure for employees since the LTIP was first implemented a decade ago, as until recently, in Chile they were taxable in full at the date they were granted. Despite recent changes to Chilean tax laws that have removed this disincentive for using real shares, these awards continue to be uncommon in Chile. Consequently, all awards relating to shares are cash awards linked to a notional number of shares and share price performance.
- Although our CEO is not a Director of the Company, for a number of years we voluntarily disclosed his remuneration and provided details throughout the Remuneration Report to allow shareholders to understand how these structures support the strategy and promote long-term sustainable success. Since the implementation of the European Shareholders' Rights Directive II in 2019, these disclosures became mandatory and are included in this report.

The Committee follows the UK Corporate Governance Code. The table below summarises how we have considered Code provision 40 when developing and implementing our remuneration strategy.

Factor	How the Committee addresses the factor
Clarity Remuneration arrangements are transparent and promote effective engagement with shareholders and the workforce.	Our rationale for operating two different long-term (performance and restricted) incentive plans is clear and well communicated. The performance measures used in both the Annual Bonus Plan and LTIP are used internally and externally in tracking and communicating business performance, ensuring that they are well understood by participants. The Committee Chair engages and seeks the views of our shareholders on material changes to Executive Remuneration, and in the year prior to a remuneration policy resolution. Feedback from shareholders is received by the Committee and informs the Committee's decisions on remuneration policy and material changes to pay. The impact this has on decisions and approach taken by the Committee is highlighted by the Chair in our annual statement. Views of the workforce are understood in accordance with the workforce engagement mechanisms described in more detail on page 120. Remuneration-related topics on which employee views are sought include: benefits, pay fairness, alignment between individual performance and pay and sharing in Company success.
Predictability The range of possible values of rewards for the CEO are identified and explained at the time of approving the policy.	Target ranges and potential pay-out levels are disclosed in advance allowing shareholders and participants to understand the potential value of the package in different performance scenarios. The Committee carefully considers the performance measures for the annual bonus and LTIP each year, and seeks to achieve consistency (where it is appropriate) with only necessary changes being made, in order that the plans are sufficiently predictable. When setting performance targets the Committee considers the same range of internal and external factors each year. This provides consistency in policy implementation.
Simplicity Remuneration structures are uncomplicated, and their rationale and operation are easy to understand and are consistent for the CEO and those, where applicable, below him.	Each element of pay is clearly communicated. Where appropriate, incentive arrangements are filtered down through the organisation to align the interests of employees and executives with those of our shareholders, and to encourage and share value creation.
Proportionality The link between individual awards, the delivery of strategy and the long-term performance of the Company is clear.	Performance conditions in the annual bonus and performance share awards require a minimum level of performance before any payment is made to executives and performance targets are clearly aligned to our business plan and strategy. There are clearly defined maximum opportunities, as set out in our Remuneration Policy.
Risk Reputational and other risks from excessive rewards, and behavioural risks that can arise from target-based incentive plans, are identified and mitigated.	Incentive plan performance measures are balanced to motivate the right behaviours and appropriate safeguards are put in place, including adjustments for safety performance. While clawback has not been introduced due to uncertainty around its legal validity in Chile, LTIP awards are subject to malus. The Committee retains discretion to adjust outcomes under the plans for variable remuneration.
Alignment to culture Incentive plans drive behaviours consistent with the Company's purpose, values and strategy.	Our Remuneration Policy aligns to the business' objectives to create sustainable value and high profitability. We reward strong performance in line with our business objectives, but only if the methods used align to our safety and sustainability objectives. All Group employee performance bonuses, including the CEO's, include an assessment of individual performance relative to the Group's Charter of Values.

CEO single figure of remuneration (audited)[1]

Base salary/ fees

The CEO's annual base salary as at 1 January 2022 was $795,214 (2021: $663,908). As disclosed on page 150 of the 2020 Annual Report, the CEO's base salary paid in Chilean pesos was increased by 25% from 1 April 2021 following a market review, the CEO's performance and changes in the Chilean peso/US dollar exchange rate since 2017. The CEO's base salary was further reviewed in December 2021 and a further 6.7% increase was applied to reflect further depreciation in the exchange rate over the year.

Benefits

Benefits include life and health insurance. Other benefit values are based on what the Company believes would be deemed by HMRC to be taxable benefits in the UK. The Company also pays the professional fees incurred to complete the CEO's tax returns and the actual tax incurred by the CEO on these expenses which are in connection with the fulfilment of his duties. The Company makes no pension contributions on behalf of the CEO.

The table below sets out the remuneration received by the CEO in respect of the years ending 31 December 2021 and 31 December 2020.

	Salary/ Fees $'000[2]	Benefits $'000	Bonus $'000[3]	Restricted Awards $'000[4]	Performance Awards $'000[5,6]	Total remuneration $'000	Total fixed remuneration $'000	Total variable remuneration $'000
Iván Arriagada[1] 2021	**755**	**36**	**1,147**	**390**	**1,447**	**3,775**	**791**	**2,984**
Iván Arriagada[1] 2020	589	24	1,216	372	2,474	4,675	612	4,062

1. Mr Arriagada is paid in Chilean pesos and his remuneration is reported in US dollars adjusted for the exchange rate during the year.
2. The salary in the table above is calculated based on amounts actually paid in Chilean pesos in each month of the relevant year converted into US dollars at the relevant average exchange rate for the month it was paid.
3. Iván Arriagada's 2020 annual bonus was paid following the date of publication of the 2020 annual report and the exchange rate used has been updated with the rate applicable at the date the bonus was paid.
4. Restricted Award amounts are reported in the year of grant based on the face value of the awards on the date of grant.
5. Performance Awards are reported in the year the performance period ends. The Total Shareholder Return (TSR) performance is an estimation based on substantial completion and it is determined after the publication of this report. The share price used to value these awards is the three-month average share price to the end of 31st December 2021 performance period £13.98/share and USD/GBP 1.35.
6. The Performance Awards included in the 2020 total vested on 27 March 2021. 50% of the award was based on the TSR performance, which was determined after the publication of last year's report. The figure included in the table has been updated to reflect the TSR performance outcome that was 100% of the maximum, leading to a total award outcome of 99% of the maximum. The increase in the value reported for the 2020 LTIP reflects the change in share price and exchange rate at vesting. The exchange rate and share price used to value this award are: £16.60/share and USD/GBP 1.37. For the 2021 LTIP, the value attributable to an increase in the Company's share price is $754,345. This figure has been calculated using the market value of a share on the date the award was granted versus the average share price for the last three months of 2021.

Annual bonus

Group performance (70%)

The targets and achievements for the 2021 annual bonus are set out below. 70% of the CEO and Executive Committee's 2021 annual bonuses were calculated based on the Group's performance against these criteria in 2021:

Measure	Weighting %	Threshold (0% vesting)	On-target (50% vesting)	Maximum (100% vesting)	Actual achievement	Achievement (% of maximum)
Core business (60%)						**60%**
EBITDA – Mining division[1] ($m)	15%	3,854	4,283	4,711	4,769	100%
Copper production[2] (kt)	25%	679.8	701.5-723.2	744.9	721.5	50%
Cash costs before by-product credits[3] ($/lb)	17%	1.87	1.77	1.66	1.79	40%
Corporate expenditure ($m)	3%	134.2	127.8	121.5	123.3	85%
Business development – Growth and innovation projects execution (20%)						**65%**
Growth projects[4]	13%	Measured according to the schedule and budget as described in more detail in the footnotes				55%
Exploration programmes[5]	3%					85%
Innovation and digital transformation projects[6]	4%					90%
Sustainability and organisational capabilities (20%)						**85%**
Safety – Mining division[7]	5%	Measured according to the KPIs and milestones as described in more detail in the footnotes				100%
People – Diversity and Inclusion Strategy[8]	5%					100%
Environmental performance[9]	5%					40%
Social performance[10]	5%					100%
Total outturn – pre-adjustments		Adjustments are described in more detail in the footnotes				67%
Adjustment (-15%) for not meeting zero fatality target[11]						-10%
Board discretion applied[12]						8%
Total outturn – post-adjustments						**65%**

1. The EBITDA targets were adjusted for exchange rate and copper price fluctuations, the impact of hedging arrangements, and diesel, acid and grinding balls price fluctuations, expenses relating to the Group's response to the COVID-19 pandemic, the impact of the water shortage at Los Pelambres and the effect of one-off bonuses paid on conclusion of labour negotiations at Los Pelambres and Centinela, which were not included in the Group's budget.
2. 100% basis, except for Zaldívar (50%). The targets for production were adjusted for the impact of the water shortage at Los Pelambres.
3. The cash cost targets were adjusted for the same factors as the EBITDA targets (except for copper price fluctuations which do not impact this measure). The figures for corporate expenditure were adjusted for the exchange rate and the difference between budgeted annual bonus payments and actual bonus payments made to employees.
4. Split between the Los Pelambres Expansion project (6%), the Centinela Second Concentrator (4%), the Zaldívar Chloride Leach project (1.5%) and the Environmental Impact Assessment (EIA) for the Zaldívar mine life extension project (1.5%). Targets for the Los Pelambres Expansion project related to execution progress and ensuring that there were no material environmental incidents. Threshold was achievable upon (75%) a delay of less than three months for the critical construction milestones for the year and (25%) one or fewer serious environmental incidents. Target was achievable upon (75%) achieving critical construction milestones for the year on schedule and (25%) if there were no serious environmental incidents. Maximum was achievable if further specified construction milestones were achieved during the year. Targets for the Centinela Second Concentrator and for the Zaldívar Chloride Leach project were based on execution progress. Threshold for the Centinela Second Concentrator was achievable upon (60%) a delay in the detailed engineering against plan of less than one month and (40%) a delay in the award of critical equipment orders of less than one month. Target was achievable on (60%) detailed engineering being completed according to plan and (40%) critical equipment orders being awarded on schedule. Maximum was achievable if specified additional critical milestones were achieved by the end of the year. Threshold for the Zaldívar Chloride Leach project was achievable upon two critical construction milestones being achieved with a delay of less than three months. Target was achievable on the two critical construction milestones being achieved on schedule. Maximum was achievable if ramp up of the project was achieved before the end of the year. Threshold for the Zaldívar EIA was achievable if the submission of responses due under the EIA process was delayed by less than one month. Target was achievable on responses being received on schedule. Maximum was achievable if the environmental permit was granted by the end of the year. The outcome was 55% of the maximum, comprising 35% of the maximum for the Los Pelambres Expansion project, 75% of the maximum for the Centinela Second Concentrator project, 100% of the maximum for the Zaldívar Chloride Leach project and 50% of the maximum for the EIA for the Zaldívar mine life extension project.
5. Includes targets to assess the progress of exploration programmes and consolidation of exploration ownership interests. The infill programme on Cachorro deposit was advanced according to the plan.
6. Split between implementation of the Group's Digital Transformation Programme (67%) and implementation of the "New Ways of Working" project (33%). Targets for the Group's Digital Transformation Programme related to implementation progress, the use of autonomous trucks (with threshold at test isolated environment, target at test in productive environment and maximum at target plus compliance with performance test for autonomous drilling machines in a productive environment) execution progress for integrated remote operations management centre for Centinela (with threshold at 80% of construction and compliance of training plan, target at enabling Infrastructure in Q4 and maximum at target plus remote control and operational in Q4). Targets for the "New Ways of Working" project related to the adoption of the model with threshold at 50% of adoption, target at 80% of adoption and maximum for 100% of adoption plus level of effectiveness and satisfaction of the deployed tools. 100% of maximum was achieved for the Group's Digital Transformation Programme (67% of the overall award), due to compliance with performance test for autonomous drilling machines in productive environment and enabling infrastructure plus remote and operational control in Q4, and 70% of maximum for the "New Ways of Working" project (23% of the overall award) with a 85% of adoption of the model.
7. Performance against a target for reducing high potential accidents versus the recorded high potential accidents in 2020, with threshold at no reduction, target a 10% reduction and maximum a 15% reduction. The actual outcome was a 30% reduction in recorded high potential accidents.
8. Performance against targets for implementation of the Diversity and Inclusion Strategy. 50% was based on the results of an evaluation of the Group culture, with threshold at no improvement in culture, target of an expected improvement in culture and maximum for an improvement in culture above expectations based on the Committee's approval of an evaluation overseen by the CEO and Vice President of Operations. 50% was based on an increase in the percentage of female employees with threshold at 14.8%, target at 16.4% and maximum at 17.2% as at 31 December 2021. The outcome was 100% of the maximum for the cultural evaluation and 100% of the maximum for the percentage of female employees which stood at 17.4% as at 31 December 2021.
9. The control of risks relating to environmental performance across all operations measured against KPIs relating to compliance with an internal plan for the implementation of controls for high and moderate environmental risks and a reduction in the Group's overall emissions of CO_2 versus budget for the year with the threshold at 80% implementation of the internal plan and less than 3.5% over the CO_2 emissions budget for the year or no environmental incident with an impact on production or reputation, the target at 100% implementation of the internal plan and no environmental incident with an impact on production or reputation, compliance with the CO_2 emissions target and achieving the Copper Mark at Centinela and Zaldívar, and the maximum at compliance with the target KPIs plus a 3.5% reduction in CO_2 emissions versus the budget for the year. The outcome was 91% of the maximum for reduction in the Group's overall consumption of CO_2 emissions and achieving the Copper Mark at Centinela and Zaldívar, but the final outcome was 40% of the maximum due to one incident of higher significance reported to the SMA.
10. Performance against the planned execution of social initiatives (50%) and a planned programme to measure the impact of initiatives (50%) with the threshold at 70% implementation for each plan, and the maximum at full implementation of the execution plans plus a 3% saving versus budget and an agreed action plan defined to address any gaps in the impact measurement plan. The outcome was 100% of the maximum.
11. A standalone adjustment trigger amounting to 15% of the calculated outcome applies to the Annual Bonus Plan – upwards if there are no fatalities during the year and downwards if there are one or more fatalities during the year. This resulted in an automatic decrease of 15% to the final Group outcome for 2021. This adjustment reduced the outcome by 10% to 57%, before the application of the Board's discretionary adjustment noted below.
12. The Group was forced to respond to unforeseen circumstances arising from the COVID-19 pandemic during the year. The Board believes that the Group's employees, led by the CEO, handled these circumstances in an exceptional manner. The Company also achieved record results. Because of these two achievements, the Committee exercised its discretion to increase the calculated outcome of the Group's performance, at each of the individual operations, as well as at the Group level, resulting in an increase under the Group's 2021 Annual Bonus Plan from 57% of the maximum to 65%. This decision confirmed alignment between the discretion applied to the performance outcome for the individual operations and at Group level, which impacts senior management and the CEO's pay.

Individual performance (30%)

The Committee, based on individual feedback received from each Director, assessed Iván Arriagada's performance against his individual objectives as 90% of the maximum for his individual contribution to the business during the year. This performance outcome reflects exceptional performance during the year, in which all his individual objectives were met or exceeded and count towards 30% of his annual bonus. Iván Arriagada's performance against his individual objectives is summarised below:

Key Goals	Performance
Keeping the Board well-informed and responding to feedback received during the year	• Strong communication throughout the year kept the Board apprised of key developments. • Receptive to Directors' input, ensuring that the Board's perspectives, ideas and feedback were shared and implemented throughout the Group.
Leading the Group's core values and developing a culture of excellence	• Strong commitment to the Group's values, demonstration of desired behaviours and effective leadership of a corporate culture of excellence.
Implementing strategy including in relation to long-term growth and the management of environment, social and governance (ESG) matters	• Demonstrated long-term strategic vision to strengthen the Group's operations and projects. • Enhanced the Group's ESG focus, including setting new CO_2 emissions reduction targets.
Focusing on the Group's core business	• Record financial performance in a challenging business environment.
Developing talent, ensuring appropriate succession planning and performance management	• Evident personal commitment to talent management, succession planning and performance management.
Enhancing the organisation to support efficiency and cost effectiveness	• Restructured the Operations Vice Presidency and strengthened Zaldívar's management team.
Pursuing exploration and business development opportunities	• Progressed the Group's exploration programme through the COVID-19 pandemic. • Business development opportunities thoroughly evaluated throughout the year.
Promoting the Group's reputation, working with key stakeholders and local communities	• Outstanding stakeholder management in response to the COVID-19 pandemic. • Strong market presence and engagement with investors.
Addressing business challenges including the Group's response to the COVID-19 pandemic, diversity and inclusion initiatives and environmental performance	• Outstanding leadership during the COVID-19 pandemic. • Diversity and inclusion initiatives progressing according to plan. • Good overall environmental performance.

Performance adjustments, discretion and total bonus for 2021

Based on performance achieved against targets during the 2021 financial year, the Committee determined that Iván Arriagada would receive a bonus payment of $1,147,493 for 2021. This figure was determined as follows:

Overall performance score	(70% x 65%) + (30% x 90%) = 72% of the maximum
(as a percentage of the maximum)	72% of $1,590,427
Gross annual bonus	= $1,147,493

Calculated in US dollars using the exchange rate as at 31 December 2021 of $1 = Ch$844.7

Because the annual bonus is calculated and paid in Chilean pesos, it is subject to exchange rate movements when reported annually in US dollars.

The amount of bonus paid was not linked to share price appreciation.

Long-term incentives

Anticipated vesting in 2022

As noted in the single figure remuneration table on page 148, performance against the Performance Awards granted in 2019[1] will not be finally determined by the Committee until after the date of this report. The performance criteria attaching to these Performance Awards and the anticipated performance against these criteria, based on estimates as at the date of this report, are as follows:

Measure	Weighting %		Threshold	On-target	Maximum	Performance	Achievement %	Discretion applied
Relative total shareholder return[2] ESTIMATED	50%	Vs. EMIX Global Mining Index	Below index	Equal to index	≥5% above index	This KPI will vest on or after 29 March 2022. The estimate is based on performance of 8% greater than the index as of 1 March 2022.	100%	No
		% Score	0%	33%	100%			
Mineral resources increase	25%	Tonnes of contained copper	81.8m	83.0m	84.2m	Resources increased to 87.5m tonnes of contained copper as at 31 December 2021.	100%	No
		% Score	0%	50%	100%			
Project portfolio progress	12.5%	% progress in Los Pelambres Expansion project construction (70%)	50% progress against end goal	75% progress	85% progress	Performance of the construction of the Los Pelambres Expansion project is 88%.[3] Performance for the Zaldívar Chloride Leach project and Phase 2 of the Los Pelambres Expansion project is 100%.	92%	No
		% progress in Zaldívar Chloride Leach project (20%)			In construction			
		% progress in Phase 2 of the Los Pelambres Expansion project (10%)			Achievement of feasibility study advancement target			
		% Score	0%	75%	100%			
Sustainability commitments	12.5%	Agreements with communities near Los Pelambres (80%)	50% or less progress against end goal	75% progress	100% vesting when 100% compliance is achieved.[4]	All goals achieved.	100%	No
		CO_2 emissions (20%)	50% progress of commitments and goal	75% progress				
		% Score	0%	75%				
					100%			
						Total outturn	**99%[5]**	

1. The number of shares and share price used and impact of vesting % for this award is available in the notes to the single figure table and the table setting out long-term incentive awards outstanding for the CEO from prior periods.
2. The TSR outturn is an estimate as the performance period ends after this report is published and the actual outturn will be included in next year's report.
3. Progress in the construction of the Los Pelambres Expansion project: The date for this KPI was amended to allow for the 9.5 month delay attributable to COVID-19 and the additional scope of enabling work added to allow for the future expansion of the desalination plant from 400 l/s to 800 l/s, which was approved after this KPI was set in 2019.
4. 100% compliance means: agreements with communities near Los Pelambres, 100% compliance with historical commitments and agreements and CO_2 emissions reduction in accordance with forecasts set on the grant date, certified by an independent third party.
5. The impact of this vesting level on the CEO's 2021 remuneration is set out in footnote 5 of the CEO single figure total remuneration table on page 148.

Performance adjustments and discretion

No adjustments or discretion have been applied to any of the performance calculations for the 2019 LTIP outcome.

Directors' single figure of remuneration (audited)

The remuneration of the Directors for 2021 and 2020 is set out below in US dollars. Unless otherwise noted, amounts paid in Chilean pesos have been converted at the exchange rate on the first day of the month following the date of payment. Any additional fees payable for serving on subsidiary and joint venture company boards are also included in the amounts below.

	Fees		Benefits[2, 3]		Total[4]	
	2021[5] $000	2020 $000	2021 $000	2020 $000	2021 $000	2020 $000
Chairman						
Jean-Paul Luksic	**1,012**	1,005	**16**	12	**1,028**	1,017
Non-Executive Directors						
Ollie Oliveira (departed 31 July 2021)	**210**	332	**1**	7	**211**	339
Ramón Jara[1]	**965**	904	**7**	5	**972**	910
Juan Claro	**278**	272	**2**	4	**280**	276
Andrónico Luksic C	**260**	260	**2**	4	**262**	264
Vivianne Blanlot	**318**	306	**2**	4	**320**	309
Jorge Bande	**314**	296	**2**	4	**316**	300
Francisca Castro	**309**	293	**2**	9	**312**	302
Michael Anglin	**311**	284	**-**	10	**311**	294
Tony Jensen (appointed 13 March 2020)	**333**	198	**-**	-	**333**	198
Eugenia Parot (appointed 20 April 2021)	**199**	-	**-**	-	**199**	-
Total Board	**4,509**	4,150	**34**	59	**4,543**	4,209

1. During 2021, remuneration of $645,053 (2020 – $597,335) was paid to Asesorías Ramón F Jara Ltda for the provision of services by Ramón Jara. The reported increase in 2021 is due to a decrease in the Ch$/USD exchange rate, partially offset by an annual adjustment for inflation in Chile. This remuneration is included in the fees attributable to Ramón Jara of $965,000 (2020 – $904,000).
2. Amounts for Jean-Paul Luksic include the provision of life and health insurance. Amounts for Ramón Jara include the provision of life insurance. These insurances are not in place for other Directors.
3. All "benefits" included in this table arose in connection with the fulfilment of Directors' duties and, in particular, the cost of attending Board meetings. These calculations have been based on what the Company believes would be deemed by HMRC to be taxable benefits in the UK. Given these expenses are incurred by Directors in connection with the fulfilment of their director duties, the Company also pays the professional fees incurred to complete each Director's tax returns and the actual tax incurred by Directors on these expenses. Figures are reported in the year that they are paid, or would be payable, by the Company.
4. Totals reflect the total fixed remuneration for each Director. Directors did not receive any variable remuneration.
5. In April 2021, an increase was made in the fees paid to the members and chairs of each committee. Details of these increases are set out in detail in the 2020 annual report.

Notes relevant to single figure disclosures for 2020 can be found on page 141 of the 2020 annual report. These remain unchanged.

Payments to past directors (audited)

There were no payments made to past directors.

Payments for loss of office (audited)

There were no payments made for loss of office.

Directors and CEO's shareholding and share interests (audited)

The Directors who held office at 31 December 2021 had the following interests in the ordinary shares of the Company:

	Ordinary shares of 5p each	
	31 December 2021	1 January 2021
Jean-Paul Luksic[1]	**41,963,110**	41,963,110
Tony Jensen	**–**	–
Ramón Jara[2]	**5,260**	5,260
Juan Claro	**–**	–
Andrónico Luksic C	**–**	–
Vivianne Blanlot	**–**	–
Jorge Bande	**–**	–
Francisca Castro	**–**	–
Michael Anglin	**–**	–
Eugenia Parot	**–**	–
Ollie Oliveira	**–**	–

1. Jean-Paul Luksic's interest relates to shares held by Aureberg Establishment, an entity that he ultimately controls.
2. Ramón Jara's interest relates to shares held by a close family member.

There have been no changes to the Directors' interests in the shares of the Company between 31 December 2021 and the date of this report.

The Directors and CEO had no interests in the shares of the Company during the year other than those set out above or on page 148. No Director had any material interest in any contract (other than a service contract in the case of Ramón Jara) with the Company or its subsidiary undertakings during the year other than in the ordinary course of business.

The Group does not have shareholding guidelines or requirements for Directors, all of whom are Non-Executive.

The Chairman Mr Luksic and Non-Executive Director Andrónico Luksic C are members of the Luksic family. Members of the Luksic family are interested in the E. Abaroa Foundation which controls Metalinvest Establishment and Kupferberg Establishment (which, in aggregate, hold approximately 60.66% of the Company's ordinary shares and approximately 94.12% of the Company's preference shares). In addition, Mr Luksic controls the Severe Studere Foundation which, in turn, controls Aureberg Establishment (which holds approximately 4.26% of the Company's ordinary shares). This creates significant alignment between these members of the Board and shareholders.

During the period, no Non-Executive Director was eligible for any short-term or long-term incentive awards and no Non-Executive Director owns any shares as a result of the achievement of performance conditions.

Other relevant information

Long-term incentive plan awards made to the CEO during the financial year (audited)

As stated earlier in this report all LTIP awards are cash awards linked to a notional number of shares and share price performance.

Type of award	Date of grant	Number of shares/options	Award as % of salary	Face value (market value at date of grant)	Performance period	Vesting date
Restricted Award	29 Mar 21	16,905	59%	$390,000	N/A	29 Mar 22 29 Mar 23 29 Mar 24
Performance Award	29 Mar 21	39,442	137%	$910,000	29 Mar 2021 to 29 Mar 2024	29 Mar 24

Performance conditions attaching to long-term incentive plan awards granted to the CEO in 2021

Objective		Weighting	Threshold	Target	Maximum	Vesting at threshold	Vesting at target	Vesting at maximum
Relative total shareholder return vs. Global X Copper Miners ETF (CopX Index)		50%	Performance below index	Equal to index	≥5% above index	0%	33%	100%
Mineral resources increase (contained copper)		25%	82.6m tonnes	85.6m tonnes	86.6m tonnes	0%	50%	100%
Projects portfolio: (1) Los Pelambres concentrate transport system (2) Desalination plant expansion (3) Centinela Second Concentrator		12.5%	(1) and (2) feasibility study not started. (3) Not submitted for Board approval.	(1) and (2) feasibility study 75% complete. (3) Submitted for Board approval and construction underway.	(1) and (2) feasibility study 100% complete. (3) Construction progress in accordance with the approved plan.	0%	75%	100%
Sustainability commitments	Choapa Valley (30%)	12.5%	50% compliance with the social management plan initiatives. Final compliance is calculated as the average compliance of all initiatives.	75% compliance.	≥ 85% compliance. Considers existing initiatives as of 31 March 2021 and those that may be added by 31 December 2023. 100% includes compliance with the implementation timelines and budget.	0%	75%	100%
	North District (10%)					0%	75%	100%
	Climate change & environment (60%)		50% compliance with the emissions budget.[1] 50% compliance with the climate change strategy roadmap. 50% compliance with the internal plan for extreme, high and moderate risk regulatory requirements.	75% compliance.	100% compliance.	0%	75%	100%

1. Emissions budget is according to the 2023 emissions reduction target of 900,000 tonnes of Scope 1 and Scope 2 CO_2 emissions by 2023, compared with the 2020 level.

The Committee set stretching targets which incentivise the CEO and Executive Committee members to deliver exceptional performance and to drive sustainable results. The Committee ensures that targets are appropriately stretching in the context of the business plan and prior year achievements and that there is an appropriate balance between incentivising the CEO to meet financial targets and to deliver specific non-financial goals.

Long-term incentive plan awards outstanding for the CEO from prior periods (audited)

The following LTIP awards with one or more outstanding tranches have been granted to Mr Arriagada. The number of shares to which each grant relates is determined based on the limits set out in the LTIP rules, consideration around retention and the share price at the time of grant.

Year of grant	Type of award	Date of grant	Number of awards as at start of year	Vested during year	Lapsed during year	Under award as at 31 December 2021	Vesting date
2019	Performance Awards	29 Mar 19	77,516	N/A	0	77,516	29 Mar 22
2019	Restricted Awards	29 Mar 19	22,148	11,074	0	 11,074	29 Mar 21 29 Mar 22
2020	Performance Awards	27 Mar 20	105,295	N/A	0	105,295	27 Mar 23
2020	Restricted Awards	27 Mar 20	45,126	15,042	0	 15,042 15,042	27 Mar 21 27 Mar 22 27 Mar 23
2021	Performance Awards	29 Mar 21	39,442	N/A	0	39,442	29 Mar 24
2021	Restricted Awards	29 Mar 21	16,905	0	0	5,635 5,635 5,635	29 Mar 22 29 Mar 23 29 Mar 24

The performance conditions and face values at grant for the awards granted in 2019 and 2020 are set out in the annual reports for 2019 and 2020. No variations to the original terms of the awards have been made.

Restricted awards are not subject to performance conditions.

CEO pay history and Company performance

The total remuneration of the lead executives in the Group for the past ten years is as follows:

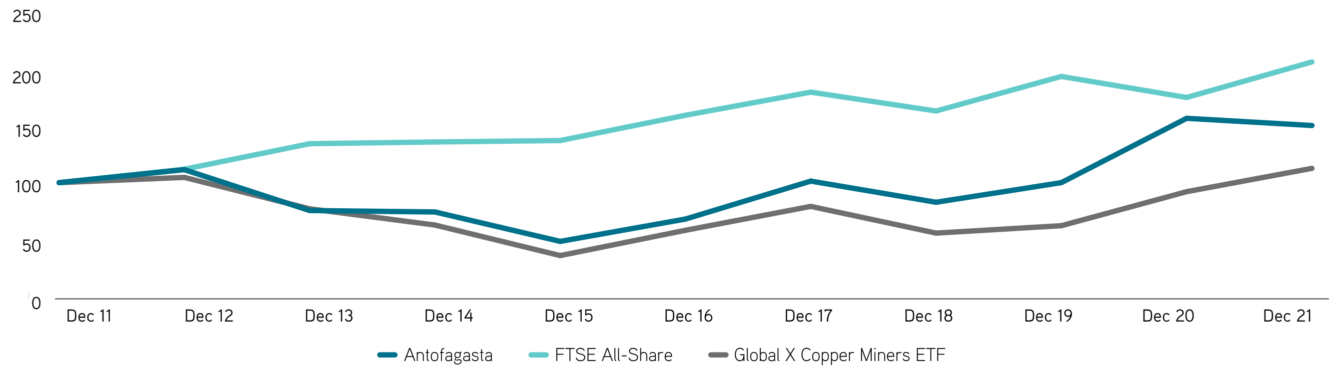
Single figure of remuneration for the Group's lead executive $000	2012	2013	2014[1]	2015	2016[2]	2017	2018	2019	2020[4]	2021
Chairman – Jean-Paul Luksic	3,598	3,615	2,196	–	–	–	–	–	–	**–**
CEO – Diego Hernández	–	–	688	2,445	1,525	–	–	–	–	**–**
CEO – Iván Arriagada	–	–	–	–	681	1,790	2,513	2,458	4,675	**3,775**
Annual bonus payout (% of maximum)	–	–	69%	39%	61%	79%	66%	83%	93%	**72%**
LTIP payout (% of maximum)[3]	–	–	76%	16%	–	85%	60%	65%	99%	**99%**

1. The single figure remuneration for the Group's lead executive in 2014 comprises Jean-Paul Luksic's remuneration until 1 September 2014 (when he became Non-Executive Chairman) and Diego Hernández' remuneration from 1 September 2014. The Chairman was not eligible for variable remuneration and the 2014 percentage figures therefore only relate to the 2014 annual bonus and LTIP awards vesting to the CEO.
2. The single figure remuneration for the Group's lead executive in 2016 comprises Diego Hernández' remuneration until 8 April 2016 (when he stepped down as CEO) and Iván Arriagada's remuneration from 8 April 2016 (when he became CEO). No Performance Awards vested to the CEO in 2016.
3. As Restricted Awards do not have a performance element, they are not included in these calculations.
4. 2020 figures have been restated to reflect actual 2020 outcomes as explained in the CEO single figure remuneration table on page 148.

Relative TSR performance

The chart below sets out the TSR performance of the Company over the past ten years. The FTSE All-Share Index and the Global X Copper Miners ETF (CopX Index) has also been shown over the same period. The FTSE All-Share Index has been selected as an appropriate broad equity market index benchmark as it is the most broadly-based index to which the Company belongs and relates to the London Stock Exchange, where the Company's ordinary shares are traded. The Global X Copper Miners ETF is also shown (new this year) because this index has been determined to be the most appropriate specific comparator group for the Company, and the Global X Copper Miners is one of the peer groups used in the Group's LTIP as set out on page 151.

Indexed total shareholder returns



This graph shows the value of £100 invested in Antofagasta on 31 December 2011 compared with £100 invested in the comparative indices.

Change in remuneration of Directors and employees

The table below sets out the percentage change, compared to the previous year, in key elements of the remuneration of the Directors, the CEO and employees.

	2021			2020		
	Percentage change in fees/ base salary[4]	Percentage change in benefits	Percentage change in annual bonus	Percentage change in fees/ base salary	Percentage change in benefits	Percentage change in annual bonus
Non-Executive Directors[1]						
Jean-Paul Luksic	**1%**	**36%**	**–**	–	28%	–
Ollie Oliveira (departed 31 July 2021)	**8%**	**-87%**	**–**	–	-91%	–
Ramón Jara	**7%**	**33%**	**–**	-4.3%	17%	–
Juan Claro	**2%**	**-32%**	**–**	–	-64%	–
Andrónico Luksic C	**–**	**-32%**	**–**	–	23%	–
Vivianne Blanlot	**4%**	**-32%**	**–**	0.2%	-45%	–
Jorge Bande	**6%**	**-32%**	**–**	–	-63%	–
Francisca Castro	**6%**	**-73%**	**–**	1.0%	-29%	–
Michael Anglin[5]	**9%**	**–**	**–**	0.6%	-75%	–
Tony Jensen[6] (appointed 13 March 2020)	**34%**	**–**	**–**	–	–	–
Eugenia Parot[7] (appointed 20 April 2021)	**N/A**	**N/A**	**–**	–	–	–
CEO	**28.3%**	**51.5%**	**-5.7%**	-8.0%	-65.0%	38.8%
Company employees[2]	**1.6%**	**-0.3%**	**19.7%**	1.8%	19.9%	7.5%
Mining division employees[3]	**7.2%**	**16.3%**	**-10.6%**	-9.8%	-10.1%	7.0%[3]

1. The percentage change in fees for Directors who served for only part of a comparator year has been annualised.
2. The parent company, Antofagasta plc, has fewer than 10 employees. The reporting of these figures is mandatory, and the parent company is not considered to be an appropriate comparator group.
3. Mining division employees are considered to be a relevant comparator group because the Mining division accounts for more than 97% of the Group's revenue and the Annual Bonus Plan that applies to the Executive Committee is the same plan that applies to the Mining division employees at management and professional level. This annual bonus figure relates to the percentage change in the average annual bonus for the Mining division employees and does not include any one-off bonuses paid to employees as a result
of the conclusion of collective bargaining agreements with labour unions.
4. Increase in Committee fees from 1 April 2021.
5. Michael Anglin 's role changed from being a member to the chair of the Project Committee and was also appointed as a member of the Sustainability and Stakeholder Management Committee.
6. Tony Jensen was appointed as the Senior Independent Director and his role changed from being a member to the chair of the Audit and Risk Committee. He was also appointed as a member of the Nomination and Governance Committee and stepped down as a member of the Sustainability and Stakeholder Management Committee.
7. Eugenia Parot was appointed as a member of the Project Committee and the Sustainability and Stakeholder Management Committee.

An explanation for the percentage change in remuneration for 2020 can be found in the 2020 Annual Report.

Relative importance of remuneration expenditure

The table below shows the total expenditure on employee remuneration, the distributions to shareholders and tax expenses in 2020 and 2021.

	2021 $m	2020 $m	Percentage change
Employee remuneration[1]	**498.0**	453.8	9.7%
Distributions to shareholders[2]	**1,404.8**	539.3	160.5%
Taxation[3]	**1,035.5**	515.3	101.0%

1. Employee remuneration includes salaries and social security costs, as set out in Note 9 to the financial statements.
2. Distributions to shareholders represent the dividends proposed and approved for payment in relation to the year as set out in Note 14 to the financial statements.
3. Tax has been included because it shows the Group's tax contribution, almost all of which is paid by the Group's operations in Chile to the Chilean state. The tax expense represents the current tax charge in respect of corporate tax, mining tax (royalty) and withholding tax, as set out in Note 11 to the financial statements.

Remuneration and Talent Management Committee report

Key responsibilities

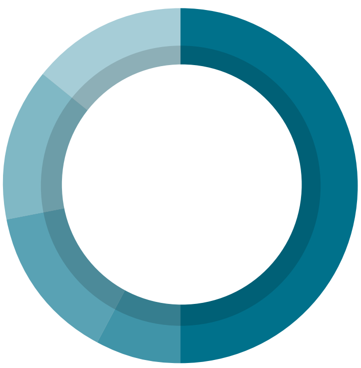
- The Committee ensures that the Group's remuneration arrangements support the Group's purpose and the effective implementation of strategy and enables the recruitment, motivation, reward and retention of talent.
- The Committee is responsible for setting remuneration for the Chairman, Directors and the CEO and for monitoring the compensation strategy, level, structure and reward outcomes for Executive Committee members.
- The Committee actively participates in the Group's talent management strategy, including the review, consideration and implementation of succession plans for the Executive Committee (excluding the CEO).
- The Committee also reviews workforce remuneration and related policies, including the Diversity and Inclusion Policy, the alignment of incentives and rewards with the Group's culture, the terms and limits of collective negotiations with the Company's unions and the implementation of policy changes that affect the workforce as a whole.

2021 Remuneration and Talent Management Committee activities

The key matters considered by the Committee are set out in the table below:

	Jan 21	Mar 21 #1	Mar 21 #2	Aug 21	Nov 21
Directors' and Executive Remuneration and Governance					
2020 annual bonus and LTIP	•	•			
2021 annual bonus and LTIP	•	•	•	•	•
Review of total shareholder return performance	•				
Review of 2020 performance appraisal and Executive Committee individual performance	•				
Directors' Remuneration Report	•	•			•
Annual General Meeting season governance update				•	
LTIP governance				•	•
Executive benefits					•
Workforce, HR policies and talent management					
Gender Pay Gap Reporting	•				
CEO to worker pay ratio	•				
HR plan		•			•
Talent management and succession planning					•
2022 Mining division scorecard					•

Activities during the year



Executive remuneration	50%
Director remuneration	8%
Pay-related governance	14%
Workforce and HR policies	14%
Talent management and succession	14%

Engagement with colleagues

As explained in last year's Annual Report, when the Committee reviews the remuneration of Directors and the CEO, it takes into consideration pay conditions across the Group. This is set in the context of different working environments and geographies and therefore is not a mechanical process. The Company does not have any executive directors and the executive pay policy that applies to the CEO (who is not a Director) is the same as the Group's wider pay policy. This pay policy includes access to the same benefits, and participation in the same Annual Bonus Plan. Members of the Executive Committee and certain key executives participate in the LTIP and this plan is the same for the CEO as for the other participants. The same principles apply to our workforce remuneration plans as to the CEO, seeking to drive the same aligned culture, values and behaviours across the Group.

Approximately 77% of the Group's employees are unionised and the number is close to 100% at the operator level. The Committee reviews gender pay gap, CEO pay ratio figures and a range of other internal and external remuneration comparison metrics and benchmarks when determining the quantum and structure of the CEO's remuneration. This includes feedback received from shareholders and more general feedback received from employees on the Group's pay policies, including through regular engagement with union representatives and oversight of the parameters for collective bargaining negotiations.

The Committee communicates with, and receives feedback from, the workforce through a variety of channels, including employee engagement surveys (carried out during October and November 2021 at

Antofagasta Minerals and Minera Antucoya and scheduled for H1 2022 at Centinela, Los Pelambres and Zaldívar) and the corresponding results are shared with the Committee and the Board. The Group also conducts ad hoc focused surveys on specific issues which in 2021 included COVID-19, employee wellbeing and the Group's employee value proposition. The results of the surveys were also shared with the Committee. The Committee is regularly updated on workforce pay and benefits by the senior management team who consult with the workforce on issues including remuneration policy. The workforce receives regular communications throughout the year on the Group's performance targets and incentive awards. As well as receiving regular feedback in the performance of their roles, the senior management team regularly engage with employees to specifically understand their views on workforce remuneration policy and practices.
In addition, the Board as a group and independently, visit Group operations throughout the year and hear directly from employees their views on labour issues including workforce remuneration, culture and values as well as the application of remuneration policy across the Group, including executive remuneration. More detail on the Board's engagement with the workforce is provided on pages 120 and 121.

Consequently, the Committee has multiple touchpoints with the workforce in order to receive feedback on the Group's workforce remuneration policy which includes senior management and the CEO. At the beginning of every Committee meeting the CEO provides an update to the Committee on key workforce issues relating to remuneration and talent and Committee meetings are focused on this subject. A summary of matters considered by the Committee is reported by the Committee Chair to the full Board following each Committee meeting. The Committee receives regular feedback on safety performance, community relations, the working environment, operations and critical projects and the Committee ensures that the workforce remuneration policy (including senior management and CEO) and its outcomes reflect the desired culture and ensure alignment with the values and behaviours of the organisation, as well as being fair and transparent. The Committee also ensures that the process for setting pay and establishing KPIs and performance outcomes across the workforce reflects the governance and outcomes for senior management and the CEO. The Committee ensures these principles and application are applied to the whole workforce including senior management and the CEO. In 2021 the Committee took into account the views of the workforce in adjusting KPI weightings in the Annual Bonus Plan and also oversaw the implementation of 'New Ways of Working' for employees, providing more flexibility and adaptability after extensive engagement with the workforce. This policy applies to the CEO, senior management and employees.

Additionally, with its advisers, the Group reviewed market practice and considered the developing environment for talent and the needs of the business before making proposals to the Committee across a number of areas impacting the reward and talent proposition for employees. The proposals sought to continue to maximise value and increase the overall employee experience and ensure that the Group remains a world class employer attracting and retaining the best mining talent to succeed.

Consideration by the Directors of matters relating to Directors' remuneration

During the year the Committee reappointed Willis Towers Watson to provide advice to the Committee on remuneration issues. This reappointment was on the basis of the Committee's satisfaction of advice provided in previous years. The Committee is satisfied that the advice provided by Willis Towers Watson was objective and independent and that no conflict of interest arose in relation to these services. Willis Towers Watson's fees for this work were charged in accordance with time and materials and amounted to £73,915. Willis Towers Watson also provided advice and support during the year to management, primarily on general remuneration issues, benchmarking, best HR practices and ad hoc advice on topics such as equality and gender remuneration.

In determining that advice received was independent, the Committee took into account that Willis Towers Watson is an independent global professional services firm that is a signatory to, and adheres to, the Code of Conduct for Remuneration Consultants. This can be found at www.remunerationconsultantsgroup.com.

The Committee also received assistance from the Chairman, Jean-Paul Luksic, the CEO, Iván Arriagada, the then Vice President of Human Resources, Ana Maria Rabagliati and the Company Secretary, Julian Anderson, during 2021, none of whom participated in discussions relating to their own remuneration. Additionally, part of each Committee meeting is held without management present to ensure that individual views or areas of concern can be debated between Committee members.

The responsibilities of the Committee are defined by its Terms of Reference, which can be found on the Company's website.

Talent management and succession planning

Oversight of talent management and succession planning is an important part of the Committee's responsibilities and directly relate to the Group's ability to achieve long-term sustainable success. The talent review is carried out on an annual basis, in order to update succession planning for key positions, identify talent pools, define individual development plans and agree on recruitment needs.

During 2020 and 2021, a new methodology was to put into practice, looking for a more effective and simple exercise, to add focus to implementing a development mindset in the business. The purpose of this exercise is to continue to improve employees' overall experience and ensure that the Group remains a world class employer attracting and retaining the best talent to succeed.

/ Implementation of the Directors' and CEO's remuneration policy in 2022

Implementation of the CEO's Remuneration Policy in 2022

Base salary

Base salary from 1 January 2022 will be $795,214 and is not intended to change following the increases and adjustments made during 2021. The Chilean peso/US dollar exchange rate will continue to be monitored and may result in changes to pay during 2022 if the Committee considers this appropriate.

Benefits

Benefits will be provided in line with the remuneration policy and prior years.

Annual bonus for 2022

The operation of the bonus for 2022 will be in line with the Remuneration Policy. Bonus measures, weightings and targets have been updated for 2022 in response to a review of our strategic priorities for the forthcoming year. The approach to calculating the targets and outturns will reflect the 2021 bonus plan.

The performance targets which are not commercially sensitive are set out below. The remaining targets will be disclosed retrospectively.

Measure	Weighting %	Threshold (0% pay-out)	On-target (50% pay-out)	Maximum (100% pay-out)
Core business	**50%**			
EBITDA[1] – Mining division ($m)	12%	≤-10%	The Group's future metals price assumptions are commercially sensitive and therefore the target for EBITDA will not be disclosed in advance. The Company will disclose the 2022 target and outcome in the 2022 Annual Report.	≤+10%
Copper production (kt)[2]	22%	635	655.3-675.6	685.7
Cash costs before by-product credits ($/lb)[3]	13%	2.14	2.02	1.90
Corporate expenditure ($m)[4]	3%	128.5	122.4	116.3
Business development	**25%**			
Growth projects[5]	15%	Measured according to the schedule and budget as described in more detail in the footnotes.		
Exploration programmes[6]	5%			
Innovation and digital transformation projects[7]	5%			
Sustainability and organisational capabilities	**25%**			
Safety – Mining division[8]	5%	Measured according to the schedule and budget as described in more detail in the footnotes.		
People – Diversity and Inclusion Strategy[9]	5%			
Environmental performance[10]	10%			
Social performance[11]	5%			

1. The EBITDA targets will be adjusted for exchange rate changes, the impact of hedging arrangements, copper price fluctuations and the impact of any one-off bonuses paid on conclusion of labour negotiations during the year.
2. 100% basis, except for Zaldívar (50%).
3. The cash cost targets will be adjusted for exchange rate changes, key input price deviations above 20% and the impact of any one-off bonuses paid on conclusion of labour negotiations.
4. The figures for corporate expenditure will be adjusted for exchange rate changes and the difference between budgeted annual bonus payments and actual bonus payments made to employees for the year.
5. Progress of growth projects according to predefined milestones. Split between the Los Pelambres Expansion project desalinated water system (6%), the Los Pelambres Expansion project concentrator plant construction (4%) and the Centinela Second Concentrator project detailed engineering (5%).
6. Maximum and target are defined according to the progress of a planned exploration programme for one target previously discovered to have potential mineralisation and the consolidation of exploration ownership interests, including infill drilling campaigns and increasing the mineral resources inventory.
7. Split between KPIs for the implementation of Remote Operation Centres for Centinela and Los Pelambres (33.3%), Data Analytics Impact (measured as the cumulative US dollar annual savings of all implemented data analytics projects) (33.3%) and implementation of the New Ways of Working project (33.3%).
8. Performance against targets for reducing high potential accidents.
9. Performance against diversity and inclusion targets with the threshold at 17.4% female employees, target at 19.3% female employees and maximum at 20.2% female employees and results of an evaluation of the Group culture in relation to inclusion. A 15% negative trigger applies if the overall target of 1% of people with disabilities is not met.
10. Split between environmental commitments (4%) and the implementation of the Group's climate change roadmap (6%).
11. Performance against the planned execution of social initiatives, improvements in measured social programmes and the control of risks relating to social incidents performance within the budget across all operations.

LTIP

The operation of the LTIP for 2022 will be in line with the Remuneration Policy:

- Restricted Awards (30% of overall award) – vest one-third each year over a three-year period following grant.
- Performance Awards (70% of overall award) – awards subject to a three-year performance period with no holding period.

The Performance Awards measures, weightings and targets are set out in the table below:

Weighting	Objective	Measure
50%	Relative total shareholder return	Comparison against Global X Copper Miners ETF (CopX Index) with 0% vesting if the Company's performance is below the index during the three-year period, 33% vesting at equal performance index and 100% vesting at performance equal or greater than the index plus 5% during the three-year period to the 2024 financial year end.
25%	Mineral resources increase	Maximum is expected to be 87.5 million tonnes of contained copper, with target and threshold of 86.4 and 83.1 million tonnes of contained copper respectively as at 31 December 2024.
12.5%	Projects' performance	Maximum is achievable if the Concentrate Transportation System (30%) and Desalination Plant Expansion (40%) projects have an approved environmental impact assessment and are under construction, and Centinela's Second Concentrator project meets its respective budget and construction plans approved by the Board (30%).
12.5%	Environmental and social commitments	This KPI has two parts: 1. Social Management Plan (40%) Maximum is achievable for equal or greater than 85% compliance with the initiatives included in the Group's social management plan, including initiatives existing as at 31 March 2022 and added before 31 December 2024, on time and on budget; with target at 75% and threshold at 50%. The final score is calculated as the average score of all initiatives. 2. Climate change and environment (60%) Maximum is achievable for compliance with the Group's emissions budget according to the emissions reduction goal of 1 milliont CO_2e by 2024, 100% compliance with the climate change strategy roadmap and 100% compliance with the internal plan to address regulatory requirements.

Implementation of the Directors' Remuneration Policy in 2022

Chairman

Jean-Paul Luksic's total fee for 2022 is $1,015,000, (2021 – $1,012,000) comprising:

- $730,000 per annum for his services as Chairman of the Board;
- $25,000 per annum for his services as Chairman of the Nomination and Governance Committee; and
- $260,000 per annum for his services as Chairman of the Antofagasta Minerals board.

This fee level reflects his responsibility, experience and time commitment to the role.

Non-Executive Directors

There has been no change to Non-Executive Director base fees of $130,000 since 2012. Given the core role which Antofagasta Minerals plays in the management of the mining operations and projects, all Directors also serve as directors of Antofagasta Minerals. The annual fee payable to directors of Antofagasta Minerals remains $130,000 (as it has since 2012). Therefore, the combined base fees payable to Non-Executive Directors amount to $260,000 per annum. The Board periodically reviews both the structure and levels of fees paid to Non-Executive Directors and will continue to review these fees from time to time, in accordance with the Directors' Remuneration Policy.

Benefits that were reported for 2021 will continue to apply. Directors are not expected to receive any other remuneration in 2022.

The fees payable for Committee roles and the role of Senior Independent Director from January 2022 are set out below:

Additional Director fees payable from 1 January 2022

Role	Additional fees ($000)
Senior Independent Director	33
Audit and Risk Committee Chair	42
Audit and Risk Committee member	20
Nomination and Governance Committee Chair	25
Nomination and Governance Committee member	10
Projects Committee Chair	35
Projects Committee member	20
Remuneration and Talent Management Committee Chair	35
Remuneration and Talent Management Committee member	20
Sustainability and Stakeholder Management Committee Chair	35
Sustainability and Stakeholder Management Committee member	20

AGM voting history

	2021 Directors' and CEO Annual Report on Remuneration	2020 Remuneration Policy
Votes for	1,062,537,379	1,062,750,494
	97.27%	98.17%
Votes against	29,858,307	19,832,684
	2.73%	1.83%
Votes cast as a percentage of issued share capital	92.12%	91.29%
Votes withheld	2,885,387	16,811

I hope that this report demonstrates the importance that we place on the transparency of the decisions we make and how they are arrived at and I look forward to meeting shareholders at our AGM when I will be available to answer questions.

Francisca Castro
Chair of the Remuneration and Talent Management Committee

Directors' Report

Directors
Directors who have served during the year and summaries of current Directors' key skills and experience are set out in the Corporate Governance Report on pages 122-124.

Post-balance sheet events
In March 2022 the Company reached an agreement in principle with Barrick Gold and the Governments of Pakistan and Balochistan on a framework that provides for the reconstitution of the Reko Diq project, and a pathway for the Company to exit the project. If definitive agreements are executed and the conditions to closing are satisfied, a consortium comprising various Pakistani state-owned enterprises will acquire an interest in the project for consideration of approximately $900m to jointly develop the project with Barrick, and Antofagasta would exit. If all the conditions are satisfied during 2022, we would expect to receive the proceeds in 2023.

Financial risk management
Details of the Company's policies on financial risk management are set out in Note 25 to the financial statements.

Results and dividends
The consolidated profit before tax has increased from $1,413.1 million in 2020 to $3,477.1 million in 2021.

The Board has recommended a final dividend of 118.9 cents per ordinary share (2020 – 48.5 cents). An interim dividend of 23.6 cents was paid on 1 October 2021 (2020 interim dividend – 6.2 cents). This gives total dividends per share proposed in relation to 2021 of 142.5 cents (2020 – 54.7 cents) and a total dividend amount of 1,404.8 million (2020 – $539.3 million).

Preference shares carry the right to a fixed cumulative dividend of 5% per annum. The preference shares are classified within borrowings and preference dividends are included within finance costs. The total cost of dividends paid on preference shares and recognised as an expense in the income statement was $0.1 million (2020 – $0.1 million). Further information relating to dividends is set out in the Financial Review on page 99 and in Note 14 to the financial statements.

Political contributions
The Group did not make any political donations during the year ended 31 December 2021 (2020 – nil).

Auditor
The Company's auditor, PricewaterhouseCoopers LLP, has indicated its willingness to continue in office and a resolution seeking its reappointment will be proposed at the Annual General Meeting.

Disclosure of information to auditors
The Directors in office at the date of this report have each confirmed that:

- so far as they are aware, there is no relevant audit information of which the Group's auditor is unaware; and
- they have taken all the steps that they ought to have taken as Directors in order to make themselves aware of any relevant audit information and to establish that the Group's auditor is aware of that information.

Capital structure
Details of the authorised and issued ordinary share capital are shown in Note 30 to the financial statements. The Company has one class of ordinary shares, which carry no right to fixed income. Each ordinary share carries one vote at any general meeting of the Company.

Details of the preference share capital are shown in Note 23 to the financial statements. The preference shares are non-redeemable and are entitled to a fixed cumulative dividend of 5% per annum. Each preference share carries 100 votes on a poll at any general meeting of the Company.

When the preference shares were issued, they each carried one vote at any general meeting of the Company in parity with the ordinary shares in issue at that time. The number of ordinary shares in issue has increased since then through stock splits and bonus issues and the preference shares were not split at the same time as the ordinary shares. Therefore, in order to maintain proportionate voting rights attaching to the preference shares, the voting rights attaching to preference shares have increased to 100 votes on a poll at any general meeting of the Company.

There are no specific restrictions on the transfer of shares or on their voting rights beyond those standard provisions set out in the Company's Articles of Association and other provisions of applicable law and regulation (including, in particular, following a failure to provide the Company with information about interests in shares as required by the Companies Act 2006). The Company is not aware of any agreements between holders of the Company's shares that may result in restrictions on the transfer of securities or on voting rights.

With regard to the appointment and replacement of Directors, the Company is governed by, and has regard to, its Articles of Association, the UK Corporate Governance Code 2018, the Companies Act 2006 and related legislation. The Articles of Association may be amended by special resolution of the shareholders. There are no significant agreements in place that take effect, alter or terminate upon a change of control of the Company. There are no agreements in place between the Company and its Directors or employees that provide for compensation for loss of office or employment resulting from a change of control of the Company.

The percentages of the total nominal share capital of the Company represented by each class of share are:

Class	Number in issue	Nominal value per share	Percentage of capital
Ordinary shares of 5p each	985,856,695	5p	96.10%
Preference shares of £1.00 each	2,000,000	£1	3.90%

Authority to issue shares and authority to purchase own shares
At the 2021 AGM, held on 12 May 2021, authority was given to the Directors to allot unissued relevant securities in the Company up to a maximum amount equivalent to two-thirds of the ordinary shares in issue (of which one-third may only be offered by way of rights issue). This authority expires on the date of this year's AGM, scheduled to be held on 11 May 2022. No shares have been issued as at the date of this report or during the year. The Directors propose to seek renewal of this authority at this year's AGM.

A further special resolution passed at the 2021 AGM granted authority to the Directors to allot equity securities in the Company for cash up to an aggregate nominal amount of £2,464,641, without regard to the pre-emption provisions of the Companies Act 2006. This authority also expires on the date of this year's AGM and the Directors will seek to renew this authority by way of two separate resolutions, in line with the Investment Association's guidance and the Pre-Emption Group's Statement of Principles.

The Company was also authorised by a shareholders' resolution passed at the 2021 AGM to purchase up to 10% of its issued ordinary share capital. Any shares bought back may be held as treasury shares or, if not so held, must be cancelled immediately upon completion of the purchase, thereby reducing the amount of the Company's issued and authorised share capital. This authority will expire at this year's AGM and a resolution to renew the authority for a further year will be proposed. No shares were purchased by the Company during the year.

Directors' interests and indemnities

Details of Directors' contracts and letters of appointment, remuneration and emoluments and their interests in the shares of the Company as at 31 December 2021, are given in the Directors' Remuneration Report. No Director had any material interest in a contract of significance (other than a service contract – see page 152) with the Company or any subsidiary company during the year.

In accordance with the Company's Articles of Association and to the extent permitted by the laws of England and Wales, Directors are granted an indemnity from the Company in respect of liabilities personally incurred as a result of their office. The Company also maintained a Directors and Officers' liability insurance policy throughout the financial year. A new policy has been entered into for the current financial year.

Conflicts of interest

Each year, the Directors complete a form identifying interests that may constitute a conflict of interest, including, for example, directorships in other companies. Directors are also required to notify the Company during the year of any relevant changes in those positions or situations.

The Board, with assistance from the Nomination and Governance Committee, considers the potential and actual conflict situations and decides in relation to each situation the steps, if any, which need to be taken to manage it.

The authorisation process is not regarded as a substitute for managing an actual conflict of interest if one arises and the monitoring and, if appropriate, authorisation of actual and potential conflicts of interest is an ongoing process.

Substantial shareholdings

As at 31 December 2021, the following significant holdings of voting rights in the share capital of the Company had been disclosed to the Company under Disclosure and Transparency Rule 5:

Shareholder	Ordinary share capital %	Preference share capital %	Total share capital %
1. Metalinvest Establishment	50.72	94.12	58.04
2. Kupferberg Establishment	9.94	–	8.27
3. Aureberg Establishment	4.26	–	3.54

Metalinvest Establishment and Kupferberg Establishment are both controlled by the E. Abaroa Foundation ("Abaroa"), in which members of the Luksic family are interested. As explained in Note 37 to the financial statements, Metalinvest Establishment is the immediate Parent Company of the Group and the E. Abaroa Foundation is the Ultimate Parent Company. Aureberg Establishment is controlled by the Severe Studere Foundation that, in turn, is controlled by Jean-Paul Luksic, the Chairman of the Company.

No interests have been disclosed to the Company between 31 December 2021 and the date of this report.

Exploration and research and development

The Group's subsidiaries carry out exploration and research and development activities that are necessary to support and expand the Group's operations.

Going concern

The Directors, having made appropriate enquiries, have satisfied themselves that it is appropriate to adopt the going concern basis of accounting in preparing the financial statements, as detailed in Note 1 to the financial statements. Additionally, the Directors have considered the Company's longer-term viability, as described in their statement on page 30.

Business relationships with suppliers, customers and others

A statement of how the Directors have had regard to the need to foster the Company's business relationships with suppliers, customers and others and the effect of that regard, including on the principal decisions made by the Company during the year, are set out on pages 32-65 of the Strategic Report and pages 116-117 of the Corporate Governance Report.

Other statutory disclosures

The Corporate Governance Report on pages 102-160, the Statement of Directors' responsibilities on page 163 and Note 25 to the financial statements are incorporated into this Directors' Report by reference.

Other information can be found in the following sections of the Strategic Report:

	Location in Strategic Report
Future developments in the business of the Group	Pages 78-81
Viability statement	Page 30
Subsidiaries, associates and joint ventures	Pages 68-77
Employee engagement	Pages 42-43
Greenhouse gas emissions	Pages 49-50
Streamlined energy and carbon reporting	Pages 49-50

Disclosures required pursuant to Listing Rule 9.8.4R can be found on the following pages of the Annual Report:

	Location in Annual Report
Statement of interest capitalised by the Group (LR 9.8.4(1))	See Notes 10 and 16 to the financial statements.
Long-term Incentive Plan (LR 9.8.4(7))	See pages 144-160 and Note 4 to the financial statements.
Relationship agreement (LR 9.8.4(14))	Page 111

By order of the Board

Julian Anderson
Company Secretary

24 March 2022

Statement of Directors' responsibilities in respect of the financial statements

The Directors are responsible for preparing the Annual Report and Financial Statements 2021 in accordance with applicable law and regulation.

Company law requires the Directors to prepare financial statements for each financial year. Under that law the Directors have prepared the Group financial statements in accordance with UK-adopted international accounting standards and the parent company financial statements in accordance with United Kingdom Generally Accepted Accounting Practice (United Kingdom Accounting Standards, comprising FRS 101 "Reduced Disclosure Framework", and applicable law).

Under company law, Directors must not approve the financial statements unless they are satisfied that they give a true and fair view of the state of affairs of the Group and parent company and of the profit or loss of the Group for that period. In preparing the financial statements, the Directors are required to:

- select suitable accounting policies and then apply them consistently;
- state whether applicable UK-adopted international accounting standards have been followed for the Group financial statements and United Kingdom Accounting Standards, comprising FRS 101, have been followed for the parent company financial statements, subject to any material departures disclosed and explained in the financial statements;
- make judgements and accounting estimates that are reasonable and prudent; and
- prepare the financial statements on the going concern basis unless it is inappropriate to presume that the Group and parent company will continue in business.

The Directors are responsible for safeguarding the assets of the Group and parent company and hence for taking reasonable steps for the prevention and detection of fraud and other irregularities.

The Directors are also responsible for keeping adequate accounting records that are sufficient to show and explain the Group's and parent company's transactions and disclose with reasonable accuracy at any time the financial position of the Group and parent company and enable them to ensure that the financial statements and the Directors' Remuneration Report comply with the Companies Act 2006.

The Directors are responsible for the maintenance and integrity of the parent company's website. Legislation in the United Kingdom governing the preparation and dissemination of financial statements may differ from legislation in other jurisdictions.

Directors' confirmations

The Directors consider that the Annual Report and Financial Statements 2021 and accounts, taken as a whole, is fair, balanced and understandable and provides the information necessary for shareholders to assess the Group's and parent company's position and performance, business model and strategy.

Each of the Directors, whose names and functions are listed in the Corporate Governance Report confirm that, to the best of their knowledge:

- the Group financial statements, which have been prepared in accordance with UK-adopted international accounting standards, give a true and fair view of the assets, liabilities, financial position and profit of the Group;
- the parent company financial statements, which have been prepared in accordance with United Kingdom Accounting Standards, comprising FRS 101, give a true and fair view of the assets, liabilities and financial position of the parent company; and
- the Strategic Report includes a fair review of the development and performance of the business and the position of the Group and parent company, together with a description of the principal risks and uncertainties that it faces.

In the case of each director in office at the date the directors' report is approved:

- so far as the Director is aware, there is no relevant audit information of which the Group and parent company's auditors are unaware; and
- they have taken all the steps that they ought to have taken as a director in order to make themselves aware of any relevant audit information and to establish that the Group and parent company's auditors are aware of that information.

By order of the Board

Jean-Paul Luksic
Chairman

Tony Jensen
Senior Independent Director

24 March 2022

Supported by a strong copper price, our EBITDA increased by 77% to $4.8 billion, a record for the Group, with an EBITDA margin of 65%.

Our solid cash flow from operations allowed us to improve our already strong financial position, completely deleveraging our balance sheet to a net cash position of $540 million.

Based on this, our pay-out ratio for 2021 was 100%, a record total dividend of 142.5 cents per share.

/ Mauricio Ortiz
Chief Financial Officer

/ Financial Statements

FINANCIAL PERFORMANCE

Report on the audit of the financial statements

Opinion

In our opinion:

- Antofagasta plc's Group financial statements and Parent Company financial statements (the "financial statements") give a true and fair view of the state of the Group's and of the Parent Company's affairs as at 31 December 2021 and of the Group's profit and the Group's cash flows for the year then ended;
- the Group financial statements have been properly prepared in accordance with UK-adopted international accounting standards;
- the Parent Company financial statements have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice (United Kingdom Accounting Standards, comprising FRS 101 "Reduced Disclosure Framework", and applicable law); and
- the financial statements have been prepared in accordance with the requirements of the Companies Act 2006.

We have audited the financial statements, included within the Annual Report and Financial Statements 2021 (the "Annual Report"), which comprise: the consolidated and Parent Company balance sheets as at 31 December 2021; the consolidated income statement, the consolidated statement of comprehensive income, the consolidated cash flow statement, and the consolidated and Parent Company statements of changes in equity for the year then ended; and the notes to the financial statements, which include a description of the significant accounting policies.

Our opinion is consistent with our reporting to the Audit and Risk Committee.

Basis for opinion

We conducted our audit in accordance with International Standards on Auditing (UK) ("ISAs (UK)") and applicable law. Our responsibilities under ISAs (UK) are further described in the Auditors' responsibilities for the audit of the financial statements section of our report. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

Independence

We remained independent of the Group in accordance with the ethical requirements that are relevant to our audit of the financial statements in the UK, which includes the FRC's Ethical Standard, as applicable to listed public interest entities, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

To the best of our knowledge and belief, we declare that non-audit services prohibited by the FRC's Ethical Standard were not provided.

Other than those disclosed in note 8 to the Group financial statements, we have provided no non-audit services to the Parent Company or its controlled undertakings in the period under audit.

Our audit approach

Overview

Audit scope

- We identified two components (2020: two) as individually financially significant components, which required an audit of their complete financial information due to their financial significance to the Group, and a further three components (2020: three) where we concluded that a full scope audit of the component financial information was warranted.
- We also determined that specified procedures were necessary in respect of certain balances within the corporate segment and transport division to ensure that we had sufficient coverage from our audit work over each line of the Group's financial statements.
- Taken together, the components at which audit work was performed accounted for 98% of Group revenue.

Key audit matters

- Assessment of indicators of impairment and impairment reversal for property, plant and equipment and intangible assets, in particular in respect of the Antucoya cash generating unit and Twin Metals mining licences (Group) and investments in subsidiaries (Parent)

Materiality

- Overall Group materiality: $108 million (2020: $64 million) based on 5% of three year average profit before tax adjusted for one-off items.
- Overall Parent Company materiality: $26.5 million (2020: $22.0 million) based on 1% of total assets.
- Performance materiality: $81 million (2020: $48 million) (Group) and $19.875 million (2020: $16.5 million) (Parent Company).

The scope of our audit

As part of designing our audit, we determined materiality and assessed the risks of material misstatement in the financial statements.

In planning our work, including identifying areas of audit risk and determining an appropriate audit response, we were mindful of the increased focus on the impact of climate change risk on companies and their financial reporting, and also that the Group has identified climate change as a principal risk. As part of our audit, we made enquiries of management to understand its processes to assess the extent of the potential impact of climate change risks on the Group and its financial statements. This included consideration of the Group's Climate Change Strategy and specific targets to reduce Scope 1 and 2 emissions by 30% by 2025 relative to the 2020 baseline, to use electricity solely from renewable sources at its mining operations by the end of 2022, and, in the long term, to achieve carbon neutrality.

We considered the financial statement line items, including accounting estimates, that are most likely to be impacted by climate change risks and related commitments. Given that the material impact of climate change on the Group is likely, principally, to crystallise in the medium to long term, we concluded that the risk of material misstatement in the financial statements associated with climate change relates primarily to the valuation of property, plant and equipment and associated estimates of future cash flows. Our audit response to this aspect of climate change risk is included in the related key audit matter set out below.

Key audit matters

Key audit matters are those matters that, in the auditors' professional judgement, were of most significance in the audit of the financial statements of the current period and include the most significant assessed risks of material misstatement (whether or not due to fraud) identified by the auditors, including those which had the greatest effect on: the overall audit strategy; the allocation of resources in the audit; and directing the efforts of the engagement team. These matters, and any comments we make on the results of our procedures thereon, were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

This is not a complete list of all risks identified by our audit.

COVID-19 (Group and Parent Company), which was a key audit matter last year, is no longer included because the key audit matter was to address the response to the initial year impacted by COVID-19. We have addressed the continuing impact of COVID-19 on the financial statements but do not consider COVID-19 itself to constitute a key audit matter. Otherwise, the key audit matters below are consistent with last year.

Key audit matter	How our audit addressed the key audit matter
Assessment of indicators of impairment and impairment reversal for property, plant and equipment and intangible assets, in particular in respect of the Antucoya cash generating unit and Twin Metals mining licences (Group) and investments in subsidiaries (Parent) In accordance with IAS 36 'Impairment of Assets', the Directors are required to perform an impairment assessment of long-lived assets at any time an indicator of impairment exists. The Directors considered various external and internal factors, as set out in IAS 36 'Impairment of Assets', in assessing whether an indicator of impairment, or in respect of Antucoya, impairment reversal, existed as at 31 December 2021 in respect of the operating mine cash generating units ("CGUs"), such as short- and long-term forecast copper prices, the operational performance of these mines and estimates of movements in indicative value during the year based on the latest Life of Mine plans. This assessment included consideration of the impact of climate risks, including scenario analysis, as detailed in note 5 to the Group financial statements. The Directors concluded that no indicators of impairment or impairment reversal existed as at 31 December 2021 in respect of these CGUs and, therefore, no detailed impairment tests were performed. This assessment required judgement on the part of the Directors in determining whether an impairment trigger existed and was, therefore, considered a key audit matter. As a result of the strong copper price environment through the year and an associated increase in market consensus forecast pricing for copper, there is a heightened risk of potential impairment reversal at Antucoya, given the cumulative historical impairments of $716 million recorded in 2012 and 2016. Refer to note 5 to the Group financial statements and the Audit and Risk Committee's views set out on pages 135 and 136.	We assessed management's conclusion that there were no indicators of impairment or impairment reversal, other than for Twin Metals as discussed below, as at 31 December 2021. Our procedures included evaluating management's assessment, including its completeness by reference to both internal and external factors, including but not limited to the impact of COVID-19, operational performance in the year, macro-economic factors including forecast copper prices, foreign currency exchange rates and market interest rates, climate change, and expected future production profiles and capital expenditure as included in the latest Life of Mine plan for each operation. In addition, we evaluated management's quantitative impairment indicator assessments, and the process by which the indicative valuations were determined, including verifying the mathematical accuracy of the cash flow models and agreeing future capital and operating expenditure to the latest Board approved budgets and the latest approved Life of Mine plans. We assessed the reasonableness of the expected capital and operating expenses in light of their historical levels and recent operational performance, and considered the competence and objectivity of management's internal technical experts who prepared the Life of Mine plans. We evaluated the appropriateness of key market related assumptions in the indicative valuation models, including the copper prices, discount rates and foreign currency exchange rates, with the support of our valuation experts. We also performed sensitivity analysis around the key assumptions within the cash flow forecasts, using both lower long-term copper prices and a stronger Chilean peso. In addition, we assessed the impact of incorporating estimates of the potential future costs relating to climate change risks, based on the Task Force on Climate-related Financial Disclosures "TCFD" scenario analyses prepared by management during the year, into these quantitative impairment indicator assessments. In light of the above, we assessed the appropriateness of the related disclosures in note 5 to the Group financial statements, including the sensitivities provided. Overall, we identified no material issues in our work.

Key audit matter	How our audit addressed the key audit matter
During the year, the Directors identified an indicator of impairment of the intangible asset associated with the Twin Metals project. This asset was assessed for impairment indicators in accordance with the requirements of IFRS 6 'Exploration for and Evaluation of Mineral Resources', with a trigger identified due to the uncertainty associated with the project as a result of legal challenges and the cancellation of certain permits and leases. Based on the impairment assessment, an impairment has been recognised in the year for \$150.1 million in respect of the intangible asset. In addition, associated property, plant and equipment of \$27.5 million has also been impaired. Refer to note 4 to the Group financial statements and the Audit and Risk Committee's views set out on page 135. As at 31 December 2021, the Parent Company holds investments in subsidiaries amounting to \$529.1 million (2020: \$538.6 million), comprising shares and long-term funding balances that the Directors do not intend to demand repayment of in the foreseeable future. Judgement is required to assess whether impairment triggers exist and, where triggers are identified, to determine whether the recoverable amount is no lower than the investment carrying value. In assessing for impairment triggers, management considers whether the underlying net assets of the investment support the carrying amount, the nature of the underlying assets and whether other facts and circumstances, including impairments recorded in the Group financial statements, could also represent a trigger. For loan balances, the Directors considered whether the relevant subsidiary could repay the loans if they were demanded at the balance sheet date. Based on management's assessment, no impairment triggers in respect of the carrying value of investments in subsidiaries were identified at the balance sheet date, and nor was the recognition of an expected credit loss warranted. Refer to note C to the Parent Company's financial statements.	In respect of Twin Metals, we assessed the developments during 2021 and subsequent to the year end and determined that they should, taken collectively, be considered as an indicator of impairment as at 31 December 2021. In assessing management's determination of the recoverable amount of the associated assets, we read the most recent pre-feasibility study for the project (prepared in 2019) and met with management to understand how the various project permits impact the accessible resource base and potential mine plan, obtained legal letters from management's external counsel in respect of the likelihood of reinstatement of cancelled permits through the available legal pathways, and considered alternative valuations that might be determined by a market participant. We also assessed the appropriateness of the related disclosures in note 4 to the Group financial statements and considered the appropriateness of the presentation of the impairment charge as an exceptional item. Overall, we identified no material issues in our work. In respect of investments in subsidiaries in the Parent Company, we performed the following: • evaluated and challenged management's assessment and judgements in relation to the identification of impairment triggers, including ensuring that consideration had been given to the results of the Group's impairment assessment in respect of intangible assets and property, plant and equipment of the Twin Metals project; • independently performed an assessment of other potential internal and external impairment triggers, including considering the market capitalisation of the Group with reference to the carrying value of investments in subsidiaries in the Parent Company; and • evaluated the ability of the subsidiaries to repay loan balances. As a result of our work, we are satisfied that the carrying value of the Parent Company's investments in subsidiaries is appropriate as at 31 December 2021.

How we tailored the audit scope

We tailored the scope of our audit to ensure that we performed enough work to be able to give an opinion on the financial statements as a whole, taking into account the structure of the Group and the Parent Company, the accounting processes and controls, and the industry in which the Group operates.

The core mining business comprises four mining operations: Los Pelambres; Centinela; Antucoya and Zaldívar, a joint venture with Barrick Gold Corporation operated by the Group. These mines produce copper cathodes, copper concentrates and significant volumes of by-products.

In addition to mining, the Group has a transport division that provides rail and road cargo services in northern Chile, predominantly to mining customers, including to the Group's own operations.

All of the above operations are located in Chile. In addition, the Group has corporate head offices located in both Santiago, Chile (Antofagasta Minerals S.A.) and London, UK (Antofagasta plc). The Group also has exploration projects in various countries.

In establishing the overall approach to the Group audit, we determined the type of work that needed to be performed at each of the four mine sites and the corporate offices in Chile, by us, as the Group engagement team and by component auditors from PwC Chile operating under our instruction. Los Pelambres and Centinela were considered to be financially significant components of the Group, due to their contribution towards Group profit before tax, and so required audits of their complete financial information. Antucoya and Zaldívar, as well as the Parent Company Antofagasta plc, were also subject to an audit of their complete financial information. We also requested that component auditors perform specified procedures over the corporate head office in Chile, and specific line items of other entities within the Group (including the transport division) to ensure that we had sufficient coverage from our audit work over each line of the Group's financial statements. The Group engagement team also performed specified procedures in respect of the recoverability of the intangible asset associated with the Twin Metals' mining licences. For all other components, the Group team performed analytical review procedures.

Where work was performed by component auditors, we determined the level of involvement we needed to have in the audit work to be able to conclude whether sufficient appropriate audit evidence had been obtained as a basis for our opinion on the Group financial statements as a whole. As a result of Covid-19, we were unable to visit Chile for the 2021 audit. As such, our oversight procedures included the issuance of formal, written instructions to the component auditors setting out the work to be performed, regular communication throughout the audit cycle including regular component calls, review of certain component auditor workpapers and participation in audit clearance meetings. In most cases communication was performed through video conferencing.

Taken together, the components where we performed our audit work accounted for 98% of consolidated revenue, 97% of consolidated profit before tax and 94% of consolidated profit before tax adjusted for one-off items. This was before considering the contribution to our audit evidence from performing audit work at the Group level, including disaggregated analytical review procedures, which cover a significant portion of the Group's smaller and lower risk components that were not directly included in our Group audit scope.

The Parent Company financial statements are prepared in the corporate head office in Santiago, with oversight from the Group Financial Controller based in London, and are ultimately reviewed and approved by the Directors alongside the Group financial statements. The Parent Company financial statements were audited by the Group engagement team.

Materiality

The scope of our audit was influenced by our application of materiality. We set certain quantitative thresholds for materiality. These, together with qualitative considerations, helped us to determine the scope of our audit and the nature, timing and extent of our audit procedures on the individual financial statement line items and disclosures and in evaluating the effect of misstatements, both individually and in aggregate on the financial statements as a whole.

Based on our professional judgement, we determined materiality for the financial statements as a whole as follows:

	Financial statements - Group	Financial statements - Parent Company
Overall materiality	$108 million (2020: $64 million).	$26.5 million (2020: $22.0 million).
How we determined it	5% of three year average profit before tax adjusted for one-off items	1% of total assets
Rationale for benchmark applied	For overall Group materiality, we chose to use an underlying earnings measure as the benchmark because an underlying measure removes the impact of material items that do not recur from year to year or otherwise significantly affect the underlying trend of performance from continuing operations. The adoption of a multi-year average benchmark for materiality responds to longer term trends in commodity markets and reduces volatility in the measure year-on-year. Using our professional judgement, we determined materiality for this year at $108 million, which equates to 3.0% of the current year's profit before tax adjusted for one-off items.	For the Parent Company materiality, we determined our materiality based on total assets, which is more relevant than a performance-related measure as the Parent Company is an investment holding company for the Group.

For each component in the scope of our Group audit, we allocated a materiality that is less than our overall Group materiality. The range of materiality allocated across components was between $9 million and $90 million.

We use performance materiality to reduce to an appropriately low level the probability that the aggregate of uncorrected and undetected misstatements exceeds overall materiality. Specifically, we use performance materiality in determining the scope of our audit and the nature and extent of our testing of account balances, classes of transactions and disclosures, for example in determining sample sizes. Our performance materiality was 75% (2020: 75%) of overall materiality, amounting to $81 million (2020: $48 million) for the Group financial statements and $19.875 million (2020: $16.5 million) for the Parent Company financial statements.

In determining the performance materiality, we considered a number of factors - the history of misstatements, risk assessment and aggregation risk and the effectiveness of controls - and concluded that an amount at the upper end of our normal range was appropriate.

We agreed with the Audit and Risk Committee that we would report to them misstatements identified during our audit above $5.4 million (Group audit) (2020: $3.2 million) and $1.325 million (Parent Company audit) (2020: $1.1 million) as well as misstatements below those amounts that, in our view, warranted reporting for qualitative reasons.

Conclusions relating to going concern

Our evaluation of the Directors' assessment of the Group's and the Parent Company's ability to continue to adopt the going concern basis of accounting included:

- Obtaining and examining management's base case forecasts and downside scenarios, checking that the forecasts had been subject to board review and, in the case of the base case, approval;
- Considering the historical reliability of management forecasting by comparing budgeted results with actual performance;
- Assessing the future cash flows included in the base case to ensure that these were consistent with our understanding from work performed over other key accounting estimates in the financial statements such as the impairment indicator assessment;
- Performing our own sensitivity analysis to understand the impact of changes in cash flows and net debt on the resources available to the Group;
- Assessing the covenants applicable to the Group's borrowings and considering whether management's forecasts supported ongoing compliance with the covenants; and
- Reading management's paper to the Audit and Risk Committee in respect of going concern, and agreeing the forecasts set out in this paper to the underlying base case cash flow model.

Based on the work we have performed, we have not identified any material uncertainties relating to events or conditions that, individually or collectively, may cast significant doubt on the Group's and the Parent Company's ability to continue as a going concern for a period of at least twelve months from when the financial statements are authorised for issue.

In auditing the financial statements, we have concluded that the Directors' use of the going concern basis of accounting in the preparation of the financial statements is appropriate.

However, because not all future events or conditions can be predicted, this conclusion is not a guarantee as to the Group's and the Parent Company's ability to continue as a going concern.

In relation to the Directors' reporting on how they have applied the UK Corporate Governance Code, we have nothing material to add or draw attention to in relation to the Directors' statement in the financial statements about whether the Directors considered it appropriate to adopt the going concern basis of accounting.

Our responsibilities and the responsibilities of the Directors with respect to going concern are described in the relevant sections of this report.

Reporting on other information

The other information comprises all of the information in the Annual Report other than the financial statements and our auditors' report thereon. The Directors are responsible for the other information, which includes reporting based on the TCFD recommendations. Our opinion on the financial statements does not cover the other information and, accordingly, we do not express an audit opinion or, except to the extent otherwise explicitly stated in this report, any form of assurance thereon.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. If we identify an apparent material inconsistency or material misstatement, we are required to perform procedures to conclude whether there is a material misstatement of the financial statements or a material misstatement of the other information. If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report based on these responsibilities.

With respect to the Strategic report and Directors' Report, we also considered whether the disclosures required by the UK Companies Act 2006 have been included.

Based on our work undertaken in the course of the audit, the Companies Act 2006 requires us also to report certain opinions and matters as described below.

Strategic Report and Directors' Report

In our opinion, based on the work undertaken in the course of the audit, the information given in the Strategic Report and Directors' Report for the year ended 31 December 2021 is consistent with the financial statements and has been prepared in accordance with applicable legal requirements.

In light of the knowledge and understanding of the Group and Parent Company and their environment obtained in the course of the audit, we did not identify any material misstatements in the Strategic Report and Directors' Report.

Directors' Remuneration

In our opinion, the part of the Directors' and CEO remuneration report to be audited has been properly prepared in accordance with the Companies Act 2006.

Corporate governance statement

The Listing Rules require us to review the Directors' statements in relation to going concern, longer-term viability and that part of the corporate governance statement relating to the Parent Company's compliance with the provisions of the UK Corporate Governance Code specified for our review. Our additional responsibilities with respect to the corporate governance statement as other information are described in the Reporting on other information section of this report.

Based on the work undertaken as part of our audit, we have concluded that each of the following elements of the corporate governance statement is materially consistent with the financial statements and our knowledge obtained during the audit, and we have nothing material to add or draw attention to in relation to:

- The Directors' confirmation that they have carried out a robust assessment of the emerging and principal risks;
- The disclosures in the Annual Report that describe those principal risks, what procedures are in place to identify emerging risks and an explanation of how these are being managed or mitigated;
- The Directors' statement in the financial statements about whether they considered it appropriate to adopt the going concern basis of accounting in preparing them, and their identification of any material uncertainties to the Group's and Parent Company's ability to continue to do so over a period of at least twelve months from the date of approval of the financial statements;
- The Directors' explanation as to their assessment of the Group's and Parent Company's prospects, the period this assessment covers and why the period is appropriate; and
- The Directors' statement as to whether they have a reasonable expectation that the Parent Company will be able to continue in operation and meet its liabilities as they fall due over the period of its assessment, including any related disclosures drawing attention to any necessary qualifications or assumptions.

Our review of the Directors' statement regarding the longer-term viability of the Group was substantially less in scope than an audit and only consisted of making inquiries and considering the Directors' process supporting their statement; checking that the statement is in alignment with the relevant provisions of the UK Corporate Governance Code; and considering whether the statement is consistent with the financial statements and our knowledge and understanding of the Group and Parent Company and their environment obtained in the course of the audit.

In addition, based on the work undertaken as part of our audit, we have concluded that each of the following elements of the corporate governance statement is materially consistent with the financial statements and our knowledge obtained during the audit:

- The Directors' statement that they consider the Annual Report, taken as a whole, is fair, balanced and understandable, and provides the information necessary for the members to assess the Group's and Parent Company's position, performance, business model and strategy;
- The section of the Annual Report that describes the review of effectiveness of risk management and internal control systems; and
- The section of the Annual Report describing the work of the Audit and Risk Committee.

We have nothing to report in respect of our responsibility to report when the Directors' statement relating to the Parent Company's compliance with the Code does not properly disclose a departure from a relevant provision of the Code specified under the Listing Rules for review by the auditors.

Responsibilities for the financial statements and the audit

Responsibilities of the Directors for the financial statements

As explained more fully in the Statement of Directors' responsibilities in respect of the financial statements, the Directors are responsible for the preparation of the financial statements in accordance with the applicable framework and for being satisfied that they give a true and fair view. The Directors are also responsible for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Directors are responsible for assessing the Group's and the Parent Company's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the Directors either intend to liquidate the Group or the Parent Company or to cease operations, or have no realistic alternative but to do so.

Auditors' responsibilities for the audit of the financial statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditors' report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs (UK) will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these financial statements.

Irregularities, including fraud, are instances of non-compliance with laws and regulations. We design procedures in line with our responsibilities, outlined above, to detect material misstatements in respect of irregularities, including fraud. The extent to which our procedures are capable of detecting irregularities, including fraud, is detailed below.

Based on our understanding of the Group and industry, we identified that the principal risks of non-compliance with laws and regulations related to breaches of environmental regulations, health and safety regulations, and unethical and prohibited business practices, and we considered the extent to which non-compliance might have a material effect on the financial statements. We also considered those laws and regulations that have a direct impact on the financial statements such as the Companies Act 2006 and tax law in the jurisdictions in which the Group operates. We evaluated management's incentives and opportunities for fraudulent manipulation of the financial statements (including the risk of override of controls), and determined that the principal risks were related to the posting of inappropriate journal entries to increase revenue or reduce expenditure, and management bias in accounting estimates. The Group engagement team shared this risk assessment with the component auditors so that they could include appropriate audit procedures in response to such risks in their work. Audit procedures performed by the Group engagement team and/or component auditors included:

- Inquiries with management, including the Group's Vice President of Legal, regarding its consideration of known or suspected instances of non-compliance with laws and regulations;
- Obtaining legal letters from the Group's external legal advisers in respect of litigation and claims and other such matters, where considered necessary;
- Evaluation of management's controls designed to prevent and detect irregularities;
- Challenging assumptions and judgements made by management in respect of critical accounting judgements and significant accounting estimates; and
- Identifying and testing journal entries, in particular any journal entries posted with certain unusual account combinations.

There are inherent limitations in the audit procedures described above. We are less likely to become aware of instances of non-compliance with laws and regulations that are not closely related to events and transactions reflected in the financial statements. Also, the risk of not detecting a material misstatement due to fraud is higher than the risk of not detecting one resulting from error, as fraud may involve deliberate concealment by, for example, forgery or intentional misrepresentations, or through collusion.

Our audit testing might include testing complete populations of certain transactions and balances, possibly using data auditing techniques. However, it typically involves selecting a limited number of items for testing, rather than testing complete populations. We will often seek to target particular items for testing based on their size or risk characteristics. In other cases, we will use audit sampling to enable us to draw a conclusion about the population from which the sample is selected.

A further description of our responsibilities for the audit of the financial statements is located on the FRC's website at: www.frc.org.uk/auditorsresponsibilities. This description forms part of our auditors' report.

Use of this report

This report, including the opinions, has been prepared for and only for the Parent Company's members as a body in accordance with Chapter 3 of Part 16 of the Companies Act 2006 and for no other purpose. We do not, in giving these opinions, accept or assume responsibility for any other purpose or to any other person to whom this report is shown or into whose hands it may come save where expressly agreed by our prior consent in writing.

Other required reporting

Companies Act 2006 exception reporting

Under the Companies Act 2006 we are required to report to you if, in our opinion:

- we have not obtained all the information and explanations we require for our audit; or
- adequate accounting records have not been kept by the Parent Company, or returns adequate for our audit have not been received from branches not visited by us; or
- certain disclosures of Directors' remuneration specified by law are not made; or
- the Parent Company financial statements and the part of the Directors' and CEO remuneration report to be audited are not in agreement with the accounting records and returns.

We have no exceptions to report arising from this responsibility.

Appointment

Following the recommendation of the Audit and Risk Committee, we were appointed by the members on 20 May 2015 to audit the financial statements for the year ended 31 December 2015 and subsequent financial periods. The period of total uninterrupted engagement is seven years, covering the years ended 31 December 2015 to 31 December 2021.

Other matter

In due course, as required by the Financial Conduct Authority Disclosure Guidance and Transparency Rule 4.1.14R, these financial statements will form part of the ESEF-prepared annual financial report filed on the National Storage Mechanism of the Financial Conduct Authority in accordance with the ESEF Regulatory Technical Standard ('ESEF RTS'). This auditors' report provides no assurance over whether the annual financial report will be prepared using the single electronic format specified in the ESEF RTS.

Simon Morley (Senior Statutory Auditor)

for and on behalf of PricewaterhouseCoopers LLP
Chartered Accountants and Statutory Auditors
London

24 March 2022

Consolidated income statement

For the year ended 31 December 2021

	Note(s)	Excluding exceptional items 2021 $m	Exceptional Items 2021 $m	2021 $m	Excluding exceptional items 2020 $m	Exceptional Items 2020 $m	2020 $m
Group revenue	6,7	**7,470.1**	**–**	**7,470.1**	5,129.3	–	5,129.3
Total operating costs		**(3,891.1)**	**(177.6)**	**(4,068.7)**	(3,537.1)	–	(3,537.1)
Operating profit from subsidiaries	6,8	**3,579.0**	**(177.6)**	**3,401.4**	1,592.2	–	1,592.2
Net share of results from associates and joint ventures	6,18	**59.7**	**–**	**59.7**	5.1	–	5.1
Impairment of investment in associate	3	**–**	**–**	**–**	–	(80.8)	(80.8)
Total profit from operations, associates and joint ventures	8	**3,638.7**	**(177.6)**	**3,461.1**	1,597.3	(80.8)	1,516.5
Investment income		**5.0**	**–**	**5.0**	18.9	–	18.9
Interest expense		**(63.4)**	**–**	**(63.4)**	(77.1)	–	(77.1)
Other finance items		**74.4**	**–**	**74.4**	(45.2)	–	(45.2)
Net finance income /(expense)	10	**16.0**	**–**	**16.0**	(103.4)	–	(103.4)
Profit before tax	6	**3,654.7**	**(177.6)**	**3,477.1**	1,493.9	(80.8)	1,413.1
Income tax expense	11	**(1,332.9)**	**90.6**	**(1,242.3)**	(546.2)	19.7	(526.5)
Profit from continuing operations	6	**2,321.8**	**(87.0)**	**2,234.8**	947.7	(61.1)	886.6
Profit from discontinued operations	12	**–**	**–**	**–**	7.3	–	7.3
Profit for the year		**2,321.8**	**(87.0)**	**2,234.8**	955.0	(61.1)	893.9
Attributable to:							
Non-controlling interests	31	**917.4**	**27.2**	**944.6**	408.4	(20.9)	387.5
Owners of the parent	13	**1,404.4**	**(114.2)**	**1,290.2**	546.6	(40.2)	506.4

	Note(s)						US cents
Basic earnings per share	13						
From continuing operations		**142.5**	**(11.6)**	**130.9**	54.7	(4.1)	50.6
From discontinued operations		**–**	**–**	**–**	0.7	–	0.7
Total continuing and discontinued operations		**142.5**	**(11.6)**	**130.9**	55.4	(4.1)	51.3

/ Financial statements continued

Consolidated statement of comprehensive income

For the year ended 31 December 2021

	Note(s)	2021 $m	2020 $m
Profit for the year	6	**2,234.8**	893.9
Items that may be or were subsequently reclassified to profit or loss:			
Losses on cash flow hedges		**(90.9)**	(32.1)
Losses in fair value of cash flow hedges transferred to the income statement	25	**126.8**	3.4
Currency translation adjustment		**(1.6)**	0.9
Tax relating to these items		**(4.4)**	2.4
Total items that may be or were subsequently reclassified to profit or loss		**29.9**	(25.4)
Items that will not be subsequently reclassified to profit or loss:			
Actuarial gains on defined benefit plans	27	**3.1**	9.8
(Losses)/gains in fair value of equity investments	19	**(2.1)**	5.5
Tax relating to these items		**(2.5)**	(2.6)
Total items that will not be subsequently reclassified to profit or loss		**(1.5)**	12.7
Total other comprehensive income/(expense)		**28.4**	(12.7)
Total comprehensive income for the year		**2,263.2**	881.2
Attributable to:			
Non-controlling interests	31	**952.8**	383.2
Equity holders of the Company		**1,310.4**	498.0

	2021 $m	2020 $m
Total comprehensive income for the year – continuing operations	**2,263.2**	873.9
Total comprehensive income for the year – discontinued operations	**–**	7.3
	2,263.2	881.2

Consolidated statement of changes in equity

For the year ended 31 December 2021

	Share capital $m	Share premium $m	Other reserves (Note 30) $m	Retained earnings (Note 30) $m	**Equity attributable to equity owners of the parent $m**	Non-controlling interests $m	**Total equity $m**
At 1 January 2020	89.8	199.2	(18.1)	7,112.8	**7,383.7**	2,017.3	**9,401.0**
Capital increases from non-controlling interest (Note 23)[1]	–	–	–	–	**–**	210.0	**210.0**
Profit for the year	–	–	–	506.4	**506.4**	387.5	**893.9**
Other comprehensive (expense)/income for the year	–	–	(12.5)	4.1	**(8.4)**	(4.3)	**(12.7)**
Dividends	–	–	–	(131.1)	**(131.1)**	(280.0)	**(411.1)**
At 31 December 2020	**89.8**	**199.2**	**(30.6)**	**7,492.2**	**7,750.6**	**2,330.5**	**10,081.1**
Profit for the year	–	–	–	1,290.2	**1,290.2**	944.6	**2,234.8**
Other comprehensive income for the year	–	–	20.2	–	**20.2**	8.2	**28.4**
Dividends	–	–	–	(710.8)	**(710.8)**	(604.5)	**(1,315.3)**
At 31 December 2021	**89.8**	**199.2**	**(10.4)**	**8,071.6**	**8,350.2**	**2,678.8**	**11,029.0**

1. In 2020, a capital contribution of $210 million was received from Marubeni, the minority partner at Antucoya, in order to replace part of Antucoya's subordinated debt financing with equity.

Consolidated balance sheet

As at 31 December 2021

	Note(s)	2021 $m	2020 $m
Non-current assets			
Intangible assets	15	–	150.1
Property, plant and equipment	16	**10,538.5**	9,851.9
Other non-current assets		**1.3**	2.6
Inventories	20	**270.4**	278.1
Investment in associates and joint ventures	18	**905.8**	914.6
Trade and other receivables	21	**51.2**	55.9
Derivative financial instruments	25	–	0.3
Equity investments	19	**8.7**	11.1
Deferred tax assets	28	**96.8**	6.4
		11,872.7	11,271.0
Current assets			
Inventories	20	**532.8**	592.7
Trade and other receivables	21	**1,146.1**	1,016.9
Current tax assets		**13.7**	49.8
Derivative financial instruments	25	–	1.1
Liquid investments	22	**2,969.7**	2,426.0
Cash and cash equivalents	22	**743.4**	1,246.8
		5,405.7	5,333.3
Total assets		**17,278.4**	16,604.3
Current liabilities			
Short-term borrowings	23	**(337.1)**	(603.4)
Derivative financial instruments	25	–	(37.4)
Trade and other payables	24	**(829.1)**	(808.8)
Short-term decommissioning and restoration provisions	29	**(33.8)**	(22.2)
Current tax liabilities		**(374.2)**	(153.9)
		(1,574.2)	(1,625.7)
Non-current liabilities			
Medium and long-term borrowings	23	**(2,835.5)**	(3,151.4)
Trade and other payables	24	**(16.8)**	(11.0)
Liabilities in relation to joint ventures	18	**(0.6)**	(1.1)
Post-employment benefit obligations	27	**(107.5)**	(123.2)
Decommissioning and restoration provisions	29	**(302.3)**	(498.0)
Deferred tax liabilities	28	**(1,412.5)**	(1,112.8)
		(4,675.2)	(4,897.5)
Total liabilities		**(6,249.4)**	(6,523.2)
Net assets		**11,029.0**	10,081.1
Equity			
Share capital	30	**89.8**	89.8
Share premium	30	**199.2**	199.2
Other reserves	30	**(10.4)**	(30.6)
Retained earnings	30	**8,071.6**	7,492.2
Equity attributable to equity owners of the parent		**8,350.2**	7,750.6
Non-controlling interests	31	**2,678.8**	2,330.5
Total equity		**11,029.0**	10,081.1

The financial statements on pages 173 to 224 were approved by the Board of Directors on 24 March 2022 and signed on its behalf by

Jean-Paul Luksic
Chairman

Tony Jensen
Senior Independent Director

Consolidated cash flow statement

For the year ended 31 December 2021

	Note(s)	2021 $m	2020 $m
Cash flow from continuing operations	32	**4,507.7**	2,431.1
Interest paid		**(60.7)**	(52.7)
Income tax paid		**(776.9)**	(319.7)
Net cash from operating activities		**3,670.1**	2,058.7
Investing activities			
Capital contributions to joint ventures	18	**(33.5)**	(7.2)
Dividends from associates	18	**142.5**	–
Acquisition of mining properties		**(4.5)**	(1.5)
Proceeds from sale of property, plant and equipment		**1.5**	0.8
Purchases of property, plant and equipment		**(1,773.0)**	(1,305.9)
Net increase in liquid investments	22	**(543.7)**	(886.3)
Interest received		**7.4**	12.6
Net cash used in investing activities		**(2,203.3)**	(2,187.5)
Financing activities			
Dividends paid to equity holders of the Company	14	**(710.8)**	(131.1)
Dividends paid to preference shareholders of the Company	14	**(0.1)**	(0.1)
Dividends paid to non-controlling interests	31	**(604.5)**	(280.0)
Capital increase from non-controlling interest [1]		**–**	210.0
Proceeds from issue of new borrowings	32	**149.1**	2,398.6
Repayments of borrowings	32	**(694.7)**	(1,393.8)
Principal elements of lease payments	32	**(88.9)**	(86.5)
Net cash (used in)/generated from financing activities		**(1,949.9)**	717.1
Net (decrease)/increase in cash and cash equivalents		**(483.1)**	588.3
Cash and cash equivalents at beginning of the year		**1,246.8**	653.7
Net (decrease)/increase in cash and cash equivalents	32	**(483.1)**	588.3
Effect of foreign exchange rate changes	32	**(20.3)**	4.8
Cash and cash equivalents at end of the year	22,32	**743.4**	1,246.8

1. In 2020, a capital contribution of $210 million was received from Marubeni, the minority partner at Antucoya, in order to replace part of Antucoya's subordinated debt financing with equity.

Notes to the financial statements

1 Basis of preparation

The financial statements have been prepared in accordance with UK-adopted International Accounting Standards. The financial statements have been prepared on the going concern basis.

On 31 December 2020, IFRS as adopted by the European Union at that date was brought into UK law and became UK-adopted International Accounting Standards, with future changes being subject to endorsement by the UK Endorsement Board. Antofagasta plc transitioned to UK-adopted International Accounting Standards in its financial statements on 1 January 2021. This change constitutes a change in accounting framework. However, there is no impact on recognition, measurement or disclosure in the period reported as a result of the change in framework.

Going concern

The Directors have assessed the going concern status of the Group, considering the period to 31 December 2023.

The Group's business activities, together with those factors likely to affect its future performance, are set out in the Strategic Report, and in particular within the Operating Review. Details of the cash flows of the Group during the period, along with its financial position at the period-end, are set out in the Financial Review. The consolidated financial statements include details of the Group's cash, cash equivalents and liquid investment balances in Note 22, and details of borrowings are set out in Note 23.

When assessing the going concern status of the Group, the Directors have considered in particular its financial position, including its significant balance of cash, cash equivalents and liquid investments and the terms and remaining durations of the borrowing facilities in place. The Group had a strong financial position as at 31 December 2021, with combined cash, cash equivalents and liquid investments of $3,713.1 million. Total borrowings were $3,172.6 million, resulting in a net cash position of $540.5 million. Of the total borrowings, only 11% is repayable within one year, and 13% repayable between one and two years.

When assessing the prospects of the Group, the Directors have considered the Group's copper price forecasts, the Group's expected production levels, operating cost profile and capital expenditure. These forecasts are based on the Group's budgets and Life-of-Mine models, which are also used when assessing relevant accounting estimates. This analysis has focused on the existing asset base of the Group, without factoring in potential development projects, which is considered appropriate for an assessment of the Group's ability to manage the impact of a depressed economic environment. The analysis has only included the draw-down of existing committed borrowing facilities, and has not assumed that any new borrowing facilities will be put in place. The Directors have assessed the key risks which could impact the prospects of the Group over the going concern period and consider the most relevant to be risks to the copper price outlook, as this is the factor most likely to result in significant volatility in earnings and cash generation. Robust down-side sensitivity analyses have been performed, assessing the impact of:

- A significant deterioration in the future copper price forecasts by 10% throughout the going concern period.
- In addition to the above deterioration in the copper price throughout the review period, an even more pronounced short-term reduction of 15% in the copper price for a period of three months.
- The Group's most significant individual operational risks. In respect of the El Mauro tailings storage facility at Los Pelambres, the risk of a major failure is considered to be extremely low, principally because of the nature of the design and construction, as well as the rigorous ongoing monitoring and controls and its performance since it was built. Given this, it has not been considered appropriate to include a scenario incorporating the possible impact of a potential major dam failure within the sensitivity analyses.
- A shut-down of the Group's operations for a period of three months as the result of COVID-19 or other issues.
- The proposed new Chilean mining royalty, taking into account the Group's existing tax stability agreements.

These stress-tests each indicated results which could be managed in the normal course of business. The analysis indicated that the Group is expected to remain in compliance with all of the covenant requirements of its borrowings throughout the review period and retain sufficient liquidity. Based on their assessment of the Group's prospects and viability, the Directors have formed a judgement, at the time of approving the financial statements, that there are no material uncertainties that the Directors are aware of that cast doubt on the Group's going concern status and that there is a reasonable expectation that the Group has adequate resources to continue in operational existence for the period to 31 December 2023. The Directors therefore consider it appropriate to adopt the going concern basis of accounting in preparing its financial statements.

Company structure

Antofagasta plc is a company limited by shares, incorporated and domiciled in the United Kingdom at 103 Mount Street, London W1K 2TJ. The immediate parent of the Group is Metalinvest Establishment, which is controlled by the E. Abaroa Foundation, in which members of the Luksic family are interested.

The nature of the Group's operations is mining and exploration activities and the transport of rail and road cargo.

A) Adoption of new accounting standards

The following accounting standards, amendments and interpretations became effective in the current reporting period:

- Interest Rate Benchmark Reform – Phase 2 (Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16)

The application of these standards and interpretations effective for the first time in the current year has had no significant impact on the amounts reported in these financial statements.

B) Accounting standards issued but not yet effective

At the date of authorisation of these financial statements, the following standards and interpretations, which have not been applied in these financial statements, were in issue but not yet effective:

- IFRS 17, Insurance Contracts
- Deferred Tax related to Assets and Liabilities arising from a Single Transaction (Amendments to IAS 12)
- Classification of Liabilities as Current or Non-Current (Amendments to IAS 1)
- Disclosure of Accounting Policies – Amendments to IAS 1 and IFRS Practice Statement 2
- Definition of Accounting Estimates – Amendments to IAS 8
- Reference to the Conceptual Framework (Amendments to IFRS 3)
- Property, Plant and Equipment – Proceeds before Intended Use (Amendments to IAS 16)

1 Basis of preparation continued

- Onerous Contracts – Cost of Fulfilling a Contract (Amendments to IAS 37)
- Annual Improvements to IFRS Standards 2018-2020 (Amendments to IFRS 1, IFRS 9, IFRS 16 and IAS 41)

The item which is expected to have most relevance to the Group is the amendment to IAS 16 Property, Plant and Equipment – Proceeds before intended use. Currently the Group deducts amounts received from the sale of products during the initial ramp-up of new projects, before commercial production is achieved, from the capital cost of the project. Under the amendment to IAS 16, such amounts will instead be recognised as revenue in the income statement along with a corresponding allocation of related operating expenses, which is likely to result in increased revenue and operating expenses and a higher initial capitalised amount. The amendment will be applicable in the year beginning on 1 January 2022. The amendment would apply retrospectively only to relevant projects in progress at 1 January 2021 which were generating proceeds, and there were no such projects at 1 January 2021.

2 Principal accounting policies

A) Accounting convention

These financial statements have been prepared under the historical cost convention as modified by the use of fair values to measure certain financial instruments, principally provisionally priced sales as explained in Note 2(F) and financial derivative contracts as explained in Note 2(W).

B) Basis of consolidation

The financial statements comprise the consolidated financial statements of Antofagasta plc ("the Company" or "the Parent" or "the Parent Company") and its subsidiaries (collectively "the Group").

Subsidiaries – A subsidiary is an entity over which the Group has control, which is the case when the Group is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. The consolidated financial statements include all the assets, liabilities, revenues, expenses and cash flows of the Company and its subsidiaries after eliminating inter-company balances and transactions. For partly-owned subsidiaries, the net assets and profit attributable to non-controlling shareholders are presented as "Non-controlling interests" in the consolidated balance sheet and consolidated income statement.

Non-controlling interests that are present ownership interests and entitle their holders to a proportionate share of the entity's net assets in the event of liquidation may be initially measured either at fair value or at the non-controlling interests' proportionate share of the recognised amounts of the acquiree's identifiable net assets. The choice of measurement basis is made on an acquisition-by-acquisition basis. Other types of non-controlling interests are measured at fair value or, when applicable, on the basis specified in another IFRS. Subsequent to acquisition, the carrying amount of non-controlling interests is the amount of those interests at initial recognition plus the non-controlling interests' share of subsequent changes in equity. Total comprehensive income is attributed to non-controlling interests even if this results in the non-controlling interests having a deficit balance.

Changes in the Group's ownership interests in subsidiaries that do not result in the Group losing control over the subsidiaries are accounted for as equity transactions. The carrying amounts of the Group's interests and the non-controlling interests are adjusted to reflect the changes in their relative interests in the subsidiaries. Any difference between the amount by which the non-controlling interests are adjusted and the fair value of the consideration paid or received is recognised directly in equity and attributed to owners of the Company.

When the Group loses control of a subsidiary, a gain or loss is recognised in profit or loss and is calculated as the difference between (i) the aggregate of the fair value of the consideration received and the fair value of any retained interest and (ii) the previous carrying amount of the assets (including goodwill), and liabilities of the subsidiary and any non-controlling interests. When assets of the subsidiary are carried at revalued amounts or fair values and the related cumulative gain or loss has been recognised in other comprehensive income and accumulated in equity, the amounts previously recognised in other comprehensive income and accumulated in equity are accounted for as if the Group had directly disposed of the relevant assets (ie reclassified to profit or loss or transferred directly to retained earnings as specified by applicable IFRSs). The fair value of any investment retained in the former subsidiary at the date when control is lost is regarded as the fair value on initial recognition for subsequent accounting under IFRS 9 Financial Instruments: Recognition and Measurement or, when applicable, the cost on initial recognition of an investment in an associate or a joint venture.

Acquisitions and disposals are treated as explained in Note 2(G) relating to business combinations and goodwill.

C) Investments in associates

An associate is an entity over which the Group is in a position to exercise significant influence, but not control or joint control, through the power to participate in the financial and operating policy decisions of that entity. The results and assets and liabilities of associates are incorporated in these consolidated financial statements using the equity method of accounting. This requires recording the investment initially at cost to the Group and then, in subsequent periods, adjusting the carrying amount of the investment to reflect the Group's share of the associate's results less any impairment and any other changes to the associate's net assets such as dividends. When the Group loses control of a former subsidiary but retains an investment in associate in that entity, the initial carrying value of the investment in associate is recorded at its fair value at that point. When the Group's share of losses of an associate exceeds the Group's interest in that associate, the Group discontinues recognising its share of further losses. Additional losses are recognised only to the extent that the Group has incurred legal or constructive obligations or made payments on behalf of the associate.

D) Joint arrangements

A joint arrangement is an arrangement in which two or more parties have joint control. Joint arrangements are accounted depending on the nature of the arrangement.

i) **Joint ventures** – are accounted for using the equity method in accordance with IAS 28 Investment in Associates and Joint Ventures as described in Note 18.

ii) **Joint operations** – are accounted for recognising directly the assets, obligations, revenues and expenses of the joint operator in the joint arrangement. The assets, liabilities, revenues and expenses are accounted for in accordance with the relevant IFRS.

When a Group entity transacts with its joint arrangements, profits and losses resulting from the transactions with the joint arrangements are recognised in the Group's consolidated financial statements only to the extent of interests in the joint arrangements that are not related to the Group.

E) Currency translation

The functional currency for each entity in the Group is determined as the currency of the primary economic environment in which it operates. Transactions in currencies other than the functional currency of the entity are translated at the exchange rate ruling at the date of the transaction. Monetary assets and liabilities denominated in currencies other than the functional currency are retranslated at year end exchange rates. Gains and losses on retranslation are included in net profit or loss for the period within other finance items.

The presentational currency of the Group and the functional currency of the Company is the US dollar. On consolidation, income statement items for entities with a functional currency other than the US dollar are translated into US dollars at average rates of exchange. Balance sheet items are translated at period-end exchange rates. Exchange differences on translation of the net assets of such entities are taken to equity and recorded in a separate currency translation reserve. Cumulative translation differences arising after the transition date to IFRS are recognised as income or as expenses in the income statement in the period in which an operation is disposed of.

On consolidation, exchange gains and losses which arise on balances between Group entities are taken to reserves where that balance is, in substance, part of the net investment in a foreign operation, ie where settlement is neither planned nor likely to occur in the foreseeable future. All other exchange gains and losses on Group balances are recognised in the income statement within other finance items.

Fair value adjustments and any goodwill arising on the acquisition of a foreign entity are treated as assets of the foreign entity and translated at the period-end rate.

F) Revenue recognition and other income

Revenue represents the value of goods and services supplied to third parties during the year. Revenue is measured at the fair value of consideration received or receivable, and excludes any applicable sales tax.

Revenue is recognised when the Group satisfies a performance obligation by transferring a promised good or service (ie an asset) to a customer. An asset is transferred when (or as) the customer obtains control of that asset.

For the Group's mining products, the customer generally gains control over the material when it has been loaded at the port of loading, and so this is the point of revenue recognition. The Group sells a significant proportion of its products on Cost, Insurance & Freight (CIF) Incoterms, which means that the Group is responsible for shipping the product to a destination port specified by the customer. The shipping service represents a separate performance obligation, and revenue in relation to such services is recognised separately from the sale of the material over time as the shipping service is provided, along with the associated costs. Shipment revenue is recognised at the contracted price to the Group as this reflects the standalone selling price.

Revenue from mining activities is recorded at the invoiced amounts with an adjustment for provisional pricing at each reporting date, as explained below. For copper and molybdenum concentrates, which are sold to smelters and roasting plants for further processing into fully refined metal, the price of the concentrate invoiced to the customer reflects the market value of the fully refined metal less a "treatment charge" deduction, to reflect the lower value of this partially processed material compared with the fully refined metal. Revenue includes amounts from the sale of by-products such as gold and silver.

Copper and molybdenum concentrate sale agreements and copper cathode sale agreements generally provide for provisional pricing of sales at the time of shipment, with final pricing based on the monthly average London Metal Exchange ("LME") copper price or the monthly average market molybdenum price for specified future periods. This normally ranges from one to four months after delivery to the customer. For sales contracts which contain provisional pricing mechanisms, the initial invoice typically reflects the month-average market price for the metal in the month of shipment, with the associated receivable balance subsequently measured at fair value through profit or loss. Gains and losses from the marking-to market of the receivable balance in relation to open sales are recognised through adjustments to other income presented within revenue in the income statement and to trade receivables in the balance sheet. The fair value calculations are based on forward prices at the period end for copper concentrate and cathode sales, and period-end average prices for molybdenum concentrate sales due to the absence of a futures market for this product.

For the Transport division, revenue in respect of its transportation and ancillary services are recognised over time in line with the performance of those services.

Interest income

Interest income is accrued on a time basis, by reference to the principal outstanding and the effective interest rate applicable, which is the rate that exactly discounts estimated future cash receipts through the expected life of the financial asset to that asset's net carrying amount.

Dividend income

Dividend income from equity investments, associates and joint ventures is recognised when the shareholders' right to receive payment has been established. For associates and joint ventures, it is recorded as a decrease of the investment.

G) Business combinations and goodwill

Acquisitions of businesses are accounted for using the acquisition method. The consideration transferred in a business combination is measured at fair value, which is calculated as the sum of the acquisition-date fair values of the assets transferred by the Group, liabilities incurred by the Group to the former owners of the acquiree and the equity interests issued by the Group in exchange for control of the acquiree. The results of businesses acquired during the year are brought into the consolidated financial statements from the effective date of acquisition. The identifiable assets, liabilities and contingent liabilities of a business, which can be measured reliably, are recorded at their provisional fair values at the date of acquisition. Provisional fair values are finalised within 12 months of the acquisition date. Acquisition-related costs are expensed as incurred.

When the consideration transferred by the Group in a business combination includes assets or liabilities resulting from a contingent consideration arrangement, the contingent consideration is measured at its acquisition-date fair value and included as part of the consideration transferred in a business combination. Changes in the fair value of the contingent consideration that qualify as measurement period adjustments are adjusted retrospectively, with corresponding adjustments against goodwill. Measurement period adjustments are adjustments that arise from additional information obtained during the "measurement period" (which cannot exceed one year from the acquisition date) about facts and circumstances that existed at the acquisition date.

2 Principal accounting policies continued

The subsequent accounting for changes in the fair value of the contingent consideration that do not qualify as "measurement period" adjustments depends on how the contingent consideration is classified. Contingent consideration that is classified as equity is not remeasured at subsequent reporting dates and its subsequent settlement is accounted for within equity. Contingent consideration that is classified as an asset or a liability is remeasured at subsequent reporting dates in accordance with IFRS 9.

When a business combination is achieved in stages, the Group's previously held equity interest in the acquiree is remeasured to fair value at the acquisition date (ie the date when the Group obtains control) and the resulting gain or loss, if any, is recognised in profit or loss. Amounts arising from interests in the acquiree prior to the acquisition date that have previously been recognised in other comprehensive income are reclassified to profit or loss where such treatment would be appropriate if that interest were disposed of.

If the initial accounting for a business combination is incomplete by the end of the reporting period in which the combination occurs, the Group reports provisional amounts for the items for which the accounting is incomplete. Those provisional amounts are adjusted during the measurement period (see above), or additional assets or liabilities are recognised, to reflect new information obtained about facts and circumstances which existed at the acquisition date that, if known, would have affected the amounts recognised at that date.

Goodwill arising in a business combination is measured as the excess of the sum of the consideration transferred, the amount of any non-controlling interest in the acquiree and the fair value of the acquirer's previously held equity interest in the acquiree (if any) over the net identifiable assets acquired and liabilities assumed. Any goodwill on the acquisition of subsidiaries is separately disclosed, while any goodwill on the acquisition of associates and joint ventures is included within investments in equity accounted entities. Internally generated goodwill is not recognised. Where the fair values of the identifiable net assets acquired exceed the sum of the consideration transferred, the surplus is credited to the profit or loss in the period of acquisition as a bargain purchase gain.

The Group sometimes enters into earn-in arrangements whereby the Group acquires an interest in a project company in exchange for funding exploration and evaluation expenditure up to a specified level of expenditure or a specified stage in the life of the project. Funding is usually conditional on the achievement of key milestones by the partner. Typically there is no consideration transferred or funding liability on the effective date of acquisition of the interest in the project company and no goodwill is recognised on this type of transaction.

The results of businesses sold during the year are included in the consolidated financial statements for the period up to the effective date of disposal. Gains or losses on disposal are calculated as the difference between the sales´ proceeds (net of expenses) and the net assets attributable to the interest which has been sold. Where a disposal represents a separate major line of business or geographical area of operations, the net results attributable to the disposed entity are shown separately in the income statement as a discontinued operation.

H) Exploration and evaluation expenditure

Exploration and evaluation costs, other than those incurred in acquiring exploration licences, are expensed in the year in which they are incurred. When a mining project is considered to be commercially viable (normally when the project has completed a pre-feasibility study, and the start of a feasibility study has been approved) all further directly attributable pre-production expenditure is capitalised. Capitalisation of pre-production expenditure ceases when commercial levels of production are achieved.

Costs incurred in acquiring exploration and mining licences are classified as intangible assets when construction of the related mining operation has not yet commenced. When construction commences the licences are transferred from intangible assets to the mining properties category within property, plant and equipment.

I) Stripping costs

Pre-stripping and operating stripping costs are incurred in the course of the development and operation of open-pit mining operations.

Pre-stripping costs relate to the removal of waste material as part of the initial development of an open-pit, in order to allow access to the ore body. The capitalised costs are depreciated once production commences on a unit of production basis, in proportion to the volume of ore extracted in the year compared with total proven and probable reserves for that pit at the beginning of the year.

Operating stripping costs relate to the costs of extracting waste material as part of the ongoing mining process. The ongoing mining and development of the Group's open-pit mines is generally performed via a succession of individual phases. The costs of extracting material from an open-pit mine are generally allocated between ore and waste stripping in proportion to the tonnes of material extracted. The waste stripping costs are generally absorbed into inventory and expensed as that inventory is processed and sold. Where the stripping costs relate to a significant stripping campaign which is expected to provide improved access to an identifiable component of the ore body (typically an individual phase within the overall mine plan), the costs of removing waste in order to improve access to that part of the ore body will be capitalised within property, plant and equipment. The capitalised costs will then be amortised on a unit of production basis, in proportion to the volume of ore extracted compared with the total ore contained in the component of the pit to which the stripping campaign relates.

J) Intangible assets

Exploration and mining licences are classified as intangible assets when construction of the related mining operation has not yet commenced. When construction commences, the licences are transferred from intangible assets to the mining properties category within property, plant and equipment.

K) Property, plant and equipment

The costs of mining properties and leases, which include the costs of acquiring and developing mining properties and mineral rights, are capitalised as property, plant and equipment in the year in which they are incurred, when a mining project is considered to be commercially viable (normally when the project has completed a pre-feasibility study, and the start of a feasibility study has been approved). The cost of property, plant and equipment comprises the purchase price and any costs directly attributable to bringing the asset to the location and condition necessary for it to be capable of operating in the manner intended. Once a project has been established as commercially viable, related development expenditure is capitalised. This includes costs incurred in preparing the site for mining operations, including pre-stripping costs. Capitalisation ceases when the mine is capable of commercial production, with the exception of development costs which give rise to a future benefit.

Interest on borrowings related to construction or development of projects is capitalised, until such time as the assets are substantially ready for their intended use or sale which, in the case of mining properties, is when they are capable of commercial production.

L) Depreciation of property, plant and equipment

Depreciation of an asset begins when it is available for use, ie when it is in the location and condition necessary for it to be capable of operating in the manner intended.

Property, plant and equipment is depreciated over its useful life, or over the remaining life of the operation if shorter, to residual value. The major categories of property, plant and equipment are depreciated as follows:

(i) Land – freehold land is not depreciated unless the value of the land is considered to relate directly to a particular mining operation, in which case the land is depreciated on a straight-line basis over the expected mine life.

(ii) Mining properties – mining properties, including capitalised financing costs, are depreciated on a unit of production basis, in proportion to the volume of ore extracted in the year compared with total proven and probable reserves at the beginning of the year.

(iii) Buildings and infrastructure – straight-line basis over 10 to 25 years.

(iv) Railway track (including trackside equipment) – straight-line basis over 20 to 25 years.

(v) Wagons and rolling stock – straight-line basis over 10 to 20 years.

(vi) Machinery, equipment and other assets – are depreciated on a unit of production basis, in proportion to the volume of ore/material processed or on a straight-line basis over 5 to 20 years.

(vii) Assets under construction – no depreciation until asset is available for use.

(viii) Lease right-of-use assets – depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis.

(ix) Stripping cost – capitalised costs are amortised on a unit of production basis, in proportion to the volume of ore extracted compared with the total ore contained in the component of the pit to which the stripping campaign relates (Note 16).

Residual values and useful lives are reviewed, and adjusted if appropriate, at least annually, and changes to residual values and useful lives are accounted for prospectively.

M) Impairment of property, plant and equipment and intangible assets

Property, plant and equipment and intangible assets relating to exploration and mining licences are reviewed for impairment if there is any indication that the carrying amount may not be recoverable. In respect of historical impairments recognised in prior years, the Group assesses whether there is any indication that impairment may no longer exist or may have decreased.

If any such indications exist, the recoverable amount of the asset is estimated in order to determine the extent of the impairment or reversal (if any). Where the asset does not generate cash flows that are largely independent from other assets, the Group estimates the recoverable amount of the cash-generating unit to which the asset belongs.

Recoverable amount is the higher of fair value less costs of disposal and value in use. Fair value less costs of disposal reflects the net amount the Group would receive from the sale of the asset in an orderly transaction between market participants. For mining assets, this would generally be determined based on the present value of the estimated future cash flows arising from the continued use, further development or eventual disposal of the asset. The estimates used in determining the present value of those cash flows are those that an independent market participant would consider appropriate. Value in use reflects the expected present value of the future cash flows which the Group would generate through the operation of the asset in its current condition, without taking into account potential enhancements or further development of the asset. The fair value less costs of disposal valuation will normally be higher than the value in use valuation, as realisation of the full potential of the Group's mining operations typically requires further capital expenditure and ongoing mine development, and accordingly the Group typically applies this valuation estimate in its impairment assessments, unless indicated otherwise. Details of the valuations and sensitivities of the Group's mining operations considered as part of the impairment trigger assessment are included in Note 5.

If the recoverable amount of an asset or cash-generating unit is estimated to be less than its carrying amount, the carrying amount is reduced to the recoverable amount. An impairment charge is recognised in the income statement immediately. Where an impairment subsequently reverses, the carrying amount is increased to the revised estimate of recoverable amount, but so that the increased carrying amount does not exceed the carrying value that would have been determined if no impairment had previously been recognised after taking into account the depreciation and/or amortisation that would otherwise have been recorded in the intervening period. A reversal is recognised in the income statement immediately.

N) Inventory

Inventory consists of raw materials and consumables, work-in-progress and finished goods. Work-in-progress represents material that is in the process of being converted into finished goods. The conversion process for mining operations depends on the nature of the copper ore. For sulphide ores, processing includes milling and concentrating and results in the production of copper concentrate. For oxide ores, processing includes leaching of stockpiles, solvent extraction and electrowinning and results in the production of copper cathodes. Finished goods consist of copper concentrate containing gold and silver at Los Pelambres and Centinela and copper cathodes at Centinela and Antucoya. Los Pelambres and Centinela also produce molybdenum as a by-product.

Inventory is valued at the lower of cost, on a weighted average basis, and net realisable value. Net realisable value represents estimated selling price less all estimated costs of completion and costs to be incurred in marketing, selling and distribution. Cost of finished goods and work-in-progress is production cost and for raw materials and consumables it is purchase price. Production cost includes:

- labour costs, raw material costs and other costs directly attributable to the extraction and processing of ore;
- depreciation of plant, equipment and mining properties directly involved in the production process; and
- an appropriate allocation of production overheads.

Stockpiles represent ore that is extracted and is available for further processing. Costs directly attributable to the extraction of ore are generally allocated as part of production costs in proportion to the tonnes of material extracted. Operating stripping costs are generally absorbed into inventory, and therefore expensed as that inventory is processed and sold. If ore is not expected to be processed within 12 months of the balance sheet date it is included within non-current assets. If there is significant uncertainty as to when any stockpiled ore will be processed it is expensed as incurred.

2 Principal accounting policies continued

O) Taxation

Tax expense comprises the charges or credits for the year relating to both current and deferred tax.

Current tax is based on taxable profit for the year. Taxable profit may differ from net profit as reported in the income statement because it excludes items of income or expense that are taxable and deductible in different years and also excludes items that are not taxable or deductible. The liability for current tax is calculated using tax rates for each entity in the consolidated financial statements which have been enacted or substantively enacted at the balance sheet date.

Deferred tax is the tax expected to be payable or recoverable on temporary differences (ie differences between the carrying amount of assets and liabilities in the financial statements and the corresponding tax basis used in the computation of taxable profit). Deferred tax is accounted for using the balance sheet liability method and is provided on all temporary differences with certain limited exceptions as follows:

(i) tax payable on undistributed earnings of subsidiaries, associates and joint ventures is provided except where the Group is able to control the remittance of profits and it is probable that there will be no remittance of past profits earned in the foreseeable future;

(ii) deferred tax is not provided on the initial recognition of an asset or liability in a transaction that does not affect accounting profit or taxable profit and is not a business combination; nor is deferred tax provided on subsequent changes in the carrying value of such assets and liabilities, for example where they are depreciated; and

(iii) the initial recognition of any goodwill.

Deferred tax assets are recognised only to the extent that it is probable that they will be recovered through sufficient future taxable profit. The carrying amount of deferred tax assets is reviewed at each balance sheet date.

Deferred tax is calculated at the tax rates that are expected to apply in the period when the liability is settled or the asset is realised. Deferred tax is charged or credited in the income statement, except when it relates to items charged or credited directly to equity, in which case the deferred tax is also taken directly to equity.

P) Provisions

Provisions are recognised when the Group has a present obligation (legal or constructive) as a result of a past event, it is probable that the Group will be required to settle the obligation and a reliable estimate can be made of the amount of the obligation.

The amount recognised as a provision is the best estimate of the consideration required to settle the present obligation at the end of the reporting period, taking into account the risks and uncertainties surrounding the obligation. When a provision is measured using the cash flows estimated to settle the present obligation, its carrying amount is the present value of those cash flows (when the effect of the time value of money is material).

When some or all of the economic benefits required to settle a provision are expected to be recovered from a third party, a receivable is recognised as an asset if it is virtually certain that reimbursement will be received and the amount of the receivable can be measured reliably.

Q) Provisions for decommissioning and restoration costs

An obligation to incur decommissioning and restoration costs occurs when environmental disturbance is caused by the development or ongoing production of a mining property. Costs are estimated on the basis of a formal closure plan and are subject to regular formal review.

Such costs arising from the installation of plant and other site preparation work, discounted to their net present value, are provided and capitalised at the start of each project, as soon as the obligation to incur such costs arises. These decommissioning costs are charged against profit or loss over the life of the mine, through depreciation of the asset and unwinding or amortisation of the discount on the provision. Depreciation is included in operating costs while the unwinding of the discount is included within other finance items. Changes in the measurement of a liability relating to the decommissioning of plant or other site preparation work are added to, or deducted from, the cost of the related asset in the current year.

The costs for restoration of site damage, which is created on an ongoing basis during production, are provided for at their net present values and charged against profit or loss as extraction progresses. Changes in the measurement of a liability relating to site damage created during production, which relate to changes in the estimate of the closure costs, are charged against operating profit, and changes relating to the discount rate and foreign exchange are recorded within other finance items.

R) Share-based payments

For cash-settled share-based payments, a liability is recognised for the goods or services acquired, measured initially at the fair value of the liability. At the end of each reporting period until the liability is settled, and at the date of settlement, the fair value of the liability is remeasured, with any changes in fair value recognised in profit or loss for the year. The Group currently does not have any equity settled share-based payments to employees or third parties.

S) Post-employment benefits

The Group operates defined contribution schemes for a limited number of employees. For such schemes, the amount charged to the income statement is the contributions paid or payable in the year.

Employment terms may also provide for payment of a severance indemnity when an employment contract comes to an end. This is typically at the rate of one month for each year of service (subject in most cases to a cap as to the number of qualifying years of service) and based on final salary level. The severance indemnity obligation is treated as an unfunded defined benefit plan, and the calculation is based on valuations performed by an independent actuary using the projected unit credit method, which are regularly updated.

The obligation recognised in the balance sheet represents the present value of the severance indemnity obligation. Actuarial gains and losses are immediately recognised in other comprehensive income.

T) Cash and cash equivalents

Cash and cash equivalents comprise cash on hand, deposits held on call with banks, highly liquid investments that are readily convertible into known amounts of cash, are subject to insignificant risk of changes in value and are held for the purpose of meeting short-term cash commitments rather than for investment or other purposes. The cash balance is presented net of bank overdrafts which are repayable on demand. Cash and cash equivalents have a maturity period of 90 days or less.

U) Liquid investments

Liquid investments represent highly liquid current asset investments such as term deposits and managed funds invested in high quality fixed income instruments. They do not meet the IAS 7 definition of cash and cash equivalents, normally because even if readily accessible, the underlying investments have an average maturity profile greater than 90 days from the date first entered into, or because they are held primarily for investment purposes rather than meeting short-term cash commitments. These assets are designated as fair value through profit or loss.

V) Leases

Leases are recognised as a right-of-use asset and a corresponding liability at the date at which the leased asset is available for use by the Group. Each lease payment is allocated between the liability and finance cost. The finance cost is charged to profit or loss over the lease period so as to produce a constant periodic rate of interest on the remaining balance of the liability for each period. The right-of-use asset is depreciated over the shorter of the asset's useful life and the lease term on a straight-line basis.

Assets and liabilities arising from a lease are initially measured on a present value basis. Lease liabilities include the net present value of the following lease payments:

- fixed payments (including in-substance fixed payments), less any lease incentives receivable
- variable lease payments that are based on an index or a rate
- amounts expected to be payable by the lessee under residual value guarantees
- the exercise price of a purchase option if the lessee is reasonably certain to exercise that option, and
- payments of penalties for terminating the lease, if the lease term reflects the lessee exercising that option.

The lease payments are discounted using the interest rate implicit in the lease. If that rate cannot be readily determined, the lessee's incremental borrowing rate is used, being the rate that the lessee would have to pay to borrow the funds necessary to obtain an asset of similar value in a similar economic environment with similar terms and conditions.

Right-of-use assets are measured at cost comprising the following:

- the amount of the initial measurement of the lease liability
- any lease payments made at or before the commencement date less any lease incentives received
- any initial direct costs, and
- restoration costs.

W) Other financial instruments

Financial assets and financial liabilities are recognised on the Group's balance sheet when the Group becomes a party to the contractual provisions of the instrument. Financial assets are derecognised when the contractual rights to the cash flows from the financial asset expire or the Group has transferred the asset to another party. Financial liabilities are removed from the Group's balance sheet when they are extinguished – ie when the obligation specified in the contract has been discharged, cancelled or expired.

(i) Investments – Equity investments which are not subsidiaries, associates or joint ventures are recognised at fair value. The Group generally applies an irrevocable election for each equity investment to designate them as Fair Value through Other Comprehensive Income (FVOCI). Dividends from equity investments are recognised in the income statement when the right to receive payment is established.

(ii) Trade and other receivables – As explained above, for sales contracts which contain provisional pricing mechanisms the total receivable balance is measured at fair value through profit or loss. Other receivable balances are recognised at amortised cost.

(iii) Trade and other payables – Trade and other payables are generally not interest-bearing and are normally stated at their nominal value.

(iv) Borrowings (loans and preference shares) – Interest-bearing loans and bank overdrafts are initially recorded at fair value which is typically equal to the proceeds received, net of direct issue costs. They are subsequently measured at amortised cost using the effective interest method, with interest expense recognised on an effective yield basis. The effective interest method is a method of calculating the amortised cost of a financial liability and of allocating interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash payments through the expected life of the financial liability, or, where appropriate, a shorter period. Finance charges, including premiums payable on settlement or redemption and direct issue costs, are accounted for on an accruals basis using the effective interest rate method. Amounts are either recorded as financing costs in profit or loss or capitalised in accordance with the accounting policy set out in Note 2(K). Finance charges are added to the carrying amount of the instrument to the extent that they are not settled in the period in which they arise.

The Sterling-denominated preference shares issued by the Company carry a fixed rate of return without the right to participate in any surplus. They are accordingly classified within borrowings and translated into US dollars at period-end rates of exchange. Preference share dividends are included within other finance items within net finance expense in the income statement.

(v) Equity instruments – Equity instruments issued are recorded at the proceeds received, net of direct issue costs. Equity instruments of the Company comprise its Sterling-denominated issued ordinary share capital and related share premium. As explained in Note 2(E), the presentational currency of the Group and the functional currency of the Company is US dollars, and ordinary share capital and share premium are translated into US dollars at historical rates of exchange based on dates of issue.

(vi) Derivative financial instruments – As explained in Note 25(D), the Group periodically uses derivative financial instruments to reduce exposure to foreign exchange, interest rate and commodity price movements. The Group does not use such derivative instruments for trading purposes. The Group has applied the hedge accounting provisions of IFRS 9 Financial Instruments. The effective portion of changes in the fair value of derivative financial instruments that are designated and qualify as hedges of future cash flows have been recognised directly in equity, with such amounts subsequently recognised in profit or loss in the period when the hedged item affects profit or loss. Any ineffective portion is recognised immediately in profit or loss. Realised gains and losses on commodity derivatives recognised in profit or loss are recorded within revenue. The time value element of changes in the fair value of derivative options is recognised within other comprehensive income.

Financial assets with embedded derivatives are considered in their entirety when determining the appropriate classification and measurement. The treatment of embedded derivatives arising from provisionally priced commodity sales contracts is set out in further detail in Note 2(F) relating to revenue. Derivatives embedded in financial liabilities are treated as separate derivatives when their risks and characteristics are not closely related to those of the host contract and the host contract is not measured at fair value. Changes in fair value are reported in profit or loss for the year.

2 Principal accounting policies continued

(vii) Impairment of financial assets – The Group applies the forward-looking expected credit loss model to its financial assets, other than those measured at fair value through profit or loss. The Group applies the IFRS 9 "simplified approach" to its trade receivables, measuring the loss allowance at the lifetime expected credit loss. For other financial assets, where the credit risk has not increased significantly since initial recognition, the loss allowance is measured at the 12 month expected credit loss. If there has been a significant increase in credit risk, the loss allowance is measured at the lifetime expected credit loss. Increases or decreases to the credit loss allowance are recognised immediately in profit or loss.

X) Exceptional items

Exceptional items are material items of income and expense which are non-regular or non-operating and typically non-cash, including impairments and profits or losses on disposals. The tax effect of items presented as exceptional is also classified as exceptional, as are material deferred tax adjustments that relate to more than one reporting period.

Y) Rounding

All amounts disclosed in the financial statements and notes have been rounded to the nearest million dollars unless otherwise stated.

These policies have been consistently applied to all the years presented, unless otherwise stated.

3 Critical accounting judgements and key sources of estimation uncertainty

Determining many of the amounts included in the financial statements involves the use of judgement and/or estimation. These judgements and estimates are based on management's best knowledge of the relevant facts and circumstances having regard to prior experience, but actual results may differ from the amounts included in the financial statements. Information about such judgements and estimates is included in the principal accounting policies in Note 2 or the other notes to the financial statements, and the key areas are set out below.

A) Judgements

The following are the critical judgements, apart from those involving estimations (which are dealt with separately), that have been made in the process of applying the Group's accounting policies and that have the most significant effect on the amounts recognised in the financial statements.

(i) Non-financial assets impairment

As explained in Note 2(M), the Group reviews the carrying value of its intangible assets and property, plant and equipment to determine whether there is any indication that those assets are impaired. In performing assessments for impairment triggers, assets that do not generate largely independent cash inflows are allocated to an appropriate cash generating unit ("CGU"). Details of the valuations and sensitivities of the Group's mining operations considered as part of the impairment trigger assessment are included in Note 5, including quantitative sensitivity analyses. Details of the value of assets and liabilities for each of the mining operations are set out in Note 6.

When an impairment trigger is identified, an impairment test is performed, wherein the recoverable amount of those assets, or the CGU, is measured at the higher of their fair value less costs of disposal and value in use.

When an impairment test is performed, management necessarily applies its judgement in allocating assets to CGUs, in estimating the probability, timing and value of underlying cash flows and in selecting appropriate discount rates to be applied within the fair value less costs of disposal calculation. The key assumptions are set out in Note 2(M). Subsequent changes to CGU allocation, licensing status, reserves and resources, price assumptions or other estimates and assumptions in the fair value less costs of disposal calculation could impact the carrying value of the respective assets.

As explained in Note 4, the United States federal government has cancelled a number of the mining leases relating to the Twin Metals project. This was judged to be an impairment indicator as at the balance sheet date, and following the resulting impairment test an impairment has been recognised in respect of the $177.6 million of intangible assets and property, plant and equipment relating to the project.

As explained in Note 5, based on an assessment of both qualitative and quantitative factors, there were no indicators of potential impairment, or reversal of previous impairments, for the Group's non-current assets associated with its mining operations at the 2021 year-end, and accordingly no impairment tests have been performed.

(ii) Capitalisation of project costs within property, plant and equipment

As explained in Note 2(K) the costs of developing mining properties are capitalised as property, plant and equipment when the mining project is considered to be commercially viable. Commercial viability is normally considered to be demonstrable when the project has completed a pre-feasibility study, and the start of a feasibility study has been approved. Management reviews amounts capitalised to ensure that the treatment of that expenditure as capital rather than operating expenditure is reasonable, in particular in respect of the commercial viability of the project.

As at 31 December 2021, $180 million of feasibility study costs relating to the Centinela Second Concentrator project, which is still under evaluation and has not yet received final Board approval, were capitalised within property, plant and equipment. Should the Group ultimately take the decision not to proceed with the development of this project, then it is likely that the corresponding element of the capitalised feasibility study costs would need to be impaired.

The capitalisation of the construction and commissioning costs for a new mining operation ceases, and depreciation commences, when the operation is in the condition necessary for it to be capable of operating in the manner intended (which is termed as achieving commercial production).

The determination of the commercial production date requires judgement which involves the consideration of a number of relevant factors, including the successful completion of commissioning tests and the processing and production levels achieved compared with expected design capacity.

B) Estimates

The Group makes estimates and assumptions concerning the future. The resulting accounting estimates will, by definition, seldom equal the related actual results. The estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities within the next financial year are addressed below.

(i) Deferred taxation

No deferred tax liability is recognised in respect of the undistributed earnings of subsidiaries where it is not likely that those profits will be distributed in the foreseeable future. When determining whether it is likely that distributions will be made in the foreseeable future, and what is the appropriate foreseeable future period for this purpose, the Group considers factors such as the predictability of the likely future Group dividends, taking into account the Group's dividend policy and the level of potential volatility of the Group's future earnings, as well as the current level of distributable reserves at the Antofagasta plc entity level. As set out in Note 28, at 31 December 2021 deferred withholding tax liabilities of $23.1 million have been recognised, which relate to undistributed earnings of subsidiaries where it is considered likely that the corresponding profits will be distributed in the foreseeable future. The value of the remaining undistributed earnings of subsidiaries, for which deferred tax liabilities have not been recognised, because the Group is in a position to control the timing of the distributions and it is likely that distributions will not be made in the foreseeable future, was $6,483 million (31 December 2020 – $4,980 million - restated from the previously reported amount of $4,810 million, reflecting the removal of amounts relating to entities with accumulated losses). If deferred withholding tax liabilities were recognised in respect of all of these remaining undistributed earnings of subsidiaries this would result in an additional deferred tax liability and expense of approximately $1,232 million.

As explained in Note 2(O), deferred tax assets are recognised only to the extent that it is probable that they will be recovered through sufficient future taxable profits. When assessing the probable future taxable profits, the Group considers whether the relevant Group entity has sufficient taxable temporary differences which will result in taxable amounts against which the unused tax losses can be utilised.

Generally under Chilean tax law most tax losses can be carried forward indefinitely, and so the expiry of tax losses is not generally an issue. The key assumptions to which the forecasts of the probable level of future taxable profits are most sensitive are future commodity prices, production levels and operating costs.

As set out in Note 28, the Group has recognised $96.8 million of deferred tax assets as at 31 December 2021, relating to tax losses, provisions and short-term timing differences. This includes $90.6 million of previously unrecognised deferred tax assets in respect of tax losses available for offset against future profits, which have been recognised at 31 December 2021. These losses may be carried forward indefinitely.

In previous periods the Group had reviewed these tax losses for potential recognition, and concluded that it was not probable that future taxable profits would be available against which the losses could be utilised, and accordingly had not recognised a deferred tax asset in respect of those losses. In making this assessment in previous periods, the Group had taken into account that the relevant Group entity (Antucoya) had consistently generated taxable losses in recent years, was continuing to generate taxable losses in the then current period, and was forecast to continue generating taxable losses in future periods. During 2021, there has been a significant improvement in the current copper price (with the copper price reaching record levels in nominal terms during the year) and also the near-term copper price outlook. As a result of this improvement in the copper price environment, Antucoya began to generate taxable profits in 2021. The improved near-term outlook for the copper price also means that Antucoya is now forecast to generate sufficient future taxable profits to fully utilise its remaining tax losses.

In addition to the above estimates and assumptions that have a significant risk of causing a material adjustment to the carrying amounts of assets and liabilities, we have also set out the following additional estimates and assumptions which have a significant impact on the financial statements, but which are not considered to be key sources of estimation uncertainty as defined in IAS 1.

(i) Inventory valuation

The valuation of work in progress inventories involves a number of estimates, including the average ore grade, volume and density of ore stockpiles, and the recoveries in respect of material on the leach piles. Evaluating the net realisable value of the inventories also requires an estimate of the likely future copper price for the periods when it is expected that the inventories will be completed and sold. As set out in Note 20, the value of work in progress inventories at 31 December 2021 was $586.9 million.

If the copper spot price at 31 December 2021 (used for forecasting the likely sales price of short-term inventories) had been 10% lower, this would not have resulted in any net realisable value provision.

The valuation of leachpile inventories can be particularly complex, given the required estimates including in respect of the total recoveries and the speed of recovery in relation to the material on the piles. This is particularly the case with leachpiles with a long leaching cycle, where material may remain on the pile for several years before it has been fully leached. The operation with the most significant long-term leachpile inventory is Zaldívar, with a long-term leachpile with a value of approximately $140 million (on a 50% attributable basis) at 31 December 2021. This balance is forecast to be consumed over the operation's remaining 14-year mine life and its recoverability is based on the same assumptions about future operational considerations as detailed in Note 5. As a simple, high-level sensitivity, if this balance were reduced by 10% (due to changes in recovery estimates for example), this would result in a reduction in Zaldívar's inventory balance of approximately $14 million (on a 50% attributable basis).

(ii) Useful economic lives of property, plant and equipment and ore reserves estimates

As explained in Note 2(L), mining properties, including capitalised financing costs, are depreciated in proportion to the volume of ore extracted in the year compared with total proven and probable reserves at the beginning of the year.

There are numerous uncertainties inherent in estimating ore reserves, and assumptions that were valid at the time of estimation may change when new information becomes available. These include assumptions as to grade estimates and cut-off grades, recovery rates, commodity prices, exchange rates, production costs, capital costs, processing and reclamation costs and discount rates. The actual volume of ore extracted and any changes in these assumptions could affect prospective depreciation rates and carrying values.

The majority of other items of property, plant and equipment are depreciated on a straight-line basis over their useful economic lives. Management reviews the appropriateness of useful economic lives at least annually and, again, any changes could affect prospective depreciation rates and asset carrying values.

3 Critical accounting judgements and key sources of estimation uncertainty continued

The operation with the most significant depreciation expense is Centinela, with a depreciation expense of $655 million in 2021, representing approximately 60% of the total Group depreciation charge. As a simple high-level sensitivity, a 10% adjustment to the useful economic lives of Centinela's property, plant and equipment would result in an impact of approximately $65 million on the annual depreciation charge.

In the particular case of the Zaldívar joint venture, the following factors have been considered when assessing the appropriate useful economic lives, depreciation rates and asset carrying values:

- an Environmental Impact Assessment (EIA) has been submitted to extend the permits for water extraction (which currently expire during 2025) and general mining activities (which currently expire at the end of 2023) until 2031. Subsequent applications will be required in due course to further extend the permits beyond 2031. The assets'useful economic lives assume that essential permits will be extended to the end of the mine life, and other permits can be extended, or alternative solutions to enable the ongoing operation of the mine can be implemented. However, if essential permits are not extended, this may result in a change in the assets' useful economic lives or carrying value.
- Zaldívar's final pit phase, which represents approximately 20% of current ore reserves, impacts a portion of Minera Escondida's mine property, as well as infrastructure owned by third parties (road, railway, powerline and pipelines). The assets'useful economic lives assume that mining of the final pit phase, which is subject to agreements or easements to access these areas and relocate this infrastructure, will be possible.

(iii) Provisions for decommissioning and site restoration costs

As explained in Note 2(Q), provision is made, based on net present values, for decommissioning and site rehabilitation costs as soon as the obligation arises following the development or ongoing production of a mining property. The provision is based on a closure plan prepared with the assistance of external consultants.

Management uses its judgement and experience to provide for and (in the case of capitalised decommissioning costs) amortise these estimated costs over the life of the mine. The ultimate cost of decommissioning and site rehabilitation is uncertain and cost estimates can vary in response to many factors including changes to relevant legal requirements, the emergence of new restoration techniques or experience at other mine sites.

The expected timing and extent of expenditure can also change, for example in response to changes in ore reserves or processing levels. As a result, there could be significant adjustments to the provisions established which would affect future financial results.

Details of the decommissioning and restoration provisions are set out in Note 29. The total value of these provisions as at 31 December 2021 was $336.1 million. As a simple high-level sensitivity, a 10% increase in the forecast closure costs would increase the provision balance by approximately $34 million, the capitalised decommissioning costs asset within property, plant and equipment by approximately $12 million and the on-going annual operating expenses by approximately $1 million.

4 Exceptional items

Exceptional items are material items of income and expense which are non-regular or non-operating and typically non-cash, including impairments and profits or losses on disposals. The tax effect of items presented as exceptional is also classified as exceptional, as are material deferred tax adjustments that relate to more than one reporting period. The classification of these types of items as exceptional is considered to be useful as it provides an indication of the earnings generated by the ongoing businesses of the Group.

2021 – Impairment of Twin Metals' assets

Twin Metals Minnesota ("Twin Metals") is a wholly owned copper, nickel and platinum group metals (PGM) underground mining project, which holds copper, nickel, cobalt-PGM deposits in north-eastern Minnesota, US. In recent years, Twin Metals has been progressing its Mine Plan of Operations (MPO) and Scoping Environmental Assessment Worksheet Data Submittal, submitted in December 2019 to the US Bureau of Land Management (BLM) and Minnesota Department of Natural Resources (DNR), respectively. However, over the past year, while the Twin Metals project was advancing through environmental review, several actions were taken by the federal government that have changed the potential scenarios for the project.

In September 2021, the United States Forest Service (USFS) submitted an application to withdraw approximately 225,000 acres of land in the Superior National Forest from the scope of federal mineral leasing laws, subject to valid existing rights. In October 2021, the United States Bureau of Land Management (BLM) rejected Twin Metals' Preference Right Lease Applications (PRLAs) and Prospecting Permit Applications (PPAs). In January 2022, the United States Department of the Interior cancelled Twin Metals' MNES-1352 and MNES-1353 federal mineral leases. The PRLAs and federal mineral leases form a significant proportion of the mineral resources contained within Twin Metals' current project plan and, accordingly, it was determined that these events collectively represented an impairment trigger as at the balance sheet date.

Prior to the resulting impairment assessment being performed, as at 31 December 2021, the Group had recognised an intangible asset of $150.1 million and property, plant and equipment of $27.5 million relating to the Twin Metals project. The intangible asset arose upon the acquisition in 2015 of Duluth Metals, which owned a 60% stake in the Twin Metals project, with the carrying value of the intangible asset reflecting the consideration paid for that acquisition. The property, plant and equipment balances reflected the historical cost of acquiring those assets. These carrying values prior to the impairment did not, therefore, reflect an estimate of the commercial potential of the project as at 31 December 2021.

The Group believes that Twin Metals has a valid legal right to the mining leases and a strong case to defend its legal rights. Although the Group intends to pursue validation of those rights, considering the time and uncertainty related to any legal action to challenge the government decisions, an impairment has been recognised as at 31 December 2021 in respect of the $177.6 million of intangible assets and property, plant and equipment relating to the Twin Metals project.

2021 – Recognition of previously unrecognised deferred tax assets

At 31 December 2021, the Group recognised $90.6 million of previously unrecognised deferred tax assets relating to tax losses available for offset against future profits. In previous periods, the Group had reviewed these tax losses for potential recognition, and concluded that it was not probable that future taxable profits would be available against which the losses could be utilised, and accordingly had not recognised a deferred tax asset in respect of those losses. In making this assessment in previous periods, the Group had taken into account that the relevant Group entity (Antucoya) had consistently generated taxable losses in recent years, was continuing to generate taxable losses in the then current period, and was forecast to continue generating taxable losses in future periods, and the Group could not use these taxable losses to offset profits in other Group entities. During 2021, there has been a significant improvement in the current copper price (with the copper price reaching record levels in nominal terms during the year) and also the near-term copper price outlook. As a result of this improvement in the copper price environment, the relevant Group entity began to generate taxable profits in 2021. The improved near-term outlook for the copper price also means that the entity is now forecast to generate sufficient future taxable profits to fully utilise its remaining tax losses. Current forecasts indicate that the losses will be utilised over approximately the next eight years (compared with the remaining mine life for Antucoya of 22 years). The forecasts are based on Antucoya's Life-of-Mine model. When the tax losses are utilised in future years it is expected that the impact will be recorded within the underlying tax charge for that year, in order to match with the similar classification of the corresponding taxable profits of that year.

2020 – Impairment of the investment in Hornitos

On 31 March 2020, the Group agreed to dispose of its 40% interest in the Hornitos coal-fired power station to ENGIE Energía Chile S.A. ("ENGIE"), the owner of the remaining 60% interest. This was part of the value accretive renegotiation of Centinela's power purchase agreement, which as a result will be wholly supplied from lower cost renewable sources from 2022. In accordance with the terms of the agreement, the Group disposed of its investment to ENGIE in December 2021 for a nominal consideration, and has not been entitled to receive any further dividend income from Hornitos from the date of the agreement. Accordingly, the Group no longer had any effective economic interest in the results or assets of Hornitos from 31 March 2020 onwards, and therefore recognised an impairment of $80.8 million in respect of its investment in associate balance as of that date, and no longer recognised any share of Hornitos' results. The post-tax impact of the impairment is $61.1 million, of which $40.2 million is attributable to the equity owners of the Company.

5 Asset sensitivities

Other asset sensitivities

Based on an assessment of both qualitative and quantitative factors, there were no indicators of potential impairment, or reversal of previous impairments, for the Group's non-current assets associated with its mining operations at the 2021 year-end, and accordingly no impairment tests have been performed. The quantitative element of the trigger assessment, which is based on the Group's life-of-mine models, provides an indication of what the approximate recoverable amount of the Group's operations would be, were a full impairment test under IAS 36 to be performed. In order to provide an indication of the sensitivities of the approximate recoverable amount of the Group's mining operations, sensitivity analysis has been performed on the indicative valuation, prepared as part of the Group's impairment indicator analysis.

This impairment indicator valuation exercise demonstrated positive headroom for all of the Group's mining operations, with the recoverable amount of the assets in excess of their carrying value.

Relevant aspects of these indicative valuation estimates include:

Fair value less costs of disposal and value in use valuations

If a full IAS 36 impairment test were to be prepared, which was not the case as at 31 December 2021, the recoverable amount is the higher of fair value less costs of disposal and value in use. Fair value less costs of disposal reflects the net amount the Group would receive from the sale of the asset in an orderly transaction between market participants. For mining assets, this would generally be determined based on the present value of the estimated future cash flows arising from the continued use, further development or eventual disposal of the asset. Value in use reflects the expected present value of the future cash flows which the Group would generate through the operation of the asset in its current condition, without taking into account potential enhancements or further development of the asset. The fair value less costs of disposal valuation will normally be higher than the value in use valuation for mining companies, and accordingly the Group typically applies this valuation estimate in its impairment or valuation assessments.

Climate risks

The indicative valuations incorporate estimates of the potential future costs relating to climate risks. During 2021, the Group has implemented, and disclosed against, the recommendations of the Task Force on Climate-related Financial Disclosures ("TCFD"). This process is described in detail in the Task Force on Climate-related Financial Disclosures section of the Strategic Report. This process included scenario analyses assessing the potential future impact of transition and physical risks. In preparing this analysis, the Group used two climate scenarios to capture the broadest possible spectrum of climate-related risks and opportunities, an aggressive mitigation scenario and a high warming scenario. The total of the estimated potential transition and physical risk impacts under this approach is likely to overstate the probable overall impact, for example because if relatively aggressive actions are taken in order to minimise transition risks, this should reduce the risk of relatively significant physical impacts. However, in order to incorporate a simple and conservative estimate of the potential future costs of climate risks we have combined the estimates of the potential costs of the transition risk and physical risk scenarios, and incorporated those total cost forecasts into the indicative valuations.

5 Asset sensitivities continued

Copper price outlook

The assumption to which the value of the assets is most sensitive is the future copper price. The copper price forecasts (representing the Group's estimates of the assumptions that would be used by independent market participants in valuing the assets) are based on the forward curve for the short term and consensus analyst forecasts for the longer term. A long-term copper price of $3.30/lb (reflecting 2021 real terms) has been used in the base valuations used in the impairment indicator assessment. As an additional down-side sensitivity a valuation was performed with a long-term copper price of $2.97/lb, reflecting a 10% reduction in the long-term price forecast. Los Pelambres, Centinela, and Zaldívar still showed positive headroom in this alternative down-side scenario. However, the Antucoya valuation indicated a potential deficit of $160 million. This was a simple sensitivity exercise, looking at an illustrative change in the forecast long-term copper price in isolation. In reality, a deterioration in the long-term copper price environment is likely to result in corresponding improvements in a range of input cost factors. In particular, given that copper exports account for over 50% of Chile's exports, movements in the US dollar/Chilean peso exchange rate have historically been highly correlated to the copper price, and a decrease in the copper price is likely to result in a weakening of the Chilean peso, with a resulting reduction in the Group's operating costs and capital expenditure. These likely cost reductions, as well as potential operational changes which could be made in a weaker copper price environment, could partly mitigate the impact of the lower copper price modelled in these estimated potential sensitivities.

The US dollar/Chilean peso exchange rate

The value of the assets is also sensitive to movements in the US dollar/Chilean peso exchange rate. A long-term exchange rate of Ch$770/$1 has been used in the base valuations used in the impairment indicator assessment. As an additional down-side sensitivity an indicative valuation was performed with a 10% stronger long-term Chilean peso exchange rate assumption. Los Pelambres, Centinela, and Zaldívar all still showed positive headroom in this alternative down-side scenario. In the case of Antucoya, this down-side scenario indicated a potential break-even position. As noted above, movements in the US dollar/Chilean peso exchange rate have historically been highly correlated to the copper price and so in reality the exchange rate would not be expected to move in isolation.

Other relevant assumptions

In addition to the impact of climate change risks, the future copper price and the US dollar/Chilean peso exchange rate, the indicative valuations are sensitive to the assumptions in respect of future production levels, operating costs, sustaining and development capital expenditure, potential changes in the Chilean mining royalty regime, and the discount rate used to determine the present value of the future cash flows.

A real post-tax discount rate of 8% has been used in determining the present value of the forecast future cash flow from the assets as part of the impairment indicator assessment.

The COVID-19 situation is not expected to have a significant negative impact on the future production or capital projects of the Group's mining operations. The forecasts within the indicative valuations reflect estimates of the expected ongoing costs of managing the situation over the near-term.

As indicated by the sensitivities for movements in the long-term copper price and the US dollar/Chilean peso exchange rate described above, Antucoya is particularly sensitive to movements in the input assumptions.

The impairment trigger assessments for Los Pelambres and Centinela are not sensitive to movements in these assumptions. While Zaldívar is also not particularly sensitive to changes in the assumptions used in the indicative valuation prepared as part of the quantitative impairment indicator assessment, the conclusion that there are no impairment indicators does reflect certain assumptions about future operational considerations, which include the following:

- an Environmental Impact Assessment (EIA) has been submitted to extend the permits for water extraction (which currently expire during 2025) and general mining activities (which currently expire at the end of 2023) until 2031. Subsequent applications will be required in due course to further extend the permits beyond 2031. The indicative valuation assumes that essential permits will be extended to the end of the mine life, and other permits can be extended, or alternative solutions to enable the ongoing operation of the mine, can be implemented. However, if essential permits are not extended, this is likely to be considered an indicator of a potential impairment, requiring a full impairment assessment at that point.
- Zaldívar's final pit phase, which represents approximately 20% of current ore reserves, impacts a portion of Minera Escondida's mine property, as well as infrastructure owned by third parties (road, railway, powerline and pipelines). The indicative valuation assumes that mining of the final pit phase, which is subject to agreements or easements to access these areas and relocate this infrastructure, will be possible.

Indicators of potential reversal of previous impairments

Antucoya recognised impairments totalling $716 million in 2012 and 2016. Of the original impairment amounts, approximately $550 million remains in effect unamortised as at 31 December 2021. Based on an assessment of both qualitative and quantitative factors, there were no indicators of a potential reversal of these previous impairments at the 2021 year-end. As noted above, the indicative valuation exercise for Antucoya at the 2021 year-end indicated positive headroom for Antucoya. However, the headroom position is relatively marginal – the down-side sensitivity reflecting a 10% reduction in the long-term copper price resulted in a potential deficit of $160 million; the sensitivity using a 10% stronger long-term Chilean peso exchange rate assumption indicated a potential break-even position. Given this marginal headroom position, reasonably possible changes in the general market environment, the operational performance of the mine or the regulatory and taxation environment in Chile could result in a break-even or a potential deficit position for Antucoya and hence it was concluded that there was no impairment reversal trigger as at 31 December 2021.

However, if there is a future significant improvement in the performance and value of Antucoya, for example due to one, or a combination of, the following – a significant increase in the long-term copper price outlook, strong operational performance that is expected to be sustained into the future, and/or positive resolution of uncertainty with the regulatory and taxation environment in Chile – a full or partial reversal of these impairments could be triggered in future periods.

6 Segment information

The Group's operating and reportable segments are as follows:

- Los Pelambres
- Centinela
- Antucoya
- Zaldívar
- Exploration and evaluation
- Corporate and other items
- Transport division

For management purposes, the Group is organised into two business divisions based on their products – Mining and Transport. The Mining division is split further for management reporting purposes to show results by mine and exploration activity.

Los Pelambres produces primarily copper concentrate, molybdenum, gold and silver as a by-product. Centinela produces copper concentrate containing gold and silver as a by-product, molybdenum concentrates and copper cathodes. Antucoya and Zaldívar produce copper cathodes. The Transport division provides rail cargo and road cargo transport together with a number of ancillary services. All the operations are based in Chile. The Exploration and evaluation segment incurs exploration and evaluation expenses. "Corporate and other items" comprises costs incurred by the Company, Antofagasta Minerals SA, the Group's mining corporate centre and other entities, that are not allocated to any individual business segment. Consistent with its internal management reporting, the Group's corporate and other items are included within the Mining division.

The chief operating decision-maker (the Group's Chief Executive Officer) monitors the operating results of the business segments separately for the purpose of making decisions about resources to be allocated and assessing performance. Segment performance is evaluated based on the operating profit of each of the segments.

A) Segment revenues and results

For the year ended 31 December 2021

	Los Pelambres $m	Centinela $m	Antucoya $m	Zaldívar $m	Exploration and evaluation[2] $m	Corporate and other items $m	Mining $m	Transport division $m	Total $m
Revenue	3,621.0	2,981.3	697.8	–	–	–	7,300.1	170.0	7,470.1
Operating cost excluding depreciation	(1,095.0)	(1,062.0)	(360.7)	–	(103.2)	(76.0)	(2,696.9)	(106.3)	(2,803.2)
Depreciation	(281.8)	(654.7)	(98.3)	–	–	(13.0)	(1,047.8)	(30.9)	(1,078.7)
Loss on disposals	(3.7)	(4.0)	(0.5)	–	–	–	(8.2)	(1.0)	(9.2)
Provision against the carrying value of assets[4]	–	–	–	–	(177.6)	–	(177.6)	–	(177.6)
Operating profit/(loss)	2,240.5	1,260.6	238.3	–	(280.8)	(89.0)	3,369.6	31.8	3,401.4
Net share of results from associates and joint ventures	–	–	–	68.5	–	(9.0)	59.5	0.2	59.7
Investment income	1.4	1.5	0.3	–	–	1.7	4.9	0.1	5.0
Interest expense	(3.5)	(16.4)	(15.5)	–	–	(27.2)	(62.6)	(0.8)	(63.4)
Other finance items	41.1	26.1	4.9	–	–	5.1	77.2	(2.8)	74.4
Profit/(loss) before tax	2,279.5	1,271.8	228.0	68.5	(280.8)	(118.4)	3,448.6	28.5	3,477.1
Tax	(743.7)	(382.0)	(7.1)	–	–	(188.3)	(1,321.1)	(11.8)	(1,332.9)
Tax – exceptional items[3]	–	–	90.6	–	–	–	90.6	–	90.6
Profit/(loss) for the year	1,535.8	889.8	311.5	68.5	(280.8)	(306.7)	2,218.1	16.7	2,234.8
Non-controlling interests	607.5	252.2	84.4	–	–	0.5	944.6	–	944.6
Profit/(losses) attributable to the owners of the parent	928.3	637.6	227.1	68.5	(280.8)	(307.2)	1,273.5	16.7	1,290.2
EBITDA[1]	2,526.0	1,919.3	337.1	172.8	(103.2)	(84.0)	4,768.0	68.2	4,836.2
Additions to non-current assets									
Additions to property, plant and equipment	903.1	826.4	62.7	–	0.6	30.4	1,823.2	32.7	1,855.9
Segment assets and liabilities									
Segment assets	5,667.1	5,924.2	1,735.9	–	–	2,661.1	15,988.3	384.3	16,372.6
Investment in associates and joint ventures	–	–	–	900.0	–	–	900.0	5.8	905.8
Segment liabilities	(2,642.0)	(1,797.0)	(548.7)	–	–	(1,174.5)	(6,162.2)	(87.2)	(6,249.4)

1. EBITDA refers to Earnings Before Interest, Tax, Depreciation and Amortisation. EBITDA is calculated by adding back depreciation, amortisation, profit or loss on disposals and impairment charges to operating profit. This comprises 100% of the EBITDA from the Group's subsidiaries, and the Group's proportional share of the EBITDA of its associates and joint ventures (refer to the Alternative Performance Measures section on page 229).
2. Operating cash outflow in the exploration and evaluation segment was $49.9 million.
3. During 2021, there was an exceptional item of $90.6 million which reflects the recognition of a deferred tax asset at Antucoya (see Note 4).
4. An impairment has been recognised as at 31 December 2021 in respect of the $177.6 million of intangible assets and property, plant and equipment relating to the Twin Metals project, presented as an exceptional item.

6 Segment information continued

For the year ended 31 December 2020

	Los Pelambres $m	Centinela $m	Antucoya $m	Zaldívar $m	Exploration and evaluation[2] $m	Corporate and other items $m	Mining $m	Transport division $m	Total $m
Revenue	2,655.1	1,844.5	480.3	–	–	–	4,979.9	149.4	5,129.3
Operating cost excluding depreciation	(992.1)	(932.8)	(314.5)	–	(85.1)	(66.2)	(2,390.7)	(91.4)	(2,482.1)
Depreciation	(252.6)	(662.9)	(94.6)	–	–	(7.8)	(1,017.9)	(30.8)	(1,048.7)
Loss on disposals	(2.5)	(1.8)	–	–	–	–	(4.3)	(2.0)	(6.3)
Operating profit/(loss)	1,407.9	247.0	71.2	–	(85.1)	(74.0)	1,567.0	25.2	1,592.2
Equity accounting results	–	–	–	12.2	–	(6.5)	5.7	(0.6)	5.1
Impairment of investment in associate[3]	–	(95.6)	–	–	–	–	(95.6)	14.8	(80.8)
Net share of results from associates and joint ventures	–	(95.6)	–	12.2	–	(6.5)	(89.9)	14.2	(75.7)
Investment income	4.7	4.3	0.8	–	–	9.0	18.8	0.1	18.9
Interest expense	(4.3)	(24.9)	(25.5)	–	–	(20.7)	(75.4)	(1.7)	(77.1)
Other finance items	(26.0)	(13.7)	(4.0)	–	–	(5.5)	(49.2)	4.0	(45.2)
Profit/(loss) before tax	1,382.3	117.1	42.5	12.2	(85.1)	(97.7)	1,371.3	41.8	1,413.1
Tax	(435.8)	(23.0)	(0.3)	–	–	(59.2)	(518.3)	(8.2)	(526.5)
Profit/(loss) for the year from continuing operations	946.5	94.1	42.2	12.2	(85.1)	(156.9)	853.0	33.6	886.6
Profit for the period from discontinued operations	–	–	–	–	–	7.3	7.3	–	7.3
Profit/(loss) for the year	946.5	94.1	42.2	12.2	(85.1)	(149.6)	860.3	33.6	893.9
Non-controlling interests	371.5	12.9	3.1	–	–	–	387.5	–	387.5
Profit/(losses) attributable to the owners of the parent	575.0	81.2	39.1	12.2	(85.1)	(149.6)	472.8	33.6	506.4
EBITDA[1]	1,663.0	911.7	165.8	95.5	(85.1)	(72.7)	2,678.2	61.0	2,739.2
Additions to non-current assets									
Additions to property, plant and equipment	827.3	441.8	44.6	–	–	8.4	1,322.1	26.2	1,348.3
Segment assets and liabilities									
Segment assets	5,475.9	5,898.8	1,641.5	–	–	2,284.2	15,300.4	382.9	15,683.3
Deferred tax assets	–	–	–	–	–	2.7	2.7	3.7	6.4
Investment in associates and joint ventures	–	–	–	909.0	–	–	909.0	5.6	914.6
Segment liabilities	(2,700.1)	(1,823.2)	(702.5)	–	–	(1,202.6)	(6,428.4)	(94.8)	(6,523.2)

1. EBITDA refers to Earnings Before Interest, Tax, Depreciation and Amortisation. EBITDA is calculated by adding back depreciation, amortisation, profit or loss on disposals and impairment charges to operating profit. This comprises 100% of the EBITDA from the Group´s subsidiaries, and the Group´s proportional share of the EBITDA of its associates and joint ventures (refer to the Alternative Performance Measures section on page 229).
2. Operating cash outflow in the exploration and evaluation segment was $43.1 million.
3. On 31 March 2020, the Group agreed to dispose of its 40% interest in Hornitos coal-fired power station to ENGIE Energía Chile S.A. ("ENGIE"), the owner of the remaining 60% interest. This has resulted in a $80.8 million impairment in respect of the Group's investment in associate balance.

Notes to segment revenues and results

(i) Inter-segment revenues are eliminated on consolidation. The only inter-segment revenue related to sales from the Transport division to the mining division of $8.2 million (year ended 31 December 2020 – $6.8 million), has been eliminated and is therefore not reflected in the above figures.

(ii) Revenue includes provisionally priced sales of copper, gold and molybdenum concentrates and copper cathodes. Further details of such adjustments are given in Note 7.

(iii) For sales of concentrates, which are sold to smelters and roasting plants for further processing into fully refined metal, the price of the concentrate (which is the amount recorded as revenue) reflects the market value of the fully refined metal less a "treatment and refining charge" deduction, to reflect the lower value of this partially processed material compared with the fully refined metal. Treatment and refining charges for copper and molybdenum concentrates are detailed in Note 7.

(iv) The effects of tax and non-controlling interests on the expenses within the Exploration and evaluation segment are allocated to the mine that the exploration work relates to.

(v) The assets of the Transport division segment include $5.8 million (31 December 2020 – $5.6 million) relating to the Group's 30% interest in Antofagasta Terminal International SA ("ATI"), which operates a concession to manage installations in the port of Antofagasta. Further details of these investments are set out in Note 17.

B) Entity-wide disclosures

Revenue by product

	2021 $m	2020 $m
Copper		
• Los Pelambres	**3,097.0**	2,269.2
• Centinela concentrate	**1,735.4**	908.6
• Centinela cathodes	**774.1**	599.1
• Antucoya	**693.3**	475.9
Provision of shipping services[1]		
• Los Pelambres	**57.8**	54.4
• Centinela concentrate	**46.8**	31.8
• Centinela cathodes	**4.3**	4.8
• Antucoya	**4.5**	4.4
Gold		
• Los Pelambres	**91.0**	106.4
• Centinela concentrate	**345.4**	251.3
Molybdenum		
• Los Pelambres	**329.2**	181.8
• Centinela concentrate	**37.2**	27.7
Silver		
• Los Pelambres	**46.0**	43.3
• Centinela concentrate	**38.1**	21.2
Total	**7,300.1**	4,979.9
Transport division	**170.0**	149.4
	7,470.1	5,129.3

1. These prior year figures have been re-presented to separately analyse revenue from the sale of products and from the provision of shipping services.

Revenue by location of customer

	2021 $m	2020 $m
Europe		
• United Kingdom	**54.4**	123.3
• Switzerland	**1,303.7**	593.5
• Spain	**67.6**	29.3
• Germany	**121.5**	116.4
• Rest of Europe	**177.4**	92.3
Latin America		
• Chile	**282.0**	224.4
• Rest of Latin America	**214.7**	182.0
North America		
• United States	**666.5**	216.5
Asia		
• Japan	**1,842.3**	1,631.1
• China	**1,236.9**	531.4
• Singapore	**726.1**	667.5
• South Korea	**322.6**	353.4
• Hong Kong	**217.1**	235.7
• Rest of Asia	**237.3**	132.5
	7,470.1	5,129.3

Information about major customers

In the year ended 31 December 2021, the Group's mining revenue included $1,015.1 million related to one large customer that individually accounted for more than 10% of the Group's revenue (year ended 31 December 2020 – one large customer representing $763.4 million).

6 Segment information continued

Non-current assets by location of assets

	2021 $m	2020 $m Restated
Chile	**11,715.2**	11,023.2
USA	**1.0**	178.3
	11,716.2	11,201.5

The above amounts reflect non-current assets excluding financial assets and deferred tax assets. The non-current assets shown above exclude $96.7 million ($6.4 million – 2020) of deferred tax assets, $51.1 million ($51.7 million – 2020) of receivables (being financial assets), $8.7 million of equity investments ($11.1 million – 2020) and nil ($0.3 million – 2020) of derivative instruments. The prior period comparatives have been restated to exclude financial assets and deferred tax assets, resulting in a reduction in respect of the assets located in Chile of $69.5 million as at 31 December 2020.

7 Group Revenue

Copper and molybdenum concentrate sale contracts and copper cathode sale contracts generally provide for provisional pricing of sales at the time of shipment, with final pricing being based on the monthly average London Metal Exchange copper price or monthly average molybdenum price for specified future periods. This normally ranges from one to four months after shipment to the customer. For sales contracts which contain provisional pricing mechanisms the total receivable balance is measured at fair value through profit or loss. Gains and losses from the mark-to-market of open sales are recognised through adjustments to revenue in the income statement and to trade receivables in the balance sheet. The Group determines mark-to-market prices using forward prices at each period-end for copper concentrate and cathode sales, and period-end month average prices for molybdenum concentrate sales due to the absence of a futures market in the market price references for that commodity in the majority of the Group's contracts.

With sales of concentrates, which are sold to smelters and roasting plants for further processing into fully refined metal, the price of the concentrate (which is the amount recorded as revenue) reflects the market value of the fully refined metal less a "treatment and refining charge" deduction, to reflect the lower value of this partially processed material compared with the fully refined metal.

The shipping service represents a separate performance obligation, and is recognised separately from the sale of the material over time as the shipping service is provided.

An analysis of the Group's revenue is as follows:

	2021 $m	2020 $m
Revenue from contracts with customers		
Sale of products	**6,809.0**	4,617.3
Provision of shipping services associated with the sale of products[1]	**113.4**	95.4
Transport division[2]	**170.0**	149.4
Provisional pricing adjustments in respect of copper, gold and molybdenum	**377.7**	267.2
Total revenue	**7,470.1**	5,129.3

1. The Group sells a significant proportion of its products on Cost, Insurance & Freight (CIF) Incoterms, which means that the Group is responsible for shipping the product to a destination port specified by the customer.

2. The Transport division provides rail and road cargo transport together with a number of ancillary services.

For the year ended 31 December 2021

	Los Pelambres Copper concentrate $m	Centinela Copper concentrate $m	Centinela Copper cathodes $m	Antucoya Copper cathodes $m	Los Pelambres Gold in concentrate $m	Centinela Gold in concentrate $m	Los Pelambres Molybdenum concentrate $m	Centinela Molybdenum concentrate $m
Provisionally priced sales of products	2,966.6	1,685.3	824.3	749.7	93.3	354.8	322.1	38.4
Revenue from freight services	57.8	46.8	4.3	4.5	–	–	–	–
	3,024.4	1,732.1	828.6	754.2	93.3	354.8	322.1	38.4
Effects of pricing adjustments to previous year invoices								
Reversal of mark-to-market adjustments at the end of the previous year	(58.7)	(26.8)	0.1	(0.5)	–	(0.9)	0.2	(0.3)
Settlement of sales invoiced in the previous year	175.1	74.7	1.8	1.5	(1.0)	(4.0)	6.4	1.2
Total effect of adjustments to previous year invoices in the current year	116.4	47.9	1.9	1.0	(1.0)	(4.9)	6.6	0.9
Effects of pricing adjustments to current year invoices								
Settlement of sales invoiced in the current year	92.2	58.8	10.2	6.0	(1.1)	(4.1)	30.6	5.8
Mark-to-market adjustments at the end of the current year	12.0	5.2	0.3	0.8	–	0.4	(5.7)	(0.7)
Total effect of adjustments to current year invoices	104.2	64.0	10.5	6.8	(1.1)	(3.7)	24.9	5.1
Total pricing adjustments	220.6	111.9	12.4	7.8	(2.1)	(8.6)	31.5	6.0
Realised losses on commodity derivatives	–	–	(62.6)	(64.2)	–	–	–	–
Treatment and refining charges	(90.2)	(61.8)	–	–	(0.2)	(0.8)	(24.4)	(7.2)
Revenue	3,154.8	1,782.2	778.4	697.8	91.0	345.4	329.2	37.2

The categories of revenue which are principally affected by different economic factors are the individual product types. A summary of revenue by product is set out in Note 6.

The table above sets out the impact of provisional pricing adjustments, derivative commodity instruments and treatment and refining charges for the more significant products. The revenue from these products, along with the revenue from other products and services, is reconciled to total revenue in Note 6.

The revenue from the individual products shown in the above table excludes revenue from sales of silver and the Transport division, which are presented in the revenue by product table in Note 5 to reconcile to Group Revenue.

With sales of concentrates at Los Pelambres and Centinela, which are sold to smelters and roasting plants for further processing into fully refined metal, the price of the concentrate invoiced to the customer reflects the market value of the fully refined metal less a "treatment and refining charge" deduction, to reflect the lower value of this partially processed material compared with the fully refined metal. For accounting purposes, the revenue amount is the net of the market value of fully refined metal less the treatment and refining charges. Under the standard industry definition of cash costs, treatment and refining charges are regarded as an expense and part of the total cash cost figure.

/ Notes to the financial statements continued

7 Group Revenue continued

For the year ended 31 December 2020[1]

	Los Pelambres Copper concentrate $m	Centinela Copper concentrate $m	Centinela Copper cathodes $m	Antucoya Copper cathodes $m	Los Pelambres Gold in concentrate $m	Centinela Gold in concentrate $m	Los Pelambres Molybdenum concentrate $m	Centinela Molybdenum concentrate $m
Provisionally priced sales of products	2,202.3	917.5	590.0	470.4	104.9	250.6	205.0	31.6
Revenue from freight services	54.4	31.8	4.8	4.4	–	–	–	–
Provisionally invoiced gross sales	2,256.7	949.3	594.8	474.8	104.9	250.6	205.0	31.6
Effects of pricing adjustments to previous year invoices								
Reversal of mark-to-market adjustments at the end of the previous year	(29.1)	(15.2)	(0.4)	(0.4)	–	(1.2)	0.4	–
Settlement of sales invoiced in the previous year	(43.6)	(18.7)	(0.3)	(0.3)	0.2	3.7	(1.5)	(0.2)
Total effect of adjustments to previous year invoices in the current year	(72.7)	(33.9)	(0.7)	(0.7)	0.2	2.5	(1.1)	(0.2)
Effects of pricing adjustments to current year invoices								
Settlement of sales invoiced in the current year	194.6	67.0	11.2	7.8	1.5	(2.0)	4.6	2.1
Mark-to-market adjustments at the end of the current year	58.7	26.8	(0.1)	0.5	–	0.9	(0.2)	0.3
Total effect of adjustments to current year invoices	253.3	93.8	11.1	8.3	1.5	(1.1)	4.4	2.4
Total pricing adjustments	180.6	59.9	10.4	7.6	1.7	1.4	3.3	2.2
Realised losses on commodity derivatives	–	–	(1.3)	(2.1)	–	–	–	–
Treatment and refining charges	(113.6)	(68.8)	–	–	(0.2)	(0.7)	(26.5)	(6.1)
Revenue	2,323.7	940.4	603.9	480.3	106.4	251.3	181.8	27.7

1. These prior year figures have been re-presented to separately analyse revenue from the sale of products and from the provision of shipping services.

The revenue from the individual products shown in the above table excludes revenue from sales of silver and the Transport division, which are presented in the revenue by product table in Note 5 to reconcile to Group Revenue.

With sales of concentrates at Los Pelambres and Centinela, which are sold to smelters and roasting plants for further processing into fully refined metal, the price of the concentrate invoiced to the customer reflects the market value of the fully refined metal less a "treatment and refining charge" deduction, to reflect the lower value of this partially processed material compared with the fully refined metal. For accounting purposes, the revenue amount is the net of the market value of fully refined metal less the treatment and refining charges. Under the standard industry definition of cash costs, treatment and refining charges are regarded as an expense and part of the total cash cost figure.

(I) Copper concentrate

The typical period for which sales of copper concentrate remain open until settlement occurs is a range of approximately three to four months from shipment date.

		2021	2020
Sales provisionally priced at the balance sheet date	Tonnes	**177,900**	162,300
Average mark-to-market price	$/lb	**4.41**	3.52
Average provisional invoice price	$/lb	**4.37**	3.28

(II) Copper cathodes

The typical period for which sales of copper cathodes remain open until settlement occurs is approximately one month from shipment date.

		2021	2020
Sales provisionally priced at the balance sheet date	Tonnes	**15,000**	13,800
Average mark-to-market price	$/lb	**4.42**	3.52
Average provisional invoice price	$/lb	**4.39**	3.50

(III) Gold in concentrate

The typical period for which sales of gold in concentrate remain open until settlement occurs is approximately one month from shipment date.

		2021	2020
Sales provisionally priced at the balance sheet date	Ounces	**32,300**	16,300
Average mark-to-market price	$/oz	**1,801**	1,917
Average provisional invoice price	$/oz	**1,791**	1,861

(IV) Molybdenum concentrate

The typical period for which sales of molybdenum remain open until settlement occurs is approximately two months from shipment date.

		2021	2020
Sales provisionally priced at the balance sheet date	Tonnes	**2,400**	2,000
Average mark-to-market price	$/lb	**18.60**	9.34
Average provisional invoice price	$/lb	**19.65**	9.38

As detailed above, the effects of gains and losses from the marking-to-market of open sales are recognised through adjustments to revenue in the income statement and to trade debtors in the balance sheet. The effect of mark-to-market adjustments on the balance sheet at the end of each period are as follows:

	Effect on debtors of year end mark-to-market adjustments	
	2021 $m	2020 $m
Los Pelambres – copper concentrate	**12.0**	58.7
Los Pelambres – molybdenum concentrate	**(5.7)**	(0.2)
Centinela – copper concentrate	**5.2**	26.8
Centinela – molybdenum concentrate	**(0.7)**	0.3
Centinela – gold in concentrate	**0.4**	0.9
Centinela – copper cathodes	**0.3**	(0.1)
Antucoya – copper cathodes	**0.8**	0.5
	12.3	86.9

8 Profit before tax

Operating profit from subsidiaries and total profit from operations and associates and joint ventures is derived from Group revenue by deducting operating costs as follows:

	2021 $m	2020 Restated $m
Group revenue	**7,470.1**	5,129.3
Cost of sales	**(3,120.2)**	(2,856.9)
Gross profit	**4,349.9**	2,272.4
Administrative and distribution expenses	**(550.4)**	(453.9)
Other operating income	**31.8**	27.0
Other operating expenses[1]	**(429.9)**	(253.3)
Operating profit from subsidiaries	**3,401.4**	1,592.2
Net share of results from associates and joint ventures	**59.7**	5.1
Impairment of investment in associate	**–**	(80.8)
Total profit from operations, associates and joint ventures	**3,461.1**	1,516.5

1. The prior period comparatives have been restated to reflect a reclassification from Administrative and distribution expenses to Other operating expenses of $30.7 million related to project labour costs.

Other operating expenses comprise $103.2 million of exploration and evaluation expenditure (2020 – $85.1 million), $19.8 million in respect of the employee severance provision (2020 – $17.9 million), $11.3 million in respect of the closure provision (2020 – $45.2 million), $177.6 million in respect of the provision against the carrying value of assets relating to the Twin Metals project (2020 – nil) and $118.0 million of other expenses (2020 – $105.2 million).

Profit before tax is stated after (charging)/crediting:

	2021 $m	2020 $m
Foreign exchange gains/(losses)		
• included in net finance costs	**49.9**	(28.4)
• included in income tax expense	**–**	0.1
Depreciation of property, plant and equipment		
• owned assets	**(997.1)**	(966.9)
• leased assets	**(81.6)**	(81.8)
Loss on disposal of property, plant and equipment	**(9.2)**	(6.3)
Cost of inventories recognised as an expense	**(2,033.0)**	(1,810.0)
Employee benefit expense	**(498.0)**	(453.8)
Decommissioning and restoration (operating expenses)	**(11.3)**	(45.2)
Severance charges	**(19.8)**	(17.9)
Exploration and evaluation expense	**(103.2)**	(85.1)
Provision against carrying value of assets[1]	**(177.6)**	-
Auditors´ remuneration	**(1.9)**	(1.8)

1. Includes impairment provision recognised in respect of $27.5 million of property, plant and equipment (note 16) and $150.1 million of intangible assets (note 15) relating to the Twin Metals project.

A more detailed analysis of auditors´ remuneration on a worldwide basis is provided below:

Group	2021 $000	2020 $000
Fees payable to the Company´s auditors and its associates for the audit of the parent company and consolidated financial statements	**1,242**	920
Fees payable to the Company´s auditors and its associates for other services:		
• The audit of the Company's subsidiaries	**415**	323
• Audit-related assurance services[1]	**200**	185
• Other assurance services[2]	**–**	352
	1,857	1,780

1. The audit-related assurance services relate to the half-year review performed by the auditors.
2. The other assurance services in 2020 related to the bond issue in that year, which required the Group to engage PwC to act as the reporting accountant for that transaction, work which is in effect required to be performed by the Group's auditor.

Details of the Company's policy on the use of auditors for non-audit services: the reason why the auditor was used rather than another supplier and how the auditor's independence and objectivity was safeguarded are set out in the Audit and Risk Committee report on page 134. No services were provided pursuant to contingent fee arrangements.

9 Employees

A) Average monthly number of employees

	2021 Number	2020 Number
Los Pelambres	**959**	944
Centinela	**2,226**	2,092
Michilla	**–**	3
Antucoya	**817**	798
Exploration and evaluation	**71**	67
Corporate and other employees		
• Chile	**566**	528
• United Kingdom	**4**	4
• Other	**4**	4
Mining and Corporate	**4,647**	4,440
Transport division	**1,336**	1,379
	5,983	5,819

(i) The average number of employees for the year includes all the employees of subsidiaries. The average number of employees does not include contractors who are not directly employed by the Group.

(ii) The average number of employees does not include employees from associates and joint ventures.

B) Aggregate remuneration

The aggregate remuneration of the employees included in the table above was as follows:

	2021 $m	2020 $m
Wages and salaries	**(469.9)**	(430.2)
Social security costs	**(28.1)**	(23.6)
	(498.0)	(453.8)

C) Key management personnel

In accordance with IAS 24, key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the Group, directly or indirectly, including any Directors (Executive and Non-Executive) of the Company. Key management personnel who are not Directors have been identified as responsible senior management at the Corporate Centre and those responsible for the running of the key business divisions of the Group.

Compensation for key management personnel (including Directors) was as follows:

	2021 $m	2020 $m
Salaries and short-term employee benefits	**(40.1)**	(18.6)
	(40.1)	(18.6)

Disclosures on Directors' remuneration required by Schedule 8 of the Large and Medium-sized Companies and Group (Financial Statement) Regulations 2008, including those specified for audit by that Schedule, are included in the Remuneration report on pages 148 to 155.

10 Net finance income/(expense)

	2021 $m	2020 $m
Investment income		
Interest income	**3.4**	3.4
Gains on liquid investments held at fair value through profit or loss	**1.6**	15.5
	5.0	18.9
Interest expense		
Interest expense	**(63.4)**	(77.1)
	(63.4)	(77.1)
Other finance items		
Unwinding of discount on provisions	**(6.2)**	(7.5)
Adjustment to provision discount rates	**30.8**	(9.2)
Effects of changes in foreign exchange rates	**49.9**	(28.4)
Preference dividends	**(0.1)**	(0.1)
	74.4	(45.2)
Net finance income/(expense)	**16.0**	(103.4)

During 2021, amounts capitalised and consequently not included within the above table were as follows: $12.1 million at Los Pelambres (year ended 31 December 2020 – $21.0 million) and $2.1 million at Centinela (year ended 31 December 2020 – $5.7 million).

The interest expense shown above includes $7.9 million in respect of leases (2020 – $9.7 million).

11 Income tax expense

The tax charge for the year comprised the following:

	2021 $m	2020 $m
Current tax charge		
• Corporate tax (principally first category tax in Chile)	**(560.8)**	(353.5)
• Mining tax (royalty)	**(250.0)**	(106.1)
• Withholding tax	**(224.7)**	(55.8)
• Exchange gains on corporate tax balances	**–**	0.1
	(1,035.5)	(515.3)
Deferred tax charge		
• Corporate tax (principally first category tax in Chile)	**(237.4)**	(1.1)
• Mining tax (royalty)	**0.9**	4.2
• Withholding tax	**29.7**	(14.3)
	(206.8)	(11.2)
Total tax charge	**(1,242.3)**	(526.5)

The rate of first category (ie corporate) tax in Chile is 27.0% (2020 – 27.0%).

In addition to first category tax and the mining tax, the Group incurs withholding taxes on any remittance of profits from Chile. Withholding tax is levied on remittances of profits from Chile at 35% less first category (ie corporate) tax already paid in respect of the profits to which the remittances relate.

The Group's mining operations are also subject to a mining tax (royalty), which is calculated as a percentage of taxable mining operating profit. Production from Los Pelambres and Antucoya is subject to a rate of between 5–14%, depending on the level of operating profit margin. At Centinela, production from Encuentro Oxides, the Tesoro North East pit and the Run-of-Mine processing at Centinela Cathodes are subject to a rate of between 5–14%, depending on the level of operating profit margin, and production from Centinela Concentrates and the Tesoro Central and Mirador pits is subject to a rate of 5% of taxable operating profit.

	Year ended Excluding exceptional items 2021 $m	%	Year ended Including exceptional items 2021 $m	%	Year ended Excluding exceptional items 2020 $m	%	Year ended Including exceptional items 2020 $m	%
Profit before tax	**3,654.7**		**3,477.1**		1,493.9		1,413.1	
Tax at the Chilean corporate tax rate of 27%	**(986.8)**	**27.0**	**(938.8)**	**27.0**	(403.4)	27.0	(381.5)	27.0
Mining tax (royalty)	**(243.8)**	**6.7**	**(243.8)**	**7.0**	(101.3)	6.8	(101.3)	7.2
Deduction of mining tax (royalty) as an allowable expense in determination of first category tax	**67.8**	**(1.9)**	**67.8**	**(1.9)**	28.1	(1.9)	28.1	(2.0)
Withholding tax	**(195.0)**	**5.3**	**(195.0)**	**5.6**	(70.0)	4.7	(70.0)	5.0
Items not deductible from first category tax	**(31.6)**	**0.9**	**(31.6)**	**0.9**	(9.8)	0.7	(9.8)	0.6
Adjustment in respect of prior years	**(12.1)**	**0.3**	**(12.1)**	**0.3**	(1.6)	0.1	(1.6)	0.1
Tax effect of share of profit of associates and joint ventures	**16.1**	**(0.4)**	**16.1**	**(0.5)**	1.4	(0.1)	1.4	(0.1)
Impact of previously unrecognised tax losses on current tax	**52.5**	**(1.4)**	**52.5**	**(1.5)**	10.5	(0.7)	10.5	(0.7)
Impact of recognition of previously unrecognised tax losses on deferred tax	**–**	**–**	**90.6**	**(2.6)**	–	–	–	–
Provision against carrying value of assets	**–**	**–**	**(48.0)**	**1.4**	–	–	–	–
Impairment of investment in associate	**–**	**–**	**–**	**–**	–	–	(2.2)	0.2
Net other items	**–**	**–**	**–**	**–**	(0.1)	–	(0.1)	–
Tax expense and effective tax rate for the year	**(1,332.9)**	**36.5**	**(1,242.3)**	**35.7**	(546.2)	36.6	(526.5)	37.3

The effective tax rate excluding exceptional items of 36.5% varied from the statutory rate principally due to the mining tax (royalty) (net impact of $176.0 million/4.8% including the deduction of the mining tax (royalty) as an allowable expense in the determination of first category tax), the withholding tax relating to the remittance of profits from Chile (impact of $195.0 million/5.3%), items not deductible for Chilean corporate tax purposes, principally the funding of expenses outside of Chile (impact of $31.6 million/0.9%) and adjustments in respect of prior years (impact of $12.1 million/0.3%), partly offset by the impact of previously unrecognised tax losses (impact of $52.5 million/1.4%) and the impact of the recognition of the Group's share of profit from associates and joint ventures, which are included in the Group's profit before tax, net of their respective tax charges (impact of $16.1 million/0.4%).

The impact of the exceptional items on the effective tax rate including exceptional items was $42.6 million/1.2%.

The main factors which could impact the sustainability of the Group's existing effective tax rate are:

- the level of future distributions made by the Group's Chilean subsidiaries out of Chile, which could result in increased withholding tax charges
- the impact of expenses which are not deductible for Chilean first category tax. Some of these expenses are relatively fixed costs, and so the relative impact of these expenses on the Group's effective tax rate will vary depending on the Group's total profit before tax in a particular year.

There are no significant tax uncertainties which would require critical judgements, estimates or potential provisions other than deferred tax judgements and estimates as explained in Note 3 B (i).

12 Discontinued operations

There are no profits from discontinued operations in the year ended 2021.

In 2016, the Group disposed of Minera Michilla SA, with the profit on disposal, along with the results for that year, being presented on the "Profit for the period from discontinued operations" line in the income statement. The Group retained certain residual options over the Michilla operation, and in December 2020, the current owner of Michilla paid the Group $10.0 million in order to extinguish those options, resulting in a post-tax gain for the Group of $7.3 million. Consistent with the original presentation in 2016, this gain has been reflected on the "Profit for the period from discontinued operations" line in the income statement for the year ended 2020.

13 Earnings per share

	2021 $m	2020 $m
Profit for the period attributable to equity holders of the Company (exc. exceptional items)	**1,404.4**	546.6
Exceptional Items	**(114.2)**	(40.2)
Less profit from discontinuing operations	**–**	(7.3)
Profit for the period attributable to equity holders of the Company (inc. exceptional items) from continuing operations	**1,290.2**	499.1

	2021 Number	2020 Number
Ordinary shares in issue throughout each year	**985,856,695**	985,856,695

13 Earnings per share continued

	2021 cents	2020 cents
Basic earnings per share (exc. exceptional items) from continuing operations	**142.5**	54.7
Basic earnings per share (exceptional items) from continuing operations	**(11.6)**	(4.1)
Basic earnings per share (inc. exceptional items) from continuing operations	**130.9**	50.6
Basic earnings per share from discontinued operations	**–**	0.7
Total continuing and discontinued operations (inc. exceptional items)	**130.9**	51.3

Basic earnings per share are calculated as profit after tax and non-controlling interests, based on 985,856,695 (2020: 985,856,695) ordinary shares.

There was no potential dilution of earnings per share in either year set out above, and therefore diluted earnings per share did not differ from basic earnings per share as disclosed above.

Reconciliation of basic earnings per share from continuing operations:

		2021	2020
Profit for the year attributable to equity holders of the Company	$m	**1,290.2**	506.4
Less: profit for discontinued operations attributable to equity holders of the Company	$m	**–**	(7.3)
Profit from continuing operations attributable to equity holders of the Company	$m	**1,290.2**	499.1
Ordinary shares	Number	**985,856,695**	985,856,695
Basic earnings per share from continuing operations	cents	**130.9**	50.6

14 Dividends

Amounts recognised as distributions to equity holders in the year:

	2021 $m	2020 $m	2021 cents per share	2020 cents per share
Final dividend paid in June (proposed in relation to the previous year)				
• Ordinary	**478.1**	70.0	**48.5**	7.1
Interim dividend paid in October				
• Ordinary	**232.7**	61.1	**23.6**	6.2
	710.8	131.1	**72.1**	13.3

The recommended final dividend for each year, which is subject to approval by shareholders at the Annual General Meeting and has therefore not been included as a liability in these financial statements, is as follows:

	2021 $m	2020 $m	2021 cents per share	2020 cents per share
Final dividend proposed in relation to the year				
• Ordinary	**1,172.1**	478.1	**118.9**	48.5

This gives total dividends proposed in relation to 2021 (including the interim dividend) of 142.5 cents per share or $1,404.8 million (2020 – 54.7 cents per share or $539.3 million).

In accordance with IAS 32, preference dividends have been included within net finance expense (see Note 10) and amounted to $0.1 million (2020 – $0.1 million).

Further details of the currency election timing and process (including the default currency of payment) are available on the Antofagasta plc website (antofagasta.co.uk) or from the Company's registrar, Computershare Investor Services PLC on +44 370 702 0159.

Further details relating to dividends for each year are given in the Directors' Report on page 161.

15 Intangible assets

	$m
At 1 January 2020	150.1
Additions	–
Disposals	–
At 31 December 2020	**150.1**
Additions	**–**
Provision against carrying value	**(150.1)**
At 31 December 2021	**–**

The $150.1 million intangible asset reflects the cost of Twin Metals' mining licences assets included within the corporate segment. As explained in Note 4, an impairment provision has been recognised in respect of this asset as at 31 December 2021.

16 Property, plant and equipment

	Land $m	Mining properties $m	Stripping costs $m	Buildings and infrastructure $m	Railway track $m	Wagons and rolling stock $m	Machinery, equipment and others $m	Assets under construction $m	Right-of-use assets $m	Total $m
Cost										
At 1 January 2020	60.6	667.5	1,880.5	5,464.8	99.7	203.6	7,059.0	1,335.3	430.6	17,201.6
Additions	1.4	–	356.7	0.2	–	–	0.3	937.4	33.6	1,329.6
Additions – capitalised depreciation	–	–	67.8	–	–	–	–	–	–	67.8
Adjustment to capitalised decommissioning provisions	–	–	–	59.4	–	–	–	–	–	59.4
Capitalisation of interest	–	–	–	–	–	–	8.0	18.7	–	26.7
Capitalisation of critical spare parts	–	–	–	–	–	–	10.2	–	–	10.2
Reclassifications	–	–	–	403.7	9.7	14.6	192.5	(620.5)	–	–
Asset disposals	(0.1)	–	–	–	(1.1)	(10.2)	(3.1)	(4.3)	(5.3)	(24.1)
At 31 December 2020	61.9	667.5	2,305.0	5,928.1	108.3	208.0	7,266.9	1,666.6	458.9	18,671.2
At 1 January 2021	61.9	667.5	2,305.0	5,928.1	108.3	208.0	7,266.9	1,666.6	458.9	18,671.2
Additions	–	4.5	502.5	–	–	–	3.9	1,283.2	61.8	1,855.9
Additions – capitalised depreciation	–	–	72.0	–	–	–	–	–	–	72.0
Adjustment to capitalised decommissioning provisions	–	–	–	(119.9)	–	–	–	–	–	(119.9)
Capitalisation of interest	–	–	–	–	–	–	–	14.2	–	14.2
Capitalisation of critical spare parts	–	–	–	–	–	–	0.9	–	–	0.9
Reclassifications	–	–	–	1.4	14.5	5.8	4.7	(26.6)	(2.8)	(3.0)
Asset disposals	–	–	–	(5.7)	–	(7.3)	(32.0)	(8.2)	(17.6)	(70.8)
At 31 December 2021	61.9	672.0	2,879.5	5,803.9	122.8	206.5	7,244.4	2,929.2	500.3	20,420.5
Accumulated depreciation and impairment										
At 1 January 2020	–	(530.3)	(704.1)	(2,383.2)	(34.0)	(91.2)	(3,731.2)	–	(170.9)	(7,644.9)
Charge for the year	–	(31.8)	(413.0)	(230.4)	(4.8)	(18.8)	(268.1)	–	(81.8)	(1,048.7)
Depreciation capitalised in inventories	–	–	–	–	–	–	(74.8)	–	–	(74.8)
Depreciation capitalised in property, plant and equipment	–	–	–	–	–	–	(67.8)	–	–	(67.8)
Asset disposals	–	–	–	–	0.3	9.2	2.1	–	5.3	16.9
At 31 December 2020	–	(562.1)	(1,117.1)	(2,613.6)	(38.5)	(100.8)	(4,139.8)	–	(247.4)	(8,819.3)
At 1 January 2021	–	(562.1)	(1,117.1)	(2,613.6)	(38.5)	(100.8)	(4,139.8)	–	(247.4)	(8,819.3)
Charge for the year	–	(26.0)	(255.3)	(274.1)	(5.9)	(17.1)	(418.7)	–	(81.6)	(1,078.7)
Depreciation capitalised in inventories	–	–	–	–	–	–	54.1	–	–	54.1
Depreciation capitalised in property, plant and equipment	–	–	–	–	–	–	(72.0)	–	–	(72.0)
Reclassifications	–	–	–	–	–	–	–	–	1.4	1.4
Impairment	(25.0)	–	–	(2.2)	–	–	(0.3)	–	–	(27.5)
Asset disposals	–	–	–	–	–	6.4	36.0	–	17.6	60.0
At 31 December 2021	(25.0)	(588.1)	(1,372.4)	(2,889.9)	(44.4)	(111.5)	(4,540.7)	–	(310.0)	(9,882.0)
Net book value										
At 31 December 2021	36.9	83.9	1,507.1	2,914.0	78.4	95.0	2,703.7	2,929.2	190.3	10,538.5
At 31 December 2020	61.9	105.4	1,187.9	3,314.5	69.8	107.2	3,127.1	1,666.6	211.5	9,851.9

The Group has no (2020 – nil) assets pledged as security against bank loans provided to the Group.

At 31 December 2021, the Group had entered into contractual commitments for the acquisition of property, plant and equipment amounting to $599.3 million (2020 – $849.5 million) of which $396.7 million was related to Los Pelambres and $169.4 million to Centinela.

The average interest rate for the amounts capitalised was 1.9% (2020 – 4.2%).

At 31 December 2021, assets capitalised relating to the decommissioning provision were $263.9 million (2020 – $199.5 million).

Depreciation capitalised in property, plant and equipment of $72.0 million related to the depreciation of assets used in mine development (operating stripping) at Centinela, Los Pelambres and Antucoya (2020 – $67.8 million).

As explained in Note 4, an impairment provision has been recognised in respect of $27.5 million of property, plant and equipment relating to the Twin Metals project.

17 Investments in subsidiaries

The subsidiaries of the Group, the percentage of equity owned and the main country of operation are set out below. These interests are consolidated within these financial statements.

	Country of incorporation	Country of operations	Registered office	Nature of business	Economic interest
Direct subsidiaries of the Parent Company					
Antofagasta Railway Company plc	UK	Chile	1	Railway	100%
Andes Trust Limited (The)	UK	UK	1	Investment	100%
Chilean Northern Mines Limited	UK	Chile	1	Investment	100%
Andes Re Limited	Bermuda	Bermuda	4	Insurance	100%
Indirect subsidiaries of the Parent Company					
Minera Los Pelambres SCM	Chile	Chile	2	Mining	60%
Minera Centinela SCM	Chile	Chile	2	Mining	70%
Minera Antucoya SCM	Chile	Chile	2	Mining	70%
Antofagasta Minerals SA	Chile	Chile	2	Mining	100%
Alfa Estates Limited	Jersey	Jersey	3	Investment	100%
Energía Andina Geothermal SpA	Chile	Chile	2	Energy	100%
MLP Transmisión SA	Chile	Chile	2	Energy	100%
Northern Minerals Investment (Jersey) Limited	Jersey	Jersey	3	Investment	100%
Northern Metals (UK) Limited	UK	UK	1	Investment	100%
Northern Minerals Holding Co	USA	USA	5	Investment	100%
Duluth Metals Limited	Canada	Canada	7	Investment	100%
Twin Metals (UK) Limited	UK	UK	1	Investment	100%
Twin Metals (USA) Inc	USA	USA	6	Investment	100%
Twin Metals Minnesota LLC	USA	USA	6	Mining	100%
Franconia Minerals (US) LLC	USA	USA	6	Mining	100%
Duluth Metals Holdings (USA) Inc	USA	USA	13	Investment	100%
Duluth Exploration (USA) Inc	USA	USA	14	Investment	100%
DMC LLC (Minnesota)	USA	USA	13	Investment	100%
DMC (USA) LLC (Delaware)	USA	USA	13	Investment	100%
DMC (USA) Corporation	USA	USA	13	Investment	100%
Antofagasta Investment Company Limited	UK	UK	1	Investment	100%
Minprop Limited	Jersey	Jersey	3	Mining	100%
Antomin 2 Limited	BVI	BVI	8	Mining	51%
Antomin Investors Limited	BVI	BVI	8	Mining	51%
Antofagasta Minerals Australia Pty Limited	Australia	Australia	9	Mining	100%
Minera Anaconda Peru	Peru	Peru	10	Mining	100%
Los Pelambres Holding Company Limited	UK	UK	1	Investment	100%
Los Pelambres Investment Company Limited	UK	UK	1	Investment	100%
Lamborn Land Co	USA	USA	5	Investment	100%
Anaconda South America Inc	USA	USA	15	Investment	100%
El Tesoro (SPV Bermuda) Limited	Bermuda	Bermuda	4	Investment	100%
Antofagasta Minerals Canada	Canada	Canada	9	Agency	100%
Antofagasta Minerals (Shanghai) Co Limited	China	China	16	Agency	100%
Andes Investments Company (Jersey) Limited	Jersey	Jersey	3	Investment	100%
Bolivian Rail Investors Co Inc	USA	USA	5	Investment	100%
Inversiones Los Pelambres Chile Limitada	Chile	Chile	2	Investment	100%
Equatorial Resources SpA	Chile	Chile	2	Investment	100%
Minera Santa Margarita de Astillas SCM	Chile	Chile	2	Mining	82.0%

	Country of incorporation	Country of operations	Registered office	Nature of business	Economic interest
Minera Penacho Blanco SA	Chile	Chile	2	Mining	66.6%
Michilla Costa SpA	Chile	Chile	2	Logistics	99.9%
Minera Pampa Fenix SCM	Chile	Chile	2	Investment	90.0%
Minera Mulpun Limitada	Chile	Chile	2	Mining	100%
Fundación Minera Los Pelambres	Chile	Chile	2	Community development	100%
Inversiones Punta de Rieles Limitada	Chile	Chile	12	Investment	100%
Ferrocarril Antofagasta a Bolivia (Permanent Establishment)	Chile	Chile	12	Railway	100%
Inversiones Chilean Northern Mines Limitada	Chile	Chile	12	Investment	100%
The Andes Trust Chile SA	Chile	Chile	12	Investment	100%
Forestal SA	Chile	Chile	12	Forestry	100%
Servicios de Transportes Integrados Limitada	Chile	Chile	12	Road transport	100%
Inversiones Train Limitada	Chile	Chile	12	Investment	100%
Servicios Logisticos Capricornio Limitada	Chile	Chile	12	Transport	100%
Embarcadores Limitada	Chile	Chile	12	Transport	100%
FCAB Ingenieria y Servicios 2 Limitada	Chile	Chile	12	Transport	100%
Inmobiliaria Parque Estación SA	Chile	Chile	12	Real Estates	100%
Emisa Antofagasta SA	Chile	Chile	12	Transport	100%

Registered offices:

1 103 Mount Street, London, W1K 2TJ, UK
2 Avenida Apoquindo N° 4001, Piso 18, Las Condes, Santiago, Chile
3 22 Grenville Street, St Helier, Jersey, JE4 8PX3, Channel Islands
4 Crawford House, 50 Cedar Avenue, Hamilton HM 11, Bermuda
5 1209 Orange Street, Wilmington, DE 19801, USA
6 6040 Earle Brown Drive, 480 Brooklyn Center, MN 55430, USA
7 161 Bay Street, Suite 4320, Toronto, Ontario, M5J 2S1, Canada
8 PO Box 958, Road Town, Tortola VG1110, British Virgin Islands
9 Riparian Plaza, Level 28, 71 Eagle Street, Brisbane, Qld 4001, Australia
10 Avenida Paseo de la Republica Nº 3245 Piso 3, Lima, Peru
11 Avenida 16 de Julio N° 1440, piso 19 oficina 1905, La Paz, Bolivia
12 Simon Bolivar 255, Antofagasta, Chile
13 6041 Earle Brown Drive, 480 Brooklyn Center, MN 55430, USA
14 1010 Dale Street N, St Paul, MN 55117-5603, USA
15 2711 Centerville Road, Suite 400, Wilmington, DE 19808, USA
16 Unit 3309, IFC 2, 8 Century Avenue, Shanghai, China

With the exception of the Antofagasta Railway Company plc, all of the above Group companies have only one class of ordinary share capital in issue. The Antofagasta Railway Company plc has ordinary and preference share capital in issue, with the ordinary share capital representing 76% of the Company's total share capital, and the preference share capital representing 24%. Antofagasta plc holds 100% of both the ordinary and preference shares.

The proportion of voting rights is proportional to the economic interest for the companies listed above.

18 Investment in associates and joint ventures

	ATI (ii) 2021 $m	Minera Zaldívar (iii) 2021 $m	Tethyan Copper (iv) 2021 $m	Total 2021 $m
Balance at the beginning of the year	5.6	909.0	–	914.6
Obligations on behalf of JV and associates at the beginning of the year	–	–	(1.1)	(1.1)
Capital contribution	–	–	9.5	9.5
Share of net profit/(loss) before tax	0.2	99.0	(9.0)	90.2
Share of tax	–	(30.5)	–	(30.5)
Share of profit/(loss) from JV and associates	0.2	68.5	(9.0)	59.7
Dividends receivable	–	(77.5)	–	(77.5)
Balance at the end of the year	5.8	900.0	–	905.8
Obligations on behalf of JV and associates at the end of the year	–	–	(0.6)	(0.6)

	Inversiones Hornitos 2020 $m	ATI 2020 $m	Minera Zaldívar 2020 $m	Tethyan Copper 2020 $m	Total 2020 $m
Balance at the beginning of the year	56.9	6.1	961.8	–	1,024.8
Obligations on behalf of JV and associates at the beginning of the year	–	–	–	(1.8)	(1.8)
Capital contribution	23.9	–	–	7.2	31.1
Impairment of investment in associate (i)	(80.8)	–	–	–	(80.8)
Share of net (loss)/profit before tax	–	(0.9)	19.6	(6.5)	12.2
Share of tax	–	0.4	(7.5)	–	(7.1)
Share of (loss)/profit from JV and associates	–	(0.5)	12.1	(6.5)	5.1
Dividends receivable	–	–	(65.0)	–	(65.0)
Balance at the end of the year	–	5.6	909.0	–	914.6
Obligations on behalf of JV and associates at the end of the year	–	–	–	(1.1)	(1.1)

The investments which are included in the $905.2 million balances at 31 December 2021 are set out below:

Investment in associates

(i) On 31 March 2020, the Group agreed to dispose of its 40% interest in the Hornitos coal-fired power station to ENGIE Energía Chile S.A. ("ENGIE"), the owner of the remaining 60% interest. This was part of the value accretive renegotiation of Centinela's power purchase agreement which as a result will be wholly supplied from lower cost renewable sources from 2022. Under the terms of the agreement, the Group disposed of its investment to ENGIE in December 2021 for a nominal consideration, and has not been entitled to receive any further dividend income from Hornitos from the date of the agreement. Accordingly, the Group no longer had any effective economic interest in the results or assets of Hornitos from 31 March 2020 onwards, and therefore recognised an impairment of $80.8 million in respect of its investment in associate balance as at that date, and no longer recognises any share of Hornitos' results. The post-tax impact of the provision is $61.1 million, of which $40.2 million is attributable to the equity owners of the Company.

(ii) The Group's 30% interest in Antofagasta Terminal Internacional ("ATI"), which operates a concession to manage installations in the port of Antofagasta.

Investment in joint ventures

(iii) The Group's 50% interest in Minera Zaldívar SpA ("Zaldívar").

(iv) The Group's 50% interest in Tethyan Copper Company Limited ("Tethyan"), which is a joint venture with Barrick Gold Corporation in respect of the Reko Diq project in the Islamic Republic of Pakistan ("Pakistan"). Tethyan has been pursuing arbitration claims against Pakistan following the unlawful denial of a mining lease for the project in 2011. Details in respect of the arbitration are set out in Note 35.

As the net carrying value of the interest in Tethyan is negative, it is included within non-current liabilities, as the Group is liable for its share of the joint venture's obligations.

Summarised financial information for the associates is as follows:

	ATI 2021 $m	Total 2021 $m
Cash and cash equivalents	**1.2**	**1.2**
Current assets	**13.7**	**13.7**
Non-current assets	**99.3**	**99.3**
Current liabilities	**(22.5)**	**(22.5)**
Non-current liabilities	**(75.0)**	**(75.0)**
Revenue	**47.2**	**47.2**
Profit from continuing operations	**1.3**	**1.3**
Total comprehensive income	**1.3**	**1.3**

	ATI 2020 $m	Total 2020 $m
Cash and cash equivalents	0.2	0.2
Current assets	11.3	11.3
Non-current assets	108.2	108.2
Current liabilities	(19.9)	(19.9)
Non-current liabilities	(83.5)	(83.5)
Revenue	40.4	40.4
Loss from continuing operations	(1.9)	(1.9)
Total comprehensive expense	(1.9)	(1.9)

Summarised financial information for the joint ventures is as follows:

	Minera Zaldívar 2021 $m	Tethyan Copper 2021 $m	Total 2021 $m
Cash and cash equivalents	**46.4**	**3.6**	**50.0**
Current assets	**664.0**	**3.6**	**667.6**
Non-current assets	**1,675.1**	**–**	**1,675.1**
Current financial liabilities (excl. trade and other payables and provisions)	**(54.3)**	**–**	**(54.3)**
Current liabilities	**(170.2)**	**(5.1)**	**(175.3)**
Non-current financial liabilities (excl. trade and other payables and provisions)	**(124.4)**	**–**	**(124.4)**
Non-current liabilities	**(155.1)**	**(0.1)**	**(155.2)**
Revenue	**849.2**	**–**	**849.2**
Depreciation and amortisation	**(160.4)**	**(3.0)**	**(163.4)**
Interest income	**0.3**	**2.0**	**2.3**
Interest expense	**(0.5)**	**–**	**(0.5)**
Income tax expense	**(62.1)**	**–**	**(62.1)**
Profit/(loss) after tax from continuing and discontinued operations	**137.1**	**(18.0)**	**119.1**
Total comprehensive income/(expense)	**137.1**	**(18.0)**	**119.1**

/ *Notes to the financial statements* continued

	Minera Zaldívar 2020 Restated[1] $m	Tethyan Copper 2020 $m	Total 2020 Restated $m
Cash and cash equivalents	66.8	4.2	71.0
Current assets	958.2	4.2	962.4
Non-current assets	1,427.2	–	1,427.2
Current liabilities	(290.0)	(6.2)	(296.2)
Non-current liabilities	(241.3)	(0.1)	(241.4)
Revenue	599.3	–	599.3
Depreciation and amortisation	(145.2)	(1.0)	(146.2)
Interest income	0.9	5.0	5.9
Interest expense	(0.6)	–	(0.6)
Income tax expense or income	(16.1)	–	(16.1)
Profit/(loss) after tax from continuing and discontinued operations	24.3	(12.9)	11.4
Total comprehensive income/(expense)	24.3	(12.9)	11.4

1. The prior period comparatives have been restated to reflect the net position in respect of deferred tax assets/liabilities ($429.1 million) and to reclassify liquid investments which had been included within the cash and cash equivalents line ($214.2 million).

The above summarised financial information is based on the amounts included in the IFRS financial statements of the associate or joint venture (100% of the results or balances of the associate or joint venture, rather than the Group's proportionate share), after the Group's fair value adjustments and applying the Group's accounting policies.

19 Equity investments

	2021 $m	2020 $m
Balance at the beginning of the year	**11.1**	5.1
Movement in fair value	**(2.1)**	5.5
Foreign currency exchange differences	**(0.3)**	0.5
Balance at the end of the year	**8.7**	11.1

Equity investments represent those investments which are not subsidiaries, associates or joint ventures and are not held for trading purposes. The fair value of all equity investments is based on quoted market prices.

20 Inventories

	2021 $m	20201 $m
Current		
Raw materials and consumables	**155.6**	178.2
Work-in-progress	**316.5**	339.3
Finished goods	**60.7**	75.2
	532.8	592.7
Non-current		
Work-in-progress	**270.4**	278.1
Total	**803.2**	870.8

During 2021, no net realisable value ("NRV") adjustment has been recognised (2020 – $1.5 million). Non-current work-in-progress represents inventory expected to be processed more than 12 months after the balance sheet date.

The carrying value of the Group's inventory balances has been reassessed with consideration of the effects of the COVID-19 pandemic. No material adjustments have been made to the carrying values of the inventory balances for the years ended 31 December 2021 and 31 December 2020 as a result of the COVID-19 pandemic.

21 Trade and other receivables

Trade and other receivables do not generally carry any interest, are principally short-term in nature and are normally stated at their nominal value less any impairment.

	Due in one year		Due after one year		Total	
	2021 $m	2020 $m	2021 $m	2020 $m	2021 $m	2020 $m
Trade receivables	**1,040.0**	832.6	**–**	–	**1,040.0**	832.6
Other receivables	**106.1**	184.3	**51.2**	55.9	**157.3**	240.2
	1,146.1	1,016.9	**51.2**	55.9	**1,197.3**	1,072.8

The largest balances of trade receivables are with equity participants in the key mining projects. Many other significant trade receivables are secured by letters of credit or other forms of security. There is no material element which is interest-bearing. Trade receivables include mark-to-market adjustments in respect of provisionally priced sales of copper and molybdenum concentrates which remain open as to final pricing. Further details of such adjustments are given in Note 7. Other receivables includes employee loans of $42.9 million (31 December 2020 – $47.4 million).

Movements in the provision for doubtful debts were as follows:

	2021 $m	2020 $m
Balance at the beginning of the year	**(1.5)**	(3.1)
Utilised in year	**0.1**	1.8
Foreign currency exchange difference	**0.2**	(0.2)
Balance at the end of the year	**(1.2)**	(1.5)

The ageing analysis of the trade and other receivables balance is as follows:

		Past due but not impaired			
	Neither past due nor impaired $m	Up to 3 months past due $m	3-6 months past due $m	More than 6 months past due $m	Total $m
2021	**1,187.1**	**8.4**	**0.3**	**1.5**	**1,197.3**
2020	1,064.3	8.0	0.2	0.3	1,072.8

With respect to the trade receivables that are neither past due nor impaired, there are no indications that the debtors will not meet their payment obligations. The carrying value of the trade receivables recorded in the financial statements represents the Group's maximum exposure to credit risk.

The recoverability of the Group's trade receivables has been reassessed with consideration of the effects of the COVID-19 pandemic. No material adjustments have been made to the carrying values of trade receivables for the years ended 31 December 2021 and 31 December 2020 as a result of the COVID-19 pandemic.

22 Cash and cash equivalents, and liquid investments

The fair value of cash and cash equivalents, and liquid investments is not materially different from the carrying values presented. The credit risk on cash and cash equivalents is limited because the counterparties are banks with high credit ratings assigned by international credit rating agencies.

Cash and cash equivalents, and liquid investments comprised:

	2021 $m	2020 $m
Cash and cash equivalents	**743.4**	1,246.8
Liquid investments	**2,969.7**	2,426.0
	3,713.1	3,672.8

At 31 December 2021 and 2020 there is no cash which is subject to restriction.

The denomination of cash, cash equivalents and liquid investments was as follows:

	2021 $m	2020 $m
US dollars	**3,673.8**	3,558.9
Chilean pesos	**37.8**	112.8
Sterling	**1.2**	–
Other	**0.3**	1.1
	3,713.1	3,672.8

The credit quality of cash, cash equivalents and liquid investments are as follow:

	2021 $m	2020 $m
AAA	**1,772.4**	2,007.1
AA+	**2.2**	–
AA	**54.4**	46.0
AA-	**121.1**	279.5
A+	**799.5**	553.3
A	**904.0**	741.5
A-	**–**	33.9
BBB+	**–**	2.1
Subtotal	**3,653.6**	3,663.4
Cash at bank[1]	**59.5**	9.4
Total cash, cash equivalents and liquid investments	**3,713.1**	3,672.8

1. Cash at bank is held with investment grade financial institutions.

There have been no impairments recognised in respect of cash or cash equivalents in the year ended 31 December 2021 (31 December 2020 - nil).

23 Borrowings

A) Analysis by type of borrowing

Borrowings may be analysed by business segment and type as follows:

	Note	2021 $m	2020 $m
Los Pelambres			
• Senior loan	(i)	**(1,188.3)**	(1,288.1)
• Leases	(ii)	**(54.8)**	(91.4)
Centinela			
• Senior loan	(iii)	**(386.8)**	(496.5)
• Subordinated debt	(iv)	**–**	(203.0)
• Leases	(v)	**(59.8)**	(78.0)
Antucoya			
• Senior loan	(vi)	**(196.3)**	(261.1)
• Subordinated debt	(vii)	**(184.5)**	(191.5)
• Short-term loan	(viii)	**(35.0)**	(75.0)
• Leases	(ix)	**(23.4)**	(19.9)
Corporate and other items			
• Senior loan	(x)	**(497.3)**	(496.6)
• Bond	(xi)	**(496.1)**	(495.6)
• Leases	(xii)	**(20.4)**	(18.6)
Transport division			
• Senior loan	(xiii)	**(25.8)**	(36.5)
• Leases	(xiv)	**(1.4)**	(0.3)
Preference shares	(xv)	**(2.7)**	(2.7)
Total		**(3,172.6)**	(3,754.8)

(i) The senior loan at Los Pelambres is divided into three tranches. The first tranche has a remaining duration of 4 years and has an interest rate of US LIBOR six-month rate plus 1.05%. The second tranche has a remaining duration of 7 years and has an interest rate of US LIBOR six-month rate plus 0.85%. The third tranche has a remaining duration of 6.5 years and has an interest rate of US LIBOR six-month rate plus 1.10%. As at 31 December 2021, $1,420 million of the loan facility had been drawn-down and $209 million had been paid. The loans are subject to financial covenants which require that specified net debt to EBITDA and EBITDA to finance expense ratios are maintained.

(ii) Leases at Los Pelambres are denominated in US dollars with an average interest rate of US LIBOR six-month rate plus 1.74% and a remaining duration of 0.5 years.

(iii) The senior loan at Centinela is US dollar denominated with a duration of 4 years and an interest rate of US LIBOR six-month rate plus 0.95%. The loan is subject to financial covenants which require that specified net debt to EBITDA and EBITDA to finance expense ratios are maintained.

(iv) The US dollar denominated subordinated debt at Centinela was repaid on 19 November 2021.

(v) Leases at Centinela are denominated in US dollars with an average interest rate of US LIBOR six-month rate plus 4.8% and a remaining duration of 5 years.

(vi) The senior loan at Antucoya represents a US dollar denominated syndicated loan. This loan has a remaining duration of 3 years and has an interest rate of US LIBOR six-month rate plus 1.3%. The loan is subject to financial covenants which require that specified net debt to EBITDA and EBITDA to finance expense ratios are maintained.

(vii) Subordinated debt at Antucoya is US dollar denominated, provided to Antucoya by Marubeni Corporation with a remaining duration of 3 years and an interest rate of US LIBOR six-month rate plus 3.65%. Subordinated debt provided by Group companies to Antucoya has been eliminated on consolidation.

(viii) The short-duration loan at Antucoya is US dollar denominated, comprising a working capital loan for an average period of 0.8 years and has an interest rate of US LIBOR six-month rate plus a weighted average spread of 0.25%.

(ix) Leases at Antucoya are denominated in US dollars with an average interest rate of US LIBOR six-month rate plus 2.0% and a remaining duration of 2.5 years.

(x) The senior loan at Corporate (Antofagasta plc) is US dollar denominated with an interest rate of US LIBOR six-month rate plus 2.25% and has a remaining duration of 4 years.

(xi) Antofagasta plc in October 2020 issued a corporate bond for $500 million with a 10-year tenor with a yield of 2.415%.

(xii) Leases at Corporate and other items are denominated in Unidades de Fomento (inflation-linked Chilean pesos) and have a remaining duration of 5 years and are at fixed rates with an average interest rate of 5.2%.

(xiii) Long-term loans at the Transport division are US dollar denominated, and have a remaining duration of 1.5 years and an interest rate of US LIBOR six-month rate plus 1.06%.

(xiv) Leases at the Transport division are US dollar denominated in with an average interest rate of US LIBOR six-month rate plus 3.2% and a remaining duration of 5 years.

(xv) The preference shares are Sterling-denominated and issued by Antofagasta plc. There were 2 million shares of £1 each authorised, issued and fully paid at 31 December 2018. The preference shares are non-redeemable and are entitled to a fixed cumulative dividend of 5% per annum. On winding up, they are entitled to repayment and any arrears of dividend in priority to ordinary shareholders but are not entitled to participate further in any surplus. Each preference share carries 100 votes in any general meeting of the Company.

B) Leases

Information in respect of the Group's leases is contained in the following notes:

- Note 16 – depreciation charges, additions and disposals in respect of the right of use assets relating to the leases
- Note 32(B) – repayments of the lease balances and new lease liabilities arising during the period
- Note 10 – interest expense in respect of the lease balances

C) Analysis of borrowings by currency

The exposure of the Group's borrowings to currency risk is as follows:

At 31 December 2021	Chilean pesos $m	Sterling $m	US dollars $m	2021 Total $m
Corporate loans	**–**	**–**	**(2,294.5)**	**(2,294.5)**
Bond	**–**	**–**	**(496.1)**	**(496.1)**
Other loans (including short-term loans)	**–**	**–**	**(219.5)**	**(219.5)**
Leases	**(113.5)**	**(4.3)**	**(42.0)**	**(159.8)**
Preference shares	**–**	**(2.7)**	**–**	**(2.7)**
	(113.5)	**(7.0)**	**(3,052.1)**	**(3,172.6)**

At 31 December 2020	Chilean pesos $m	Sterling $m	US dollars $m	2020 Total $m
Corporate loans	–	–	(2,578.8)	(2,578.8)
Bond	–	–	(495.6)	(495.6)
Other loans (including short-term loans)	–	–	(469.5)	(469.5)
Leases	(169.5)	–	(38.7)	(208.2)
Preference shares	–	(2.7)	–	(2.7)
	(169.5)	(2.7)	(3,582.6)	(3,754.8)

D) Analysis of borrowings by type of interest rate

The exposure of the Group's borrowings to interest rate risk is as follows:

At 31 December 2021	Fixed $m	Floating $m	2021 Total $m
Corporate loans	**–**	**(2,294.5)**	**(2,294.5)**
Bond	**(496.1)**	**–**	**(496.1)**
Other loans (including short-term loans)	**–**	**(219.5)**	**(219.5)**
Leases	**(143.9)**	**(15.9)**	**(159.8)**
Preference shares	**(2.7)**	**–**	**(2.7)**
	(642.7)	**(2,529.9)**	**(3,172.6)**

At 31 December 2020	Fixed $m	Floating $m	2020 Total $m
Corporate loans	–	(2,578.8)	(2,578.8)
Bond	(495.6)	–	(495.6)
Other loans (including short-term loans)	–	(469.5)	(469.5)
Leases	(177.6)	(30.6)	(208.2)
Preference shares	(2.7)	–	(2.7)
	(675.9)	(3,078.9)	(3,754.8)

23 Borrowings continued

E) Maturity profile

The maturity profile of the Group's borrowings is as follows:

At 31 December 2021	Within 1 year $m	Between 1-2 years $m	Between 2-5 years $m	After 5 years $m	2021 Total $m
Corporate loans	**(233.0)**	**(367.0)**	**(1,526.7)**	**(167.8)**	**(2,294.5)**
Bond	**–**	**–**	**–**	**(496.1)**	**(496.1)**
Other loans	**(35.0)**	**–**	**(184.5)**	**–**	**(219.5)**
Leases	**(69.9)**	**(38.2)**	**(51.7)**	**–**	**(159.8)**
Preference shares	**–**	**–**	**–**	**(2.7)**	**(2.7)**
	(337.9)	**(405.2)**	**(1,762.9)**	**(666.6)**	**(3,172.6)**

At 31 December 2020	Within 1 year $m	Between 1-2 years $m	Between 2-5 years $m	After 5 years $m	2020 Total $m
Corporate loans	(454.3)	(471.3)	(941.0)	(712.2)	(2,578.8)
Bond	–	–	–	(495.6)	(495.6)
Other loans	(75.0)	–	–	(394.5)	(469.5)
Leases	(74 .1)	(62.6)	(67.4)	(4.1)	(208.2)
Preference shares	–	–	–	(2.7)	(2.7)
	(603.4)	(533.9)	(1,008.4)	(1,609.1)	(3,754.8)

The amounts included above for leases are based on the present value of minimum lease payments.

The total minimum lease payments for these leases may be analysed as follows:

	2021 $m	2020 $m
Within 1 year	**(74.7)**	(81.3)
Between 1 – 2 years	**(40.5)**	(66.7)
Between 2 – 5 years	**(54.8)**	(71.9)
After 5 years	**–**	(4.3)
Total minimum lease payments	**(170.0)**	(224.2)
Less amounts representing finance charges	**10.2**	16.0
Present value of minimum lease payments	**(159.8)**	(208.2)

All leases are on a fixed payment basis and no arrangements have been entered into for contingent rental payments.

24 Trade and other payables

	Due in one year		Due after one year		Total	
	2021 $m	2020 $m	2021 $m	2020 $m	2021 $m	2020 $m
Trade creditors	**(579.5)**	(536.5)	**–**	–	**(579.5)**	(536.5)
Other creditors and accruals	**(249.6)**	(272.3)	**(16.8)**	(11.0)	**(266.4)**	(283.3)
	(829.1)	(808.8)	**(16.8)**	(11.0)	**(845.9)**	(819.8)

Trade creditors and accruals principally comprise amounts outstanding for trade purchases and ongoing costs. Other creditors are mainly related to property plant and equipment payables, finance interest and employee retentions.

The average credit period taken for trade purchases is 20 days (2020 – 21 days).

At 31 December 2021, the other creditors and accruals include $10.1 million (2020 – $3.8 million) relating to prepayments. Prepayments are offset against payables to the same suppliers where there is a right of offset.

25 Financial instruments and financial risk management

A) Categories of financial instruments

The carrying value of financial assets and financial liabilities is shown below:

2021 $m	At fair value through profit and loss	At fair value through other comprehensive income	Held at amortised cost	Total
Financial assets				
Equity investments	**–**	**8.7**	**–**	**8.7**
Loans and receivables	**1,011.7**	**–**	**83.3**	**1,095.0**
Cash and cash equivalents	**–**	**–**	**743.4**	**743.4**
Liquid investments	**2,969.7**	**–**	**–**	**2,969.7**
	3,981.4	**8.7**	**826.7**	**4,816.8**
Financial liabilities				
Trade and other payables	**–**	**–**	**(835.6)**	**(835.6)**
Borrowings and leases	**–**	**–**	**(3,172.6)**	**(3,172.6)**
	–	**–**	**(4,008.2)**	**(4,008.2)**

2020 $m	At fair value through profit and loss	At fair value through other comprehensive income	Held at amortised cost	Total
Financial assets				
Derivative financial assets	1.4	–	–	1.4
Equity investments	–	11.1	–	11.1
Loans and receivables	808.0	–	184.6	992.6
Cash and cash equivalents	–	–	1,246.8	1,246.8
Liquid investments	2,426.0	–	–	2,426.0
	3,235.4	11.1	1,431.4	4,677.9
Financial liabilities				
Derivative financial liabilities	(37.4)	–	–	(37.4)
Trade and other payables	(0.3)	–	(815.8)	(816.1)
Borrowings and leases	–	–	(3,754.8)	(3,754.8)
	(37.7)	–	(4,570.6)	(4,608.3)

The fair value of the fixed rate bond included within the "Borrowings and leases" category was $476.2 million at 31 December 2021 compared with its carrying value of $496.1 million. The fair value of all other financial assets and financial liabilities carried at amortised cost approximates the carrying value presented above.

	2021 $m	2020 $m
Financial assets		
Trade and other receivables (non-current) per balance sheet	**51.2**	55.9
Trade and other receivables (current) per balance sheet	**1,146.1**	1,016.9
Total trade and other receivables per balance sheet	**1,197.3**	1,072.8
Less: non-financial assets (including prepayments and VAT receivables)	**(102.3)**	(80.2)
Total loans and receivables (financial assets)	**1,095.0**	992.6
Financial liabilities		
Trade and other payables (current) per balance sheet	**(829.1)**	(808.8)
Trade and other payables (non-current) per balance sheet	**(16.8)**	(11.0)
Total trade and other payables per balance sheet	**(845.9)**	(819.8)
Less: non-financial liabilities (including VAT payables)	**10.3**	3.7
Total loans and payables (financial liabilities)	**(835.6)**	(816.1)

25 Financial instruments and financial risk management continued

B) Fair value of financial instruments

	Level 1 $m	Level 2 $m	Level 3 $m	Total 2021 $m
Financial assets				
Equity investments (b)	**8.7**	**–**	**–**	**8.7**
Loans and receivables (c)	**–**	**1,011.7**	**–**	**1,011.7**
Liquid investments (d)	**–**	**2,969.7**	**–**	**2,969.7**
	8.7	**3,981.4**	**–**	**3,990.1**
Financial liabilities				
Trade and other payables	**–**	**–**	**–**	**–**
	–	**–**	**–**	**–**

	Level 1 $m	Level 2 $m	Level 3 $m	Total 2020 $m
Financial assets				
Derivative financial assets (a)	–	1.4	–	1.4
Equity investments (b)	11.1	–	–	11.1
Loans and receivables (c)	–	808.0	–	808.0
Liquid investments (d) (restated)	–	2,426.0	–	2,426.0
	11.1	3,235.4	–	3,246.5
Financial liabilities				
Derivative financial liabilities (a)	–	(37.4)	–	(37.4)
Trade and other payables	–	(0.3)	–	(0.3)
	–	(37.7)	–	(37.7)

Recurring fair value measurements are those that are required in the balance sheet at the end of each reporting year.

a) Derivatives in designated hedge accounting relationships are valued using a discounted cash flow analysis valuation model, which includes observable credit spreads and using the applicable yield curve for the duration of the instruments for non-optional derivatives, and option pricing models for optional derivatives. These are level 2 inputs as described below. Hedging instruments in place during 2021 and 2020 related to commodity and foreign exchange options.

b) Equity investments are investments in shares on active markets and are valued using unadjusted quoted market values of the shares at the financial reporting date. These are level 1 inputs as described below.

c) Provisionally priced metal sales for the period are marked-to-market at the end of the period. Gains and losses from the marking-to-market of open sales are recognised through adjustments to revenue in the income statement and trade receivables in the balance sheet. Forward prices at the end of the period are used for copper sales while period-end average prices are used for molybdenum concentrate sales. These are level 2 inputs as described below.

d) Liquid investments are highly liquid current asset investments that are valued reflecting market prices at the period end. These are level 2 inputs as described below. The 2020 comparative figures have been restated to reclassify these amounts from level 1 to level 2 inputs.

The inputs to the valuation techniques described above are categorised into three levels, giving the highest priority to unadjusted quoted prices in active markets (level 1) and the lowest priority to unobservable inputs (level 3 inputs):

- Level 1 fair value measurement inputs are unadjusted quoted prices in active markets for identical assets or liabilities.
- Level 2 fair value measurement inputs are derived from inputs other than quoted market prices included in level 1 that are observable for the asset or liability, either directly or indirectly.
- Level 3 fair value measurement inputs are unobservable inputs for the asset or liability.

The degree to which inputs into the valuation techniques used to measure the financial assets and liabilities are observable and the significance of these inputs in the valuation are considered in determining whether any transfers between levels have occurred. In the year ended 31 December 2021, there were no transfers between levels in the hierarchy.

C) Financial risk management

The Group's activities expose it to a variety of financial risks: market risk (including commodity price risk, currency risk, interest rate risk and other price risk), credit risk and liquidity risk. The Group periodically uses derivative financial instruments, to reduce its exposure to commodity price, foreign exchange and interest rate movements. The Group does not use such derivative instruments for speculative trading purposes.

The Board of Directors is responsible for overseeing the Group's risk management framework. The Audit and Risk Committee assists the Board with its review of the effectiveness of the risk management process, and monitoring of key risks and mitigations. The Internal Audit department undertakes both regular and ad hoc reviews of risk management controls and procedures, the results of which are reported to the Audit and Risk Committee.

(I) Commodity price risk

The Group generally sells its copper and molybdenum concentrate and copper cathode output at prevailing market prices, subject to final pricing adjustments which normally range from one to four months after delivery to the customer, and it is therefore exposed to changes in market prices for copper and molybdenum both in respect of future sales and previous sales, which remain open as to final pricing. In 2021, sales of copper and molybdenum concentrate and copper cathodes represented 90.8% of Group revenue and therefore revenues and earnings depend significantly on LME and realised copper prices.

The Group periodically uses futures and min-max options to manage its exposure to copper prices. These instruments may give rise to accounting volatility due to fluctuations in their fair value prior to the maturity of the instruments. Details of those copper and molybdenum concentrate sales and copper cathode sales, which remain open as to final pricing, are given in Note 7. Details of commodity rate derivatives entered into by the Group are given in Note 23(E).

Commodity price sensitivity

The sensitivity analysis below shows the impact of a movement in the copper price on the financial instruments held as at the reporting date. A movement in the copper market price as at the reporting date will affect the final pricing adjustment to sales that remain open at that date, impacting the trade receivables balance and consequently the income statement. A movement in the copper market price will also affect the valuation of commodity derivatives, impacting the hedging reserve in equity if the fair value movement relates to an effective designated cash flow hedge, and impacting the income statement if it does not. The calculation assumes that all other variables, such as currency rates, remain constant.

- If the copper market price as at the reporting date had increased by 10 c/lb, profit attributable to the owners of the parent would have increased by $18.4 million (2020 – increase by $16.8 million).
- If the copper market price as at the reporting date had decreased by 10 c/lb, profit attributable to the owners of the parent would have decreased by $18.4 million (2020 – decrease by $16.8 million). In addition, a movement in the average copper price during the year would impact revenue and earnings. A 10 c/lb change in the average copper price during the year would have affected profit attributable to the owners of the parent by $64.8 million (2020 – $73.5 million) and earnings per share by 6.6 cents (2020 – 7.5 cents), based on production volumes in 2021, without taking into account the effects of provisional pricing and hedging activity. A $1/lb change in the average molybdenum price for the year would have affected profit attributable to the owners of the parent by $9.2 million (2020 – $11.8 million), and earnings per share by 0.9 cents (2020 – 1.2 cents), based on production volumes in 2021, and without taking into account the effects of provisional pricing. A $100/oz change in the average gold price for the year would have affected profit attributable to the owners of the parent by $11.5 million (2020 – $10.1 million), and earnings per share by 1.2 cents (2020 – 1.0 cents), based on production volumes in 2021, and without taking into account the effects of provisional pricing.

(II) Currency risk

The Group is exposed to a variety of currencies. The US dollar, however, is the currency in which the majority of the Group's sales are denominated. Operating costs are influenced by the countries in which the Group's operations are based (principally in Chile) as well as those currencies in which the costs of imported goods and services are determined. After the US dollar, the Chilean peso is the most important currency influencing costs and to a lesser extent sales.

Given the significance of the US dollar to the Group's operations, this is the presentational currency of the Group for internal and external reporting. The US dollar is also the currency for borrowing and holding surplus cash, although a portion of this may be held in other currencies, notably Chilean pesos and Sterling, to meet short-term operating and capital commitments and dividend payments.

When considered appropriate, the Group uses forward exchange contracts and currency swaps to limit the effects of movements in exchange rates in foreign currency denominated assets and liabilities. The Group may also use these instruments to reduce currency exposure on future transactions and cash flows. Details of any exchange rate derivatives entered by the Group in the year are given in Note 25(D).

The currency exposure of the Group's cash, cash equivalents and liquid investments is given in Note 22, and the currency exposure of the Group's borrowings is given in Note 23(C). The effects of exchange gains and losses included in the income statement are given in Note 10. Exchange differences on translation of the net assets of entities with a functional currency other than the US dollar are taken to the currency translation reserve and are disclosed in the Consolidated Statement of Changes in Equity on page 174.

25 Financial instruments and financial risk management continued

Currency sensitivity

The sensitivity analysis below shows the impact of a movement in the US dollar/Chilean peso exchange rate on the financial instruments held as at the reporting date.

The impact on profit or loss is as a result of the retranslation of monetary financial instruments (including cash, cash equivalents, liquid investments, trade receivables, trade payables and borrowings). The impact on equity is as a result of changes in the fair value of derivative instruments which are effective designated cash flow hedges, and changes in the fair value of equity investments. The calculation assumes that all other variables, such as interest rates, remain constant.

If the US dollar had strengthened by 10% against the Chilean peso as at the reporting date, profit attributable to the owners of the parent would have increased by $6.1 million (2020 – increase of $15.8 million). If the US dollar had weakened by 10% against the Chilean peso as at the reporting date, profit attributable to the owners of the parent would have decreased by $7.4 million (2020 – decrease of $19.3 million).

(III) Interest rate risk

The Group's policy is generally to borrow and invest cash at floating rates. Fluctuations in interest rates may impact the Group's net finance income or cost, and to a lesser extent the value of financial assets and liabilities. The Group occasionally uses interest rate swaps and collars to manage interest rate exposures on a portion of its existing borrowings. Details of any interest rate derivatives entered into by the Group are given in Note 25(D).

The interest rate exposure of the Group's borrowings is given in Note 23.

Interest rate sensitivity

The sensitivity analysis below shows the impact of a movement in interest rates in relation to the financial instruments held as at the reporting date. The impact on profit or loss reflects the impact on annual interest expense in respect of the floating rate borrowings held as at the reporting date, and the impact on annual interest income in respect of cash and cash equivalents held as at the reporting date. The impact on equity is as a result of changes in the fair value of derivative instruments which are effective designated cash flow hedges. The calculation assumes that all other variables, such as currency rates, remain constant.

If the interest rate increased by 1%, based on the financial instruments held as at the reporting date, profit attributable to the owners of the parent would have decreased by $6.4 million (2020 – decrease of $1.7 million). This does not include the effect on the income statement of changes in the fair value of the Group's liquid investments relating to the underlying investments in fixed income instruments.

(IV) Other price risk

The Group is exposed to equity price risk on its equity investments.

Equity price sensitivity

The sensitivity analysis below shows the impact of a movement in the equity values of the equity investment financial assets held as at the reporting date.

If the value of the equity investments had increased by 10% as at the reporting date, equity would have increased by $0.9 million (2020 – increase of $1.1 million). There would have been no impact on the income statement.

(V) Cash flow risk

The Group's future cash flows depend on a number of factors, including commodity prices, production and sales levels, operating costs, capital expenditure levels, and financial income and costs. Its cash flows are therefore subject to the exchange, interest rate and commodity price risks described above as well as operating factors and input costs. To reduce the risk of potential short-term disruptions to the supply of key inputs such as electricity and sulphuric acid, the Group enters into medium and long-term supply contracts to help ensure continuity of supply. Long-term electricity supply contracts are in place at each of the Group's mines, in most cases linking the cost of electricity under the contract to the current cost of electricity on the Chilean grid or the generation cost of the supplier. The Group seeks to lock in supply of sulphuric acid for future periods of a year or longer, with contract prices agreed in the latter part of the year, to be applied to purchases of acid in the following year. Further information on production and sales levels and operating costs are given in the Operating review on pages 68 to 89.

(VI) Credit risk

Credit risk arises from trade and other receivables, cash, cash equivalents, liquid investments and derivative financial instruments. The Group's credit risk is primarily to trade receivables. The credit risk on cash, cash equivalents and liquid investments and on derivative financial instruments is limited as the counterparties are financial institutions with high credit ratings assigned by international credit agencies.

The largest balances of trade receivables are with equity participants in the key mining projects. Many other significant trade receivables are secured by letters of credit or other forms of security. All customers are subject to credit review procedures, including the use of external credit ratings where available. Credit is provided only within set limits, which are regularly reviewed. The main customers are recurrent with a good credit history during the years they have been customers.

Outstanding receivable balances are monitored on an ongoing basis.

The carrying value of financial assets recorded in the financial statements represents the maximum exposure to credit risk. The amounts presented in the balance sheet are net of allowances for any doubtful receivables (Note 21).

The Group has recognised an expected credit loss provision for its employee receivables, with the main inputs into the provision calculation being the average level of staff turnover and the average level of recovery of receivables from former employees. For the reasons set out above, the expected credit loss risk for other trade and other receivable balances is considered to be immaterial to the Group.

(VII) Liquidity risk

The Group manages liquidity risk by maintaining adequate cash reserves and financing facilities, through the review of forecast and actual cash flows.

The Group typically holds surplus cash in demand or term deposits or highly liquid investments, which typically can be accessed or liquidated within 24 hours.

At the end of 2021, the Group was in a net cash position (2020 – net debt position), as disclosed in Note 32(C). Details of cash, cash equivalents and liquid investments are given in Note 22, while details of borrowings including the maturity profile are given in Note 23(E). Details of undrawn committed borrowing facilities are also given in Note 23.

The following table analyses the maturity of the Group's contractual commitments in respect of its financial liabilities and derivative financial instruments. The table has been drawn up based on the undiscounted cash flows on the earliest date on which the Group can be required to pay. The table includes both interest and principal cash flows.

At 31 December 2021	Less than 1 year $m	Between 1-2 years $m	Between 2-5 years $m	After 5 years $m	2021 Total $m
Corporate loans	**(267.1)**	**(398.5)**	**(1,574.8)**	**(170.6)**	**(2,411.0)**
Other loans (including short-term loans and bond)	**(47.0)**	**(11.9)**	**(242.7)**	**(555.5)**	**(857.1)**
Leases	**(74.7)**	**(40.5)**	**(54.5)**	**–**	**(169.7)**
Preference shares*	**–**	**–**	**–**	**(2.7)**	**(2.7)**
Trade and other payables	**(829.1)**	**(16.8)**	**–**	**–**	**(845.9)**
	(1,217.9)	**(467.7)**	**(1,872.0)**	**(728.8)**	**(4,286.4)**

At 31 December 2020	Less than 1 year $m	Between 1-2 years $m	Between 2-5 years $m	After 5 years $m	2020 Total $m
Corporate loans	(444.5)	(462.6)	(1,046.5)	(792.0)	(2,745.6)
Other loans (including short-term loans and bond)	(88.3)	(24.1)	–	(1,011.7)	(1,124.1)
Leases	(81.2)	(66.7)	(71.8)	(4.4)	(224.1)
Preference shares*	–	–	–	(2.7)	(2.7)
Trade and other payables	(808.8)	(11.0)	–	–	(819.8)
Derivative financial instruments	(36.0)	–	–	–	(36.0)
	(1,458.8)	(564.4)	(1,118.3)	(1,810.8)	(4,952.3)

* The preference shares pay an annual dividend of £100,000 in perpetuity, and accordingly it is not possible to determine total amounts payable for periods without a fixed end date.

(VIII) Capital risk management

The Group's objectives are to return capital to shareholders while leaving the Group with sufficient funds to progress its short, medium and long-term growth plans as well as preserving the financial flexibility to take advantage of opportunities as they may arise. This policy remains unchanged.

The Group monitors capital on the basis of net cash/debt (defined as cash, cash equivalents and liquid investments less borrowings) which was net cash of $540.5 million at 31 December 2021 (2020 – net debt $82.0 million), as well as gross cash (defined as cash, cash equivalents and liquid investments) which was $3,713.1 million at 31 December 2021 (2020 – $3,672.8 million). The Group's total cash is held in a combination of on demand and term deposits and managed funds investing in high quality, fixed income instruments. The managed funds are held primarily for investment purposes rather than meeting short-term cash commitments and accordingly these amounts are presented as liquid investments; however they are included in net cash for monitoring and decision-making purposes. The Group has a risk averse investment strategy. The Group's borrowings are detailed in Note 23. Additional project finance or shareholder loans are taken out by the operating subsidiaries to fund projects on a case-by-case basis.

Under the terms of the major borrowing facilities, the Group is required to comply with the following financial covenants:

1) Net Financial Debt/EBITDA
2) EBITDA/Interest Expense
3) Total Indebtedness/Tangible Net Worth

The Group has complied with these covenants throughout the reporting period.

D) Derivative financial instruments

The Group periodically uses derivative financial instruments, to reduce its exposure to commodity price, foreign exchange and interest rate movements. The Group does not use such derivative instruments for speculative trading purposes.

The Group has applied the hedge accounting provisions of IFRS 9 "Financial Instruments". Changes in the fair value of derivative financial instruments that are designated and effective as hedges of future cash flows have been recognised directly in equity, with such amounts subsequently recognised in the income statement in the period when the hedged item affects profit or loss. Any ineffective portion is recognised immediately in the income statement. Realised gains and losses on commodity derivatives recognised in the income statement have been recorded within revenue. The time value element of changes in the fair value of derivative options is recognised within other comprehensive income. Realised gains and losses and changes in the fair value of exchange and interest derivatives are recognised within other finance items for those derivatives where hedge accounting has not been applied. When hedge accounting has been applied, the realised gains and losses on exchange and interest derivatives are recognised within other finance items and interest expense respectively.

25 Financial instruments and financial risk management continued

Hedges for future cash flows at the 2021 year-end relate to provisionally priced trade receivables and foreign exchange and commodity options, and are immaterial to the Group.

26 Long-term incentive plan

The long-term incentive plan (the "Plan") forms part of the remuneration of senior managers in the Group. Directors are not eligible to participate in the Plan.

Details of the Awards

Under the Plan, the Group may grant awards based on the price of ordinary shares in the Company and cannot grant awards over actual shares.

- Restricted Awards: These awards are conditional rights to receive cash payment by reference to a specified number of the Company's ordinary shares, subject to the relevant employee remaining employed by the Group when the Restricted Award vests; and
- Performance Awards: These awards are conditional rights to receive cash payment by reference to a specified number of the Company's ordinary shares subject to both the satisfaction of a performance condition and the relevant employee remaining employed by the Group when the Performance Award vests.

When awards vest under the Plan, participants become entitled to receive a cash payment by reference to the number and portion of awards that have vested and the market value of the Company's ordinary shares on the date of vesting. There is no exercise price payable by participants in respect of the awards.

Restricted Awards can only vest in full if participants remain employed by the Group for three years from the date that Restricted Awards are granted. In ordinary circumstances, the first one-third of a Restricted Award will vest after one year, the second one-third will vest after two years and the remaining one-third will vest after three years. There are no performance criteria attached to Restricted Awards. The fair value of Restricted Awards granted under the Plan is recorded as a compensation expense over the vesting periods, with a corresponding liability recognised for the fair value of the liability at the end of each period until settled.

Performance Awards only vest if certain performance criteria are met. The performance criteria reflect a number of factors including total shareholder return, earnings levels, growth in the Group's reserves and resources and project delivery targets. The fair value of Performance Awards under the Plan is recorded as a compensation expense over the vesting period, with a corresponding liability at the end of each period until settled.

Valuation process and accounting for the awards

The fair value of the awards is determined using a Monte Carlo simulation model. The inputs into the Monte Carlo simulation model are as follows:

	2021	2020
Weighted average forecast share price at vesting date	**$18.0**	$19.2
Expected volatility	**39.23%**	49.56%
Expected life of awards	**3 years**	3 years
Expected dividend yields	**3.94%**	0.73%
Discount rate	**0.08%**	0.08%

Expected volatility was determined by calculating the historical volatility of the Group's share price over the previous five years. The expected life of awards used in the model has been adjusted based on management's best estimate for the effects of non-transferability and compliance of the objectives determined according to the characteristic of each plan.

The number of awards outstanding at the end of the year is as follows:

	Restricted Awards	Performance Awards
Outstanding at 1 January 2021	**738,735**	**1,629,526**
Granted during the year	**197,631**	**312,198**
Cancelled during the year	**(65,993)**	**(114,990)**
Payments during the year	**(326,230)**	**(441,259)**
Outstanding at 31 December 2021	**544,143**	**1,385,475**
Number of awards that have vested	**245,089**	

The Group has recorded a liability of $18.9 million at 31 December 2021, of which $9.2 million is due after more than one year (31 December 2020 – $22.3 million of which $11.0 million was due after more than one year) and total expenses of $9.0 million for the year (2020 – expenses of $17.2 million).

27 Post-employment benefit obligations

A) Defined contribution schemes

The Group operates defined contribution schemes for a limited number of employees. The amount charged to the income statement in 2021 was $0.1 million (2020 – $0.1 million), representing the amount paid in the year. There were no outstanding amounts which remain payable at the end of either year.

B) Severance provisions

Employment terms at some of the Group's operations provide for payment of a severance payment when an employment contract comes to an end. This is typically at the rate of one month for each year of service (subject in most cases to a cap as to the number of qualifying years of service) and based on final salary level. The severance payment obligation is treated as an unfunded defined benefit plan, and the obligation recognised is based on valuations performed by an independent actuary using the projected unit credit method, which are regularly updated. The obligation recognised in the balance sheet represents the present value of the severance payment obligation. Actuarial gains and losses are immediately recognised in other comprehensive income.

The most recent valuation was carried out in 2021 by Ernst & Young, a qualified actuary in Santiago, Chile who is not connected with the Group.

The main assumptions used to determine the actuarial present value of benefit obligations were as follows:

	2021 %	2020 %
Average nominal discount rate	**6.3%**	3.5%
Average rate of increase in salaries	**2.3%**	2.0%
Average staff turnover	**4.9%**	5.7%

Amounts included in the income statement in respect of severance provisions are as follows:

	2021 $m	2020 $m
Current service cost (charge to operating profit)	**(19.8)**	(17.9)
Interest cost (charge to other finance items)	**(3.6)**	(4.9)
Foreign exchange credit/(charge) to other finance items	**19.6**	(6.2)
Total charge to income statement	**(3.8)**	(29.0)

Movements in the present value of severance provisions were as follows:

	2021 $m	2020 $m
Balance at the beginning of the year	**(123.2)**	(118.7)
Current service cost	**(19.8)**	(17.9)
Actuarial gains	**3.1**	9.8
Unwinding of discount on provisions	**(3.6)**	(4.9)
Paid in the year	**16.4**	14.5
Foreign currency exchange difference	**19.6**	(6.0)
Balance at the end of the year	**(107.5)**	(123.2)

Assumptions description

Discount rate

	31 December 2021	31 December 2020
Nominal discount rate	**6.50%**	3.64%
Reference rate name	**20-year Chilean Central Bank Bonds**	20-year Chilean Central Bank Bonds
Governmental or corporate rate	**Governmental**	Governmental
Reference rating	**AA-/AA+**	AA-/AA+
Corresponds to an Issuance market (primary) or secondary market	**Secondary**	Secondary
Issuance currency associated to the reference rate	**Chilean peso**	Chilean peso
Date of determination of the reference interest rate	**31 October 2021**	15 November 2020
Source of the reference interest rate	**Bloomberg**	Bloomberg

The discount rate is the interest rate used to discount the estimated future severance payments to their present value. The table above shows the principal instruments and assumptions utilised in determining the discount rate.

Rate of increase in salaries

This represents the estimated average rates of future salary increases, reflecting likely future promotions and other changes. This has been based on historical information for the Group for the period from 2017 to 2021.

27 Post-employment benefit obligations continued

Turnover rate

This represents the estimated average level of future employee turnover. This has been based on historical information for the Group for the period from 2017 to 2021.

Sensitivity analysis

Significant actuarial assumptions for the determination of the defined obligation are discount rate, expected salary increase and staff turnover. The sensitivity analysis below has been determined based on reasonably possible changes of the respective assumptions occurring at the end of the reporting period, while holding all other assumptions constant.

- If the discount rate is 100 basis points higher, the defined benefit obligation would decrease by $5.3 million. If the discount rate is 100 basis points lower, the defined benefit obligation would increase by $6.0 million.
- If the expected salary growth increases by 1%, the defined benefit obligation would increase by $5.4 million. If the expected salary growth decreases by 1%, the defined benefit obligation would decrease by $5.0 million.
- If the staff turnover increases by 1%, the defined benefit obligation would decrease by $2.4 million. If the staff turnover decreases by 1%, the defined benefit obligation would increase by $2.8 million.

28 Deferred tax assets and liabilities

	Accelerated capital allowances $m	Temporary differences on provisions $m	Withholding tax $m	Short-term differences $m	Mining tax (Royalty) $m	Tax losses $m	Disposal $m	Total $m
At 1 January 2020	(1,111.8)	120.0	(38.5)	35.5	(107.4)	5.2	–	(1,097.0)
(Charge)/credit to income	(10.3)	2.9	(14.3)	6.5	4.2	(0.2)	–	(11.2)
Disposal of subsidiary	–	–	–	–	–	–	0.1	0.1
Charge deferred in equity	–	2.0	–	–	(0.3)	–		1.7
Reclassifications	–	(0.3)	–	–	–	0.3	–	–
At 31 December 2020 and 1 January 2021	**(1,122.1)**	**124.6**	**(52.8)**	**42.0**	**(103.5)**	**5.3**	**0.1**	**(1,106.4)**
(Charge)/credit to income	**(248.9)**	**(7.5)**	**29.7**	**(103.3)**	**1.0**	**31.7**	**(0.1)**	**(297.4)**
Exceptional items	**–**	**–**	**–**	**–**	**–**	**90.6**	**–**	**90.6**
Charge deferred in equity	**–**	**(2.1)**	**–**	**–**	**(0.4)**	**–**	**–**	**(2.5)**
At 31 December 2021	**(1,371.0)**	**115.0**	**(23.1)**	**(61.3)**	**(102.9)**	**127.6**	**–**	**(1,315.7)**

The charge to the income statement of $206.8 million (2020 – $11.2 million) included an impact from foreign exchange differences of nil (2020 – included a credit of $0.1 million).

Certain deferred tax assets and liabilities have been offset. Deferred tax assets and liabilities are offset where there is a legally enforceable right to do so, which under Chilean tax regulations is only possible within individual legal entities.

The following is the analysis of the deferred tax balance (after offset):

	2021 $m	2020 $m
Net deferred tax assets	**96.8**	6.4
Net deferred tax liabilities	**(1,412.5)**	(1,112.8)
Net deferred tax balances	**(1,315.7)**	(1,106.4)

At 31 December 2021, the Group had unused tax losses associated with Chilean entities (predominantly Antucoya) of $472.5 million (2020 – $599.4 million) available for offset against future profits. Generally under Chilean tax law most tax losses can be carried forward indefinitely. A deferred tax asset of $127.6 million has been recognised in respect of 100% of these losses as at 31 December 2021 (31 December 2020 – $5.3 million in respect of $19.6 million of the losses). In addition, at 31 December 2021, the Group had unused tax losses associated with entities outside of Chile (predominantly in respect of the Twin Metals project) of $428.0 million (2020 – $399.7 million - which were previously not disclosed) in respect of which no deferred tax asset has been recognised. A portion of the Twin Metals tax losses expire in the period from 2030 – 2037, and the remainder can be carried forward indefinitely.

At 31 December 2021, the Group recognised $90.6 million of previously unrecognised deferred tax assets relating to tax losses available for offset against future profits. In previous periods, the Group had reviewed these tax losses for potential recognition, and concluded that it was not probable that future taxable profits would be available against which the losses could be utilised, and accordingly had not recognised a deferred tax asset in respect of those losses. In making this assessment in previous periods the Group had taken into account that the relevant Group entity (Antucoya) had consistently generated taxable losses in recent years, was continuing to generate taxable losses in the then current period, and was forecast to continue generating taxable losses in future periods. During 2021, there has been a significant improvement in the current copper price (with the copper price reaching record levels in nominal terms during the year) and also the near-term copper price outlook. As a result of this improvement in the copper price environment, Antucoya began to generate taxable profits in 2021. The improved near-term outlook for the copper price also means that Antucoya is now forecast to generate sufficient future taxable profits to fully utilise its remaining tax losses. Current forecasts indicate that the losses will be utilised over approximately the next eight years (compared with the remaining mine life for Antucoya of 22 years). The forecasts are based on Antucoya's Life-of-mine model. When the tax losses are utilised in future years, it is expected that the impact will be recorded within the underlying tax charge for that year, in order to match with the similar classification of the corresponding taxable profits of that year.

28 Deferred tax assets and liabilities continued

At 31 December 2021, deferred withholding tax liabilities of $23.1 million have been recognised (31 December 2020 – $52.8 million) which relate to undistributed earnings of subsidiaries where it is considered likely that the corresponding profits will be distributed in the foreseeable future. The value of the remaining undistributed earnings of subsidiaries, for which deferred tax liabilities have not been recognised, because the Group is in a position to control the timing of the distributions and it is likely that distributions will not be made in the foreseeable future, was $6,483 million (31 December 2020 – $4,980 million - restated from the previously reported amount of $4,810 million, reflecting the removal of amounts relating to entities with accumulated losses).

Temporary differences arising in connection with interests in associates are insignificant.

The deferred tax balance of $1,315.7 million (2020 – $1,106.4 million) includes $1,272.6 million (2020 – $1,053.4 million) due in more than one year.

All amounts are shown as non-current on the face of the balance sheet as required by IAS 12 Income Taxes.

29 Decommissioning and restoration provisions

	2021 $m	2020 $m
Balance at the beginning of the year	**(520.2)**	(413.2)
Charge to operating profit in the year	**(11.3)**	(45.2)
Unwind of discount to net interest in the year	**(2.6)**	(2.6)
Adjustment to provision discount rates	**30.8**	(9.2)
Capitalised adjustment to provision	**119.9**	(59.4)
Utilised in year	**33.8**	22.2
Foreign currency exchange difference	**13.5**	(12.8)
Balance at the end of the year	**(336.1)**	(520.2)
Short-term provisions	**(33.8)**	(22.2)
Long-term provisions	**(302.3)**	(498.0)
Total	**(336.1)**	(520.2)

Decommissioning and restoration costs relate to the Group's mining operations. Costs are estimated on the basis of a formal closure plan and are subject to regular independent formal review by Sernageomin, the Chilean government agency which regulates the mining industry in Chile. There have not been any significant updates to the mining operations closure plans approved by Sernageomin during the year. During 2020, the Pelambres, Centinela and Zaldívar balances were updated to reflect new plans approved by Sernageomin during that year. The provision balance reflects the present value of the forecast future cash flows expected to be incurred in line with the closure plans, discounted using Chilean real interest rates with durations corresponding with the timings of the closure activities. At 31 December 2021, the real discount rates ranged from 2.3% to 2.5% (31 December 2020: 0.5% to 0.9%).

It is estimated that the provision will be utilised from 2022 until 2064 based on current mine plans, with approximately 19% of the total provision balance expected to be utilised between 2022 and 2031, approximately 48% between 2032 and 2041, approximately 9% between 2042 and 2051 and approximately 23% between 2052 and 2068.

Given the long-term nature of these balances, it is possible that future climate risks could impact the appropriate amount of these provisions, both in terms of the nature of the decommissioning and site rehabilitation activities that are required, or the costs of undertaking those activities. During 2021, the Group has implemented, and disclosed against, the recommendations of the Task Force on Climate-related Financial Disclosures ("TCFD"). This process included scenario analyses assessing the potential future transition and physical risks. As a simple high-level sensitivity, we have considered whether the level of estimated costs relating to the potential future risks, identified under the scenario analysis could indicate a general level of future cost increases as a consequence of climate risks, which could indicate a significant potential impact on these provision balances. This analysis did not indicate a significant potential impact on the decommissioning and restoration provision balances. However, more detailed specific analysis of the potential impacts of climate risks in future periods could result in adjustments to these provision balances. When future updates to the closure plans are prepared and submitted to Sernageomin for review and approval, it is likely that there will be more detailed consideration of potential climate risk impacts which may need to be incorporated into the plan assumptions. In addition, Sernageomin may introduce new regulations or guidance in respect of climate risks which may need to be addressed in future updates to the Group's closure plans.

30 Share capital and other reserves

(I) Share capital

The ordinary share capital of the Company is as follows:

	2021 Number	2020 Number	2021 $m	2020 $m
Authorised				
Ordinary shares of 5p each	**1,300,000,000**	1,300,000,000	**118.9**	118.9

	2021 Number	2020 Number	2021 $m	2020 $m
Issued and fully paid				
Ordinary shares of 5p each	**985,856,695**	985,856,695	**89.8**	89.8

The Company has one class of ordinary shares which carry no right to fixed income. Each ordinary share carries one vote at any general meeting.

There were no changes in the authorised or issued share capital of the Company in either 2021 or 2020. Details of the Company's preference share capital, which is included within borrowings in accordance with IAS 32 Financial Instruments, are given in Note 23A(xiv).

(II) Other reserves and retained earnings

Details of the share premium account, hedging, fair value and translation reserves and retained earnings for both 2021 and 2020 are included within the consolidated statement of changes in equity on page 174.

	2021 $m	2020 $m
Share premium		
At 1 January and 31 December	**199.2**	199.2
Hedging reserves[1]		
At 1 January	**(23.9)**	(5.0)
Parent and subsidiaries net cash flow hedge fair value losses	**(100.4)**	(24.2)
Parent and subsidiaries net cash flow hedge losses transferred to the income statement	**126.8**	3.4
Tax on the above	**(2.5)**	1.9
At 31 December	**–**	(23.9)
Equity investment revaluation reserves[2]		
At 1 January	**(5.3)**	(10.8)
(Losses)/gains on equity investment	**(2.1)**	5.5
At 31 December	**(7.4)**	(5.3)
Foreign currency translation reserves[3]		
At 1 January	**(1.4)**	(2.3)
Currency translation adjustment	**(1.6)**	0.9
At 31 December	**(3.0)**	(1.4)
Total other reserves per balance sheet	**(10.4)**	(30.6)
Retained earnings		
At 1 January	**7,492.2**	7,112.8
Parent and subsidiaries' profit for the period	**1,230.5**	582.1
Equity accounted units' profit after tax for the period	**59.7**	(75.7)
Actuarial gains/(loss)[4]	**–**	4.1
Total comprehensive income for the year	**8,782.4**	7,623.3
Dividends paid	**(710.8)**	(131.1)
At 31 December	**8,071.6**	7,492.2

1. The hedging reserves record gains or losses on cash flow hedges that are recognised initially in equity (through other comprehensive income), as described in Note 25.
2. The equity investments revaluation reserves record fair value gains or losses relating to equity investments, as described in Note 19.
3. Exchange differences arising on the translation of the Group's net investment in foreign-controlled companies are taken to the foreign currency translation reserves. The cumulative differences relating to an investment are transferred to the income statement when the investment is disposed of.
4. Actuarial gains or losses relating to long-term employee benefits, as described in Note 27.

31 Non-controlling interests

The non-controlling interests of the Group during 2021 and 2020 are as follows:

	Non-controlling Interest %	Country	At 1 January 2021 $m	Share of profit for the financial year $m	Capital Increase $m	Share of dividends $m	Hedging and actuarial gains $m	At 31 December 2021 $m
Los Pelambres	**40.0**	**Chile**	**1,107.3**	**608.0**	**–**	**(512.0)**	**1.2**	**1,204.5**
Centinela	**30.0**	**Chile**	**1,113.7**	**252.2**	**–**	**(92.5)**	**2.5**	**1,275.9**
Antucoya	**30.0**	**Chile**	**109.5**	**84.4**	**–**	**–**	**4.5**	**198.4**
Total			**2,330.5**	**944.6**	**–**	**(604.5)**	**8.2**	**2,678.8**

	Non-controlling Interest %	Country	At 1 January 2020 $m	Share of profit/(losses) for the financial year $m	Capital Increase[1] $m	Share of dividends $m	Hedging and actuarial gains/ (losses) $m	At 31 December 2020 $m
Los Pelambres	40.0	Chile	1,012.4	371.5	–	(280.0)	3.4	1,107.3
Centinela	30.0	Chile	1,103.2	12.9	–	–	(2.4)	1,113.7
Antucoya	30.0	Chile	(98.3)	3.1	210.0	–	(5.3)	109.5
Total			2,017.3	387.5	210.0	(280.0)	(4.3)	2,330.5

1. A capital contribution of $210 million was received from Marubeni, the minority partner at Antucoya, in order to replace part of Antucoya's subordinated debt financing with equity.

The proportion of the voting rights is proportional with the economic interest for each of the companies listed above.

Summarised financial position and cash flow information for the years ended 2021 and 2020 is set out below:

	Los Pelambres 2021 $m	Centinela 2021 $m	Antucoya 2021 $m
Non-controlling interest (%)	**40.0%**	**30.0%**	**30.0%**
Cash and cash equivalents	**14.2**	**122.7**	**48.4**
Current assets	**1,073.3**	**1,358.0**	**381.4**
Non-current assets	**4,593.8**	**4,561.2**	**1,354.6**
Current liabilities	**(519.1)**	**(714.5)**	**(183.8)**
Non-current liabilities	**(2,123.0)**	**(1,082.6)**	**(364.9)**
Net cash from operating activities	**1,816.8**	**1,885.5**	**295.3**
Net cash used in investing activities	**(878.6)**	**(837.6)**	**(49.3)**
Net cash used in financing activities	**(1,408.4)**	**(1,152.6)**	**(206.9)**

	Los Pelambres 2020 $m	Centinela 2020 $m	Antucoya 2020 $m
Non-controlling interest (%)	40.0%	30.0%	30.0%
Cash and cash equivalents (restated)[1]	247.6	239.2	52.5
Current assets	1,466.5	1,490.8	324.5
Non-current assets	4,009.4	4,408.0	1,317.0
Current liabilities	(764.6)	(495.5)	(246.4)
Non-current liabilities	(1,935.5)	(1,327.7)	(456.1)
Net cash from operating activities	1,196.9	790.8	147.3
Net cash used in investing activities	(776.6)	(460.4)	(41.3)
Net cash from/(used in) financing activities	74.8	(88.0)	(75.8)

1. The prior period comparatives have been restated to reclassify liquid investments of $657.2 million at Los Pelambres, $497.1 million at Centinela and $91.1 million at Antucoya out of the cash and cash equivalents line.

Notes to the summarised financial position and cash flow

(i) The amounts disclosed for each subsidiary are based on the amounts included in the consolidated financial statements (100% of the results and balances of the subsidiary rather than the non-controlling interest proportionate share) before inter-company eliminations.

(ii) Summarised income statement information is shown in the segment information in Note 6.

(iii) There are some subsidiaries with a non controlling interest portion not included in this note where those portions are not material to the Group.

32 Notes to the consolidated cash flow statement

A) Reconciliation of profit before tax to cash flow from continuing operations

	2021 $m	2020 $m
Profit before tax	**3,477.1**	1,413.1
Depreciation	**1,078.7**	1,048.7
Net loss on disposals	**9.2**	6.3
Net finance (income)/expense	**(16.0)**	103.4
Net share of results from associates and joint ventures (exc. exceptional items)	**(59.7)**	(5.1)
Provision for impairment	**177.6**	(80.8)
Decrease/(increase) in inventories	**10.9**	(13.6)
Increase in debtors	**(206.8)**	(259.9)
Increase in creditors	**55.7**	31.0
(Decrease)/increase in provisions	**(19.0)**	26.4
Cash flow generated from continuing operations	**4,507.7**	2,431.1

B) Analysis of changes in net debt

	At 1 January 2021 $m	Cash flow $m	Fair value gains $m	New leases $m	Amortisation of finance costs $m	Capitalisation of interest $m	Movement between maturity categories $m	Other $m	Exchange $m	At 31 December 2021 $m
Cash and cash equivalents	**1,246.8**	**(483.1)**	**–**	**–**	**–**	**–**	**–**	**–**	**(20.3)**	**743.4**
Liquid investments	**2,426.0**	**543.7**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**2,969.7**
Total cash and cash equivalents and liquid investments	**3,672.8**	**60.6**	**–**	**–**	**–**	**–**	**–**	**–**	**(20.3)**	**3,713.1**
Borrowings due within one year	**(529.8)**	**545.6**	**–**	**–**	**–**	**–**	**(294.2)**	**10.4**	**–**	**(268.0)**
Borrowings due after one year	**(3,013.8)**	**–**	**–**	**–**	**(5.7)**	**(16.6)**	**294.2**	**–**	**(0.2)**	**(2,742.1)**
Leases due within one year	**(73.6)**	**88.9**	**–**	**–**	**–**	**–**	**(84.4)**	**–**	**–**	**(69.1)**
Leases due after one year	**(134.9)**	**–**	**–**	**(61.8)**	**–**	**–**	**84.4**	**–**	**21.6**	**(90.7)**
Preference shares	**(2.7)**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**(2.7)**
Total borrowings	**(3,754.8)**	**634.5**	**–**	**(61.8)**	**(5.7)**	**(16.6)**	**–**	**10.4**	**21.4**	**(3,172.6)**
Net cash/(debt)	**(82.0)**	**695.1**	**–**	**(61.8)**	**(5.7)**	**(16.6)**	**–**	**10.4**	**1.1**	**540.5**

	At 1 January 2020 $m	Cash flow $m	Fair value gains $m	New leases $m	Amortisation of finance costs $m	Capitalisation of interest $m	Movement between maturity categories $m	Other $m	Exchange $m	At 31 December 2020 $m
Cash and cash equivalents	653.7	588.3	–	–	–	–	–	–	4.8	1,246.8
Liquid investments	1,539.7	887.9	(1.6)	–	–	–	–	–	–	2,426.0
Total cash and cash equivalents and liquid investments	2,193.4	1,476.2	(1.6)	–	–	–	–	–	4.8	3,672.8
Borrowings due within one year	(648.4)	200.1	–	–	–	–	(88.8)	4.7	2.6	(529.8)
Borrowings due after one year	(1,861.8)	(1,204.9)	–	–	(12.5)	(23.4)	88.8	–	–	(3,013.8)
Leases due within one year	(75.6)	18.2	–	–	–	–	(14.1)	(2.1)	–	(73.6)
Leases due after one year	(168.4)	68.3	–	(33.5)	–	–	14.1	0.3	(15.7)	(134.9)
Preference shares	(2.6)	–	–	–	–	–	–	–	(0.1)	(2.7)
Total borrowings	(2,756.8)	(918.3)	–	(33.5)	(12.5)	(23.4)	–	2.9	(13.2)	(3,754.8)
Net debt	(563.4)	557.9	(1.6)	(33.5)	(12.5)	(23.4)	–	2.9	(8.4)	(82.0)

32 Notes to the consolidated cash flow statement continued

C) Net cash/(debt)

	2021 $m	2020 $m
Cash, cash equivalents and liquid investments	**3,713.1**	3,672.8
Total borrowing	**(3,172.6)**	(3,754.8)
Net cash/(debt)	**540.5**	(82.0)

33 Exchange rates

Assets and liabilities denominated in foreign currencies are translated into US dollars and Sterling at the period-end rates of exchange.

Results denominated in foreign currencies have been translated into US dollars at the average rate for each period.

	2021	2020
Year-end rates	**$1.3490 = £1**	$1.3600 = £1
	$1 = Ch$844.69	$1 = Ch$710.95
Average rates	**$1.3750 = £1**	$1.2820 = £1
	$1 = Ch$759.81	$1 = Ch$792.07

34 Related party transactions

Transactions between the Company and its subsidiaries, which are related parties, have been eliminated on consolidation and are not disclosed in this note. Transactions between the Group and its associates and joint ventures are disclosed below.

The transactions which Group companies entered into with related parties who are not members of the Group are set out below. There are no guarantees given or received and no provisions for doubtful debts related to the amount of outstanding balances.

A) Quiñenco SA

Quiñenco SA ("Quiñenco") is a Chilean financial and industrial conglomerate, the shares of which are traded on the Santiago Stock Exchange, and in which members of the Luksic family are interested. Two Directors of the Company, Jean-Paul Luksic and Andronico Luksic, are also directors of Quiñenco.

The following transactions took place between the Group and the Quiñenco group of companies, all of which were on normal commercial terms at market rates:

- the Group made purchases of fuel from ENEX SA, a subsidiary of Quiñenco, of $263.9 million (2020 – $212.6 million). The balance due to ENEX SA at the end of the year was $20.4 million (2020 – nil);
- the Group earned interest income of nil (2020 – $1.7 million) during the year on deposits with Banco de Chile SA, a subsidiary of Quiñenco. Deposit balances at the end of the year were nil (2020 – nil);
- the Group earned interest income of $0.1 million (2020 – $0.3 million) during the year on investments with BanChile Administradora General de Fondos SA, a subsidiary of Quiñenco. Investment balances at the end of the year were $2.2 million (2020 – nil);
- the Group purchased shipping services from Hapag Lloyd, an associate of Quiñenco, of $8.9 million (2020 – $7.0 million). The balance due to Hapag Lloyd at the end of the year was $0.4 million (2020 – nil).

B) Compañía de Inversiones Adriático SA

In 2021, the Group leased office space on normal commercial terms from Compañía de Inversiones Adriático SA, a company in which members of the Luksic family are interested, at a cost of $0.8 million (2020 –$0.7 million).

C) Antomin 2 Limited and Antomin Investors Limited

The Group holds a 51% interest in Antomin 2 Limited ("Antomin 2") and Antomin Investors Limited ("Antomin Investors"), which own a number of copper exploration properties. The Group originally acquired its 51% interest in these properties for a nominal consideration from Mineralinvest Establishment, which continues to hold the remaining 49% of Antomin 2 and Antomin Investors. Mineralinvest is owned by the E. Abaroa Foundation, in which members of the Luksic family are interested. During the year ended 31 December 2021, the Group incurred $0.1 million (year ended 31 December 2020 – $0.1 million) of exploration expense at these properties.

D) Tethyan Copper Company Limited

As explained in Note 18 the Group has a 50% interest in Tethyan Copper Company Limited ("Tethyan"), which is a joint venture with Barrick Gold Corporation over Tethyan's mineral interests in Pakistan. During 2021, the Group contributed $9.5 million (2020 – $7.2 million) to Tethyan.

34 Related party transactions continued

E) Compañia Minera Zaldívar SpA

The Group has a 50% interest in Zaldívar (see Note 18), which is a joint venture with Barrick Gold Corporation. Antofagasta is the operator of Zaldívar. The balance due from Zaldívar to Group companies at the end of the year was $2.5 million (2020 – $0.5 million). During 2021, Zaldívar declared dividends of $77.5 million to the Group (2020 – $65.0 million).

F) Inversiones Hornitos SA

As explained in Note 3, on 31 March 2020 the Group agreed to dispose of its 40% interest in Hornitos coal-fired power station to ENGIE Energía Chile S.A. ("ENGIE"), the owner of the remaining 60% interest. Under the terms of this agreement, the Group agreed to make a final capital contribution to Hornitos of $24 million, the payment of which took place during 2021. During 2020 the Group paid $128.2 million to Inversiones Hornitos in relation to the energy supply contract at Centinela. During 2020 and 2021, the Group has not received dividends from Inversiones Hornitos SA.

G) Directors and other key management personnel

Information relating to Directors' remuneration and interests is given in the Remuneration Report on page 152. Information relating to the remuneration of key management personnel including the Directors is given in Note 9.

35 Reko Diq project

In July 2019, the World Bank Group's International Centre for Settlement of Investment Disputes ("ICSID") awarded $5.84 billion in damages (compensation and accumulated interest as at the date of the award) to Tethyan Copper Company Pty Limited ("Tethyan"), the joint venture held equally by the Company and Barrick Gold Corporation, in relation to an arbitration claim filed against the Islamic Republic of Pakistan ("Pakistan") following the unlawful denial of a mining lease for the Reko Diq project in Pakistan in 2011. As at 31 December 2021, the outstanding award amount, including interest, was approximately $6.45 billion.

In March 2022 the Company reached an agreement in principle with Barrick Gold and the Governments of Pakistan and Balochistan on a framework that provides for the reconstitution of the Reko Diq project, and a pathway for the Company to exit the project. If definitive agreements are executed and the conditions to closing are satisfied, a consortium comprising various Pakistani state-owned enterprises will acquire an interest in the project for consideration of approximately $900m to jointly develop the project with Barrick, and Antofagasta would exit. If all the conditions are satisfied during 2022, we would expect to receive the proceeds in 2023.

36 Litigation and contingent liabilities

The Group is subject from time to time to legal proceedings, claims, complaints and investigations arising out of the ordinary course of business. The Group cannot predict the outcome of individual legal actions or claims or complaints or investigations. As a result, the Group may become subject to liabilities that could affect our business, financial position and reputation. Litigation is inherently unpredictable and large judgments may at times occur. The Group may incur, in the future, judgments or enter into settlements of claims that could lead to material cash outflows. The Group considers that no material loss to the Group is expected to result from the legal proceedings, claims, complaints and investigations that the Group is currently subject to. Provision is made for all liabilities that are expected to materialise through legal claims against the Group.

37 Ultimate Parent Company

The immediate parent of the Group is Metalinvest Establishment, which is controlled by the E. Abaroa Foundation, in which members of the Luksic family are interested.

Both Metalinvest Establishment and the E. Abaroa Foundation are domiciled in Liechtenstein. Information relating to the interest of Metalinvest Establishment and the E. Abaroa Foundation is given in the Directors' Report.

Antofagasta plc – balance sheet of the Parent company and related notes

The Balance Sheet of the Parent Company as at 31 December 2021 is as follows:

	Note	2021 $m	2020 $m
Non-current assets			
Investment in subsidiaries	E	**529.1**	538.6
Other receivables		**–**	485.0
Property, plant and equipment		**5.1**	–
		534.2	1,023.6
Current assets			
Other receivables	E	**57.8**	573.5
Liquid investments		**1,649.4**	447.2
Cash and cash equivalents		**422.8**	177.7
		2,130.0	1,198.4
Total assets		**2,664.2**	2,222.0
Current liabilities			
Amounts payable to subsidiaries		**(302.2)**	(303.7)
Other payables		**(15.4)**	(8.3)
		(317.6)	(312.0)
Non-current liabilities			
Medium and long-term borrowings	F	**(993.4)**	(994.9)
		(993.4)	(994.9)
Total liabilities		**(1,311.0)**	(1,307.0)
Net assets		**1,353.2**	915.0
Equity			
Share capital		**89.8**	89.8
Share premium		**199.2**	199.2
Retained earnings			
At 1 January		**626.0**	197.7
Profit for the year attributable to the owners		**1,149.0**	559.4
Other changes in retained earnings		**(710.8)**	(131.1)
At 31 December		**1,064.2**	626.0
Total equity		**1,353.2**	915.0

The financial statements on pages 225-228 were approved by the Board of Directors on 24 March 2022 and signed on its behalf by

Jean-Paul Luksic
Chairman

Tony Jensen
Senior Independent Director

Parent Company statement of changes in equity

	Share capital $m	Share premium $m	Retained earnings $m	Total equity $m
At 1 January 2020	89.8	199.2	197.7	486.7
Comprehensive income for the year	–	–	559.4	559.4
Dividends	–	–	(131.1)	(131.1)
At 31 December 2020	89.8	199.2	626.0	915.0
Comprehensive income for the year	**–**	**–**	**1,149.0**	**1,149.0**
Dividends	**–**	**–**	**(710.8)**	**(710.8)**
At 31 December 2021	**89.8**	**199.2**	**1,064.2**	**1,353.2**

The ordinary shares rank after the preference shares in entitlement to dividend and on a winding-up. Each ordinary share carries one vote at any general meeting.

Antofagasta plc is a company limited by shares, incorporated and domiciled in the United Kingdom at 103 Mount Street, London W1K 2TJ.

A) Basis of preparation of the balance sheet and related notes of the Parent Company

The Antofagasta plc Parent Company balance sheet and related notes have been prepared in accordance with the Companies Act 2006 applicable to companies using FRS 101, which applies the recognition and measurement bases of IFRS with reduced disclosure requirements. The financial information has been prepared on an historical cost basis. The financial statements have been prepared on a going concern basis. The functional currency of the Company and the presentation currency adopted is US dollars.

The following exemptions from the requirements of IFRS have been applied in the preparation of these financial statements, in accordance with FRS 101:

- Paragraphs 45(b) and 46 to 52 of IFRS 2, 'Share-based payment' (details of the number and weighted-average exercise prices of share options and how the fair value of goods or services received was determined)
- IFRS 7, 'Financial Instruments: Disclosures'
- Paragraphs 91 to 99 of IFRS 13, 'Fair value measurement' (disclosure of valuation techniques and inputs used for fair value measurement of assets and liabilities)
- Paragraph 38 of IAS 1, 'Presentation of financial statements' comparative information requirements in respect of:
  - (i) paragraph 79(a)(iv) of IAS 1, 'Presentation of financial statements'
  - (ii) paragraph 73(e) of IAS 16, 'Property, plant, and equipment'
  - (iii) paragraph 118(e) of IAS 38, Intangible assets (reconciliations between the carrying amount at the beginning and end of the period)
- The following paragraphs of IAS 1, 'Presentation of financial statements':
  - 10(d), (statement of cash flows)
  - 10(f) (a statement of financial position as at the beginning of the preceding period when an entity applies an accounting policy retrospectively or makes a retrospective restatement of items in its financial statements, or when it reclassifies items in its financial statements)
  - 16 (statement of compliance with all IFRS)
  - 38A (requirement for minimum of two primary statements, including cash flow statements)
  - 38B-D (additional comparative information)
  - 40A-D (requirements for a third statement of financial position)
  - 111 (cash flow statement information), and
  - 134-136 (capital management disclosures)
- IAS 7, 'Statement of cash flows'
- Paragraph 30 and 31 of IAS 8 'Accounting policies, changes in accounting estimates and errors' (requirement for the disclosure of information when an entity has not applied a new IFRS that has been issued but is not yet effective)
- Paragraph 17 of IAS 24, 'Related party disclosures' (key management compensation)
- The requirements in IAS 24, 'Related party disclosures' to disclose related party transactions entered into between two or more members of a group. All of the Parent Company's inter-company transactions and balances are with wholly-owned subsidiaries of the Group.

As permitted by section 408 of the Companies Act 2006, the profit and loss account of the Parent Company is not presented as part of these financial statements. The profit after tax for the year of the Parent Company amounted to $1,149.0 million (2020 – $559.4 million).

B) Principal accounting policies of the Parent Company

A summary of the principal accounting policies is set out below. These accounting policies have been applied consistently.

A) Currency translation

The Company's functional currency is the US dollar. Transactions in currencies other than the functional currency are translated at the exchange rate ruling at the date of the transaction. Monetary assets and liabilities, including amounts due from or to subsidiaries, denominated in currencies other than the functional currency (being US dollars) are retranslated at year-end exchange rates. Gains and losses on retranslation are included in net profit or loss for the year.

B) Revenue recognition

Dividends proposed by subsidiaries are recognised as income by the Company when they represent a present obligation of the subsidiaries, in the period in which they are formally approved for payment.

Interest income is accrued on a time basis, by reference to the principal outstanding and the effective interest rate applicable, which is the rate that exactly discounts estimated future cash receipts through the expected life of the financial asset to that asset's net carrying amount.

C) Dividends payable

Dividends proposed are recognised when they represent a present obligation, in the period in which they are formally approved for payment. Accordingly, an interim dividend is recognised when paid and a final dividend is recognised when approved by shareholders.

D) Investments in subsidiaries

Investments in subsidiaries represent equity holdings in subsidiaries and long-term amounts owed by subsidiaries. Such investments are valued at cost less any impairment provisions. Investments relating to equity holdings in subsidiaries are reviewed for impairment if events or changes in circumstances indicate that the carrying amount may not be recoverable; the recoverable amount of the investment is the higher of fair value less costs of disposal and value in use. Investments relating to long-term amounts owed by subsidiaries are reviewed to assess if a material expected credit loss provision is required in respect of these balances.

E) Liquid investments and cash and cash equivalents

Liquid investments represent highly liquid current asset investments such as term deposits and managed funds invested in high quality fixed income instruments. They do not meet the IAS 7 definition of cash and cash equivalents, normally because even if readily accessible, the underlying investments have an average maturity profile greater than 90 days from the date first entered into, or because they are held primarily for investment purposes rather than meeting short-term cash commitments. Cash and cash equivalents comprise cash on hand, deposits held on call with banks, highly liquid investments that are readily convertible into known amounts of cash, and which are subject to insignificant risk of changes in value and are held for the purpose of meeting short-term cash commitments rather than for investment or other purposes. The cash balance is presented net of bank overdrafts which are repayable on demand. Cash and cash equivalents have a maturity period of 90 days or less.

F) Borrowings

Interest-bearing loans and bank overdrafts are initially recorded at the proceeds received, net of direct issue costs. They are subsequently measured at amortised cost using the effective interest method, with interest expense recognised on an effective yield basis. The effective interest method is a method of calculating the amortised cost of a financial liability and of allocating interest expense over the relevant period. The effective interest rate is the rate that exactly discounts estimated future cash payments through the expected life of the financial liability, or, where appropriate, a shorter period. Finance charges, including premiums payable on settlement or redemption and direct issue costs, are accounted for on an accruals basis using the effective interest rate method.

G) Borrowings – preference shares

The Sterling-denominated preference shares issued by the Company carry a fixed rate of return without the right to participate in any surplus. They are accordingly classified as borrowings and translated into US dollars at year-end rates of exchange. Preference share dividends are included within finance costs.

H) Equity instruments – ordinary share capital and share premium

Equity instruments issued are recorded at the proceeds received, net of direct issue costs. Equity instruments of the Company comprise its Sterling-denominated issued ordinary share capital and related share premium.

The presentational and the functional currency of the Company is US dollars, and ordinary share capital and share premium are translated into US dollars at historical rates of exchange based on dates of issue.

C) Significant accounting estimates and judgements

We do not consider there to be critical accounting judgements or key sources of estimation uncertainty which could have a significant risk of causing a material adjustment to the carrying amounts of the Company's assets and liabilities within the next financial year. We have set out below the most significant judgements and estimates applied in the preparation of the Company's balance sheet. The most significant accounting judgement is whether there are impairment indicators in respect of the carrying value of the Company's investments in subsidiaries. The most significant accounting estimate is whether a credit loss provision is required in respect of any of the Company's receivable balances. Over 99% of the receivable balances relate to intercompany balances, primarily with Group holding companies which hold the Group's investments in the operating companies. There is not considered to be any significant risk of a relevant overstatement of these carrying values. In assessing this, the Group has considered the overall market capitalisation of the Group, which was $17.8 billion at 31 December 2021, the cash and other assets held by the relevant Group companies and the level of earnings generated by the Group's operations.

D) Employee Benefit Expense

A) Average number of employees

The average monthly number of employees was 4 (2020 – 4), engaged in management and administrative activities.

B) Aggregate remuneration

The aggregate remuneration of the employees mentioned above was as follows:

	2021 $m	2020 $m
Wages and salaries	**2.3**	1.8
Social security costs	**0.3**	0.2
Other pension costs	**0.1**	0.1
	2.7	2.1

The above employee figures exclude Directors who receive Directors' fees from Antofagasta plc. Details of fees payable to Directors are set out in the Remuneration Report.

E) Subsidiaries

A) Investment in subsidiaries

	2021 $m	2020 $m
Shares in subsidiaries at cost	**60.6**	60.6
Amounts owed by subsidiaries due after more than one year	**468.5**	478.0
	529.1	538.6

	Shares $m	Loans $m	Total $m
1 January 2021	60.6	478.0	538.6
31 December 2021	**60.6**	**468.5**	**529.1**

The above amount of $468.5 million (31 December 2020 – $478.0 million) in respect of amounts owed by subsidiaries due after more than one year relates to long-term funding balances for which the Company does not expect to demand repayment in the foreseeable future and which form an integral part of the Company's long-term investment in those subsidiary companies.

B) Trade and other receivables – amounts owed by subsidiaries due after one year

At 31 December 2021, an amount of nil (31 December 2020 – $485.0 million) was owed to the Company by an indirect subsidiary, pursuant to a 10-year loan agreement. There have been no impairments recognised in respect of subsidiary receivables as at 31 December 2021.

C) Trade and other receivables – amounts owed by subsidiaries due within one year

At 31 December 2021, amounts owed by subsidiaries due within one year were $54.5 million (31 December 2020 – $568.4 million). These balances principally relate to inter-company dividends declared but not yet paid to the Company by its immediate subsidiary companies. There have been no impairments recognised in respect of subsidiary receivables as at 31 December 2021.

F) Borrowings – preference shares

The authorised, issued and fully paid preference share capital of the Company comprised 2,000,000 5% cumulative preference shares of £1 each at both 31 December 2021 and 31 December 2020. As explained in Note 23C, the preference shares are recorded in the balance sheet in US dollars at period-end rates of exchange.

The preference shares are non-redeemable and are entitled to a fixed 5% cumulative dividend, payable in equal instalments in June and December of each year. On a winding-up, the preference shares are entitled to repayment and any arrears of dividend in priority to ordinary shareholders, but are not entitled to participate further in any surplus. Each preference share carries 100 votes (see Note 23A (xv)) at any general meeting.

Alternative performance measures

(not subject to audit or review)

This Annual Report includes a number of alternative performance measures, in addition to IFRS amounts. These measures are included because they are considered to provide relevant and useful additional information to users of the financial statements. Set out below are definitions of these alternative performance measures, explanations as to why they are considered to be relevant and useful, and reconciliations to the IFRS figures.

A) Underlying earnings per share

Underlying earnings per share is earnings per share from continuing operations, excluding exceptional items. This measure is reconciled to earnings per share from continuing and discontinued operations (including exceptional items) on the face of the income statement. This measure is considered to be useful as it provides an indication of the earnings generated by the ongoing businesses of the Group, excluding the impact of exceptional items which are irregular or non-operating in nature.

B) EBITDA

EBITDA refers to Earnings Before Interest, Tax, Depreciation and Amortisation. EBITDA is calculated by adding back depreciation, amortisation, profit or loss on disposals and impairment charges to operating profit. This comprises 100% of the EBITDA from the Group´s subsidiaries, and the Group´s proportional share of the EBITDA of its associates and joint ventures.

EBITDA is considered to provide a useful and comparable indication of the current operating earnings performance of the business, excluding the impact of the historical cost of property, plant and equipment or the particular financing structure adopted by the business.

For the year ended 31 December 2021

	Los Pelambres $m	Centinela $m	Antucoya $m	Zaldívar $m	Exploration and evaluation $m	Corporate and other items $m	Mining $m	Transport division $m	Total $m
Operating profit/(loss)	**2,240.5**	**1,260.6**	**238.3**	**–**	**(280.8)**	**(89.0)**	**3,369.6**	**31.8**	**3,401.4**
Depreciation	**281.8**	**654.7**	**98.3**	**–**	**–**	**13.0**	**1,047.8**	**30.9**	**1,078.7**
Loss on disposals	**3.7**	**4.0**	**0.5**	**–**	**–**	**–**	**8.2**	**1.0**	**9.2**
Provision against the carrying value of assets[1]	**–**	**–**	**–**	**–**	**177.6**	**–**	**177.6**	**–**	**177.6**
EBITDA from subsidiaries	**2,526.0**	**1,919.3**	**337.1**	**–**	**(103.2)**	**(76.0)**	**4,603.2**	**63.7**	**4,666.9**
Proportional share of the EBITDA from associates and JV	**–**	**–**	**–**	**172.8**	**–**	**(8.0)**	**164.8**	**4.5**	**169.3**
EBITDA	**2,526.0**	**1,919.3**	**337.1**	**172.8**	**(103.2)**	**(84.0)**	**4,768.0**	**68.2**	**4,836.2**

1. An impairment has been recognised as at 31 December 2021 in respect of the $177.6 million of intangible assets and property, plant and equipment relating to the Twin Metals project, presented as an exceptional item.

For the year ended 31 December 2020

	Los Pelambres $m	Centinela $m	Antucoya $m	Zaldívar $m	Exploration and evaluation $m	Corporate and other items $m	Mining $m	Transport division $m	Total $m
Operating profit/(loss)	1,407.9	247.0	71.2	–	(85.1)	(74.0)	1,567.0	25.2	1,592.2
Depreciation	252.6	662.9	94.6	–	–	7.8	1,017.9	30.8	1,048.7
Loss on disposals	2.5	1.8	–	–	–	–	4.3	2.0	6.3
EBITDA from subsidiaries	1,663.0	911.7	165.8	–	(85.1)	(66.2)	2,589.2	58.0	2,647.2
Proportional share of the EBITDA from associates and JV	–	–	–	95.5	–	(6.5)	89.0	3.0	92.0
EBITDA	1,663.0	911.7	165.8	95.5	(85.1)	(72.7)	2,678.2	61.0	2,739.2

/ Alternative performance measures continued

C) Cash costs

Cash costs are a measure of the cost of operating production expressed in terms of cents per pound of payable copper produced.

This is considered to be a useful and relevant measure as it is a standard industry measure applied by most major copper mining companies which reflects the direct costs involved in producing each pound of copper. It therefore allows a straightforward comparison of the unit production cost of different mines, and allows an assessment of the position of a mine on the industry cost curve. It also provides a simple indication of the profitability of a mine when compared against the price of copper (per lb).

With sales of concentrates at Los Pelambres and Centinela, which are sold to smelters and roasting plants for further processing into fully refined metal, the price of the concentrate invoiced to the customer reflects the market value of the fully refined metal less a "treatment and refining charge" deduction, to reflect the lower value of this partially processed material compared with the fully refined metal. For accounting purposes, the revenue amount is the net of the market value of fully refined metal less the treatment and refining charges. Under the standard industry definition of cash costs, treatment and refining charges are regarded as an expense and part of the total cash cost figure.

	2021 $m	2020 $m
Reconciliation of cash costs excluding treatment and refining charges and by-product revenue:		
Total Group operating cost (Note 6)	**4,068.7**	3,537.1
Zaldívar operating costs	**231.7**	190.9
Less:		
Depreciation (Note 6)	**(1,078.7)**	(1,048.7)
Loss on disposal (Note 6)	**(9.2)**	(6.3)
Provision against the carrying value of assets	**(177.6)**	–
Elimination of non-mining operations:		
Corporate and other items – Total operating cost (excl. depreciation) (Note 6)	**(76.0)**	(64.3)
Exploration and evaluation – Total operating cost (excl. depreciation) (Note 6)	**(103.2)**	(85.1)
Transport division – Total operating cost (excl. depreciation) (Note 6)	**(106.3)**	(91.4)
Closure provision and other expenses not included within cash costs	**(90.7)**	(105.8)
Inventory variation	**2.1**	11.1
Total cost relevant to the mining operations' cash costs	**2,660.8**	2,337.5
Copper production volumes (tonnes)	**721,450**	733,920
Cash costs excluding treatment and refining charges and by-product revenue ($/tonne)	**3,688**	3,185
Cash costs excluding treatment and refining charges and by-product revenue ($/lb)	**1.68**	1.43
Reconciliation of cash costs before deducting by-product revenue:		
Treatment and refining charges – copper and by-product – Los Pelambres (Note 7)	**115.4**	113.6
Treatment and refining charges – copper and by-product – Centinela (Note 7)	**70.4**	68.8
Treatment and refining charges – copper – total	**185.8**	182.4
Copper production volumes (tonnes)	**721,450**	733,920
Treatment and refining charges ($/tonne)	**257.5**	248.5
Treatment and refining charges ($/lb)	**0.11**	0.13
Cash costs excluding treatment and refining charges and by-product revenue ($/lb)	**1.68**	1.43
Treatment and refining charges ($/lb)	**0.11**	0.13
Cash costs before deducting by-product revenue ($/lb)	**1.79**	1.56

	2021 $m	2020 $m
Reconciliation of cash costs (net of by-product revenue):		
Gold revenue – Los Pelambres (Note 6)	**91.2**	106.4
Gold revenue – Centinela (Note 6)	**346.2**	251.3
Molybdenum revenue – Los Pelambres (Note 6)	**353.6**	181.8
Molybdenum revenue – Centinela (Note 6)	**44.4**	27.7
Silver revenue – Los Pelambres (Note 6)	**46.6**	43.3
Silver revenue – Centinela (Note 6)	**38.7**	21.2
Total by-product revenue	**920.7**	631.7
Copper production volumes (tonnes)	**721,450**	733,920
By-product revenues ($/tonne)	**1,276.0**	860.7
By-product revenues ($/lb)	**0.59**	0.42
Cash costs before deducting by-product revenue ($/lb)	**1.79**	1.56
By-product revenue ($/lb)	**(0.59)**	(0.42)
Cash costs (net of by-product revenue) ($/lb)	**1.20**	1.14

The totals in the tables above may include some small apparent differences as the specific individual figures have not been rounded.

D) Attributable cash, cash equivalents and liquid investments, borrowings and net debt

Attributable cash, cash equivalents and liquid investments, borrowings and net debt reflects the proportion of those balances which are attributable to the equity holders of the Company, after deducting the proportion attributable to the non-controlling interests in the Group's subsidiaries.

This is considered to be a useful and relevant measure as the majority of the Group's cash tends to be held at the corporate level and therefore 100% attributable to the equity holders of the Company, whereas the majority of the Group's borrowings tends to be at the level of the individual operations, and hence only a proportion is attributable to the equity holders of the Company.

	2021			2020		
	Total amount $m	Attributable share $m	Attributable amount $m	Total amount $m	Attributable share $m	Attributable amount $m
Cash, cash equivalents and liquid investments:						
Los Pelambres	**427.9**	**60%**	**256.7**	904.8	60%	542.9
Centinela	**625.3**	**70%**	**437.7**	736.3	70%	515.4
Antucoya	**181.5**	**70%**	**127.1**	143.6	70%	100.5
Corporate	**2,436.5**	**100%**	**2,436.5**	1,843.4	100%	1,843.4
Transport division	**41.9**	**100%**	**41.9**	44.7	100%	44.7
Total (Note 22)	**3,713.1**		**3,299.9**	3,672.8		3,046.9
Borrowings:						
Los Pelambres (Note 23)	**(1,243.1)**	**60%**	**(745.9)**	(1,379.5)	60%	(827.7)
Centinela (Note 23)	**(446.6)**	**70%**	**(312.6)**	(777.5)	70%	(544.2)
Antucoya (Note 23)	**(439.2)**	**70%**	**(307.5)**	(547.5)	70%	(383.3)
Corporate (Note 23)	**(1,016.5)**	**100%**	**(1,016.4)**	(1,013.5)	100%	(1,013.5)
Transport division (Note 23)	**(27.2)**	**100%**	**(27.2)**	(36.8)	100%	(36.8)
Total (Notes 23 and 32)	**(3,172.6)**		**(2,409.6)**	(3,754.8)		(2,805.5)
Net (debt)/cash	**540.5**		**890.3**	(82.0)		241.4

Five year summary

	2021 $m	2020 $m	2019 $m	2018 $m	2017 $m
Consolidated balance sheet					
Intangible asset	**–**	150.1	150.1	150.1	150.1
Property plant and equipment	**10,538.5**	9,851.9	9,556.7	9,184.1	9,064.3
Other non-current assets	**1.3**	2.6	2.1	2.6	3.5
Inventories	**270.4**	278.1	208.0	172.7	111.1
Investment in associates and joint ventures	**905.8**	914.6	1,024.8	1,056.1	1,069.7
Trade and other receivables	**51.2**	55.9	48.2	56.1	67.0
Derivative financial instruments	**–**	0.3	1.7	–	0.2
Equity investments	**8.7**	11.1	5.1	4.7	6.5
Deferred tax assets	**96.8**	6.4	8.2	37.2	69.1
Non-current assets	**11,872.7**	11,271.0	11,004.9	10,663.6	10,541.5
Current assets	**5,405.7**	5,333.3	3,605.5	3,438.9	3,668.2
Current liabilities	**(1,574.2)**	(1,625.7)	(1,548.9)	(1,307.1)	(1,562.1)
Non-current liabilities	**(4,675.2)**	(4,897.5)	(3,660.5)	(3,357.3)	(3,506.0)
	11,029.0	10,081.1	9,401.0	9,438.1	9,141.6
Share capital	**89.8**	89.8	89.8	89.8	89.8
Share premium	**199.2**	199.2	199.2	199.2	199.2
Reserves (retained earnings and hedging, translation and fair value reserves)	**8,061.2**	7,461.6	7,094.7	7,070.4	7,029.4
Equity attributable to equity holders of the Company	**8,350.2**	7,750.6	7,383.7	7,359.4	7,318.4
Non-controlling interests	**2,678.8**	2,330.5	2,017.3	2,078.7	1,823.2
	11,029.0	10,081.1	9,401.0	9,438.1	9,141.6

	2021 $m	2020 $m	2019 $m	2018 $m	2017 $m
Consolidated income statement					
Group revenue	**7,470.1**	5,129.3	4,964.5	4,733.1	4,749.4
Total profit from operations and associates	**3,461.1**	1,516.5	1,400.2	1,367.2	1,900.8
Profit before tax	**3,477.1**	1,413.1	1,349.2	1,252.7	1,830.8
Income tax expense	**(1,242.3)**	(526.5)	(506.1)	(423.7)	(633.6)
Profit from continuing operations	**2,234.8**	886.6	843.1	829.0	1,197.2
Profit from discontinued operations	**–**	7.3	–	51.3	0.5
Profit for the year	**2,234.8**	893.9	843.1	880.3	1,197.7
Non-controlling interests	**(944.6)**	(387.5)	(341.7)	(336.6)	(447.1)
Net earnings (profit attributable to equity holders of the Company)	**1,290.2**	506.4	501.4	543.7	750.6
EBITDA	**4,836.2**	2,739.2	2,438.9	2,228.3	2,586.6

	2021 cents	2020 cents	2019 cents	2018 cents	2017 cents
Earnings per share					
Basic and diluted earnings per share	**130.9**	51.3	50.9	55.1	76.2

	2021 cents	2020 cents	2019 cents	2018 cents	2017 cents
Dividends per share proposed in relation to the year					
Ordinary dividends (interim and final)	**142.5**	54.7	34.1	43.8	50.9
	142.5	54.7	34.1	43.8	50.9
Dividends per share paid in the year and deducted from equity	**72.1**	13.3	47.7	47.4	25.6

	2021 $m	2020 $m	2019 $m	2018 $m	2017 $m
Consolidated cash flow statement					
Cash flow from continuing operations	**4,507.7**	2,431.1	2,570.7	1,877.0	2,495.0
Interest paid	**(60.7)**	(52.7)	(76.3)	(68.2)	(59.1)
Income tax paid	**(776.9)**	(319.7)	(403.6)	(498.0)	(338.4)
Net cash from operating activities	**3,670.1**	2,058.7	2,090.8	1,310.8	(2,097.5)
Investing activities					
Acquisition and disposal of subsidiaries, joint venture and associates	**–**	–	–	145.2	3.1
Dividends from associates	**142.5**	–	58.0	16.6	81.8
Equity investments, investing activities and recovery of VAT	**(577.2)**	(893.5)	(678.3)	284.2	115.9
Purchases and disposals of intangible assets, property, plant and equipment	**(1,776.0)**	(1,306.6)	(1,076.9)	(872.2)	(894.4)
Interest received	**7.4**	12.6	41.0	26.4	14.3
Net cash used in investing activities	**(2,203.3)**	(2,187.5)	(1,656.2)	(399.8)	(679.3)
Financing activities					
Dividends paid to equity holders of the Company	**(710.8)**	(131.1)	(470.3)	(466.9)	(252.3)
Dividends paid to preference holders and non-controlling interests	**(604.6)**	(280.1)	(400.1)	(120.1)	(320.1)
Capital increase from non-controlling interest	**–**	210.0	–	–	–
New borrowings less repayment of borrowings and leases	**(634.5)**	918.3	60.8	(347.1)	(487.0)
Net cash (used in)/generated from financing activities	**(1,949.9)**	717.1	(809.6)	(934.1)	(1,059.4)
Net increase/(decrease) in cash and cash equivalents	**(483.1)**	588.3	(375.0)	(23.1)	358.8

	2021 $m	2020 $m	2019 $m	2018 $m	2017 $m
Consolidated net cash					
Cash, cash equivalents and liquid investments	**3,713.1**	3,672.8	2,193.4	1,897.6	2,252.3
Short-term borrowings	**(337.1)**	(603.4)	(723.9)	(646.0)	(753.6)
Medium and long-term borrowings	**(2,835.5)**	(3,151.4)	(2,032.9)	(1,847.9)	(1,955.1)
	(3,172.6)	(3,754.8)	(2,756.8)	(2,493.9)	(2,708.7)
Net cash/(debt)at the year-end	**540.5**	(82.0)	(563.4)	(596.3)	(456.4)

Production statistics

Production and sales volumes, realised prices and cash costs by mine	Production 2021 '000 tonnes	Production 2020 '000 tonnes	Sales 2021 '000 tonnes	Sales 2020 '000 tonnes	Net cash costs 2021 $/lb	Net cash costs 2020 $/lb	Realised prices 2021 $/lb	Realised prices 2020 $/lb
Copper								
Los Pelambres	**324.7**	359.6	**324.5**	366.0	**0.89**	0.81	**4.54**	3.02
Centinela	**274.2**	246.8	**276.1**	247.7	**1.13**	1.27	**4.31**	2.95
Antucoya	**78.6**	79.3	**80.4**	76.5	**2.04**	1.82	**3.94**	2.85
Zaldívar (attributable basis – 50%)	**44**	48.2	**44.6**	48.3	**2.39**	1.80	**–**	–
Group total	**721.5**	733.9	**725.6**	738.5	**1.20**	1.14	**4.37**	2.98
Group weighted average (net cash costs)								
Group weighted average (excluding treatment and refining charges and before by-products)					**1.68**	1.43		
Group weighted average (before by-product credits)					**1.79**	1.56		
Cash costs at Los Pelambres comprises								
Cash costs before by-product credits					**1.59**	1.27		
By-product credits (principally molybdenum and gold)					**(0.70)**	(0.46)		
Net cash costs					**0.89**	0.81		
Cash cost at Centinela comprises								
Cash costs before by-product credits					**1.87**	1.85		
By-product credits (principally gold)					**(0.74)**	(0.58)		
Net cash costs					**1.13**	1.27		
LME average							**4.23**	2.80

	Production 2021 '000 ounces	Production 2020 '000 ounces	Sales 2021 '000 ounces	Sales 2020 '000 ounces	Realised prices 2021 $/oz	Realised prices 2020 $/oz
Gold						
Los Pelambres	**53.2**	60.4	**51.1**	58.4	**1,783**	1,827
Centinela Concentrates	**199.0**	143.7	**193.5**	141.2	**1,789**	1,784
Group total	**252.2**	204.1	**244.6**	199.6	**1,788**	1,797
Market average price					**1,799**	1,770

	'000 tonnes	'000 tonnes	'000 tonnes	'000 tonnes	$/lb	$/lb
Molybdenum						
Los Pelambres	**9.2**	10.9	**9.2**	10.8	**17.5**	8.8
Centinela	**1.3**	1.7	**1.2**	1.7	**17.2**	8.9
Group total/average realised price	**10.5**	12.6	**10.4**	12.5	**17.4**	8.8
Market average price					**15.9**	8.7

Ore reserves and mineral resources estimates

At 31 December 2021

Introduction

The ore reserves and mineral resources estimates presented in this report comply with the requirements of the Australasian Code for Reporting of Exploration Results, Mineral Resources and Ore Reserves 2012 edition (the JORC Code) which has been used by the Group as the minimum standard for the preparation and disclosure of the information contained herein. The definitions and categories of ore reserves and mineral resources are set out below.

The information on ore reserves and mineral resources was prepared by or under the supervision of Competent Persons as defined in the JORC Code. The Competent Persons have sufficient experience relevant to the style of mineralisation and type of deposit under consideration and to the activity which they are undertaking. The Competent Persons consent to the inclusion in this report of the matters based on their information in the form and context in which it appears. The Competent Person for Exploration Results and Mineral Resources is Osvaldo Galvez (CP, Chile), Deputy Manager of Mineral Resource Evaluation for Antofagasta Minerals SA. The Competent Person for Ore Reserves is Jaime Díaz (CP, Chile), Expert Reserves Engineer for Antofagasta Minerals SA.

The Group's operations and projects are subject to a comprehensive programme of audits aimed at providing assurance in respect of ore reserves and mineral resources estimates. The audits are conducted by suitably qualified Competent Persons from within an operation, another operation of the Company or from independent consultants. The ore reserves and mineral resources estimates are the total reserves and resources, with the Group's attributable share for each mine shown in the 'Attributable Tonnage' column. The Group's economic interest in each mine is disclosed in the notes following the estimates on pages 243 to 244. The totals in the table may include some small apparent differences due to rounding.

Definitions and categories of ore reserves and mineral resources

A 'Mineral Resource' is a concentration or occurrence of material of intrinsic economic interest in or on the Earth's crust in such form, quality and quantity that there are reasonable prospects for eventual economic extraction. The location, quantity, grade, geological characteristics and continuity of a Mineral Resource are known, estimated or interpreted from specific geological evidence and knowledge. Mineral Resources are sub-divided, in order of increasing geological confidence, into Inferred, Indicated and Measured categories.

An 'Inferred Mineral Resource' is that part of a Mineral Resource for which tonnage, grade and mineral content can be estimated with a low level of confidence. It is inferred from geological evidence and assumed but not verified geological and/or grade continuity. It is based on information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drillholes which may be limited or of uncertain quality and reliability.

An 'Indicated Mineral Resource' is that part of a Mineral Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a reasonable level of confidence. It is based on exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drillholes. The locations are too widely or inappropriately spaced to confirm geological and/or grade continuity but are spaced closely enough for continuity to be assumed.

A 'Measured Mineral Resource' is that part of a Mineral Resource for which tonnage, densities, shape, physical characteristics, grade and mineral content can be estimated with a high level of confidence. It is based on detailed and reliable exploration, sampling and testing information gathered through appropriate techniques from locations such as outcrops, trenches, pits, workings and drillholes. The locations are spaced closely enough to confirm geological and grade continuity.

An 'Ore Reserve' is the economically mineable part of a Measured and/or Indicated Mineral Resource. It includes diluting materials and allowances for losses, which may occur when the material is mined. Appropriate assessments and studies have been carried out and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction could reasonably be justified. Ore Reserves are sub-divided in order of increasing confidence into Probable Ore Reserves and Proved Ore Reserves.

A 'Probable Ore Reserve' is the economically mineable part of an Indicated, and in some circumstances, a Measured Mineral Resource. It includes diluting materials and allowances for losses which may occur when the material is mined. Appropriate assessments and studies have been carried out and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction could reasonably be justified.

A 'Proved Ore Reserve' is the economically mineable part of a Measured Mineral Resource. It includes diluting materials and allowances for losses which may occur when the material is mined. Appropriate assessments and studies have been carried out and include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors. These assessments demonstrate at the time of reporting that extraction could reasonably be justified.

/ Ore reserves and mineral resources estimates continued

Ore reserves estimates

Group Subsidiaries	Tonnage (millions of tonnes) 2021	2020	Copper (%) 2021	2020	Molybdenum (%) 2021	2020	Gold (g/tonne) 2021	2020	Attributable Tonnage (millions of tonnes) 2021	2020
Ore reserves										
Los Pelambres (see note (a))										
Proved	**612.3**	678.8	**0.60**	0.60	**0.020**	0.020	**0.05**	0.05	**367.4**	407.3
Probable	**343.8**	331.7	**0.57**	0.58	**0.019**	0.019	**0.05**	0.05	**206.3**	199.0
Total	**956.1**	1,010.5	**0.59**	0.59	**0.020**	0.020	**0.05**	0.05	**573.7**	606.3
Centinela (see note (b))										
Centinela Cathodes (oxides)										
Proved	**76.4**	93.3	**0.54**	0.53					**53.5**	65.3
Probable	**222.9**	230.5	**0.34**	0.35					**156.1**	161.4
Subtotal	**299.3**	323.9	**0.39**	0.40					**209.5**	226.7
Centinela Concentrates (sulphides)										
Proved	**545.6**	571.6	**0.45**	0.46	**0.012**	0.012	**0.17**	0.18	**381.9**	400.2
Probable	**1,138.7**	1,166.5	**0.39**	0.38	**0.013**	0.012	**0.12**	0.12	**797.1**	816.5
Subtotal	**1,684.3**	1,738.1	**0.41**	0.41	**0.012**	0.012	**0.14**	0.14	**1,179.0**	1,216.7
Proved	**622.0**	665.0	**0.46**	0.47					**435.4**	465.5
Probable	**1,361.6**	1,397.0	**0.38**	0.38					**953.1**	977.9
Total	**1,983.6**	2,062.0	**0.40**	0.41					**1,388.5**	1,443.4
Antucoya (see note (c))										
Proved	**435.9**	402.3	**0.33**	0.34					**305.1**	281.6
Probable	**309.6**	308.4	**0.30**	0.30					**216.7**	215.9
Total	**745.5**	710.7	**0.32**	0.32					**521.9**	497.5
Total Group Subsidiaries	**3,685.3**	3,783.2	**0.43**	0.44					**2,484.1**	2,547.2

Group Joint Ventures	Tonnage (millions of tonnes) 2021	2020	Copper (%) 2021	2020	Molybdenum (%) 2021	2020	Gold (g/tonne) 2021	2020	Attributable Tonnage (millions of tonnes) 2021	2020
Ore reserves										
Zaldívar (see note (l))										
Proved	**366.6**	344.2	**0.45**	0.46					**183.3**	172.1
Probable	**84.3**	123.2	**0.34**	0.41					**42.1**	61.6
Total	**450.8**	467.5	**0.43**	0.45					**225.4**	233.7
Total Group	**4,136.2**	4,250.7	**0.43**	0.44					**2,709.5**	2,780.9

Mineral resources estimates (including ore reserves)

Group Subsidiaries	Tonnage (millions of tonnes) 2021	2020	Copper (%) 2021	2020	Molybdenum (%) 2021	2020	Gold (g/tonne) 2021	2020	Attributable Tonnage (millions of tonnes) 2021	2020
Los Pelambres (see note (a))										
Sulphides										
Measured	**1,093.4**	1,165.8	**0.58**	0.58	**0.020**	0.020	**0.05**	0.05	**656.1**	699.5
Indicated	**2,135.0**	2,117.8	**0.52**	0.52	**0.016**	0.016	**0.05**	0.05	**1,281.0**	1,270.7
Measured + Indicated	**3,228.4**	3,283.5	**0.54**	0.54	**0.018**	0.018	**0.05**	0.05	**1,937.1**	1,970.1
Inferred	**2,729.0**	2,762.5	**0.46**	0.46	**0.016**	0.016	**0.06**	0.06	**1,637.4**	1,657.5
Total	**5,957.4**	6,046.1	**0.50**	0.50	**0.017**	0.017	**0.06**	0.05	**3,574.5**	3,627.6
Los Pelambres total										
Measured	**1,093.4**	1,165.8	**0.58**	0.58	**0.020**	0.020	**0.05**	0.05	**656.1**	699.5
Indicated	**2,135.0**	2,117.8	**0.52**	0.52	**0.016**	0.016	**0.05**	0.05	**1,281.0**	1,270.7
Measured + Indicated	**3,228.4**	3,283.5	**0.54**	0.54	**0.018**	0.018	**0.05**	0.05	**1,937.1**	1,970.1
Inferred	**2,729.0**	2,762.5	**0.46**	0.46	**0.016**	0.016	**0.06**	0.06	**1,637.4**	1,657.5
Total	**5,957.4**	6,046.1	**0.50**	0.50	**0.017**	0.017	**0.06**	0.05	**3,574.5**	3,627.6
Centinela (see note (b))										
Centinela Cathodes (Oxides)										
Measured	**109.6**	126.7	**0.52**	0.51	**-**	-	**-**	-	**76.7**	88.7
Indicated	**316.2**	329.0	**0.32**	0.33	**-**	-	**-**	-	**221.3**	230.3
Measured + Indicated	**425.8**	455.7	**0.37**	0.38	**-**	-	**-**	-	**298.0**	319.0
Inferred	**16.1**	18.5	**0.33**	0.34	**-**	-	**-**	-	**11.3**	12.9
Subtotal	**441.9**	474.2	**0.37**	0.37	**-**	-	**-**	-	**309.3**	331.9
Centinela Concentrates (Sulphides)										
Measured	**956.3**	980.5	**0.48**	0.49	**0.013**	0.013	**0.19**	0.19	**669.4**	686.4
Indicated	**1,903.3**	1,917.1	**0.37**	0.37	**0.013**	0.013	**0.12**	0.12	**1,332.3**	1,342.0
Measured + Indicated	**2,859.7**	2,897.6	**0.41**	0.41	**0.013**	0.013	**0.14**	0.14	**2,001.8**	2,028.3
Inferred	**1,232.5**	1,228.4	**0.30**	0.31	**0.011**	0.011	**0.08**	0.08	**862.7**	859.9
Subtotal	**4,092.1**	4,126.0	**0.38**	0.38	**0.013**	0.012	**0.12**	0.13	**2,864.5**	2,888.2
Centinela total										
Measured	**1,065.9**	1,107.2	**0.49**	0.49	**-**	-	**-**	-	**746.2**	775.0
Indicated	**2,219.5**	2,246.1	**0.36**	0.36	**-**	-	**-**	-	**1,553.6**	1,572.3
Measured + Indicated	**3,285.4**	3,353.3	**0.40**	0.41	**-**	-	**-**	-	**2,299.8**	2,347.3
Inferred	**1,248.6**	1,246.9	**0.30**	0.31	**-**	-	**-**	-	**874.0**	872.8
Total	**4,534.0**	4,600.2	**0.38**	0.38	**-**	-	**-**	-	**3,173.8**	3,220.1

/ Ore reserves and mineral resources estimates continued

Mineral resources estimates (including ore reserves) continued

	Tonnage (millions of tonnes)		Copper (%)		Molybdenum (%)		Gold (g/tonne)		Attributable Tonnage (millions of tonnes)	
Group Subsidiaries	**2021**	2020	**2021**	2020	**2021**	2020	**2021**	2020	**2021**	2020
Antucoya (See Note (c))										
Oxides										
Measured	**465.4**	427.0	**0.33**	0.33	**-**	-	**-**	-	**325.7**	298.9
Indicated	**388.9**	390.3	**0.30**	0.30	**-**	-	**-**	-	**272.2**	273.2
Measured + Indicated	**854.3**	817.3	**0.31**	0.31	**-**	-	**-**	-	**598.0**	572.1
Inferred	**337.4**	418.4	**0.26**	0.26	**-**	-	**-**	-	**236.2**	292.9
Total	**1,191.6**	1,235.8	**0.30**	0.30	**-**	-	**-**	-	**834.1**	865.0
Antucoya total										
Measured	**465.4**	427.0	**0.33**	0.33	**-**	-	**-**	-	**325.7**	298.9
Indicated	**388.9**	390.3	**0.30**	0.30	**-**	-	**-**	-	**272.2**	273.2
Measured + Indicated	**854.3**	817.3	**0.31**	0.31	**-**	-	**-**	-	**598.0**	572.1
Inferred	**337.4**	418.4	**0.26**	0.26	**-**	-	**-**	-	**236.2**	292.9
Total	**1,191.6**	1,235.8	**0.30**	0.30	**-**	-	**-**	-	**834.1**	865.0
Polo Sur (see note (d))										
Oxides										
Measured	**32.4**	32.4	**0.49**	0.49	**-**	-	**-**	-	**32.4**	32.4
Indicated	**69.5**	69.5	**0.40**	0.40	**-**	-	**-**	-	**69.5**	69.5
Measured + Indicated	**101.9**	101.9	**0.43**	0.43	**-**	-	**-**	-	**101.9**	101.9
Inferred	**6.6**	6.6	**0.41**	0.41	**-**	-	**-**	-	**6.6**	6.6
Subtotal	**108.5**	108.5	**0.43**	0.43	**-**	-	**-**	-	**108.5**	108.5
Sulphides										
Measured	**281.4**	281.4	**0.39**	0.39	**0.007**	0.007	**0.07**	0.07	**281.4**	281.4
Indicated	**654.9**	654.9	**0.34**	0.34	**0.006**	0.006	**0.05**	0.05	**654.9**	654.9
Measured + Indicated	**936.4**	936.4	**0.35**	0.35	**0.006**	0.006	**0.06**	0.06	**936.4**	936.4
Inferred	**612.1**	612.1	**0.27**	0.27	**0.005**	0.005	**0.04**	0.04	**612.1**	612.1
Subtotal	**1,548.5**	1,548.5	**0.32**	0.32	**0.006**	0.006	**0.05**	0.05	**1,548.5**	1,548.5
Polo Sur total										
Measured	**313.8**	313.8	**0.40**	0.40	**-**	-	**-**	-	**313.8**	313.8
Indicated	**724.5**	724.5	**0.34**	0.34	**-**	-	**-**	-	**724.5**	724.5
Measured + Indicated	**1,038.3**	1,038.3	**0.36**	0.36	**-**	-	**-**	-	**1,038.3**	1,038.3
Inferred	**618.7**	618.7	**0.27**	0.27	**-**	-	**-**	-	**618.7**	618.7
Total	**1,657.0**	1,657.0	**0.33**	0.33	**-**	-	**-**	-	**1,657.0**	1,657.0
Penacho Blanco (see note (e))										
Oxides										
Measured	**-**	-	**-**	-	**-**	-	**-**	-	**-**	-
Indicated	**-**	-	**-**	-	**-**	-	**-**	-	**-**	-
Measured + Indicated	**-**	-	**-**	-	**-**	-	**-**	-	**-**	-
Inferred	**18.3**	18.3	**0.29**	0.29	**-**	-	**-**	-	**9.3**	9.3
Subtotal	**18.3**	18.3	**0.29**	0.29	**-**	-	**-**	-	**9.3**	9.3
Sulphides										
Measured	**-**	-	**-**	-	**-**	-	**-**	-	**-**	-
Indicated	**-**	-	**-**	-	**-**	-	**-**	-	**-**	-
Measured + Indicated	**-**	-	**-**	-	**-**	-	**-**	-	**-**	-
Inferred	**321.9**	321.9	**0.38**	0.38	**0.002**	0.002	**0.05**	0.05	**164.2**	164.2
Subtotal	**321.9**	321.9	**0.38**	0.38	**0.002**	0.002	**0.05**	0.05	**164.2**	164.2
Penacho Blanco total										
Measured	**-**	-	**-**	-	**-**	-	**-**	-	**-**	-
Indicated	**-**	-	**-**	-	**-**	-	**-**	-	**-**	-
Measured + Indicated	**-**	-	**-**	-	**-**	-	**-**	-	**-**	-
Inferred	**340.2**	340.2	**0.37**	0.37	**-**	-	**-**	-	**173.5**	173.5
Total	**340.2**	340.2	**0.37**	0.37	**-**	-	**-**	-	**173.5**	173.5

Group Subsidiaries	Tonnage (millions of tonnes) 2021	2020	Copper (%) 2021	2020	Molybdenum (%) 2021	2020	Gold (g/tonne) 2021	2020	Attributable Tonnage (millions of tonnes) 2021	2020
Mirador (see note (f))										
Oxides										
Measured	**2.0**	1.7	**0.29**	0.23	**-**	-	**-**	-	**1.6**	1.3
Indicated	**22.6**	20.2	**0.27**	0.27	**-**	-	**-**	-	**17.6**	15.8
Measured + Indicated	**24.6**	21.9	**0.28**	0.27	**-**	-	**-**	-	**19.2**	17.1
Inferred	**9.7**	10.2	**0.27**	0.26	**-**	-	**-**	-	**7.6**	7.9
Subtotal	**34.3**	32.1	**0.27**	0.27		-	**-**	-	**26.8**	25.0
Sulphides										
Measured	**35.4**	35.2	**0.34**	0.34	**0.006**	0.006	**0.12**	0.13	**35.4**	35.2
Indicated	**19.9**	20.2	**0.28**	0.28	**0.008**	0.008	**0.07**	0.08	**19.9**	20.2
Measured + Indicated	**55.3**	55.3	**0.31**	0.32	**0.007**	0.007	**0.11**	0.11	**55.3**	55.3
Inferred	**4.0**	4.9	**0.25**	0.26	**0.008**	0.009	**0.06**	0.05	**4.0**	4.9
Subtotal	**59.2**	60.2	**0.31**	0.31	**0.007**	0.007	**0.10**	0.10	**59.2**	60.2
Mirador Total										
Measured	**37.4**	36.9	**0.33**	0.33	**-**	-	**-**	-	**36.9**	36.5
Indicated	**42.5**	40.4	**0.28**	0.28	**-**	-	**-**	-	**37.5**	35.9
Measured + Indicated	**79.8**	77.2	**0.30**	0.30	**-**	-	**-**	-	**74.4**	72.4
Inferred	**13.7**	15.0	**0.26**	0.26	**-**	-	**-**	-	**11.6**	12.8
Total	**93.5**	92.3	**0.30**	0.30	**-**	-	**-**	-	**86.0**	85.2
Los Volcanes (see note (g))										
Oxides										
Measured	**-**	-	**-**	-	**-**	-	**-**	-	**-**	-
Indicated	**-**	-	**-**	-	**-**	-	**-**	-	**-**	-
Measured + Indicated	**-**	-	**-**	-	**-**	-	**-**	-	**-**	-
Inferred	**30.8**	30.8	**0.31**	0.31	**-**	-	**-**	-	**15.7**	15.7
Subtotal	**30.8**	30.8	**0.31**	0.31	**-**	-	**-**	-	**15.7**	15.7
Sulphides										
Measured	**-**	-	**-**	-	**-**	-	**-**	-	**-**	-
Indicated	**-**	-	**-**	-	**-**	-	**-**	-	**-**	-
Measured + Indicated	**-**	-	**-**	-	**-**	-	**-**	-	**-**	-
Inferred	**1,873.4**	1,873.4	**0.50**	0.50	**0.011**	0.011	**0.03**	0.03	**955.4**	955.4
Subtotal	**1,873.4**	1,873.4	**0.50**	0.50	**0.011**	0.011	**0.03**	0.03	**955.4**	955.4
Los Volcanes total										
Measured	**-**	-	**-**	-	**-**	-	**-**	-	**-**	-
Indicated	**-**	-	**-**	-	**-**	-	**-**	-	**-**	-
Measured + Indicated	**-**	-	**-**	-	**-**	-	**-**	-	**-**	-
Inferred	**1,904.2**	1,904.2	**0.50**	0.50	**-**	-	**-**	-	**971.1**	971.1
Total	**1,904.2**	1,904.2	**0.50**	0.50	**-**	-	**-**	-	**971.1**	971.1
Brujulina (see note (h))										
Oxides										
Measured	**-**	-	**-**	-	**-**	-	**-**	-	**-**	-
Indicated	**-**	-	**-**	-	**-**	-	**-**	-	**-**	-
Measured + Indicated	**-**	-	**-**	-	**-**	-	**-**	-	**-**	-
Inferred	**87.2**	87.2	**0.49**	0.49	**-**	-	**-**	-	**44.5**	44.5
Total	**87.2**	87.2	**0.49**	0.49	**-**	-	**-**	-	**44.5**	44.5

/ *Ore reserves and mineral resources estimates* continued

Mineral resources estimates (including ore reserves) continued

Group Subsidiaries	Tonnage (millions of tonnes) 2021	2020	Copper (%) 2021	2020	Molybdenum (%) 2021	2020	Gold (g/tonne) 2021	2020	Attributable Tonnage (millions of tonnes) 2021	2020
Brujulina total										
Measured	–	–	–	–	–	–	–	–	–	–
Indicated	–	–	–	–	–	–	–	–	–	–
Measured + Indicated	–	–	–	–	–	–	–	–	–	–
Inferred	87.2	87.2	0.49	0.49	–	–	–	–	44.5	44.5
Total	87.2	87.2	0.49	0.49	–	–	–	–	44.5	44.5
Sierra (see note (i))										
Oxides										
Measured	–	–	–	–	–	–	–	–	–	–
Indicated	–	–	–	–	–	–	–	–	–	–
Measured + Indicated	–	–	–	–	–	–	–	–	–	–
Inferred	52.0	52.0	0.69	0.69	–	–	–	–	52.0	52.0
Total	52.0	52.0	0.69	0.69	–	–	–	–	52.0	52.0
Sierra total										
Measured	–	–	–	–	–	–	–	–	–	–
Indicated	–	–	–	–	–	–	–	–	–	–
Measured + Indicated	–	–	–	–	–	–	–	–	–	–
Inferred	52.0	52.0	0.69	0.69	–	–	–	–	52.0	52.0
Total	52.0	52.0	0.69	0.69	–	–	–	–	52.0	52.0
Cachorro (see note (j))										
Oxides										
Measured	–	–	–	–	–	–	–	–	–	–
Indicated	–	–	–	–	–	–	–	–	–	–
Measured + Indicated	–	–	–	–	–	–	–	–	–	–
Inferred	12.4	–	1.23	–	–	–	–	–	12.4	–
Subtotal	12.4	–	1.23	–	–	–	–	–	12.4	–
Sulphides										
Measured	–	–	–	–	–	–	–	–	–	–
Indicated	–	–	–	–	–	–	–	–	–	–
Measured + Indicated	–	–	–	–	–	–	–	–	–	–
Inferred	129.2	–	1.21	–	–	–	–	–	129.2	–
Subtotal	129.2	–	1.21	–	–	–	–	–	129.2	–
Cachorro total										
Measured	–	–	–	–	–	–	–	–	–	–
Indicated	–	–	–	–	–	–	–	–	–	–
Measured + Indicated	–	–	–	–	–	–	–	–	–	–
Inferred	141.6	–	1.21	–	–	–	–	–	141.6	–
Total	141.6	–	1.21	–	–	–	–	–	141.6	–

Group Subsidiaries	Tonnage (millions of tonnes) 2021	2020	Copper (%) 2021	2020	Nickel (%) 2021	2020	TPM (g/tonne Au+Pt+Pd) 2021	2020	Attributable Tonnage (millions of tonnes) 2021	2020
Twin Metals (see note (k))										
Maturi										
Measured	**291.4**	291.4	**0.63**	0.63	**0.20**	0.20	**0.57**	0.57	**224.6**	224.6
Indicated	**818.3**	818.3	**0.57**	0.57	**0.18**	0.18	**0.57**	0.57	**771.6**	771.6
Measured + Indicated	**1,109.7**	1,109.7	**0.59**	0.59	**0.19**	0.19	**0.57**	0.57	**996.1**	996.1
Inferred	**534.1**	534.1	**0.50**	0.50	**0.16**	0.16	**0.57**	0.57	**483.2**	483.2
Subtotal	**1,643.8**	1,643.8	**0.56**	0.56	**0.18**	0.18	**0.57**	0.57	**1,479.3**	1,479.3
Maturi South West										
Measured	**-**	-	**-**	-	**-**	-	**-**	-	**-**	-
Indicated	**93.1**	93.1	**0.48**	0.48	**0.17**	0.17	**0.31**	0.31	**65.2**	65.2
Measured + Indicated	**93.1**	93.1	**0.48**	0.48	**0.17**	0.17	**0.31**	0.31	**65.2**	65.2
Inferred	**29.3**	29.3	**0.43**	0.43	**0.15**	0.15	**0.26**	0.26	**20.5**	20.5
Subtotal	**122.4**	122.4	**0.47**	0.47	**0.17**	0.17	**0.30**	0.30	**85.7**	85.7
Birch Lake										
Measured	**-**	-	**-**	-	**-**	-	**-**	-	**-**	-
Indicated	**90.4**	90.4	**0.52**	0.52	**0.16**	0.16	**0.87**	0.87	**63.3**	63.3
Measured + Indicated	**90.4**	90.4	**0.52**	0.52	**0.16**	0.16	**0.87**	0.87	**63.3**	63.3
Inferred	**217.0**	217.0	**0.46**	0.46	**0.15**	0.15	**0.64**	0.64	**151.9**	151.9
Subtotal	**307.4**	307.4	**0.48**	0.48	**0.15**	0.15	**0.70**	0.70	**215.2**	215.2
Spruce Road										
Measured	**-**	-	**-**	-	**-**	-	**-**	-	**-**	-
Indicated	**-**	-	**-**	-	**-**	-	**-**	-	**-**	-
Measured + Indicated	**-**	-	**-**	-	**-**	-	**-**	-	**-**	-
Inferred	**435.5**	435.5	**0.43**	0.43	**0.16**	0.16	**-**	-	**304.8**	304.8
Subtotal	**435.5**	435.5	**0.43**	0.43	**0.16**	0.16	**-**	-	**304.8**	304.8
Twin Metals total										
Measured	**291.4**	291.4	**0.63**	0.63	**0.20**	0.20	**0.57**	0.57	**224.6**	224.6
Indicated	**1,001.8**	1,001.8	**0.56**	0.56	**0.18**	0.18	**0.57**	0.57	**900.0**	900.0
Measured + Indicated	**1,293.2**	1,293.2	**0.57**	0.57	**0.18**	0.18	**0.57**	0.57	**1,124.6**	1,124.6
Inferred	**1,215.9**	1,215.9	**0.47**	0.47	**0.16**	0.16	**0.37**	0.37	**960.4**	960.4
Total	**2,509.1**	2,509.1	**0.52**	0.52	**0.17**	0.17	**0.47**	0.47	**2,085.0**	2,085.0
Group subsidiaries										
Measured + Indicated	**9,779.5**	9,862.9	**0.46**	0.46	**-**	-	**-**	-	**7,072.2**	7,124.9
Inferred	**8,688.4**	8,661.1	**0.44**	0.42	**-**	-	**-**	-	**5,720.9**	5,656.3
Group Subsidiaries total	**18,467.9**	18,524.0	**0.45**	0.44	**-**	-	**-**	-	**12,793.2**	12,781.2

/ *Ore reserves and mineral resources estimates* continued

Mineral resources estimates (including ore reserves) continued

Group Join Ventures	Tonnage (millions of tonnes) 2021	2020	Copper (%) 2021	2020	Molybdenum (%) 2021	2020	Gold (g/tonne) 2021	2020	Attributable Tonnage (millions of tonnes) 2021	2020
Zaldívar (see note (l))										
Oxides & Secondary Sulphides										
Measured	**660.5**	555.4	**0.40**	0.40	**-**	-	**-**	-	**330.2**	277.7
Indicated	**168.7**	242.3	**0.30**	0.35	**-**	-	**-**	-	**84.4**	121.1
Measured + Indicated	**829.2**	797.7	**0.38**	0.39	**-**	-	**-**	-	**414.6**	398.8
Inferred	**23.0**	33.8	**0.30**	0.43	**-**	-	**-**	-	**11.5**	16.9
Subtotal	**852.2**	831.5	**0.38**	0.39	**-**	-	**-**	-	**426.1**	415.7
Primary Sulphides										
Measured	**119.5**	104.6	**0.41**	0.40	**-**	-	**-**	-	**59.8**	52.3
Indicated	**309.8**	305.3	**0.40**	0.39	**-**	-	**-**	-	**154.9**	152.7
Measured + Indicated	**429.3**	409.9	**0.40**	0.40	**-**	-	**-**	-	**214.7**	205.0
Inferred	**28.3**	27.4	**0.37**	0.36	**-**	-	**-**	-	**14.1**	13.7
Subtotal	**457.6**	437.4	**0.40**	0.39	**-**	-	**-**	-	**228.8**	218.7
Zaldívar total										
Measured	**780.0**	660.0	**0.40**	0.40	**-**	-	**-**	-	**390.0**	330.0
Indicated	**478.5**	547.6	**0.36**	0.38	**-**	-	**-**	-	**239.3**	273.8
Measured + Indicated	**1,258.5**	1,207.6	**0.39**	0.39	**-**	-	**-**	-	**629.3**	603.8
Inferred	**51.3**	61.2	**0.34**	0.40	**-**	-	**-**	-	**25.7**	30.6
Group Joint Ventures total	**1,309.9**	1,268.8	**0.38**	0.39	**-**	-	**-**	-	**654.9**	634.4

Total Group	Tonnage (millions of tonnes) 2021	2020	Copper (%) 2021	2020	Molybdenum (%) 2021	2020	Gold (g/tonne) 2021	2020	Attributable Tonnage (millions of tonnes) 2021	2020
Measured + Indicated	**11,038.1**	11,070.6	**0.45**	0.45	**-**	-	**-**	-	**7,701.5**	7,728.7
Inferred	**8,739.7**	8,722.3	**0.43**	0.42	**-**	-	**-**	-	**5,746.6**	5,686.9
Total	**19,777.8**	19,792.8	**0.44**	0.44	**-**	-	**-**	-	**13,448.1**	13,415.6

Notes to ore reserves and mineral resources estimates

The ore reserves mentioned in this report were determined considering specific cut-off grades for each mine and using a long-term copper price of \$3.10/lb (unchanged from 2020), \$11.00/lb molybdenum (\$9.50/lb in 2020) and \$1,500/oz gold (unchanged from 2020), unless otherwise noted. These same values have been used for copper equivalent (CuEq) estimates, where appropriate.

In order to ensure that the stated resources represent mineralisation that has "reasonable prospects for eventual economic extraction" (JORC Code) the resources are enclosed within pit shells that were optimised based on measured, indicated and inferred resources and considering a copper price of \$3.60/lb (unchanged from 2020). Mineralisation estimated outside these pit shells is not included in the resource figures.

Group policy on auditing of resource and reserve estimates is that prior to first publication, an independent external audit is done. External audits are also done on resources and reserves for any material changes (incorporation of a significant amount of drillhole information, for instance) or every three to five years, whichever comes first. All the resource models that support the reserve estimates and reserves have been audited as per Group policy, with an audit carried out during 2021 on the Cachorro resource model. All resource and reserve estimates have been found to comply with the JORC Code (2012).

a) Los Pelambres

Los Pelambres is 60% owned by the Group. The cut-off grade applied to the determination of mineral resources is 0.35% copper, while the cut-off grade applied for mineral reserves is variable over 0.35% copper. Ore reserves have decreased 54 million tonnes due principally to depletion in the period and reflects the remaining capacity of the existing tailing dams, limiting the amount of mineral resource that can be converted into ore reserves. Mineral resources decreased overall by a net 89 million tonnes, including depletion. Due to the new drilling – 34 drillholes for a total of 9,042 m – to improve the quality of resources, measured and indicated resources increased by 12 million tonnes while inferred resources decreased by 25 million tonnes.

b) Centinela (Concentrates and Cathodes)

Centinela is 70% owned by the Group and consists of Centinela Concentrates (Esperanza + Esperanza Sur and Encuentro Sulphide, mostly sulphide porphyry deposits) and Centinela Cathodes (Tesoro Central and Tesoro Sur, oxide deposits, including the oxide portion of the Mirador, Encuentro and Llano deposits). The cut-off grade applied to the determination of ore reserves for Centinela Concentrates is 0.15% equivalent copper, with 0.15% copper used as a cut-off grade for mineral resources. The cut-off grades used at Centinela Cathodes are 0.20% copper for ore reserves and 0.15% copper for mineral resources.

The Centinela Cathodes ore reserves have decreased by a net 25 million tonnes, due mainly to depletion and to higher processing costs. Centinela Cathodes ore reserves are made up of 185 million tonnes at 0.47% copper of heap leach ore and 114 million tonnes at 0.26% copper of ROM ore. Centinela Cathodes mineral resources decreased by a net 34 million tonnes, due mainly to depletion and higher processing costs.

Centinela Concentrates ore reserves have decreased by a net 54 million tonnes, including depletion of 25 million tonnes and the remaining due to higher ore rehandling from stockpiles.

c) Antucoya

Antucoya is 70% owned by the Group. The ore reserve cut-off grade is 0.16% copper, while the cut-off grade for mineral resources is 0.15% copper. For 2021 the mineral resource model has been updated with 44 drillholes for a total of 11,000 metres. Ore reserves have increased by a net 35 million tonnes, including a depletion of 33 million tonnes and 10 million tonnes less due to revised economic parameters, offset by an increase in resources converted to reserves of 78 million tonnes. Mineral resources have decreased by a net 44 million tonnes, due mostly to depletion.

d) Polo Sur

Polo Sur is 100% owned by the Group. The cut-off grade applied to the determination of mineral resources for both oxides and sulphides is 0.20% copper. The 2021 resource model has not been updated.

e) Penacho Blanco

Penacho Blanco is 51% owned by the Group. The cut-off grade applied to the determination of mineral resources for both oxides and sulphides is 0.20% copper. For 2021 the resource model has not been updated.

f) Mirador

Mirador is 100% owned by the Group. A portion of Mirador Oxides is subject to an agreement between the Group and Centinela, whereby Centinela purchased the rights to mine the oxide ore reserves within an identified area. The mineral resources for Mirador Oxides subject to the agreement with Centinela are included in the Centinela Cathodes section. The resources not subject to the agreement are reported in this section. The cut-off grade applied to the determination of mineral resources for oxides is 0.15% copper and for sulphides is 0.20% copper. Mineral resources have increased by a net 1.2 million tonnes due to lower mining and processing costs.

g) Los Volcanes

Los Volcanes is 51% owned by the Group. The cut-off grade applied to the determination of ore reserves and mineral resources is 0.20% copper. For 2021 the mineral resource model has not been updated.

h) Brujulina

Brujulina is 51% owned by the Group. The cut-off grade applied to the determination of mineral resources is 0.30% copper. For 2021 the mineral resource model has not been updated.

i) Sierra

Sierra is 100% owned by the Group. The cut-off grade applied to the determination of mineral resources is 0.30% copper. For 2021 the mineral resource model has not been updated.

/ Ore reserves and mineral resources estimates continued

Notes to ore reserves and mineral resources estimates continued

j) Cachorro

Cachorro is 100% owned by the Group. It is a maiden mineral resource report, supported by 105,042 metres of drilling from 176 drillholes. The cut-off grade applied to the determination of mineral resources for both oxides and sulphides is 0.50% copper. This project corresponds to the Group´s last discovery generated by the greenfield exploration programme based upon exploratory methods in gravel covered areas. It will become one of the most important manto type deposits in the coastal metallogenic belt of northern Chile. The inferred mineral resource estimated for the central body in the year 2021, represents just a part of the total potential resource of the project.

k) Twin Metals Minnesota LLC

Twin Metals Minnesota LLC ("Twin Metals") is owned 100% by the Group.

Twin Metals has a 70% interest in the Birch Lake Joint Venture ("BLJV"), which holds the Birch Lake, Spruce Road and Maturi Southwest deposits, as well as a portion of the main Maturi deposit. With these interests taken into consideration, Twin Metals owns 83.1% of the resource. For 2021 the mineral resource model has not been updated.

The cut-off grade applied to the determination of mineral resources is 0.3% copper, which when combined with credits from nickel, platinum, palladium and gold, is deemed appropriate for an underground operation. In the resource table 'TPM' (Total Precious Metals) refers to the sum of platinum, palladium and gold values in grammes per tonne. The TPM value of 0.57 g/tonne for the Maturi resource estimate is made up of 0.15 g/tonne platinum, 0.34 g/tonne palladium and 0.08 g/tonne gold. The TPM value of 0.30 g/tonne for the Maturi Southwest resource estimate is made up of 0.08 g/tonne platinum, 0.17 g/tonne palladium and 0.05 g/tonne gold. The TPM value of 0.70 g/tonne for the Birch Lake resource estimate is made up of 0.19 g/tonne platinum, 0.41 g/tonne palladium and 0.10 g/tonne gold. The Spruce Road resource estimate does not include TPM values as they were not assayed.

As described in the Strategic report section, TMM is currently evaluating its legal options in light of the federal lease cancellation and rejection of its preference right lease applications (PRLAs) and prospecting permit applications (PPAs).

The PRLAs and federal mineral leases form a significant proportion of the mineral resources contained within Twin Metals' current project plan. If TMM is unsuccessful reverting the decisions on the federal leases 1352 and 1353 and the PRLAs through litigation, it will not have entitlement to the mineral resources associated with those mineral licences.

l) Zaldívar

Minera Zaldívar is 50% owned by the Group. Heap leaching (HL) and dump leaching (DL) materials are defined based on total copper cut-off grades (COG). The cut-off grade applied to the determination of ore reserves for Heap Leach ore is 0.30% copper, while the cut-off grade for dump leach material is 0.21% copper. For resources the COG is 0.21% for HL and 0.10% for DL, throughout the LOM period. The COG applied to the primary mineral resources is 0.30%. For the 2021 statement report, the resources model was updated through the addition of geological and grade information obtained from 18,191m new drillholes. The mineral resources increased by 41 million tonnes because of the combined effects of depletion and new information added. Ore reserves have decreased by a net 17 million tonnes, due mainly to depletion and the remaining decrease is due to higher mining and processing costs.

In the southern part of the deposit (Phase 13), the final pit impacts a portion of Minera Escondida mine property and some infrastructures owned by third parties (road, railway, powerline, and pipeline). Mining of this pit phase is subject to agreements or easements to access these areas and relocate this infrastructure.

m) Antomin 2 and Antomin Investors

The Group has an approximately 51% interest in two indirect subsidiaries, Antomin 2 Limited ("Antomin 2") and Antomin Investors Limited ("Antomin Investors"), which own several copper exploration properties in Chile's Antofagasta Region and Coquimbo Region. These include, among others, Penacho Blanco, Los Volcanes and Brujulina. The remaining approximately 49% of Antomin 2 and Antomin Investors is owned by Mineralinvest Establishment ("Mineralinvest"), a company controlled by E. Abaroa Foundation, in which members of the Luksic family are interested. Further details are set out in Note 34(c) to the financial statements.

Glossary and definitions

AMSA	Antofagasta Minerals SA, a wholly-owned subsidiary of the Group incorporated in Chile, which acts as the corporate centre for the Mining division.
Annual Report	The Annual Report and Financial Statements of Antofagasta plc.
Antucoya	Minera Antucoya, a 70%-owned subsidiary incorporated in Chile.
Banco de Chile	A commercial bank that is a subsidiary of Quiñenco.
Barrick Gold	Barrick Gold Corporation, incorporated in Canada and our joint venture partner in Zaldívar and Tethyan.
Brownfield project	A development or exploration project in the vicinity of an existing operation.
By-products (credits in copper concentrates)	Products obtained as a result of copper processing. Los Pelambres and Centinela Concentrates receive credit for the gold and silver content in the copper concentrate sold. Los Pelambres and Centinela also produce molybdenum concentrate.
Capex	Capital expenditure.
Cash costs	A measure of the cost of operating production expressed in terms of US dollars per pound of payable copper produced. Cash costs are stated net of by-product credits and include treatment and refining charges for concentrates for Los Pelambres and Centinela. Cash costs exclude depreciation, financial income and expenses, hedging gains and losses, exchange gains and losses, and corporation tax.
CDP	Carbon Disclosure Project.
Centinela	Minera Centinela SA, a 70%-owned subsidiary incorporated in Chile that holds the Centinela Concentrates and Centinela Cathodes operations.
Centinela Mining District	Copper district located in the Antofagasta region of Chile, where Centinela is located.
CGU	Cash-Generating Unit.
Chilean peso	Chilean currency.
CO_2e	Carbon dioxide equivalent
Comex	A commodity exchange that trades metals such as gold, silver, copper and aluminium.
Companies Act 2006	Principal legislation for United Kingdom company law.
Company	Antofagasta plc.
Concentrate	The product of a physical concentration process, such as flotation or gravity concentration, which involves separating ore minerals from unwanted waste rock. Concentrates require subsequent processing (such as smelting or leaching) to break down or dissolve the ore minerals and obtain the desired elements, usually metals.
Contained copper	The proportion or quantity of copper contained in a given quantity of ore or concentrate.
Continental water	Water that comes from the interior of land masses including rain, snow, streams, rivers, lakes and groundwater.
Copper cathode	Refined copper produced by electrolytic refining of impure copper by electrowinning.
Corporate Governance Code	The UK Corporate Governance Code is a set of principles of good corporate governance, most of which have their own more detailed provisions published by the Financial Reporting Council, most recently updated in 2018 and which applies to accounting periods beginning on or after 1 January 2019.
Cut-off grade	The lowest grade of mineralised material considered economic to process and used in the calculation of ore reserves and mineral resources.
Directors	The Directors of the Company.
Duluth	Duluth Metals Limited, a wholly-owned subsidiary of Antofagasta plc acquired on 28 January 2015 through which the Group holds the Twin Metals Project.
EBITDA	Earnings Before Interest, Tax, Depreciation and Amortisation.
EIA	Environmental Impact Assessment.
Encuentro	Copper oxide and sulphide prospect in the Centinela Mining District.
EPS	Earnings per share.
Esperanza Sur	Copper deposit in the Centinela Mining District.
EU	European Union.
FCA	Financial Conduct Authority. UK regulatory body.
FCAB	Ferrocarril de Antofagasta a Bolivia, the corporate name of our Transport division.
Flotation	A process of separation by which chemicals in solution are added to finely crushed materials, some of which are attracted to bubbles and float, while others sink, which results in the production of concentrate.
FTSE All-Share Index	A market-capitalisation weighted index representing the performance of all eligible companies listed on the London Stock Exchange's main market.
FTSE350 Index	A share index of the 350 companies listed on the London Stock Exchange with the highest market capitalisation.
GAAP	Generally Accepted Accounting Practice or Generally Accepted Accounting Principles, a collection of commonly-followed accounting rules and standards for financial reporting.
GHG	Greenhouse Gas.

/ *Glossary and definitions* continued

Government	The Government of the Republic of Chile.
Grade A copper cathode	Highest-quality copper cathode, 99.99% pure.
Greenfield project	The development or exploration of a new project at a previously undeveloped site.
Group	Antofagasta plc and its subsidiary companies and share of joint ventures.
Heap-leaching or leaching	A process for the recovery of copper from ore, generally oxides. The crushed material is laid on a slightly sloping, impermeable pad and leached by uniformly trickling (gravity fed) chemical solution through the heaps to collection ponds. The metal is then recovered from the solution through the SX-EW process.
Hedge accounting	Accounting treatment for derivative financial instruments permitted under IFRS 9 "Financial Instruments", which recognises the offsetting effects on profit or loss of changes in the fair values of a hedging instrument and the hedged item.
IAS	International Accounting Standards.
IASB	International Accounting Standards Board.
ICMM	International Council on Mining and Metals.
IFRIC	International Financial Reporting Standards Interpretations Committee.
IFRS	International Financial Reporting Standards.
Inversiones Hornitos	Inversiones Hornitos SA owns the 150MW Hornitos thermoelectric power plant in Mejillones in Chile's Antofagasta region. The Group entered into an agreement to dispose of its 40% interest in April 2020, effective in 2021.
IVA	Impuesto al Valor Agregado, or Chilean Value Added Tax (Chilean VAT).
JORC	The Australasian Joint Ore Reserves Committee.
KPI	Key performance indicator.
ktpd	Thousand tonnes per day.
LIBOR	London Inter Bank Offered Rate.
Life-of-Mine ("LOM")	The remaining life of a mine expressed in years, calculated by reference to scheduled production rates (ie comparing the rate at which ore is expected to be extracted from the mine to current defined reserves).
LME	London Metal Exchange.
Los Pelambres	Minera Los Pelambres, a 60%-owned subsidiary incorporated in Chile.
LSE	London Stock Exchange.
LTIFR	Lost Time Injury Frequency Rate. The number of accidents with lost time during the year per million hours worked.
LTIP	Long Term Incentive Plan in which the Group's CEO, Executive Committee members and other senior managers participate.
Marubeni	Marubeni Corporation, the Group's 30% minority partner in Centinela and Antucoya.
Michilla	Minera Michilla SA, a 99.9%-owned subsidiary incorporated in Chile which was closed at the end of 2015 and sold in November 2016.
Mineral resources	Material of intrinsic economic interest occurring in such form and quantity that there are reasonable prospects for eventual economic extraction. Mineral resources are stated inclusive of ore reserves, as defined by JORC.
MW	Megawatts (one million watts).
Net cash cost	Gross cash costs less by-product credits.
Open pit	Mine working or excavation that is open to the surface.
Ore	Rock from which metal(s) or mineral(s) can be economically and legally extracted.
Ore grade	The relative quantity, or percentage, of metal content in an ore body or quantity of processed ore.
Ore reserves	Part of mineral resources for which appropriate assessments have been carried out to demonstrate that at a given date extraction could be reasonably justified. These include consideration of and modification by realistically assumed mining, metallurgical, economic, marketing, legal, environmental, social and governmental factors.
Oxide and sulphide ores	Different kinds of ore containing copper. Oxide ore occurs on the weathered surface of ore-rich lodes and normally results in the production of cathode copper through a heap-leaching process. Sulphide ore is an unweathered parent ore normally treated using a flotation process to produce concentrate which then requires smelting and refining to produce cathode copper.
Payable copper	The proportion or quantity of contained copper for which payment is received after metallurgical deduction.
PEP	Politically Exposed Person, an individual who holds or has held a prominent public position in a national or international organisation within the last year.
Platts	A provider of energy and metals information and source of benchmark price assessments.
Porphyry	A large body of rock which contains disseminated chalcopyrite and other sulphide minerals. Such a deposit is mined in bulk on a large scale, generally in open pits, for copper and its by-products.

PPA	Power Purchase Agreement.
Provisional pricing	A sales term in several copper and molybdenum concentrate sale agreements and cathodes sale agreements that provides for provisional pricing of sales at the time of shipment, with final pricing being based on the monthly average LME copper price or monthly average molybdenum price for specific future periods, normally ranging from 30 to 180 days after delivery to the customer.
Quiñenco	Quiñenco SA, a Chilean financial and industrial group listed on the Santiago Stock Exchange and controlled by a foundation in which members of the Luksic family are interested.
Ramsar Convention	International treaty for the conservation and sustainable utilisation of wetlands.
RCA	Resolución de Calificación Ambiental, Environmental Approval Resolution.
Realised prices	Effective sale price achieved comparing revenues (grossed up for treatment and refining charges for concentrate) with sales volumes.
Reko Diq	A copper-gold deposit in Pakistan, previously a subsidiary of Tethyan.
Run-of-Mine ("ROM")	A process for the recovery of copper from ore, typically used for low-grade ores. The mined, uncrushed ore is leached with a chemical solution. The metal is then recovered from the solution through the SX-EW process.
SDGs	The United Nations' Sustainable Development Goals, which were adopted by all member states in 2015.
SERNAGEOMIN	Servicio Nacional de Geología y Minería, a government agency that provides geological and technical advice and regulates the mining industry in Chile.
SHFE	Shanghai Futures Exchange.
SONAMI	Sociedad Nacional de Minería. Institution that represents the mining industry in Chile, for large, medium and small scale, metallic and non-metallic mining companies.
Sterling	Pounds sterling, UK currency.
Stockpile	Material extracted and piled for future use.
SVS	Superintendencia de Valores y Seguros de Chile, the Chilean securities regulator.
SX-EW	Solvent extraction and electrowinning. A process for extracting metal from an ore and producing pure metal. First the metal is leached into solution, the resulting solution is then purified in the solvent-extraction process before being treated in an electrochemical process (electrowinning) to recover cathode copper.

Tailings dam or tailings storage facility (TSF)	Construction used to deposit the rock waste which remains as a result of the concentrating process after the recoverable minerals have been extracted in concentrate form.
TC/RCs	Treatment and refining charges, being terms used to set the smelting and refining charge or margin for processing copper concentrate and normally set on either an annual or spot basis.
TCFD	Task Force on Climate-related Financial Disclosures.
Tethyan	Tethyan Copper Company Limited, a 50-50 joint venture with Barrick Gold incorporated in Australia.
Tonne	Metric tonne.
tpd	Tonnes per day, normally with reference to the quantity of ore processed over a given period of time expressed as a daily average.
TSR	Total Shareholder Return, being the movement in the Company's share price plus reinvested dividends.
Twin Metals Minnesota Project	A copper, nickel and platinum group metals underground-mining project located in Minnesota, US.
UK	United Kingdom.
UKLA	United Kingdom Listing Authority, part of the FCA.
Underground mine	Natural or man-made excavation under the surface of the ground.
US	United States.
US dollar	United States currency.
Zaldívar	Compañía Minera Zaldívar SpA is a 50-50 joint venture with Barrick Gold and is operated by the Company.

Shareholder information

Currency abbreviations

$	US dollar
$000	Thousand US dollars
$m	Million US dollars
£	Pound sterling
£000	Thousand pounds sterling
£m	Million pounds sterling
p	Pence sterling
C$	Canadian dollar
C$m	Million Canadian dollars
Ch$	Chilean peso
Ch$000	Thousand Chilean pesos
Ch$m	Million Chilean pesos

Definitions and conversion of weights and measures

lb	Pound
oz	A troy ounce
1 troy ounce	31.1 grammes
'000 m^3	Thousand cubic metres
1 kilogramme	2.2046 pounds
1 tonne	2,204.6 pounds or 1,000 kilogrammes
'000 tonnes	Thousand metric tonnes
1 kilometre	0.6214 miles
GL	Gigalitre
1 megalitre	Thousand cubic metres
1 GL	Thousand megalitres

Chemical symbols

Cu	Copper
Mo	Molybdenum
Au	Gold
Ag	Silver

Dividends

Details of dividends proposed in relation to the year are given in the Directors' Report on page 161, and in Note 14 to the Financial Statements.

If approved at the Annual General Meeting, the final dividend of 118.9 cents will be paid on 13 May 2022 to ordinary shareholders that are on the register at the close of business on 22 April 2022. Shareholders can elect (on or before 25 April 2022) to receive this final dividend in US dollars, Sterling or Euro, and the exchange rate, which will be applied to final dividends to be paid in Sterling or Euro, will be set as soon as reasonably practicable after that date, which is currently anticipated to be on 28 April 2022.

Further details of the currency election timing and process (including the default currency of payment) are available on the Antofagasta plc website (antofagasta.co.uk) or from the Company's registrar, Computershare Investor Services PLC on +44 37 0702 0159.

Dividends are paid gross without deduction of United Kingdom income tax. Antofagasta plc is a resident in the United Kingdom for tax purposes.

Annual General Meeting

The Annual General Meeting will be held as a hybrid meeting at Church House Conference Centre, Dean's Yard, Westminster, London SW1P 3NZ and electronically by live broadcast using the Lumi platform at 2.00 pm on Wednesday 11 May 2022. The formal notice of the Annual General Meeting and resolutions to be proposed are set out in the Notice of Annual General Meeting.

London Stock Exchange listing and share price

The Company's shares are listed on the London Stock Exchange.

Share capital

Details of the Company's ordinary share capital are given in Note 30 to the Financial Statements.

Shareholder calendar 2022

19 January 2022	Q4 2021 Production Report
22 February 2022	Full Year 2021 Results Announcement
21 April 2022	Q1 2022 Production Report
21 April 2022	2021 Final Dividend – Ex Dividend date
22 April 2022	2021 Final Dividend – Record date
25 April 2022	2021 Final Dividend – Final date for receipt of Currency Elections
28 April 2022	2021 Final Dividend – Pound sterling/Euro Rate set
11 May 2022	Annual General Meeting
13 May 2022	2021 Final Dividend – Payment date
20 July 2022	Q2 2022 Production Report
11 August 2022	Half Year 2022 Results Announcement
1 September 2022	2022 Interim Dividend – Ex Dividend date
2 September 2022	2022 Interim Dividend – Record date
5 September 2022	2022 Interim Dividend – Final date for receipt of Currency Elections
8 September 2022	2022 Interim Dividend – Pound sterling/Euro Rate set
30 September 2022	2022 Interim Dividend – Payment date
19 October 2022	Q3 2022 Production Report
18 January 2023	Q4 2022 Production Report

Dates are provisional and subject to change.

Registrars
Computershare Investor Services PLC
The Pavilions
Bridgwater Road
Bristol
BS99 6ZY
United Kingdom
Tel: +44 370 702 0159
www.computershare.com

Website
www.antofagasta.co.uk

Registered office
103 Mount Street
London
W1K 2TJ
United Kingdom
Tel: +44 20 7808 0988

Santiago office
Antofagasta Minerals SA
Av. Apoquindo 4001 – Piso 18
Las Condes
Santiago
Chile
Tel: +56 2 2798 7000

Registered number
1627889
Additional information can be found in the Shareholder Information section of the Notice of Annual General Meeting and on our website.

FSC www.fsc.org MIX Paper from responsible sources FSC® C022913

Designed and produced by Black Sun Plc
www.blacksunplc.com

This report is printed on paper certified in accordance with the FSC® (Forest Stewardship Council®) and is recyclable and acid-free.

Pureprint Ltd is FSC certified and ISO 14001 certified showing that it is committed to all round excellence and improving environmental performance is an important part of this strategy. Pureprint Ltd aims to reduce at source the effect its operations have on the environment and is committed to continual improvement, prevention of pollution and compliance with any legislation or industry standards.

Pureprint Ltd is a Carbon / Neutral® Printing Company.

Antofagasta plc
103 Mount Street
London
W1K 2TJ
United Kingdom