ANTOFAGASTA PLC

Developing mining for a better future

Annual Report and Financial Statements 2022

Contents

Strategic Report

Overview

Our purpose 1
Performance highlights 2
At a glance 4
Letter from the Chairman 6
Letter from the Chief Executive Officer 9
The copper market 12
Business model 16
Our strategic framework 18
Key Performance Indicators 22
Risk management 24

Stakeholder review

Highlights 40
Our approach to sustainability 42
How we engage with our stakeholders 46
- Our people 48
- Safety and occupational health 51
- Communities 54
- Environment 57
- Climate change 60
- Task Force on Climate-related Financial Disclosures (TCFD) 64
- Suppliers 67
- Customers 70
- Shareholders 71
- Governments and regulators 72

Non-financial information statement 73

Operating review

Mining division 76
Transport division 84
Growth projects and opportunities 86
Exploration activities 89
Key costs 90
Operating excellence and innovation 92
Financial Review 94

Corporate Governance

Applying the Code in 2022 104
Board leadership and Company purpose 106
Division of responsibilities 118
Composition, succession and evaluation 125
Audit, risk and internal control 129

Remuneration

Remuneration and Talent Management Committee Chair's introduction 142
Remuneration at a glance 146
2023 Directors' and CEO's Remuneration Policy 148
2022 Directors' and CEO's Remuneration Report 155
Remuneration and Talent Management Committee report 163
Implementation of the Directors' and CEO's remuneration policy in 2023 165
Directors' Report 168
Statement of Directors' responsibilities 171

Financial Statements

Financial performance

Independent auditors' report 174
Consolidated income statement 181
Consolidated statement of comprehensive income 182
Consolidated statement of changes in equity 182
Consolidated balance sheet 183
Consolidated cash flow statement 184
Notes to the financial statements 185
Parent Company financial statements 234

Other Information

Alternative performance measures 238
Five-year summary 242
Production statistics 244
Ore reserves and mineral resources estimates 245
Glossary and definitions 256
Shareholder information 259

Our reporting suite

Sustainability Report
antofagasta.co.uk/sr22

Social Management Report
antofagasta.co.uk/smr22

Tax Progress Report
antofagasta.co.uk/tax21

ESG Data Book
antofagasta.co.uk/esgdb

Climate Change Report
antofagasta.co.uk/ccr22

In this Annual Report, the terms "Company", "Group", "we", "us", "our" and "ourselves" are used to refer to Antofagasta plc and, unless the context requires otherwise, its subsidiaries. These terms may be used as collective expressions where general reference is made to the companies in the Group and/or where no useful purpose is served by identifying any particular company or companies.

We are committed to our purpose of developing mining for a better future

Read more on how we are delivering on our strategic framework on P18

Key performance highlights in 2022

Record year for safety, and strong growth in mineral resources. Production in transition while Los Pelambres advances its expansion projects.

NON-FINANCIAL HIGHLIGHTS

Safety

0
Fatalities

0.84
LTIFR[1]

Record safety performance, with no fatal accidents, and all our safety indicators improved during the year.

Copper production[2]

646,200 tonnes

Copper production decreased by 10% mainly due to the temporary reduction in throughput at Los Pelambres as a result of the drought and the reduced concentrate pipeline availability in June, and expected lower grades at Centinela Concentrates.

Mineral resources[3]

20.1bn tonnes

Total mineral resources increased by 1 billion tonnes during the year.

Water withdrawals

73 GL

of which 45.4% was sea water.

Scope 1 and 2 emissions

1.3 million tCO_2e

Decreased by 37% since 2021.

Gender diversity

20.4%

of our employees are women.

Total economic contribution

$7.4bn

We generate economic value for all our stakeholders, 4% higher than last year.

More information on P41

Growth projects

Zaldívar Chloride Leach project

100%

completed in 2022.

Esperanza Sur Pit project

100%

pre-stripping completed in July 2022.

Los Pelambres Expansion project

93%

complete as at the end of 2022 with the desalination plant and the concentrator plant expansion due to be in production during the second quarter of 2023.

Centinela Second Concentrator project

Engineering and pre-investment studies underway.

FINANCIAL HIGHLIGHTS

Net cash costs[4]

$1.61/lb

Increased by 34% since 2021 mainly due to the impact of the drought and higher input prices, partly offset by the weaker Chilean peso and savings coming from our Cost and Competitiveness Programme.

EBITDA[4]

$2,930m

Decreased by 39% with an EBITDA margin of 50%, reflecting a decrease in copper sales, a lower copper price, higher inflation and higher input prices.

Profit before tax

$2,559m

Profit before tax decreased by 26%.

Underlying earnings per share excluding exceptional items[4]

$59.7¢

Underlying earnings per share decreased by 82.8 cents or 58% compared with 2021 on lower EBITDA.

Earnings per share including exceptional items

$155.5¢

Earnings per share including exceptional items for the year, reflect the impact of an exceptional gain of 95.8 cents per share, and were 18% higher than in 2021.

Total dividend per share

$59.7¢

Equivalent to a payout ratio of 100%.

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. Mineral resources (including ore reserves) relating to the Group's subsidiaries on a 100% basis and Zaldívar on a 50% basis.
4. Non-IFRS measure, refer to the alternative performance measures section on page 238.

A portfolio that delivers

We operate four copper mines in Chile, two of which produce significant volumes of molybdenum and gold as by-products.

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	Net cash costs[1]	Employees[2] Gender diversity
LOS PELAMBRES 60% owned 12-year mine life Produces copper concentrates containing gold and silver and a separate molybdenum concentrate	275,000 tonnes 2022 320-335,000 tonnes 2023 forecast	$1.10/lb 2022 $1.25/lb 2023 forecast	1,144 22.2% women
CENTINELA 70% owned 43-year mine life Produces copper cathodes and copper concentrates containing gold and silver and a separate molybdenum concentrate	247,500 tonnes 2022 235-250,000 tonnes 2023 forecast	$1.75/lb 2022 $1.70/lb 2023 forecast	2,484 20.9% women
ANTUCOYA 70% owned 21-year mine life Produces copper cathodes	79,200 tonnes 2022 70-75,000 tonnes 2023 forecast	$2.50/lb 2022 $2.45/lb 2023 forecast	894 15.2% women
ZALDÍVAR 50% owned (and operated) 13-year mine life Produces copper cathodes	44,500 tonnes 2022 45-50,000 tonnes 2023 forecast	$2.39/lb 2022 $2.70/lb 2023 forecast	932 12.8% women
TRANSPORT Cargo transport system in the Antofagasta Region of Chile 900 km rail network	7.1m tonnes 2022		1,410 19.9% women
GROUP	646,200 tonnes 2022 670-710,000 tonnes 2023 forecast	$1.61/lb 2022 $1.65/lb 2023 forecast	7,494[3] 20.4%[3] women

1. Non-IFRS measure, refer to the alternative performance measures section on page 238.
2. Employees, excludes contractors as at 31 December 2022.
3. Group includes 630 employees in our corporate offices, 35.2% of them are women.

ESG COMMITMENT

Sustainability is at the heart of our decision-making as we seek to achieve our purpose of developing mining for a better future.

ICMM

THE COPPER MARK

Each of our four mining operations has been awarded the Copper Mark, the copper industry's new responsible production assurance framework, and completed the ICMM's Performance Expectations third-party validation process.

Revenue

Los Pelambres	$2,559m
Centinela	$2,406m
Antucoya	$704m
Transport	$193m

EBITDA[4]

Los Pelambres	$1,473m
Centinela	$1,157m
Antucoya	$261m
Zaldivar	$147m
Transport	$80m

FUTURE GROWTH

The Group has a pipeline of growth projects to develop our significant mineral resource base which we are currently advancing through a disciplined process of project evaluation. We also have a portfolio of growth opportunities located mainly in Chile.

The Zaldívar Chloride Leach project was completed in 2022 and pre-stripping of the Esperanza Sur pit project was completed in July.

The Los Pelambres Expansion project was 93% complete as at the end of 2022 with the desalination plant and the concentrator plant expansion due to be in production during the second quarter of this year.

Progress continues on the engineering and pre-investment studies for the $3.7 billion Centinela Second Concentrator project. In line with our strict approach to capital allocation, the project will be sent to the Board for final investment approval during 2023 following completion of the Los Pelambres Expansion project and once there is sufficient clarity on the outcomes of the ongoing discussions on the mining royalty and tax reform bills, and the rewriting of the Chilean constitution.

4. 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.

At our core, we are a long-term business

Jean-Paul Luksic
Chairman

Dear shareholders

At its core, Antofagasta is a long-term business. Our mines operate on decades-long timelines and our strong balance sheet is the result of years of disciplined capital allocation. We continue to be mindful of short-term developments but remain committed to thinking and acting for the long-term.

This year has certainly had its challenges, but it is times such as these that make demands on us that calmer times do not. They test our resolve and resilience, and in this Annual Report you'll find stories about what we have done to demonstrate both. My thanks go out to everyone across our company who helped us to navigate the year successfully.

I also want to take this opportunity to acknowledge everyone's efforts that have led to us having a record safety performance this year. Not only did we not have any fatal accidents, but we also improved our high potential incidents and lost time injury frequency rate to record lows. I know this requires constant care and attention from everyone at our operations, from the leadership team to every employee and contractor and I applaud them for their success.

2022 – A volatile year for copper and the global economy

Copper's price fluctuations reflected the broader volatility in the global economy. Although the details differed in important ways for each major economy, their growth was similarly dampened in 2022. Driving the slowdown were headwinds that dominated the headlines for much of the year: Russia's invasion of Ukraine and the economic shockwaves and energy crisis it sparked; rising inflation and interest rates; the lingering effects of COVID-19; China's reduced economic activity; and ongoing supply shortages and strained global supply chains.

Yet it wasn't entirely a year of headwinds for copper. As China, a market that consumes over half of the world's metals, relaxed its zero-COVID policies in the final weeks of 2022, and as the country's property market started to show signs of recovery, commodity prices lifted due to low stocks and an anticipation of a return to stronger economic growth.

In March, copper reached a historic high of $4.86/lb before falling to a low of $3.18/lb in July and then recovering to end the year at $3.81/lb.

A powerful long-term tailwind for copper also continued to gather strength: the transition to a low-carbon economy. The United States passed the Inflation Reduction Act in 2022 and the European Union recently announced its Net Zero Industry Act. Together they promise to spur further investment in the many copper-intensive products and technologies integral to a net-zero world. And in November 2022, COP27 took place in Egypt, drawing further attention and commitments from governments to a net-zero future.

Chile's economic, social and political environment

The centrality of climate change to Chile – and to Antofagasta

Heat waves, wildfires, a drought stretching into its 13th year; the effects of climate change were once again powerfully felt in Chile. It's a vital issue for the country, for business, for the communities where we operate, and for our people and their families. It is important that I highlight what we're doing to align ourselves with Chile's vision for a net-zero future.

Achieving and setting new climate-related targets

Combatting climate change sits at the centre of Antofagasta's strategy. Lowering emissions and reducing continental water use remain two key issues for which we have a group-level strategy, board-level focus and company-wide initiatives.

In line with Chile's national target, Antofagasta is working towards being carbon-neutral by 2050. Last year we surpassed our 2025 emission target to reduce our emissions by 30%, achieving this three years early, and we are now in process of setting a new target.

In April 2022, the last of our mining operations started using solely renewable energy and all our mining operations have now received The Copper Mark, an independently verified responsible production standard.

Our project to build a desalination plant and water pipeline at Los Pelambres will start operating in the second quarter of 2023 and by 2025 we expect that 90% of the Group's water usage will be sea or recirculated water, substantially reducing our continental water withdrawals.

Our commitment to Environmental, Social and Governance (ESG)

Our efforts on climate change are an integral part of our ESG strategy, but far from the only ones. The copper we produce has a key role to play in a net-zero world; our responsibility is to produce it sustainably, efficiently, and with respect for local communities and the environment.

ESG considerations are integrated into our business and we are working with our suppliers, not just in the application of our safety standards, but also of our sustainability practices. In 2022, Antofagasta set new standards for sustainability for our suppliers, and by doing so we plan to gradually align their ESG capabilities with our own. Whether it's lowering emissions, insisting on enhanced minimum wages, or ensuring that mining becomes more diverse and inclusive, such partnerships are poised to deliver progress in areas that are fundamental to our purpose: "Developing Mining for a Better Future".

"ESG considerations are integrated into our business."

Chile's handling of COVID-19

COVID-19's effects waned during the year, but Chile was not immune to the economic challenges felt by many countries, particularly rising inflation and supply chain disruptions. The country's budget deficit during the pandemic period was over 7% of GDP, but in 2022 the deficit is expected to have reversed to a surplus of approximately 1.6% of GDP, a commendable achievement.

Chile's uncertain political environment

In a September referendum, the country rejected a proposed draft for a new Constitution, reflecting support for a more centrist approach going forward. A new Constitution will be drafted in 2023, with a new referendum scheduled for December. My hope is that this new Constitution will unite Chileans and provide the clarity and stability that helps attract investments and all the opportunities that flow from them to Chile.

After a long period of discussion between Congress, government and industry, the proposed mining royalty bill is now with the Senate for review before moving to the lower house. Our focus remains on ensuring that Chile's mining industry, which accounts for more than 10% of the country's GDP, remains competitive globally and thereby able to contribute to furthering Chile's economic and societal growth.

The upcoming year presents Antofagasta with important capital decisions, notably the construction of a second concentrator at Centinela and we will make these decisions when we have a clearer picture of the Constitution and the mining royalty legislation.

Antofagasta's 2022 performance

Our performance reflected the challenges of a difficult operating environment with copper production falling and net cash costs increasing, and revenue of $5.9 billion and $2.9 billion of EBITDA. We ended the year strongly, with our performance improving in key areas, from lower cash costs to increased production, compared with the first half of the year.

A notable operational issue that Antofagasta faced this year related to water. The drought in central Chile continued to affect communities in the region and Los Pelambres. The water shortage has reduced our production in the short-term, but we will soon complete construction of a new desalination plant and this will lift the water constraints at Los Pelambres.

Challenges such as this reinforce the importance of planned investment, our engagement with local communities and decisions we've taken over the years to become a more resilient business. The desalination plant would have been completed earlier but for the pandemic, and we need to expand this plant to improve the water availability for other consumers in the region. The expansion is currently being permitted and if this is completed on schedule over 95% of Los Pelambres's water will then be either sea or recirculated water.

Los Pelambres also advanced its concentrator plant expansion during the year and this will come into production in the second quarter of 2023.

Exit from Reko Diq, Pakistan

Ten years after work on the Reko Diq project stopped, Antofagasta finalised an agreement with Barrick Gold Corporation and the Governments of Pakistan and Balochistan to exit the project and receive proceeds of $946 million. This enables us to refocus our time and resources on strengthening Antofagasta's business in other priority locations, notably in the Americas.

Twin Metals Minnesota, USA

In January 2022, the US Department of Interior cancelled two mineral leases which Twin Metals had renewed in 2019. The Company is challenging this decision and we still believe that Twin Metals represents a world-class project to provide the critical metals that a growing and greener world requires.

Transport division

It was a strong year for our Transport division, which had a record year for both safety and the tonnage transported.

The division has been based in the city of Antofagasta for over a century and during this period the city has grown extensively. The location of its facilities and workshops are now in the city centre, providing a long-term opportunity to repurpose the area and fully integrate it into the future urban development of the city. We have therefore made the decision to relocate the facilities and workshop 40 miles north to an industrial area near the town of Mejillones.

We have been making progress and in 2022, prior to beginning the urban redevelopment, we started the process of converting the former railyard into a historic neighbourhood. This involved us working closely with the local community and authorities to ensure the project meets the needs of the area and is environmentally sustainable.

Governance update

This year saw our entire board meet in person for the first time since early 2020. It also saw our directors make site visits to at least one of our operations, including to the desalination plant and concentrator plant expansion projects, and to Los Pelambres' tailings dams. The insights from these visits were shared at board and committee meetings, deepening the directors' understanding of our activities.

By the date of our 2023 AGM, Vivianne Blanlot will have served on our Board for nine years and, although she has agreed to continue on the Board, she will no longer be considered 'independent'. She has therefore stepped down from the Nomination and Governance Committee and Remuneration and Talent Management Committee, and has been appointed to the Projects Committee.

To fill the vacancies on these committees, Francisca Castro has joined the Nomination and Governance Committee and Eugenia Parot has joined the Remuneration and Talent Management Committee.

Vivianne joined the Board in 2014 and since then, half of our Board appointments have been female, with women currently comprising 30% of our Board. However, we aim to increase female representation to 40%, and we are actively working towards this target.

Outlook for 2023

The IMF forecasts that global growth will slow in 2023 affected by a number of issues, particularly the war in Ukraine, China's economic performance, the rate of economic growth in the US and Europe, and the energy crisis. In addition, Chile's political and economic environment further complicates the outlook.

Uncertainty clouds the short-term picture, yet important features of the long-term are clearer. The world is moving towards net-zero. That journey will demand more copper, according to some forecasters almost 10 million more tonnes over the next decade alone, at a time when the global copper supply is constrained by declining resource quality and long lead times for project development and permitting. Our focus remains on being a leading, responsible producer of the copper that the low-carbon world requires.

We know that in any environment, the diversity, safety and health of our people matter. So do the vibrancy of our culture and the discipline with which we manage costs. Such steps not only strengthen the core of our business but position us so that 2023 is not defined by the challenges we face, but by our responses to them.

Jean-Paul Luksic
Chairman

Rising to the challenges of a transition year

Iván Arriagada
Chief Executive Officer

Dear shareholders

I am pleased to share with you the significant progress we made in 2022 in the areas of project development, climate change, diversity and inclusion and, above all, safety. It was a challenging year for our operations, as expected, but we have been implementing transitions that will drive higher copper production and improved cost competitiveness in 2023 and future years.

Safety is our top priority and I am particularly pleased to report that we suffered no serious accidents during the year. We achieved a continuing reduction in high-potential incidents, which are an important leading indicator of where more serious incidents might occur, and the rate of lost time injuries fell by 37% to 0.84, a record for the Group.

These positive safety indicators reflect the maturity of our safety management system, which is based on critical controls, identifying key risks, and promoting the right behaviours among our employees and contractors. The year's strong safety results were also underpinned by an increase in on-site verification visits and interaction with teams by senior management as COVID-19 restrictions were gradually lifted.

New ways of working

In 2022, we consolidated our new hybrid way of working, which we adopted during the pandemic. The model combines in-person and remote formats and has several advantages. First, it has made the organisation more flexible – and therefore resilient – and more able to adapt to unexpected events and manage risk.

It also supports our Diversity and Inclusion Strategy by offering employees a better balance between personal needs and the demands of work. This, in turn, has enabled us to attract and retain more women in the workforce and, by the end of 2022, they represented one in five of our employees, meeting our target for the year. This achievement has encouraged us to set a more ambitious goal for women to represent 30% of the workforce by the end of 2025.

Similarly, an improved life-work balance enhances employees' job satisfaction with knock-on benefits on the organisation's productivity. So, while we still seek to perfect and refine the hybrid model, it is here to stay and a feature of how we are organising our work going forward.

As in other organisations, we have seen an increase in mental health issues arising from the pandemic and have implemented support strategies to identify and help employees suffering from mental illnesses. In a key initiative, we launched our Wellbeing Strategy during the year to support people's physical and emotional welfare.

Climate change

At Antofagasta, we regard the climate crisis as the greatest environmental emergency of our times. A key priority for us is the implementation of our Climate Change Strategy, which plans for us to be carbon neutral by 2050 at the latest. During the year, we met our short-term target of achieving a 30% reduction in greenhouse gas (GHG) emissions by 2025 three years early, and will set a new nearer-term goal in 2023.

In a major achievement, in 2022 we were among the first companies in Chile to complete the transition of all our operations to electricity generated exclusively from renewable sourced contracts. The process began in Zaldívar in July 2020, followed by Centinela and Antucoya in January 2022 and finally by Los Pelambres in April.

Now the main challenge is to reduce and, ultimately, completely replace the use of diesel at our mines, particularly in haulage trucks which are heavy consumers of the fuel. We are testing various potential solutions at our operations, including the use of green hydrogen and electric batteries, to help develop and become early adopters of whichever is the winning technology.

Our efforts involve close collaboration with suppliers of mining equipment, with whom we are also working to calculate and reduce emissions in our value chain (Scope 3) that we do not directly control. In 2022, we began using an internal carbon price and other emission criteria to evaluate bids for contracts as part of growing efforts to influence best practice among suppliers.

In another milestone, in October our Transport division became the first rail Company in Chile to order a hydrogen-fuelled cargo locomotive, which we expect to start operating in 2024. It forms part of a plan to renew our entire fleet.

Water management

The evidence of climate change is clear in central Chile, where a severe drought has entered its thirteenth year. In early 2023, we began commissioning the desalination plant for Los Pelambres which will provide a permanent solution to the restrictions on operational water supply caused by the drought. The plan is to double the plant's capacity to 800 litres per second as soon as permitting allows.

In parallel, we work closely with communities near Los Pelambres in the Choapa Province, a farming area, to strengthen water management and ensure water availability for human consumption, as well as for irrigation. The desalination plant and its planned expansion will make more water available to the area as we replace current continental water usage with sea water.

We already only use sea water for our Antucoya and Centinela operations in northern Chile, the latter fully transitioning from continental water at the end of 2022. By 2025, we expect 90% of our mining operations' water consumption will be recirculated or sea water.

Responsible production

As a copper producer, we supply a key metal to address climate change through its use in low-carbon technologies, such as electric vehicles and the generation of renewable energy and are committed to its responsible and reliable production. In 2022, Los Pelambres and Antucoya were awarded the Copper Mark, an independent external verification of their sustainable practices. Zaldívar and Centinela completed the same assurance process in 2021.

Operating results

As expected, 2022 was a transition year for the Group with the impact of the drought while the desalination plant at Los Pelambres was being completed, which will be in 2023 paving the way for strong growth. We produced 646,200 tonnes of copper, 10% less than in 2021 with the decrease primarily due to expected lower throughput as a result of the drought and planned lower grades at Centinela.

"We are committed to supplying the copper required for the energy transition."

The Transport division had a good year with total transport volume up by 6% to an all-time record of 7.1 million tonnes, as we increased share of the transport market for mining. We expect the planned renewal of our fleet to low-carbon technologies to maintain this positive trend.

For our mining operations, it was a challenging year in terms of unit costs due to general inflationary pressures, particularly for diesel and sulphuric acid in global markets, as well as the temporary decrease in production. We were successful in partially offsetting this trend through our continuous focus on productivity and cost containment, together with the contributions from our gold and molybdenum by-products. Full-year net cash costs came in within guidance at $1.61/lb, compared to $1.20/lb in 2021.

It is worth noting that we are implementing important structural changes to contain costs. As an example, our new renewable energy supply contracts are lower cost than the previous fossil-fuel agreements.

Our innovation and technology programme is also bearing fruit in this sense. Centinela's and Los Pelambres' new remote operating centres in Antofagasta and Santiago, respectively, are designed to streamline processes from mine to port and reduce transport and mine camp logistics. Productivity will also be enhanced by Centinela's fleet of automated haulage trucks, which successfully started operation during the year.

Similarly, the increased processing capacity that will come on-stream in 2023 with the completion of the Los Pelambres Expansion project's fourth milling line will bring further structural cost benefits. These improvements are reflected in our estimated copper production for 2023 of between 670,000 and 710,000 tonnes and will help us counteract the impact of inflation and the expected strengthening of the Chilean peso.

Looking ahead, we see strong copper market fundamentals for the foreseeable future. Demand will be supported as the global economic recovery gathers pace coupled with copper's significant role in the energy transition. Supply will remain tight due to the lack of major new discoveries in recent years and the long time it takes to bring new projects online. Projects are also getting technically more complex. Against this backdrop, the Group is uniquely positioned to deliver growth opportunities from its existing large resource base.

Growth outlook

Our growth strategy to focus on copper, primarily in the Americas, remains unchanged. We are pursuing robust organic growth options embedded in the large mineral resources of our first-tier sites, Los Pelambres and Centinela. The Los Pelambres Desalination Plant and Concentrator Expansion projects will be in production in 2023. A second phase expansion to extend the mine life beyond 2035 and double desalination capacity is in the permitting stage.

The $3.7 billion investment to build a second concentrator at Centinela is subject to greater clarity on tax and royalty bills under discussion by Chile's congress and the process to draft a new constitution, and is expected to be put to the Board for approval by the end of 2023. We expect these growth projects to increase annual copper production to approximately 900,000 tonnes, once implemented.

On the innovation front, our patented Cuprochlor®-T technology has completed industrial-scale testing and unlocked a solution to economically leach low-grade primary sulphides. It is now being incorporated into our Centinela and Antucoya mine plans. We are also excited by the potential of our Cachorro and Encierro exploration projects in northern Chile whose 765 million tonnes of mineral resources are now included in our resource inventory.

Our priorities in 2023

The safety and health of our employees, contractors and local communities will remain our first priority as we build on our positive 2022 performance.

We will reach a major milestone with the start of operation of the Los Pelambres Expansion project in 2023. The new desalination plant and expanded concentrator will lift water supply restrictions and increase production in 2023, helping to deliver on our commitment to lower cash costs.

On innovation, we will continue to work on introducing more automation in our operations and consolidating our integrated remote operating centres. This focus on changing how we work and transforming the way we do mining will produce more efficiency gains.

We are also committed to moving forward the Centinela second concentrator project, subject to the necessary conditions being in place.

The continued implementation of our Climate Change Strategy will be another key focus. During the year, we plan to complete decarbonisation roadmaps for our operations, which will help us to define a new nearer-term emissions reduction target. We will also press ahead on measuring Scope 3 emissions with a view to setting a reduction target during 2023 or as soon as possible thereafter.

We believe the mining industry plays a critical role in Chile's economic and social development. We are committed to supplying the copper required for the energy transition and to further general economic progress and people's wellbeing in a responsible and sustainable way, creating value for our shareholders and other stakeholders in Chile and society in general.

Iván Arriagada
Chief Executive Officer

Copper's critical role

In 2022, copper price volatility rose to its highest levels in over a decade. Growing economic uncertainty, rising inflation and slowing growth in metal demand was set against increasing mine supply disruption.

Looking ahead, the prospects for copper demand in the near-term will partly depend on how rapidly the Chinese economy recovers following the removal of its zero COVID-19 measures. The pace at which interest rates will rise and subsequently fall, and economic growth rates in North America and Europe will also be key factors. Visible inventories were at historically low levels at the beginning of 2023, and this will sustain price volatility.

Potentially, the stronger growth in mine production forecast over the next two years could alleviate the current market tightness. However, there are ongoing risks of disruption and the operating environment in major producing countries remains uncertain. Beyond the middle of the decade, the rapid uptake of copper-intensive clean technologies will underpin future copper demand as the world looks to a greener and more sustainable future.

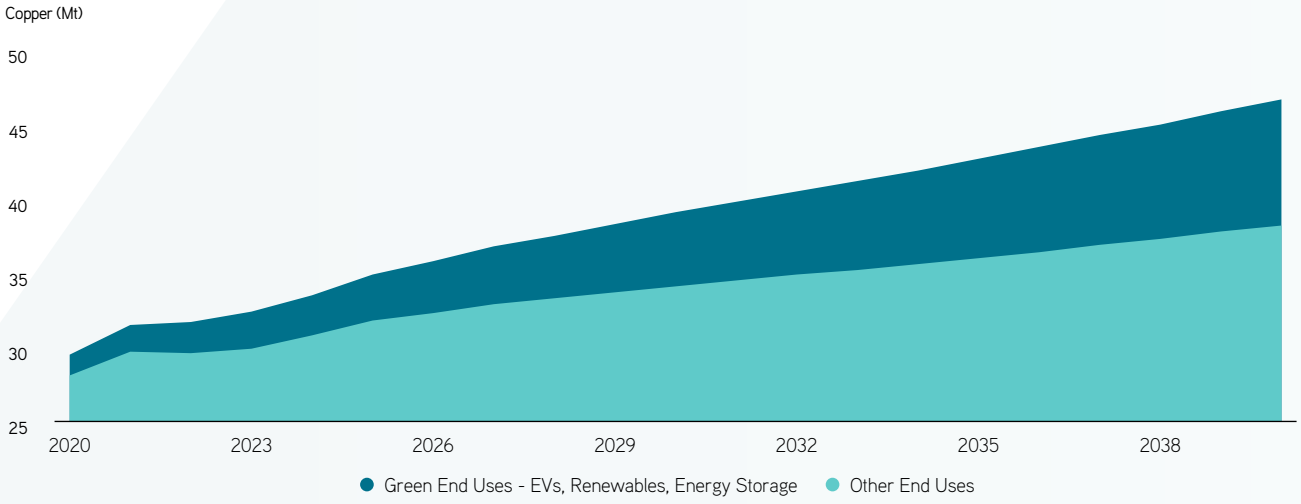
Copper's critical role in a net-zero pathway

To put the world on a Paris Agreement net-zero pathway, a very significant build out of low-carbon electric vehicles (EVs) and renewable power generating capacity will be needed. As the world reduces its dependence on hydrocarbons, metals will provide the foundation for a zero-carbon economy. Copper in the form of wire, cable and foil will bind and connect the batteries, motors and electrical networks that will help limit the rise in global temperature. Furthermore, the pressure on the world's resources to achieve this structural change will be transformational.

Electric vehicles are expected to be by far the largest single sector contributing to the boost in green demand for copper over the next two decades, with global EV sales growing three-fold in three years. Government subsidies in China, the US and Europe have helped to support greater market penetration. The plants that will provide the copper foil for batteries are being developed apace across Asia, North America and Europe (and close to the battery hubs) and further copper foil manufacturing capacity is scheduled for completion over the next few years to meet anticipated demand.

As with the automobile market, the decarbonisation of power generation is well underway. Global wind power generation capacity has increased by over 40% in the last three years. Cable makers are expanding capacity in North America and Europe to meet the necessary growth in electrical networks. Rising offshore wind generation developments are in turn supporting copper wire rod demand. The use of copper in solar power generation is also just as impactful as wind.

Copper consumption growth



Source: Wood Mackenzie

The transition to a more electrified world and higher electricity output will require power grid upgrades and expansions, connected by wire and cable. This will lead to higher demand growth for refined copper intensive wire rod.

These pressures are all in addition to the constant upward pressure from global population growth and the increased consumption per capita that will arise with increased urbanisation.

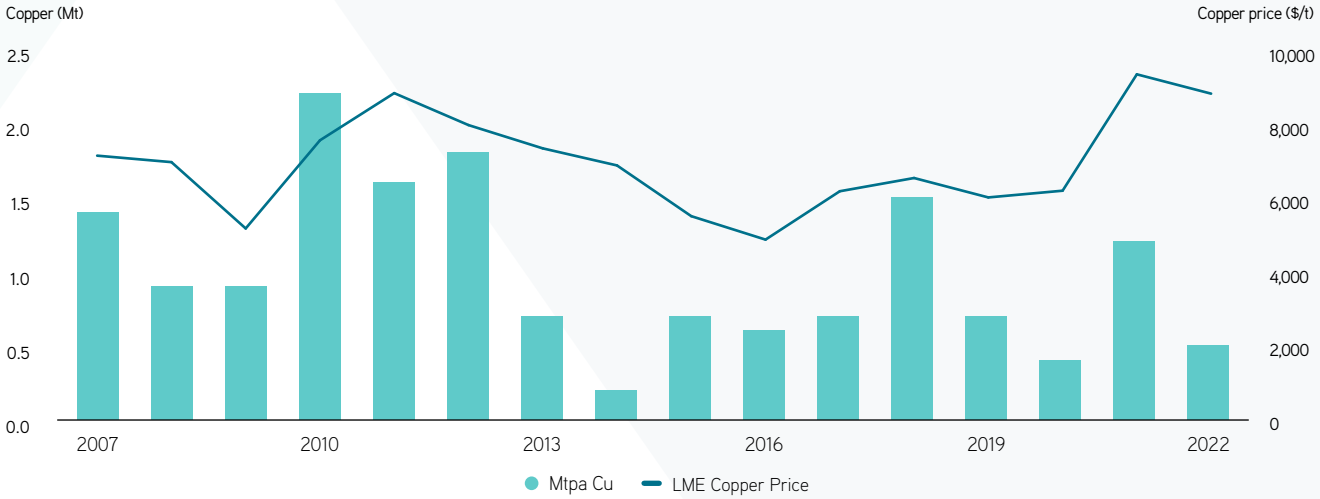
What does the energy transition mean for regional demand? For more mature markets including Europe and North America, legislation such as the recently approved Inflation Reduction Act (IRA) in the US will ensure an uptick in end-use demand from this stimulus for increased green energy use. This demand will be fulfilled by a return to domestic, downstream manufacturing. For developing Asian regions, such as ASEAN and India, the conventional drivers of low-cost production, urbanisation and industrialisation are still at play. The energy transition will further strengthen copper demand in these markets.

Supply challenges

Substantial growth in new mine supply will be needed to meet zero carbon targets. The industry will have to deliver new projects at a frequency and with a consistent level of investment never previously accomplished.

According to one leading forecaster's base case outlook, over six million tonnes of new mine supply will be required over the next decade from projects that have yet to be sanctioned. Under an accelerated energy transition scenario, whereby the Paris Agreement targets are met and zero carbon is achieved by 2050, the requirement jumps to over nine million tonnes. This is equivalent to nearly a third of current refined consumption. This estimate of new mine supply requirements also assumes a larger contribution of recycled material to meet refined demand, which would require investment in more scrap processing capacity and a significant increase in scrap availability.

Volume of copper committed to in new projects each year



Source: Wood Mackenzie, LME

"Demand for copper is growing and the industry's ability to satisfy this growth is stretched."

There are limitations to the speed at which scrap can be delivered back into the product cycle in large volumes, especially as the world looks to manufacture products that are made to last and that can be repaired and shifts away from the throwaway culture of recent years. The mismatch between the requirement for new supply and the need to meet the challenges of a decarbonised world will lead to considerable pressures in the copper sector over the next decade.

Estimates of total identified global mineral resources appear sufficient to satisfy future demand but in practice the conversion of these resources to operating mines is uncertain and slow. Many were identified decades ago and still have little likelihood of being developed. The better quality, easier to develop deposits have mostly been built. Current mineral resources tend to be of lower quality and smaller than those already developed. Some have not been developed because of poor economics. But even those that can offer an attractive return on investment often have other hurdles to overcome before they can be developed.

One of the key characteristics of a deposit is its grade, or the concentration of copper in the deposit. Average grades have been declining for decades, not just for new mining operations but existing ones as well. The grade declines at existing mines because grade often declines with depth for geological reasons. The grades of new mines decline as higher-grade deposits are mined first.

For a new mine, obtaining the necessary social and environmental permits can take a significant time, even in major producing countries. Many sites are remote and require substantial investment in infrastructure, including power, water and transport. Project lead times are longer and timing is critical as the race to control climate change gathers pace. It can take 10 to 15 years, or longer for a major project to be developed, from the identification of a resource to development.

The investment needed to produce a tonne of copper has also been steadily rising. The current inflationary environment is one reason. But a more fundamental change is the decline in grades. The cost of producing one tonne of copper is also increasing and projects need to scale up to the greatest extent possible relative to the size of the deposit in order to improve the economics. This raises the initial capital cost, often limiting the list of potential developers to those that can afford multi-billion-dollar upfront costs.

One important source of future copper production will be expanding existing mining operations. These brownfield projects are usually less capital intensive than greenfield projects and require less capital investment. All mines strive to optimise their unit operating costs and this is often achieved through productivity improvements, with investment in debottlenecking and expansions. These increases in production are an important source of future production.

Assuming the average capital intensity of the project pipeline, and taking into account the volume of copper required to achieve zero-carbon climate targets, one leading forecaster estimates that the level of investment needed to deliver new projects over the next 30 years will have to be at a rate only previously achieved between 2012 and 2016, at the back end of the China-induced commodity super cycle.

In view of this challenging backdrop, mining project approval rates have fallen to cyclical lows. In 2022, the volume of committed copper projects was well below the level needed to meet the requirements of an accelerated energy transition, despite copper prices having been close to their highest level for a decade.

The implication is that more projects need to be advanced along the pipeline and quickly, or there will be insufficient copper available to meet demand, even under a base case pathway.

Demand for copper is growing and the industry's ability to satisfy this growth is stretched. Considerable efforts are required to overcome these challenges including those to boost productivity through innovation and investment while continuing to satisfy social and environmental requirements about how mines are developed.

The industry will continue to strive to satisfy demand while being responsible producers for a changing world.

The pathway to net zero

In March 2023 the International Copper Association published a report setting out the copper industry's roadmap to net zero, including an outline of the role of copper and the industry's decarbonisation challenges.

antofagasta.co.uk/ica_zero

The year in review

Copper

The copper price started the year strongly reaching an historic high in March of $4.87/lb before falling to a low of $3.18/lb in July and recovering to close the year at $3.81/lb.

Copper's price fluctuations reflected the broader volatility in the global economy. Though the details differed in important ways for each major economy, their growth was similarly dampened in 2022. Driving the slowdown were headwinds that dominated headlines for much of the year: Russia's invasion of Ukraine and the economic shockwaves and energy crisis it sparked; rising inflation and interest rates; the lingering effects of COVID-19; China's reduced economic activity; and the ongoing supply shortages and strained global supply chains.

Over the year the LME copper price averaged $4.00/lb, 5% lower than in 2021. The average realised copper price for 2022 was $3.84/lb.

The copper market started 2023 strongly but faded as economic and geopolitical uncertainty increased. Looking forward, the strength of the market will depend on the recovery of the Chinese market and whether there are any disruptions to global trade.

LME Copper average price

$4.00/lb

Gold average price

$1,800/oz

Molybdenum average price

$18.7/lb

Gold

During 2022 gold prices were affected by the contrasting effects of persistently high inflation and central banks raising interest rates to battle soaring consumer prices. Central banks were also buyers in the market with purchases during the year reaching a 55 year high.

In February 2022, gold prices increased to near-record levels of $2,000/oz as Russia invaded Ukraine, but a strong US dollar and aggressive interest rate increases by central banks led to a fall of over 20% by September 2022. However, from late 2022 to early 2023, gold saw a trend reversal with the gold price rising by 14% since November 2022, supported by a less hawkish tone from the US Federal Bank and the reopening of China's economy.

The market price of gold averaged $1,800/oz in 2022, compared with $1,799/oz in 2021.

Molybdenum

The molybdenum price started 2022 at historically high levels and was initially stable, in a balanced market. As the year progressed, consumption in China grew steadily and production declined moving the market into deficit and towards the end of the year the price began to rise significantly.

The average annual price in 2022 was $18.7/lb, with a monthly low for the year of $15.1/lb and a monthly high of $26.1/lb, before reaching a price of $30/lb in the last days of December.

There are some primary producers of molybdenum but a substantial share of demand is satisfied from mines that produce molybdenum as a by-product, and recycled scrap. By-product producers are generally insensitive to the molybdenum price and demand for molybdenum-containing steels is expected to be strong, factors that are expected to support the molybdenum price during 2023.

Delivering value for our stakeholders through the mining lifecycle

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.

WHAT WE NEED

Long-term relationships

Our people
Approximately 31,000 employees and contractors. 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.

Communities
The wellbeing of our neighbours is directly related to the sustainable development and success of our business.

Suppliers
We work with on average over 1,700 suppliers, who provide a broad range of products and services, from large mining equipment to catering and transport. They are vital to our ability to operate continuously, safely and efficiently.

Customers
Most sales are made under long-term framework agreements or annual contracts, with sales volumes agreed for the following year.

Shareholders
We pay special attention to our communications with them, maintaining fluent and transparent dialogue to ensure that they are all treated fairly and receive all relevant information.

Governments and regulators
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.

For more information on our stakeholders see P38-73

Resources

World-class assets
We have a portfolio of large, high-quality, low-cost assets. We are investing in technology to improve productivity and drive sustainable growth across our operations.

Inputs
Our mining operations depend on a range of key inputs such as energy, water, labour, sulphuric acid and fuel.

Financial resources
We have a strong balance sheet and a large portfolio of available undrawn credit facilities.

For more information on our operations see P74-85

Responsible mining

We believe it is possible to mine sustainably by prioritising environmental protection and the efficient use of natural resources.

WHAT WE DO

Exploration / Acquisition
We undertake exploration activities in Chile and abroad, with particular focus on the Americas.

Extraction and processing
Safety and health, operating efficiency and innovation are all key elements of how we run our operations.

Evaluation
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.

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

Construction
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.

Mine closure and rehabilitation
At the end of a mine's life, it must be closed and remediated according to the international standards and national regulations in force at the time.

WHAT WE GENERATE

Our products
Copper

646,200 tonnes

Gold

176,800 ounces

Molybdenum

9,700 tonnes

Silver

2.8 million ounces

For more information on our products see P76

Our footprint
CO_2e emissions intensity

1.75 tCO_2e/tCu

Continental water withdrawal

39.7 GL

For more information on our footprint see P57-66

Our outcomes
Total economic contribution

$7,445m

We generate economic value for all our stakeholders, distributing it as wages to employees, purchases of goods and services to suppliers, social investment programmes in communities, taxes to governments, dividends to shareholders and interest payments to lenders.

For more information on our outcomes see P41

/ Our strategic framework

How we deliver our purpose

In order to deliver a better future we need a robust strategy. Our five strategic pillars are the key areas we focus on as a business, and these will drive us onwards to achieve our purpose.

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.

Our purpose

Developing mining for a better future

For whom we want to achieve our purpose

Planet

We recognise that climate change is one of the greatest challenges faced by humanity. Our vision of a better future reflects the quest for a more sustainable planet, with copper playing a central role in the energy transition, economic progress and improved livelihoods.

Society

Our vision of a better future, is one that is developed together with our local communities, and aims for a society that recognises the economic and social value generated by mining.

Organisation

To tackle the challenges we face in our daily operations and growth, we need a robust organisation that consistently meets these challenges and is grounded in clear and unshakeable values and principles.

Our vision of a better future therefore encompasses our ethical organisational behaviour and our continuous pursuit of a sustainable culture of trust, inclusivity, collaboration, agility and willingness to embrace change and continuous learning.

People

Our success relies on having the best people at the heart of everything we do. Our vision of a better future would be incomplete without the shared values of our workforce, a diverse and inclusive group of individuals open to learning and to enjoying their personal and professional growth, who strive for excellence in their results.

How we will achieve this

Through our five strategic pillars

Safety and Sustainability
to enhance our current operations, while keeping an eye on the future

People and culture
to cultivate the talent necessary for a better future

Competitiveness
is key to us achieving excellence and creating long-term value

Innovation
to constantly pushing back boundaries and exploring new ways of advancing

Growth
to keep contributing to the development of a better future

For more information on our strategic pillars see P20-21

Underpinned by our values

Respect for others
We respect people and care about their opinions, which is why we engage in an open, transparent and collaborative way. We trust them and have a genuine interest in their wellbeing. We promote a work environment that fosters diversity and inclusion.

Responsibility for safety and health
We are responsible for our own safety and health, as well as for that of others. We identify and control our risks, and we are aware of the impacts of our actions.

Committed to sustainability
We operate responsibly and efficiently, with long-term vision. We maximise the economic value of our assets, contribute to social development and minimise our environmental impacts.

Excellence in our performance
We continually seek to achieve the best possible results through operational discipline. We look after our resources and we are efficient, austere and honest. We build trust by fulfilling our commitments.

Innovation as a permanent practice
We recognise and promote new ideas that improve our work practices and the way we relate to others. We aim to create value for the organisation, people and the environment.

Forward thinking
Our business strategy aims to generate value with a long-term vision for shareholders and other stakeholders. We learn from our mistakes and have the flexibility and courage to face new challenges.

Our strategic pillars

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

Safety and Sustainability

Emphasising safety and sustainability to enhance our current operations, while keeping an eye on the future.

Description

We aim to create value and growth throughout the mining lifecycle, from exploration to mine closure. Our goal is to be a Company known for its ethical and transparent conduct, respectful of human rights and the law. To achieve this, we are determined to continue to develop a comprehensive and long-term commitment to all our stakeholders, particularly our communities and workers.

We align ourselves with the UN Sustainable Development Goals (SDG), developing responsible mining practices that are certified by the Copper Mark and ICMM's Performance Expectations. We prioritise the efficient use of renewable natural resources and the reduction of our greenhouse gas (GHG) emissions by using sea water and energy from cleaner sources.

All of this is done while ensuring the occupational health and safety of all our employees and contractors. We do this through the active leadership of our workers, who by their responsible behaviour and proactive management of risks and critical controls ensure a safe and healthy working environment for all.

Key initiatives

- Climate Change Strategy
- Social contribution
- Health and Safety Control Strategy

Performance

- Zero fatal accidents since July 2021
- 35% reduction of High Potential Incidents
- 100% renewable energy (Mining division)
- All operations had achieved the Copper Mark accreditation by the end of 2022
- $57m investment in social value creation

Read more on P38-73

People and culture

Investing in people and fostering a positive culture to cultivate the talent necessary for a better future.

Description

Our goal is to create and nurture a working environment that incorporates new ways of thinking, with innovation at the forefront, to tackle current and future challenges. We strive to inspire people to tackle more complex and dynamic problems, and to develop new management approaches to solve them. The demands of today's and tomorrow's adaptive challenges require us to collaborate and excel while developing new skills.

We aim to truly understand what our people value, to treat them fairly, and to engage and inspire them based on their personal motivations and unique qualities as individuals. This is a challenge that requires us to change the understanding of the traditional employment relationship to one of deeper commitment to the Company.

We will continue to drive forward our cultural transformation, promoting the organisation as a safe and supportive space that actively listens, empathises, connects and builds strong relationships with our people.

Key initiatives

- Diversity and Inclusion Strategy
- Leadership brand
- Digital Academy

Performance

- Wellbeing Strategy rolled out
- 20.4% of our employees are women
- Inclusive practices are an integral part of how we work

Read more on P48-50

Competitiveness

Our competitiveness is key to us achieving excellence and creating long-term value.

Description

Competitiveness is essential as it ensures resilience and makes the business viable. By producing copper efficiently we are able to grow and contribute to the development of mining while promoting the energy transition.

We aim to maintain our strong financial position through efficient capital allocation, the proper execution of our projects and the renewal of our asset portfolio, allowing us to continue operating and growing as we address increasingly complex challenges.

We strive to be one of the most cost-competitive companies in the industry, and towards that end, we are dedicated to achieving excellence in our work and seeking new and efficient ways to manage our operations.

Additionally, we are undergoing a process of operational transformation that allows us to integrate technology and innovation, utilise data analytics and promote efficient resource management by strengthening key operational processes that will enable us to achieve the full potential of our assets' performance.

Key initiatives

- Cost and Competitiveness Programme
- Full potential
- Operational excellence

Performance

- Copper production of 646,200 tonnes at a net cash cost of $1.61/lb
- EBITDA margin remains strong at 50%
- Our Cost and Competitiveness Programme achieved more than double its target, yielding benefits of $124 million

Read more on P90-93

Innovation

Through innovation we are constantly committed to pushing back boundaries and exploring new ways of advancing.

Description

We aim to create new ways of operating and using existing technology more effectively, incorporating our own and others' learning to improve performance.

We further aim to discover new ways of advancing our operations through technology that is yet to become available. With our experience we are convinced that we can contribute to the development of new solutions such as Cuprochlor®-T, integrated remote operation centres (IROCs), autonomous haulage and drilling, advanced analytics and data management for decision making, robotics for tailings and water management, decarbonisation of our processes and dust suppression.

Our Innovation Roadmap serves as a guide for the Group to achieve our operational vision for the future. This allows our operations to become smart, integrated and sustainable, optimising the use of strategic resources such as water and energy.

Key initiatives

- Integrated Remote Operations Centres
- Autonomous trucks and drilling
- Cuprochlor®-T

Performance

- Inaugurated our first fully autonomous operation at the Esperanza Sur pit
- New integrated remote operations centres for Los Pelambres and Centinela
- Validated our proprietary primary sulphides leaching technology (Cuprochlor®-T)

Read more on P92-93

Growth

Growth to continue contributing to the development of a better future.

Description

Growth enables us to maintain our viability and fulfil our purpose. It allows us to realise the full potential of our resources and assets, creating additional value and diversifying risk.

To accomplish this, we aim to:

- Expand and increase the Group's production capabilities by building projects such as Los Pelambres Expansion Phase 1 and Phase 2 (mine life extension) and the Centinela Second Concentrator project.
- Increase our mineral resource base through the exploration for new resources and/or the development of new ore deposits such as Cachorro and Encierro.

Our strategy for growth beyond our existing operations is focused on producing copper and its by-products in the Americas (particularly Chile, Peru, the United States and Canada), a region that is highly attractive due to its geological potential, mining activity, relative proximity, political and administrative similarities, culture and language.

Key initiatives

- Los Pelambres Expansion Phase 1
- Centinela Second Concentrator
- Los Pelambres Expansion Phase 2

Performance

- At the end of 2022 the Los Pelambres Expansion project was 93% complete
- Following two exploration discoveries in Chile our mineral resources have increased by 1 billion tonnes

Read more on P86-89

For further information on the risks associated with each strategic pillar, please see P26-35

For more information on how we align our strategic performance with remuneration, please see our Remuneration report on P147

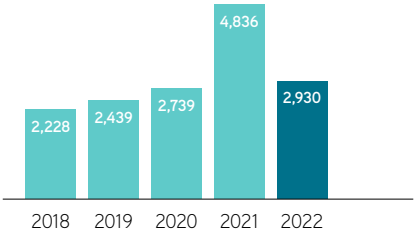
Measuring our performance

We use Key Performance Indicators (KPIs) to assess our performance in meeting our strategic and operating objectives. Performance is measured against the following financial, operating and sustainability KPIs:

Financial KPIs

EBITDA[1]

$2,930m



Why it is important

This is a measure of our underlying profitability.

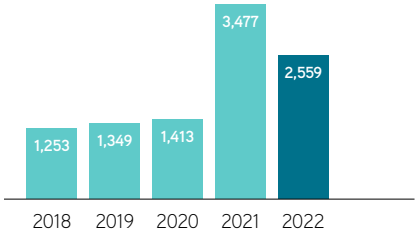
Performance in 2022

EBITDA decreased by 39% and an EBITDA margin of 50%, reflecting the decrease in copper sales, lower copper price, higher inflation and higher input prices.

Find out more P94

Profit before tax

$2,559m



Why it is important

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

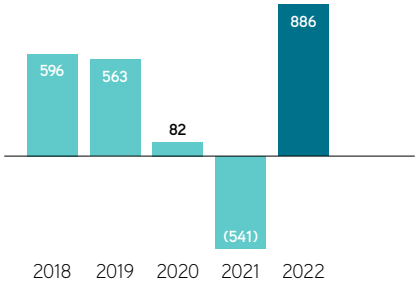
Performance in 2022

Profit before tax decreased by 26%.

Find out more P94

Net debt/(Net cash)[1]

$886m



Why it is important

This measure reflects our financial liquidity.

Performance in 2022

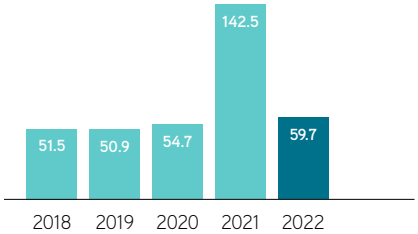
Strong balance sheet with net debt of $886 million at the end of 2022 and a Net debt/EBITDA ratio of 0.3x.

Find out more P100

1. Non-IFRS measures, refer to the alternative performance measures section on page 238.
2. From continuing operations excluding exceptional items.
3. From continuing and discontinued operations including exceptional items.
4. 100% of Los Pelambres, Centinela and Antucoya, and 50% of Zaldívar's production.
5. Mineral resources (including ore reserves) relating to the Group's subsidiaries on a 100% basis and Zaldívar on a 50% basis.
6. The Lost Time Injury Frequency Rate is the number of accidents with lost time during the year per million hours worked.
7. Scope 1 and 2, Mining division only.
8. Tonnes of CO_2 equivalent per tonne of copper produced.

Underlying earnings per share[2]

$59.7¢



Why it is important

These are measures of the profit attributable to shareholders before exceptional items.

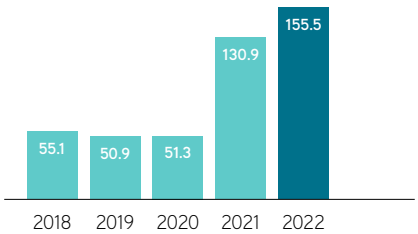
Performance in 2022

Underlying earnings per share were 59.7 cents, a decrease of 82.8 cents or 58% compared with 2021 on lower EBITDA.

Find out more P99

Earnings per share[3]

$155.5¢



Why it is important

These are measures of the profit attributable to shareholders after exceptional items.

Performance in 2022

Earnings per share including exceptional items for the year were 155.5 cents, reflecting the impact of an exceptional gain of 95.8 cents, and were 19% higher than in 2021.

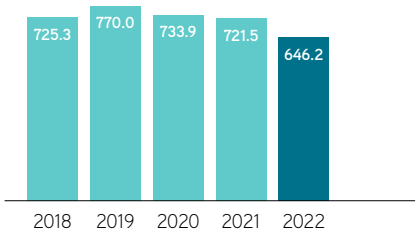
Find out more P99

Remuneration performance criteria P156

Operating KPIs

Copper production[4]

646.2k tonnes



Why it is important

Copper is our main product and largest source of revenue.

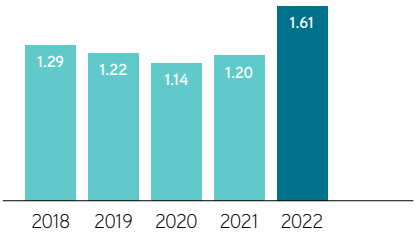
Performance in 2022

Copper production decreased by 10% mainly due to the temporary reduction in throughput at Los Pelambres as a result of the drought and the reduced concentrate pipeline availability in June, and expected lower grades at Centinela Concentrates.

Find out more
P76

Net cash costs[1]

$1.61/lb



Why it is important

This is a key indicator of operating efficiency and profitability.

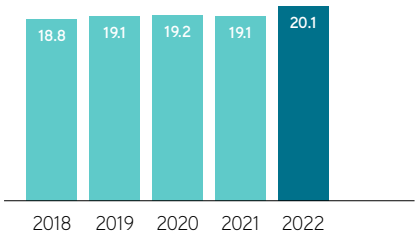
Performance in 2022

Net cash costs were 34% higher than last year mainly due to the impact of the drought, inflation and higher input prices during the period, partly offset by the weaker Chilean peso and the savings coming from our Cost and Competitiveness Programme.

Find out more
P76

Mineral resources[5]

20.1bn tonnes



Why it is important

Our mineral resource base supports our strong organic growth pipeline.

Performance in 2022

Total mineral resources increased by 1 billion tonnes during the year, including a maiden inferred resource at Encierro and additional resources at Cachorro, both of which are in northern Chile.

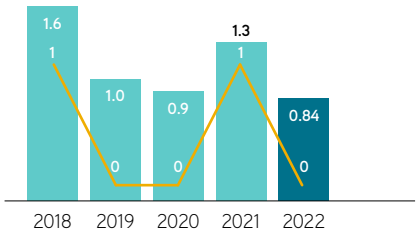
Find out more
P245

Sustainability KPIs

Safety

0 Fatalities

0.84 LTIFR[6]



Why it is important

Safety is our top priority, with fatalities and the LTIFR[6] being two of our principal measures of performance.

Performance in 2022

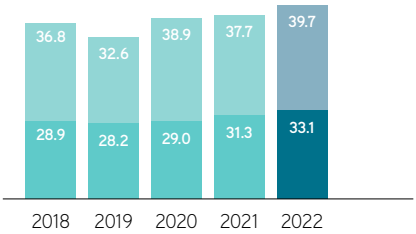
Record safety performance with no fatalities and the LTIFR improving by 37% due to strengthened control strategies for high-risk tasks.

Find out more
P53

Water withdrawals

73 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.

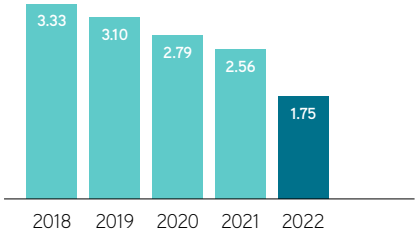
Performance in 2022

Total water withdrawals increased by 5.4% as precipitation tripled at Los Pelambres in 2022 from the low levels in 2021, and Centinela Concentrates and Antucoya achieved record annual throughput.

Find out more
P63

CO_2e emissions intensity[7,8]

1.75 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 2022

CO_2e emissions intensity decreased as Scope 1 and 2 emissions fell by 37%.

Find out more
P61

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 supported in making key 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 the achievement of our strategic goals. The framework is based on ISO 31000 and COSO ERM.[1]

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 2022

Our main focus in 2022 was in the socio-political environment, as a result of the armed conflict in Europe and political uncertainty in Chile. The latter continued following the rejection of the proposed new constitution in September and will extend into 2023 as a second rewrite is carried out. However, lessons learned during previous social contingencies in Chile meant the impact on our operations was minor.

The war in Ukraine affected the sourcing of some of our strategic supplies and it remains a concern, although our risk analysis of the war allowed us to mitigate its impact on our business.

Other risks during the year included those arising from the reform of the mining royalty and tax bills proposed by the government, expected to be implemented during 2023.

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 undertook during the year:

- Implemented on-site risk reviews of certain selected risk areas accompanied by senior management, increasing the risk maturity level of the Group
- Co-coordinated contingency committees in line with our risk management process
- Updated the Company's risk appetite statement, including the sections relating to Environmental Management, Operations and Tailings Storage, and the Project Execution risk section was expanded to incorporate the conversion of mineral resources to ore reserves. The updated statement was approved by the Board and the level of risk appetite for all risk areas was unchanged
- Reported monthly to the Executive Committee to identify and manage any deviation from expected performance
- Defined and implemented lessons learned from the COVID-19 pandemic
- Tested and validated the Business Continuity Plan
- Introduced new controls identified during the assessment of the impact of the conflict in Ukraine
- Participated in the review of the FQAR (Functional Quality Assurance Review) project
- Continued training risk owners and main users
- Updated and monitored critical controls and action plans
- 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

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; key developments in our exploration, project and business development activities; and 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 effectively monitor Antofagasta's major risks and preventive and mitigating procedures, and to assess whether actual exposure is consistent with the defined risk appetite. If a gap is identified, an action plan is prepared to fill it.

The Risk and Compliance Management Department is responsible for the Group's risk management systems. It implements the Company's risk management policy, vision and purpose to ensure there is 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.

1. The Committee of Sponsoring Organizations of the Treadway Commission Enterprise Risk Management framework

The General Manager, with the Department support, 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 taken in each company.

The General Manager of each operation has 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 in order to provide effective and direct risk management.

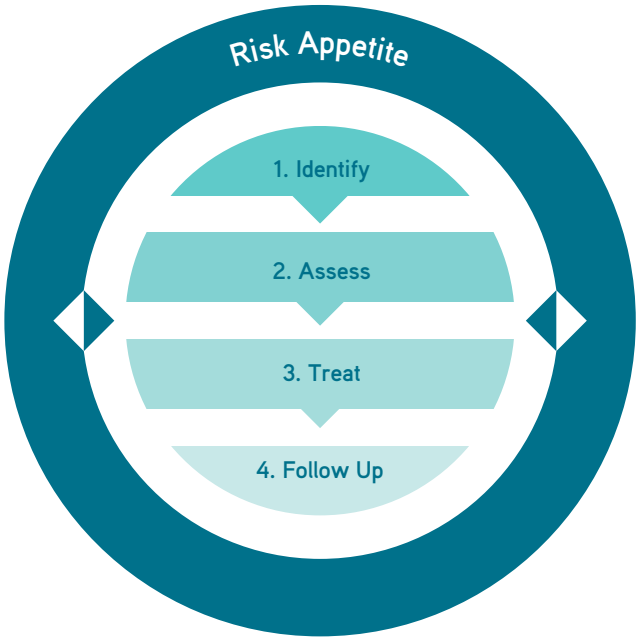
Each operation holds an annual risk workshop, at which the business unit's risks and mitigation activities are reviewed in detail and updated as necessary. Workshops are used to assess principal risks that may affect relationships with stakeholders, limit resources, interrupt operations and/or negatively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

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

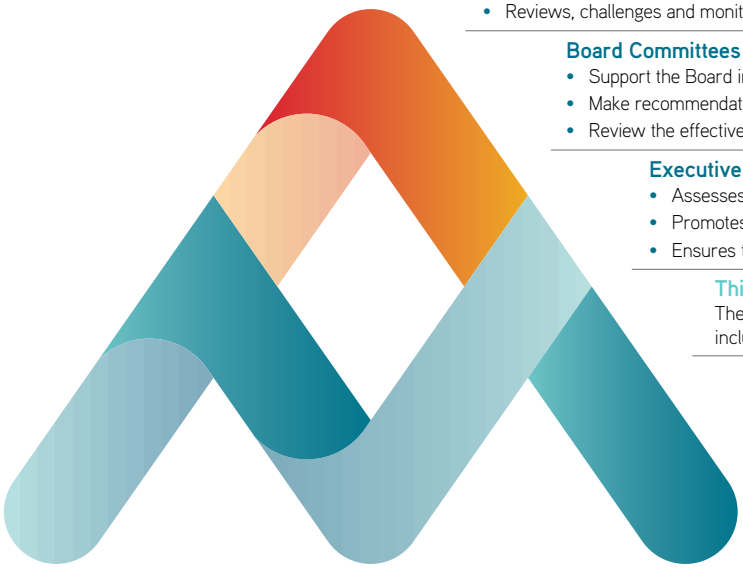
We promote a consistent risk management process across our different business units, ensuring risk is considered at all levels of the organisation. Risk information flows from the business units to the centre and from the Board back to the business units.

Risk Management Cycle

Risk appetite is the expression of the acceptable exposure to uncertainties that the organisation is willing to assume in the pursuit of its objectives. Our risk management cycle has four stages, and is designed to identify, assess, treat and follow up our risks.



Our risk management structure



Board of Directors
- Has 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
- Ensures there is transparent and satisfactory dialogue with stakeholders

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 their concerns to the appropriate level if required.

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 ensures 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 eliminated and that exposure to some risk is necessary in the pursuit of our corporate objectives.

Mining is 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 only limited information available at the time of the evaluation.

Any identified new or emerging 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 becomes available, based on research, expert analysis and internal investigations, 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 such risks protects our business, people and reputation. The risk management process provides reasonable assurance that the relevant risks are recognised and controlled, allowing the Company to achieve its strategic objectives and create value.

Because risks are periodically re-evaluated, the risk map shown here represents the position and controls in place at a specific point in time, as well as showing the changes that have taken place since 2021.

Throughout the year, the Board carried out a robust assessment of the Company's emerging and principal risks, which are set out on the following pages with related preventive and mitigation measures.

During 2022, the probability of the External Risks principal risk (18) was lowered from "Possible" to "Unlikely" following the reduction of risks related to the COVID-19 pandemic. The impact of the Political, Legal and Regulatory principal risk (7) was reduced from "Significant" to "Moderate" following the rejection of the proposed new constitution and the improved clarity on the outcome of the mining royalty reform.

Risk area	Appetite	Risk level	Change in risk level vs 2021	Outlook
People				
1. Talent management				
2. Labour relations				
Safety and sustainability				
3. Safety and health				
4. Environmental management				
5. Climate change				
6. Community relations				
7. Political, legal and regulatory				
8. Corruption				
Competitiveness				
9. Operations				
10. Tailings storage				
11. Strategic resources				
12. Cyber security				
13. Liquidity				
14. Commodity prices and exchange rate				
Growth				
15. Growth of mineral resource base and opportunities				
16. Project development and execution				
Innovation				
17. Innovation and digitalisation				
Transversal				
18. External risks				

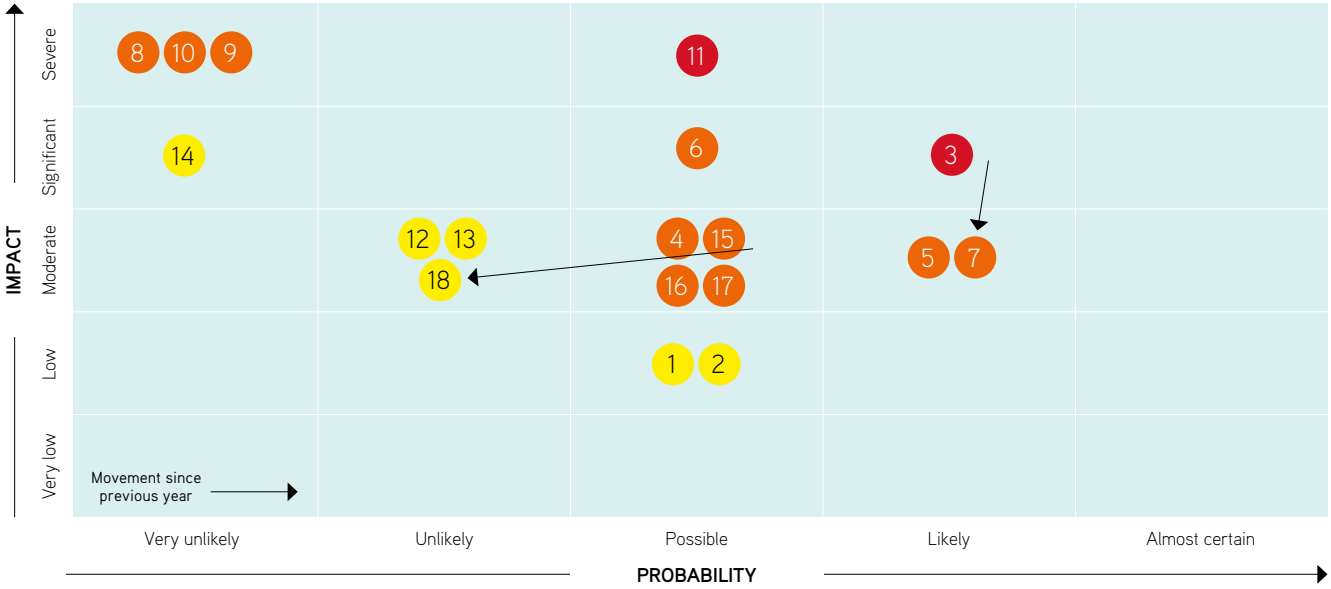
Key

	Risk appetite	Risk level
Low		
Medium		
High		
Very high		

Strategic pillars

Safety and Sustainability	
People and culture	
Competitiveness	
Innovation	
Growth	

Risk Heat Map



The risk impact scale rating has five levels of Probability and Impact:

Probability

Level	Quantitative	Qualitative
Almost certain	Once a week	Happens often
Likely	Once a month or more	Could happen easily and has occurred under similar conditions
Possible	Once or twice a year	Could happen and has happened in similar conditions
Unlikely	Once or twice every 10 years	Has not happened yet, but could happen
Very unlikely	Once or twice every 50 years	Only in extreme circumstances

Impact

Level	EBITDA / Safety and Health / Environment / Communities / Legal / Reputation
Severe	• Any incident with an impact of more than 50% of EBITDA. • Accident causing multiple fatalities or permanent disabilities. • Irreversible environmental damage or serious incident that impacts a community, with long-term effects. • Regulatory breaches which may lead to a revocation of operating permits or a financial impact exceeding 20% of EBITDA. • Severe impact on Company's international reputation with long-term effects.
Significant	• Any incident with an impact of between 20% and 50% of EBITDA. • Accident that causes a single fatality or permanent disability. • Reversible environmental damage or major incident affecting a community, with medium-term effects. • Regulatory breaches which may lead to a criminal conviction or a financial impact of more than 20% of EBITDA. • High impact on the Company's national reputation with medium-term effects.
Moderate	• Any incident with an impact of between 10% and 20% of EBITDA. • Accident resulting in lost time. • Moderate environmental impact or small incident that affects a community, with short-term effects. • Regulatory breaches which may lead to criminal charges or a financial impact of between 0.05% and 3% of EBITDA. • Moderate adverse claims and in the national news for a medium-term period.
Low	• Any incident with an impact of between 5% and 10% of EBITDA. • Accident without lost time. • Minor environmental or community impact. • Regulatory breaches which may result in a financial impact of less than 0.05% of EBITDA. • Moderate claims and in national news for a short-term period.
Very low	• Any incident with an impact of less than 5% of EBITDA. • Minor occupational accident. • Very minor environmental or community impact, easily resolved. • Regulatory breaches that will not result in a financial penalty. • Claims that do not reach the formal media.

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

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

The principal risks, together with related prevention and mitigation measures, have been presented to the Board and are grouped in line with our strategic pillars: People, Safety and Sustainability, Competitiveness, Growth and Innovation. These pillars are supported by our corporate governance structures.

The principal risks are outlined in the risk heat map and table on the previous two pages, and in more detail below.

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 could have a negative impact on the performance of our existing operations and prospects for 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 and add to 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 and competitive 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 selecting suitable external candidates when appropriate.	Our methodology for identifying and managing talent to look for the competencies we require to ensure the sustainability of our business, allows us to identify the key people for our talent pool. We embedded our New Ways of Working model (hybrid), which was introduced in 2021 to facilitate business continuity and attract and retain talent. This year, our Diversity and Inclusion Strategy has increased the proportion of our female employees to 20.4%, 3.2 percentage points higher than in 2021.
2. LABOUR RELATIONS		Risk appetite / Risk level / Outlook
Our highly-skilled workforce and experienced management team are critical to 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 comply with Chile's strict labour regulations. There are long-term labour agreements (usually three years) in place with all the unions at our operations, which helps ensure labour stability. We seek to identify and address any labour issues that may arise during 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 Antucoya, one at Los Pelambres and one at Zaldívar, all of them in a climate of mutual respect.

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, and one of our core values. A poor safety record or a serious accident 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 trained 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 safety culture, which 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 our four main goals: zero fatalities, zero occupational illnesses, the development of a resilient culture; and the automation of hazardous processes. Leadership visibility and strong use of Job Safety Analysis and Yo Digo No (I Say No) tools are part of our safety performance. Critical controls and verification tools are constantly strengthened through the verification programme and regular audits of critical controls for potential high-risk activities.	We had no fatalities during 2022. Our lagging indicators continue to fall and were below our targets for the year. This year we put extra effort into promoting the correct use of our Job Safety Analysis tool, to help supervisors and operators standardise safe working practices for high-risk tasks. After dealing with the COVID-19 aftermath, we refocused on occupational health and updated our medical surveillance programmes. This included putting more preventative controls in place to reduce exposure to our main occupational health risks-noise and dust.
4. ENVIRONMENTAL MANAGEMENT		Risk appetite Risk level Outlook
An operating incident that impacts the environment could affect 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.	We have a comprehensive approach to incident prevention. Risks are assessed, monitored and controlled to achieve our goal of zero incidents with significant environmental impact. We work to raise awareness in our employees and contractors by providing training to promote operating excellence related to the environment in which we operate. 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 resources by using sea water, favouring the use of renewable power, and achieving higher rates of reuse and recovery of water by using thickened tailings technology. We recognise that environmental performance is key to our ability to generate social value and perform regular risk assessments to identify our potential impact and develop preventive and mitigating strategies. Each site regularly updates their environmental emergency preparedness and detailed closure plans, including appropriate financial provisions to ensure physical and chemical stability at their sites once operations have ceased.	We have strengthened our environmental management model, updating it monthly with new or revised environmental regulations. We also implemented the regular monitoring of Environmental Authority inspection processes to assure compliance with our environmental commitments and action plans.

/ Risk management *continued*

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. In addition, the increasing severity of sea swells leads to delays in the delivery of key supply materials and the export of our concentrates and cathodes. The Chilean government's increased climate ambitions may result in higher compliance and operating. We are committed to contributing to the reduction of greenhouse gas emissions and water scarcity. We 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 more efficient water use and the increased use of sea water as a proportion of our total water consumption. As each phase of the Los Pelambres desalination plant construction is completed, 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 to and mitigate their potential impact. For each risk evaluated as "High" or "Extreme" we produce specific action plans and strategies. We continue to seek ways to decarbonise our operations and this requires greater investment in innovative solutions, including in developing low-carbon technology, and can increase operating costs. 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. By 2025 we aim to reduce our Scope 1 and 2 emissions by 30% compared to 2020. We are also committed to achieving carbon neutrality by 2050, or sooner if technology permits. Since April 2022, all our mining operations use only renewable power, significantly reducing our Scope 2 emissions.
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 life 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 reinforced community programmes related to water for human consumption and irrigation to mitigate the impact of the drought in the Province of Choapa. We seek to stimulate the generation of economic, social and human capital in the regions where we operate by promoting local employment, fostering local suppliers and offering education and training opportunities. We run various programmes to support local entrepreneurs and micro and small businesses. We have launched a community concerns management system to report any issues caused by our operations on neighbouring communities. Concerns can be made confidentially and tracked to monitor their progress.

Description	Preventive and mitigation measures	Highlights
7. POLITICAL, LEGAL AND REGULATORY		Risk appetite Risk level Outlook
Political instability could 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 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 that we are prepared to meet any new regulatory requirements.	There is currently a heightened level of political uncertainty in Chile that has been somewhat reduced by the rejection of the proposed new constitution and the advancement of the mining royalty reform. The Group is supporting the Chilean industry associations, particularly the Consejo Minero (Mining Council) in its representations and responses on the proposed legislation to the government on behalf of the industry.
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, open channels of communication, Group-wide training programmes, and multiple layers of controls at all our operations, projects and exploration activities, as well as in our third-party relationships using enhanced due diligence procedures. Our Compliance Model is set to prevent actions which may involve us directly or indirectly in any potential irregularities (including any kind of bribery), detect possible risks in a timely fashion and respond to any misconduct in an adequate manner. Internal policies, procedures and controls have been implemented to prevent corruption. An anonymous whistleblowing hotline is available to employees and external parties to report compliance-related concerns, which are investigated and followed-up by an expert team and reviewed by a senior management Ethics Committee. All our employees receive training on our Crime Prevention Model, which is subject to external certification. We strive to establish a Compliance culture throughout the Group, through extensive training and user-friendly internal communications.	In 2022 cyber crime was included as a new offence in the Chilean anti-bribery and employment protection laws. The Group's controls were updated accordingly. The Crime Prevention Model was recertified until mid-2023 by an expert third party. Following a compliance risk assessment carried out by external auditors, our risk matrix was updated to ensure we have a robust and transparent control framework. During the year, all our employees completed an online Code of Ethics course as part of our preventative measures programme.

/ Risk management *continued*

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 processes they undertake. This process also identifies 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 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.	Lessons learned from previous cases of community concern has improved the resilience of our operations and minimised the impact of incidents this year. Many years of drought at Los Pelambres has reduced production in 2021 and in 2022. This climate change impact will be mitigated by the completion of the desalination plant in the first half of 2023. The Los Pelambres concentrate pipeline incident was quickly and appropriately mitigated and a project to assess the entire pipeline implemented.
10. TAILINGS STORAGE		Risk appetite Risk level Outlook
Ensuring the stability of our tailings storage facilities (TSFs) during their entire lifecycle is central to how we operate. A failure or collapse of any of our TSFs could result in fatalities, damage to the environment, regulatory violations, reputational damage and disruption of the quality of life of neighbouring communities as well as the running of our operations.	We manage our TSFs to allow the effectiveness of their design, operation and closure to be monitored at the highest level of the Company. All our TSFs are built using the downstream construction method and are designed to withstand earthquakes and extreme weather. Catastrophic failures of TSFs are unacceptable. 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 to strengthen the control environment. Risk management includes timely risk identification, control definition and verification. Our 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. We are implementing this standard at all our operations. Our 2021 tailings policy sets out the guiding principles for the management of our TSFs and any potential or actual impact on the environment, using sound governance and open communication with stakeholders. In accordance with this standard, we continue to update our risk assessment methods, focusing on more detailed risk identification, failure modes and controls in order to avoid catastrophic failures.
11. STRATEGIC RESOURCES		Risk appetite Risk level Outlook
Disruption or restriction of 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.	Contingency plans are in place to address any short-term disruptions to strategic resources and maintain our security of supply. 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, keeping in place the controls necessary to ensure the traceability of all supplies (including the avoidance of any conduct related to modern slavery). We are committed to incorporating sustainable technological and innovative solutions, such as the use of sea water and renewable power when economically viable, to mitigate exposure to potentially scarce resources.	During the year, some transport interruptions and the war in Ukraine threatened the supply of some key inputs. However, the impact was either prevented or mitigated through constant monitoring, contingency planning and actions taken to improve our supply alternatives, such as inventory management and increase the stockpile capacity. The main exposure during the year was related to water scarcity at Los Pelambres due to the drought. By the year end the desalination plant was 93% complete and will be in production in 2023.

Description	Preventive and mitigation measures	Highlights
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 provides 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 our assets, and specific systems are in place to protect them and our data.	We have further strengthened our protective controls and regularly communicate with users to prevent cyber attacks. To reinforce our controls we organised "ethical phishing" and "ethical hacking" exercises during the year.
13. LIQUIDITY		Risk appetite Risk level Outlook
Restrictions in financing sources available for future growth could prevent us from taking advantage of growth or other opportunities in the market.	Security, liquidity and return are the order of priorities for our treasury 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. This gives us 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.	We maintained our solid balance sheet and financing ratios, safeguarding our capability to raise debt. We have focused on diversifying our funding sources, retaining a high level of interest from financial institutions offering to provide finance on competitive terms. During 2022 we issued our second $500 million corporate bond and we agreed a Revolving Credit Facility (RCF) for $500 million, diversifying the sources and term of our debt financing.
14. COMMODITY PRICES AND EXCHANGE RATES		Risk appetite Risk level Outlook
Our results are heavily dependent on commodity prices – principally those of copper and, to a lesser extent, gold and molybdenum. The prices of these commodities are influenced by many external factors, including world economic growth, inventory balances, industry supply and demand, possible substitution, etc. Our sales are mainly denominated in US dollars, although some of our operating costs are in Chilean pesos. Thus any 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 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 under 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.	The impact of the political uncertainty during the year often outweighed the usual correlation between the US dollar/Chilean peso exchange rate. No new hedging positions were entered into during 2022.

/ Risk management *continued*

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. 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, will influence the forecast return of investments. Incorrect estimates could cause poor decision-making. Regarding 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. To reduce our risk exposure, we focus on growth opportunities in stable and secure countries. Our rigorous assessment processes evaluate and determine the risks associated with all potential business acquisitions and exploration opportunities, including stress-test scenarios conducted 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 opportunities and transactions, approving or recommending them within authority levels set by the Board.	Our exploration activities continued to be focused on the Americas and our risk exposure level was unchanged. The Company has discovered a significant greenfield copper/gold deposit in the Chilean High Andes. The initial inferred resource of the Encierro deposit is 522 million tonnes, with a copper grade of 0.65%. Two of Twin Metals' federal mining leases were cancelled during 2022. In August 2022 Twin Metals filed a federal claim challenging these actions.
16. PROJECT DEVELOPMENT AND EXECUTION		Risk appetite Risk level Outlook
Failure to effectively manage our development projects or transform our resources into reserves could result in delays to the start of production and cost overruns. Delays on information capture and/or not achieving required enablers could limit the conversion of resources into reserves.	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 benefits 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 under a range of copper price scenarios. Joint project/operation teams are established early in a project's development to ensure a smooth transition into the operating phase once construction is completed. All new reserves and growth projects must comply with our internal procedures and all applicable environmental and social laws and regulations.	Our projects are developed in accordance with the practices set out in our Asset Delivery System (ADS), including the Functional Quality Assurance Review (FQAR), and are reviewed by external experts. Project risks are proactively managed and frequently evaluated to minimise their impact on costs. Project estimates include a contingency provision, calculated using a probability-based method that considers the systemic and specific risks of each project. The risks associated with converting mineral resources to reserves are properly identified and managed by the teams to ensure accurate conversion.

Description	Preventive and mitigation measures	Highlights
17. INNOVATION AND DIGITALISATION		Risk appetite Risk level Outlook
Our ability to deliver on our strategy and our 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, when there is no competitive barrier – to maximise the potential for improvements in our processes and systems. A dedicated team monitors, identifies and analyses external innovation trends that have potential applications in 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 innovative improvements 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 2022, various automation projects were progressed. These included the use of autonomous drills and autonomous trucks at Centinela and the commissioning of its new Integrated Remote Operations Centre (IROC). The IROC for Los Pelambres will be commissioned in 2023. Advanced data analytics are used at our operations to increase throughput and ore recovery and to improve predictive maintenance. During the year our Data Governance Programme and Data Platform were deployed across the organisation to improve data access, consistency and quality, thus accelerating our Advanced Analytics capabilities.
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.	Changes in the global or Chilean economic or political environment can impact the Group's strategy. We maintain our good practices and adopt lessons learned during periods of crisis. 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 use scenario analysis to challenge the principles on which we base our financial planning, identifying potential risks, costs and benefits of feasible action plans.	The controls for this risk were updated to incorporate lessons learned during the year, such as the geographic diversification of our suppliers and actions taken to guarantee the safety and health of our employees during a pandemic. We also increased our stocks of strategic resources to improve our supply resilience.

Emerging Risks

In addition to our principal risks, we are constantly on the lookout for emerging risks that may become new principal risks in the future.

Current emerging risks are:

Emerging risk	Impact
New tax regulations Wide-ranging Chilean tax reform is expected during 2023.	During 2022, each of our mining operations had tax stability agreements in place and the future financial impact on them will be assessed if the reforms become law.
Geopolitical Global political and economic uncertainty is affecting short-term demand for copper and other metals, as well as trade flows and our supply chains.	The potential impact may include lower revenue, longer lead times for critical supplies and increased input costs.

The above risks are closely monitored and actively managed to minimise their threat.

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 necessary controls are in place to prevent any unethical behaviour.

Areas of focus and development during 2022

- Whistleblowing investigations, performed by a group of experts, were centralised and standardised, guaranteeing independence to the process
- A robust due diligence process is in place
- The Company's Crime Prevention Model was recertified by an independent expert
- All of the Group's employees completed online Code of Ethics training during the year
- Employees in high-risk areas completed more in-depth training on ethics and compliance
- New employees were trained in the Compliance Model as part of their induction programme
- All employees updated their conflict-of-interest disclosures
- An "Integrity Week" event was held for all employees during which the value of respect in the workplace was discussed
- Anti-corruption events took place at all our operations to reinforce our compliance with our Integrity values
- The Compliance team was included as part of the approval process for social contributions, to strengthen monitoring and governance
- A communication campaign was carried out as part of our focus on Prevention in our Compliance Model
- Compliance was included as a topic in the "Antofagasta Supplier Day" event, with a particular focus on local suppliers
- Our Compliance Risk Matrix and all the controls related to it were reviewed
- All allegations regarding ethical and non-ethical concerns are presented to the Ethics Committee.

Code of Ethics

Our Code of Ethics sets out our commitment to conducting business in a responsible and sustainable 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 core of our Compliance Model and supports the implementation of all other related activities.

Our Code is available on our website.

Compliance Model

Our Compliance Model applies to both our 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 in accordance with Chilean anti-corruption legislation.

The Model has three pillars:

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

- Internal policies and procedures
- Anti-trust guidelines
- The management and update of our Compliance Risk Matrix
- Our robust due diligence processes
- Anti-corruption clauses in suppliers' and employees' contracts
- Compliance training and communication
- Access Control and Governance, Risk and Compliance (GRC) tools are used as part of the segregation of duties control

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

- Robust whistleblowing channels
- Data analysis
- Anti-corruption internal controls
- Normative Instruments, such as internal policies, procedures or guidelines, which are continually reviewed
- Internal audit

Action: If an irregular or illegal situation is detected, it is investigated according to our internal procedures using fact-based, objective and professional standards. Each of our operations has an Ethics Committee which reviews the findings of every investigation and suggests remediation plans to the Corporate 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 the whistleblowing channels is guaranteed to safeguard individuals and so achieve greater transparency and bolster our non-retaliation policy.

During the year we received 624 allegations. Of these 245 (39%) were ethics related and 379 (61%) were non-ethical concerns. The ethical allegations were classified as: 73% (180) harassment, abuse and mistreatment, 11% (28) fraud or misuse of property, 5% (10) conflicts of interest, 2% (4) bribery and corruption, 0% (0) modern slavery and 9% (23) other. Remediation action were defined and implemented for all substantiated allegations.

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 6,612 suppliers were reviewed, of which 1.6% were rejected. Of these 97% were Chilean suppliers and 3% were international. The reasons for rejection were mainly due to high financial or tax risk, non-compliance with Law 20.393 (Criminal Responsibility of Legal Entities) or non-compliance with Group guidelines.

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 model 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 the terms and remaining durations of the borrowing facilities in place. The Group had a strong financial position as at 31 December 2022, with combined cash, cash equivalents and liquid investments of $2,391.2 million. Total borrowings were $3,277.0 million, resulting in a net debt position of $885.8 million. Of the total borrowings, only 13% is repayable within one year, and 17% repayable between one and two years. 35% of the borrowings are repayable after more than five 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, including depreciation, deferred stripping and closure provisions. 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 standalone impact of each of:

- A significant deterioration in the future copper price forecasts by 20% throughout the five-year period.
- An even more pronounced short-term reduction of 50 c/lb in the copper price for a period of three months, in addition to the above deterioration of 20% in the copper price throughout the review period.
- The potential impact of the Group's most significant individual operational risks.
- A shutdown of any one of the Group's operations for a period of three months.
- Potential changes to the Chilean mining royalty, taking into account the Group's existing tax stability agreements.

The stability of tailings storage facilities represents a potentially significant operational risk for mining operations globally. The Group's tailings storage facilities are designed to international standards, constructed using downstream methods, subject to rigorous monitoring and reporting, and reviewed regularly by an international panel of independent experts. Given these standards of design, development, operations and review, the impact of a potential tailings dam failure has not been included in the sensitivity analysis.

The above downside sensitivity analyses indicated results which could be managed in the normal course of business, including the aggregate impact of a number of the above sensitivities occurring at the same time. 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.

Stakeholder Review

Highlights	40
Our approach to sustainability	42
How we engage with our stakeholders	46
Our people	48
Safety and occupational health	51
Communities	54
Environment	57
Climate Change	60
Task Force on Climate-related Financial Disclosures (TCFD)	64
Suppliers	67
Customers	70
Shareholders	71
Governments and regulators	72
Non-financial information statement	73

"Sustainability for Antofagasta plc is about deploying a strategy that improves the lives of our employees, embraces and supports the development of our surrounding communities, and manages the environmental aspects of our operations."

René Aguilar
Vice President of Corporate Affairs and Sustainability

We have made strong progress against our targets

We had record safety performance, and achieved our female participation and emissions reduction goals.

Sustainability-related governance

- In August and December respectively, our Antucoya and Los Pelambres operations were awarded the Copper Mark, the copper industry's responsible production assurance framework. Zaldívar and Centinela received this recognition in 2021.
- Our four mining operations completed the independent audits required to validate their performance against the International Council on Mining and Metals' (ICMM) Performance Expectations.
- We updated our Human Rights Policy to strengthen our explicit commitment to respect the rights, culture and traditions of indigenous peoples and approved an Indigenous Peoples Engagement Standard.
- We prepared a Sustainable Procurement Policy to govern both our management and our expectations of the companies in our supply chain.

Safety and health

- In 2022, there were no fatalities in the Group.
- The Group's safety performance continued to improve; compared to 2021, high potential incidents (HPIs) and the Lost Time Injury Frequency Rate fell by 40% to 0.12 and 37% to 0.84, respectively.
- The Mining division began installing the latest generation collision avoidance system in its transport equipment, and also in the transport equipment of its contractors and subcontractors.

People

- In 2022, we rolled out our Wellbeing Strategy, focusing on physical, emotional, financial and social welfare.
- We increased the proportion of our female employees to 20.4%, compared to 17.2% in 2021, continuing the steady improvement achieved since 2018 and meeting our target for the year.
- As our digital transformation plan advanced, we trained employees at Centinela and Los Pelambres to work in our integrated remote operations centres (IROCs) and use autonomous equipment such as trucks and drill rigs.
- Our Transport and Mining divisions launched new apprenticeship programmes, accepting 233 candidates, of whom 81% are women, mainly from communities close to our operations.

Suppliers

- In 2022, we began applying ESG criteria to evaluate bids for contracts worth over $10 million. These criteria included the contractors' emissions, D&I, local recruitment and governance strategies and practices.
- The number and value of tenders awarded by our Mining division to local suppliers increased by 49% to 7,139 and 10% to $374m respectively as part of our commitment to foster economic development in the regions where we operate.
- We signed Greenhouse Gas Agreements with mining equipment suppliers Komatsu and Caterpillar in a step towards developing zero-emission vehicles and machinery, which currently account for approximately two-thirds of our Scope 1 emissions.
- In December, we launched our Suppliers for a Better Future programme, which sets targets for suppliers on environmental, social and governance (ESG) matters, to be achieved by 2025.

Community

- In March, we launched a new community grievances management system to report concerns, complaints or grievances caused by our operations.
- We dedicated extra resources to measuring the impact of our investments in our areas of influence, as we continue to evaluate our programmes and improve our performance.
- In 2022, we ramped up our En Red (Connected) digital connectivity programme, comprising over 20 initiatives to address the deficit of digital infrastructure and skills in the rural and vulnerable communities near our operations.
- In September, as part of our efforts to combat the acute drought in the Choapa Province, we launched a 30-month project to digitalise and automate the 80 Rural Sanitary Services (SSRs) that provide water to people's homes.

Environment

- In 2022, we updated our Biodiversity Standard as part of the implementation of our Climate Change Strategy, improving its alignment with the position statement from the International Council on Mining and Metals (ICMM) on Mining and Protected Areas.
- We continued to implement the Global Industry Standard on Tailings Management at Los Pelambres and at Centinela and Zaldívar, aiming to finish by the prescribed deadlines of August 2023 and August 2025.
- Los Pelambres is planting some 48,000 native trees and shrubs across 300 hectares at the Quillayes tailings dam. This will help control particulate material events while blending the dam in with its surrounding environment.

Climate change

- We approved new Water and Energy Policies to improve our management of these critical resources in the fight against climate change and aligned our Energy Management System with Chile's new Energy Efficiency Law.
- We completed the conversion of all the electricity supply of our mining sites to renewable contracts, leading to a reduction of 873,695 tCO_2e in our Scope 2 emissions compared to 2021.
- We continued to refine our calculation of Scope 3 emissions with the aim of setting a reduction target in 2023 or as soon as possible thereafter. We also began applying an internal carbon price on tenders for carbon-intensive products and in the evaluation of projects.
- In October, our Transport division signed an agreement to acquire a 100% green hydrogen-fuelled cargo train that should start operating in 2024.
- During 2022, we began work on a decarbonisation plan for all our operations.

DELIVERING SUSTAINABLE ECONOMIC VALUE

At Antofagasta, our purpose 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 our stakeholders, distributing it as wages to employees, purchases of goods and services to suppliers, social investment programmes in communities, taxes to governments, dividends to shareholders and interest payments to lenders.

This direct distribution of economic value generates indirect benefits through spending by employees, suppliers, the government and others, benefitting the country as a whole.

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

In 2022, we directly distributed a total of $7,445 million.

Suppliers

$4,620m

Payments for the purchase of utilities, goods and services

Communities

$57m

Social investment programmes

Lenders

$77m

Interest payments

Shareholders

$1,263m

Dividends

Subsidiaries' non-controlling shareholders

$80m

Dividends

Employees

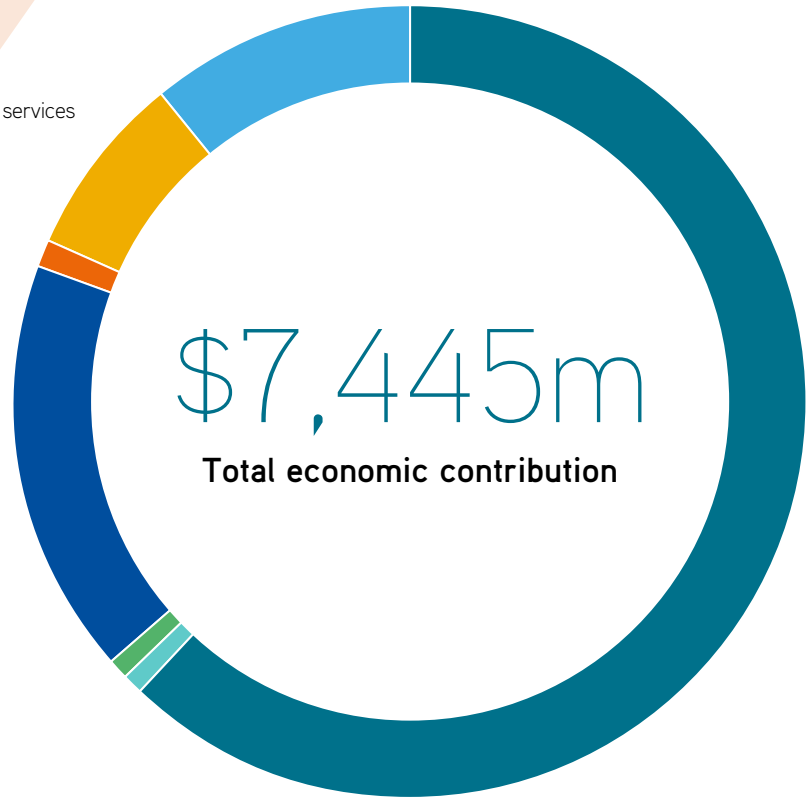
$548m

Salaries, wages and incentives

Governments

$800m

Income taxes, royalties and other payments to governments



We are committed to making a positive long-term impact on society

Sustainability is a core part of our values and is at the heart of our decision-making as we seek to achieve our purpose of developing mining for a better future.

Governance

At Antofagasta, our commitment to making a positive long-term impact on society is underpinned by our values and robust policies, standards and strategies that we constantly review and adapt in order to address emerging and growing societal concerns.

Using this framework, we strive to engage the whole organisation in our commitment to respect human rights, promote safety and health, deliver strong economic returns, protect the environment, address climate change and create social value in the regions where we operate.

Our Sustainability Policy and our Human Rights Policy establish the principles that guide our day-to-day actions on environmental, social and governance (ESG) matters. In 2022, we updated our Human Rights Policy to reinforce our commitment to the rights of indigenous people and to formally align our security practices with the Voluntary Principles on Security and Human Rights (VPSHR). We also prepared a Sustainable Procurement Policy that governs our management and expectations of companies in our supply chain.

We regard climate change as one of the greatest challenges of our times. In 2022, we approved specific Energy and Water Policies to strengthen our Climate Change Strategy across the organisation, while further embedding climate considerations into our working practices. We also updated our Biodiversity Standard.

The Board is responsible for leading and monitoring sustainability practices. The Sustainability and Stakeholder Management Committee makes recommendations to ensure ESG issues are included in the Board's deliberations. At the executive level, sustainability considerations guide decision-making across the organisation, with particular responsibility falling upon the Corporate Affairs and Sustainability area. In 2022, a sustainability reporting team was established to further improve transparency and provide more detail about our interactions with stakeholders.

In July, we published our first special Tax Report detailing our tax payments in 2021, one of a series of recent initiatives to improve transparency about our business. In August, we published an ESG Databook on the Antofagasta plc website for the first time, which shows sustainability data by site and by year since 2018. Towards the end of the year, we began preparing our second special report, this time on climate change and social investment, to be published in April 2023.

We communicate with and train the whole organisation to ensure that everyone is aligned with our commitment to sustainability. Sustainability targets associated with safety, diversity and inclusion (D&I), environment and social performance account for 25% of annual performance bonuses, to encourage internal buy-in and focus our employees' efforts on best practice.

In 2022, our CEO Iván Arriagada was named chair of both Chile's Mining Council and the London-based International Council on Mining and Metals (ICMM), thanks in part to our efforts on sustainability. He is the first Latin American to lead the ICMM, a global association which seeks to improve the industry's sustainable development performance. In addition, he was named as the 2022 recipient of the prestigious Copper Club's Ankh Award for Copper Man of the Year in recognition of his outstanding service to the copper mining industry, leadership, and for promoting the benefits of copper and its critical role in shaping a more sustainable future.

RESPONSIBLE PRODUCTION FRAMEWORK

In recent years, an important focus of our work has been to align our policies, strategies and practices with the highest sustainability standards and to address transparency and trust issues through third-party validations in order to demonstrate that we produce copper responsibly.

In 2021, Centinela and Zaldívar were among the first mining sites in the world to be awarded the Copper Mark, an independent external assurance of mining sites' compliance with strict and internationally recognised standards of sustainable production. In 2022, Antucoya and Los Pelambres completed the same assurance process, also obtaining the Copper Mark. Summaries of the full Copper Mark reports are available on coppermark.org.

The Copper Mark was launched in 2020 and was inspired by the UN's Sustainable Development Goals (SDGs). It 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. Sites must at least partially meet all criteria and commit to closing all identified gaps within 12 months. As participants, we are committed to a third-party review every three years.

As members of the International Council on Mining and Metals, our four mining sites also underwent independent audits on compliance with the ICMM's Performance Expectations. The ICMM has assessed the equivalency of its 38 Performance Expectations against the Copper Mark and the process focused on those not covered (six) or only partially covered (nine) by the Copper Mark. This assurance process ensures that ICMM's 27 member companies are held to the same high standards and will be repeated every three years.

Further information can be found in the Mining division's 2022 Sustainability Report.

Materiality analysis

In 2022, we conducted a materiality assessment to identify the sustainability issues most critical to our business and stakeholders which we update every two years. It was built collaboratively with inputs from internal and external stakeholders. For the first time we used the new Global Reporting Initiative Standard on Material Topics, which came into effect on 1 January 2023.

The analysis has four stages:

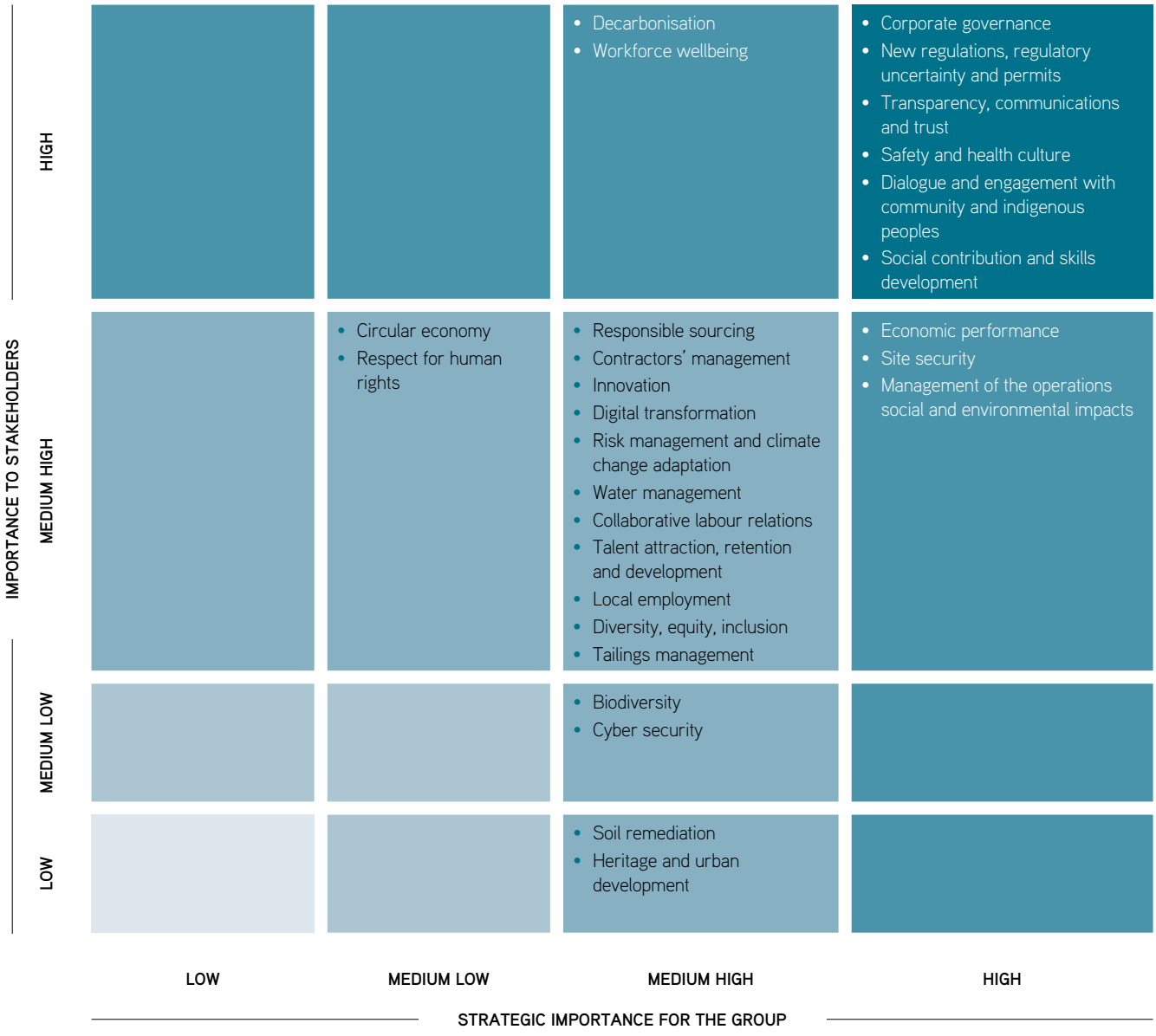
- **Diagnosing the organisation's context:** Comprehensive review of internal and external information, and interviews with senior management and external experts regarding existing, new and emerging ESG topics for the copper mining industry, both in Chile and internationally.
- **Identifying actual and potential material topics:** The information obtained was used to draw up a preliminary long list of actual, potential and positive and negative material topics.
- **Assessing the significance of the impacts:** The qualitative and quantitative impacts of each topic were evaluated based on the severity and likelihood of actual and potential impacts. The severity assessment was based on the scale, scope and remediable nature of the impacts.
- **Prioritising and defining material topics:** The European Financial Reporting Advisory Group's scales were used to define each topic's level of materiality. The most significant impacts were grouped into material topics under the categories economic, governance, environmental and social. Each topic was reviewed and confirmed or adjusted by Antofagasta's sustainability team.

In total, 28 material topics were identified, of which four are new: industrial protection, wellbeing, cyber security and, in the case of our Transport division, soil remediation. The most significant issues in terms of their importance to stakeholders and their potential impact are: corporate governance; regulations and permitting; transparency, communication and trust; safety and health culture; communities and indigenous peoples' engagement; and social contribution and skills development.

The exercise ensures that we report on subjects of interest to stakeholders in our Mining and Transport divisions' Sustainability Reports and will guide our focus, strategies, policies and practices in 2023.

Details of our approach and activities to address these challenges in 2022 are contained in the corresponding sections of this Stakeholder Review or in our 2022 Sustainability Reports.

Antofagasta plc materiality matrix



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. Since 2020, we have required contractor companies to pay their employees an ethical minimum monthly wage. In 2022, it was set at Ch$552,000, 38% higher than Chile's legal minimum wage of Ch$400,000.

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. The aim of our Safety and Health Strategy is to have no fatal accidents or occupational health illnesses. In 2022, we rolled out a Wellbeing Strategy focusing on physical, emotional, financial and social welfare to complement our existing Flexitime and Work-Life Balance Guidelines that aim to enhance employees' work experience and life quality.

QUALITY EDUCATION

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

We support inclusive access to good quality education in order to improve job opportunities in the regions where we operate. Initiatives range from providing school and higher education scholarships to providing and strengthening technical-professional courses. We offer Young Graduate programmes as well as apprenticeships and internships to give learning and work opportunities to local young people.

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. This is reflected in our recruitment and selection strategies, in the promotion of inclusive workspaces and in our zero-tolerance policy on sexual harassment. The proportion of women in our direct workforce has grown steadily, from 8.6% in 2018 to over 20% by the end of 2022.

CLEAN WATER AND SANITATION

Ensure access to water and sanitation for all

Our water management practices, which are aligned with the International Council on Mining and Metals' (ICMM) Water Stewardship Framework, aim to protect water for our operations, communities and the environment. Our strategy aims to reduce our use of continental water. We anticipate that by 2025 raw or desalinated sea water and recirculated water will account for 90% of usage at our mining operations. We also work with local communities to ensure water availability for human consumption and irrigation.

AFFORDABLE AND CLEAN ENERGY

Ensure access to affordable, reliable, sustainable and modern energy

Since April 2022, our four mining operations' electricity comes solely from renewable contracts, in line with our Climate Change Strategy, and we are piloting technology to replace the diesel used in our mining equipment. Our Transport division ordered a green hydrogen fuelled cargo train that will begin operations in 2024. We also funded solar panels for 40 homes in Michilla to provide backup against frequent outages.

DECENT WORK AND ECONOMIC GROWTH

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

We are governed by the UK Modern Slavery Act. Our Code of Ethics, Human Rights Policy and Diversity and Inclusion Strategy aim to ensure a harassment-free, inclusive workplace that respects human rights and diversity. We promote employee development and in 2022 spent $2.3 million on training initiatives. We work with our suppliers to support environmental, social and governance 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, fostered through our Innovaminerals open platform and pitch days for suppliers at our operations. As part of our Digital Transformation programme, we are training employees on digital technology and the use of autonomous equipment and integrated remote operating centres. Our En Red programme aims to bring digital infrastructure and skills to local communities.

REDUCED INEQUALITIES

Reduce inequality within and among countries

We aim to reduce inequality by providing help in the form of scholarships, educational support and access to Young Graduate programmes to promote social mobility in remote and vulnerable sectors in the regions where we operate. In 2022, we provided 951 scholarships to students in the Antofagasta Region and the Choapa Province. We also promote skills development and job opportunities for local people and businesses.

SUSTAINABLE CITIES AND COMMUNITIES

Make cities 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 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 drives the responsible management of the Group's activities. Each of our four mining operations has been awarded the Copper Mark, the copper industry's new responsible production assurance framework, and completed the ICMM's Performance Expectations third-party validation process. Our Suppliers for a Better Future programme aims to improve suppliers' ESG practices through training, targets and incentives in tender evaluations.

CLIMATE ACTION

Take urgent action to combat climate change and its impacts

We recognise climate change as one of the greatest challenges facing the world today and acknowledge that we are part of the solution. As a copper producer we supply an input that is critical for low-carbon technologies. At the same time, we are working to decarbonise our operations. Our Climate Change Strategy sets ambitious goals for emissions and water use, as well as the resilience of our operations and their areas of influence. We are committed to being carbon neutral by 2050 at the latest and this year we achieved our target to cut our Scope 1 and 2 emissions by 30%.

LIFE BELOW WATER

Conserve and sustainably use the oceans, seas and marine resources

Our Biodiversity Standard is aligned with the ICMM's position statement on Mining and Protected Areas. It aims to prevent or minimise our impact on biodiversity, to restore or provide appropriate compensation for any impacts and to generate additional benefits for the areas in which 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. Los Pelambres supports R&D projects to repopulate the area near its marine facilities with sea urchins, abalones, red kingklip and other species.

LIFE ON LAND

Sustainably manage forests, combat desertification, halt and reverse land degradation and halt biodiversity loss

Protecting biodiversity is a key part of our climate change strategy. We seek to promote net gains in biodiversity and for nature-based solutions to capture CO_2 and help the adaptation to physical risks. We implement programmes to protect animal, bird and plant species and we administer near 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

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 our teams with higher exposure to risk on these matters. We also work with suppliers to improve their governance models.

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, benefitting from 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 Health, People, Communities, Suppliers, Climate Change and Environment sections of this Stakeholder review.

We have constructive long-term relationships with all stakeholders

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

OUR PEOPLE

Approximately 31,000 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. Contractors are essential for operational continuity and, through our engagement, we seek to transfer knowledge and ensure compliance with our own standards, particularly on safety and health.

How we engage

We regularly engage 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 to discuss a range of topics, including environmental, social and governance.

See P48-50 for more information

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 and desalination 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 to grow together 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 organisations. Initiatives are selected and designed jointly with the community, using working groups on specific areas of community development or concerns.

See P54-56 for more information

SUPPLIERS

We work with on average over 1,700 suppliers, of which 91% 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 sustainability standards and guidelines. We also work with suppliers to ensure that their solutions are cost-effective and efficient.

How we engage

The procurement team regularly meets with suppliers to discuss upcoming tenders, our sustainability requirements and other matters. 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 several different external platforms. By prioritising local suppliers, we seek to foster the development of neighbouring communities.

See P67-69 for more information

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. In the Strategic Report we outline how we engage with our stakeholders to create value at our operations. Within the Corporate Governance Report we discuss key decisions that the Board has taken in the year, and how stakeholders interests were considered and how we engaged with them.

See P114-115 for more information

CUSTOMERS

We sell principally to industrial customers, 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 cathodes and concentrate on the spot market through traders, with greater uncertainty about pricing and volume.

How we engage

We hold regular meetings with 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 some of our partners and we have a marketing office in Shanghai.

See P70 for more information

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, 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 all treated fairly and receive all relevant information.

How we engage

We regularly meet with institutional investors and brokers' analysts at industry conferences and on roadshows, as well as at one-on-one meetings to discuss both business and ESG matters. 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.

See P71 for more information

GOVERNMENTS AND REGULATORS

Governments and regulators, at national, regional and local levels, draft, implement and uphold legislation, rules and regulations, setting 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 our 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. In Chile, these are clearly defined in Law N° 20.730 on lobbying.

See P72 for more information

Our people

An inclusive culture that fosters wellbeing is key to attracting and retaining a diversity of talent.

The Group's People strategy is built around the four pillars of culture, organisational effectiveness, labour relations and talent management, and is aligned with the charter of values which is central to our organisation. It seeks to promote an inclusive, innovative, motivated and effective workforce with access to meaningful training and career development opportunities.

Wellbeing

At Antofagasta, we believe employee wellbeing is vital to the effectiveness and sustainability of our organisation and improving employees' labour experience is a key focus of our work. In 2021, we implemented our New Ways of Working project, which introduced a permanent hybrid system of remote and in-person working in response to employees' preferences.

During the year, we finished updating our Work-Life Balance Guidelines, tailored for each mining site and designed to improve the balance of employees' time between work, family and recreational activities. The guidelines were launched in 2019 and provide benefits that exceed the requirements of Chilean legislation, such as being able to have a year off work for health or other reasons. Our corporate offices offer employees a flexitime system to fit working hours around their individual needs.

31,126
People

23%
Employees

20%
Women employees

77%
Contractors

77%
Unionised employees

We also rolled out our Wellbeing Strategy, which focuses on our employees' physical, emotional, financial and social welfare. The strategy builds on the tools we developed to help employees deal with increased stress levels during the COVID-19 pandemic lockdowns and it aims to promote healthy habits and closer ties among colleagues and with wider society.

As part of the strategy, we promoted our 24-hour helpline and encouraged in-person meetings and activities, allowing new recruits to meet fellow workers and strengthen interpersonal relations and teamwork. The initiative encourages healthy habits and preventive health checks, and offers financial education to improve employees' understanding of subjects such as health insurance.

The social pillar particularly seeks to foster a collaborative and supportive workplace through the Volunteering Programme, now in its second year. Employees at each mining operation and the corporate offices are encouraged to brainstorm, select and take part in a volunteer project in the local community. A total of 70 employees took part in our first volunteering programme, which ended in April 2022, benefitting 261 people.

Diversity and Inclusion

Our Diversity and Inclusion (D&I) Strategy, launched in 2018, has transitioned from an awareness-raising phase about unconscious bias and discrimination to inclusive practices becoming an integral part of how we work.

In 2022, we renewed our network of more than 80 D&I champions, who act as agents of change to create an inclusive organisational culture that supports the retention of women and people with disabilities or different cultural origins. In a key initiative, we ran a campaign on respectful behaviours and held workshops on respectful environments. Other activities included webinars on Chile's same-sex marriage and gender equality laws and, using a protocol approved in 2021, supporting any employees in the process of gender transition.

Gender balance

In 2022, we increased the proportion of our female employees to 20.4%, compared to 17.2% in 2021, meeting our goal for the year. This continues our steady improvement since 2018, when we set a target to double women's participation by the end of 2022, compared to a baseline of 8.6% in 2017. We met that target a year early in 2021, and have now set a new gender diversity goal for women to represent 30% of employees by 2025. By comparison, women comprise 15.2% of the mining industry workforce in Chile.

Women as a percentage of employees[1]

Year	2018	2019	2020	2021	**2022**
Total number of employees	6,481	6,663	6,760	7,081	**7,494**
Women	8.8%	10.4%	14.7%	17.2%	**20.4%**

1. As at year end

Female representation in management

		Executive Committee		Directly reports to the Executive Committee		Senior Management[1]
Male	9	82%	57	80%	19	86%
Female	2	18%	14	20%	3	14%

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

We use many different ways to attract, select and retain women in the workforce. For example, if a woman is on the shortlist for a position and a male candidate is selected, the decision must be justified. We have strong alliances with universities, aiming to encourage women studying science, technology, engineering and maths (STEM) subjects to join the Group and increase female participation in STEM subjects through our scholarship programmes.

Our apprenticeship programmes provide an important entry route for women from local communities to obtain technical qualifications and, in most cases, lead to a highly prized permanent job. In 2022, our Transport division and mining operations selected 233 new apprentices, of whom 81% were women, mainly from communities close to our operations.

People with disabilities

In 2022, people with disabilities accounted for 1.3% of our employees, above the level required by Chile's Workplace Inclusion Law.

We continued to lead the Mining Council's technical working group on universal access for people with disabilities to mine sites and a regulation on the topic was updated during the year.

Building human capital

At Antofagasta, we seek to develop our employees as well as potential candidates in the local communities where we focus our recruitment efforts. In 2022, 72% of our employees lived in the Antofagasta and Coquimbo Regions where our operations are located.

We invested $2.3 million in training in 2022, providing an average of 45 hours of training per employee.

Leadership skills

We trained shift leaders, providing information and tools to improve their leadership skills, to learn about labour law and to think more flexibly. Their positions are pivotal operational roles, overseeing up to 100 people, and by the end of the year, 65% of them had participated in the programme.

As part of our D&I strategy, a total of 70 women from executive, supervisor and operator positions continued with career development and leadership programmes during the year. In November, we began a new programme to strengthen the leadership skills of 30 deputy managers and superintendents in line with our Leadership Competencies Model.

Digital transformation

More than 40 operators and supervisors were retrained to operate Centinela's Integrated Remote Operations Centre (IROC), which went live in December 2021, and the Los Pelambres IROC, where a small group began working in August 2022. Employees at these mining operations also received training on the use of autonomous equipment such as drill rigs and, in the case of Centinela, a fleet of trucks at the new Esperanza Sur pit.

In 2022, 673 employees took courses on data-based decision-making and basic digital literacy as part of our Digital Academy, which aims to develop the skills necessary for our Digital Transformation programme.

Developing new talent

In 2022, Los Pelambres and Antucoya ran Relevos (Relief Workers) programmes, training local people unable to work full shifts due to family or other reasons to drive mine haulage trucks to cover lunch breaks.

We also run graduate programmes to provide a talent pool for executive positions. In 2022, we expanded the criteria and the number of places to give opportunities to young people in the Choapa Province. Similarly, we offer openings for local technical school pupils and university students to do internships or professional work placements at our operations.

Labour relations

At Antofagasta, we recognise employees' rights to union membership and collective bargaining. In total, 77% of our employees are represented by 16 unions: 11 in the Mining division and five in the Transport division.

In 2022, we successfully negotiated four three-year labour agreements in a climate of respect and without disruptions. Agreements were reached with the supervisors' unions at Los Pelambres and Zaldívar, and the supervisors' and operators' unions at Antucoya.

Chilean legislation protects freedom of association. It also prohibits forced and child labour, sets a minimum wage, limits working hours, and enforces a minimum of 15 days of annual paid leave.

Our employees and contractors can make complaints or raise issues on our confidential Tu Voz (Your Voice) reporting line. The contact details are available on our website as well as directly at the operations. We have reinforced our contractors' awareness of this whistleblowing channel.

In 2022, our Mining division conducted an Engagement and Perception Survey at Los Pelambres, Centinela and Zaldívar to assess employee satisfaction, thus completing a process that started in 2021 at Antucoya and our corporate offices. In total 91% of employees responded, expressing high levels of satisfaction with the organisation's safety and health and D&I strategies. Action plans have been developed to address gaps, such as the need for more collaborative environments.

Contractors

Contractors represent 77% of our workforce and are crucial to operational continuity. In 2022, we required contractors to pay their employees an ethical gross monthly minimum wage, 38% higher than the minimum wage established by Chilean law, and to provide them with health and life insurance. Los Pelambres and Centinela also support the further education of contractor workers' children.

In 2022, the human resources area began an audit of contractors' compliance with minimum and legal labour standards, including meeting Antofagasta's ethical minimum wage. The process will be completed in 2023.

See P67-69 in Suppliers for more information

Safety and occupational health

The safety and health of our employees, contractors and nearby communities are non-negotiable and our number one priority.

35%

fewer High Potential Incidents than in 2021

We continuously seek to improve our performance in this area, with a particular focus on the early identification of risks and the permanent elimination of fatalities and occupational illnesses at all our operations.

Strategy

Our Safety and Occupational Health Strategy is based on four pillars: safety and occupational health risk management; reporting, investigating and learning from our accidents; leadership; and contractor management. The robust management of safety and occupational health underlies all our activities, through which we are committed to continuous improvement, controlling risks and monitoring performance. We seek to be recognised as a leading Company in safety and occupational health whose employees and contractors promote and maintain a safe and healthy work environment.

Safety performance

In 2022, there were no fatalities in the Group.

We continued to reduce the number of High Potential Incidents (HPIs), recording 35% less than in 2021, due to improvements at our Mining and Transport divisions. We focus on HPIs as leading indicators of the effectiveness of safety controls to continuously strengthen critical controls. HPI targets are included as a key performance indicator in employees' Performance Agreements to promote and reinforce a preventive and resilient safety culture.

We seek to keep our Group Lost Time Injury Frequency Rate (LTIFR) below a score of 1. In 2022, the Mining division achieved 0.76, 32% better than 2021, while the overall Group scored 0.84, a 37% improvement. This was due to strengthened Control Strategies for high-risk tasks (see "Critical Controls" section below).

Safety risk management

Critical controls

20 July 2021 marked one year since the death of contractor worker Fernando Silva López at Los Pelambres. As a mark of respect, safety-related reflection breaks were held at all our operations to reinforce the lessons learned.

Following the detailed analysis of that tragic incident, we focused on improving our planning, analysis and supervision of critical tasks. We implemented programmes for supervisors to better understand their roles and responsibilities with regard to planning, shift changes, work crews and their obligation to confirm that tasks are executed according to plan, particularly high-risk and critical ones. We also defined and deployed the task risk analysis system, Planned Task Risk Assessment (PTRA), to plan high-risk and critical tasks. This tool has been design to ensure supervisors and crews are always planning and executing safe working practices of routine and non routine high risk tasks. The PTRA, ensures the key tools and equipment, standard and critical controls are always present and describes the step by step standardised working practice.

The PTRA system emphasises a preventative culture, including operational continuity without fatal accidents, the reduction of occupational illness and the minimising of workers' exposure to high-risk situations. It also emphasises self-care. If at any point workers perceive that adequate working conditions, as outlined in the PTRA, are not being met, they should employ the "Yo Digo No" (I Say No) tool and stop working until the proper conditions can be verified.

There are now 13 critical activities addressed by the PRTA in the Safety and Occupational Health's digital library.

In 2022, the Mining division began to install the latest generation collision avoidance system in its transport equipment, as well as in that of its contractors and subcontractors. Full implementation is expected by the first quarter of 2023, with the system alerting the driver of the vehicle or equipment when it detects imminent danger.

Visible leadership

Leadership is a key driver for improving safety performance and the Executive Committee conducts regular on-site safety and health reviews to engage with employees and contractors. Action plans are followed by every site on each of four key areas: safety culture, safety management systems and processes, available safety tools and contractor management. In 2022, we focused on in-field controls.

Supervision of occupational health is embedded within the operating model and throughout the whole system of controls.

Investigations

Investigation teams independent of the area involved in the incident, often involving representatives from other sites, look into all HPI incidents. Findings are shared across the entire organisation and used to close any identified risk management gaps.

In 2022, we investigated deviations to critical controls and implemented corrective measures, building on previous campaigns to raise awareness on the use of control strategies and understanding of how critical controls are verified. This focus will continue into 2023 to ensure that corrective measures are taken every time a *Yo Digo No* is activated.

Occupational health risk management

Antofagasta is committed to providing a healthy workplace and contributing to the physical and mental wellbeing of everyone who works for us. In 2022, we continued to improve the application of critical controls for health risks and high potential health events and registered an occupational illness frequency rate of 2.09 per million hours worked.

During the pandemic, our efforts to control the spread of COVID-19 allowed us to maintain operational continuity while protecting the health of our workers.

Once COVID was contained, we were able to reassign resources to implement a Surveillance Programme to protect our workforce against other health risks. In cases of early detection of hearing loss, for example, corrective action is taken and the worker is removed from the risk, with job reassignment to prevent further decline. Additionally, as a continuous improvement initiative, we study the origin of the risk and implement mitigation measures to prevent other workers from exposure.

Psychosocial risks

In 2022, we launched our Control Strategy for psychosocial risks, which increased during the COVID-19 pandemic. Thanks to this strategy, we identified five employees with temporary mental health issues and provided treatment for them to prevent the illness from becoming a chronic condition.

We have a confidential 24x7 helpline for employees and contractors seeking help for mental health issues.

Threats to security

In 2022, there were seven cases of copper theft from our Transport division's trains and trucks, three more than in 2021. There has been an increase in the violence used in the robberies, which are now more confrontational, with the use of weapons and threats that put our employees' physical and psychological safety at risk.

As a result, our Transport division has strengthened measures to protect its personnel, equipment and cargo. A senior industrial protection expert has developed a preventative strategy, involving local authorities and the police, to address the new security situation. The division also takes part in a new intersectoral industrial safety working group that has been established to focus on these challenges. It is important to note the role that the government has played in working together with the industry to address this issue.

Contractor management

Our contractors and subcontractors are included in our safety and health performance data and must fully comply with our standards and procedures. In 2022, we placed special emphasis on the effectiveness of our Special Corporate Health and Safety Regulation for Contractor and Subcontractor Companies (RECSS), continuing to embed this updated contractor management manual across the organisation to ensure an adequate understanding of our requirements and supervision of contractor tasks.

Safety Indicators

Number of fatalities

	2022	2021	2020	2019	2018
Chilean mining industry	N/A[4]	N/A[4]	13	14	16
Mining division	**0**	1	0	0	1
Transport division	**0**	0	0	0	0
Group	**0**	1	0	0	1

Lost Time Injury Frequency Rate (LTIFR)[1]

Chilean mining industry	N/A[4]	N/A[4]	1.41	1.54	1.65
Mining division	**0.76**	1.12	0.73	0.75	1.10
Transport division	**2.15**	4.60	2.37	4.03	6.66
Group	**0.84**	1.34	0.86	1.01	1.59

Total Recordable Injury Frequency Rate (TRIFR)[2]

Mining division	**0.37**	0.46	0.55	0.54	
Transport division	**1.00**	1.45	1.51	1.71	
Group	**0.41**	0.52	0.63	0.63	

Occupational Illness Frequency Rate (OIFR)[3]

Mining division	**2.26**	0.18	0.00	0.29	0.39
Transport division	**1.40**	0.00	0.00	1.30	0.34
Group	**2.09**	0.14	0.00	0.52	0.38

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. Amended method of calculation. All prior years adjusted for consistency. Our OIFR increased significantly in 2022 as we identified those whose medical conditions had changed or had developed occupational illnesses during the two years of the pandemic that was not adequately treated.
4. Not available.

Communities

We seek to foster economic and social development in local communities through proactive engagement and investment, and in collaboration with local people, organisations and authorities.

At Antofagasta, we aim to contribute to social value creation in the regions where we operate through education and training initiatives, job creation and social investment that addresses the needs of local communities. A commitment to respect human rights underlines our interactions.

Social management model

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

Impact measurement

In 2022, in partnership with external impact advisers, we dedicated extra resources to measuring the impact of our investments in our areas of influence, as we strive to evaluate our programmes and improve their performance.

$57.4 m

Economic Social Investment in 2022

"We launched a LinkedIn Learning platform to teach digital skills to 60 students, entrepreneurs and suppliers in our areas of influence."

We measured the impact of six programmes, two in the Antofagasta Region and four in the Choapa Province, using the Change Theory and Social Return on Investment (SROI) tools. In addition, we measured the process to initiate the Caimanes Development Fund. All showed a positive SROI, indicating that they create social value.

The Adolfo Ibañez University updated its Territorial Human Wellbeing Matrix, measuring the impact of Los Pelambres' social investment initiatives in the Choapa Province. The study measured 22 indicators, such as access to green areas, sports, education and health services, and found that 75 of the initiatives improved urban and rural living conditions by providing better access to services and reaching more recipients.

In 2023, we expect to complete a study that maps all our social investment projects against the UN Sustainable Development Goals.

For further information, see our 2022 Sustainability Report.

Grievance mechanism

In March, we launched a new community grievance mechanism to report concerns, complaints or grievances caused by our operations in neighbouring communities. Grievances can be expressed confidentially and tracked on the community grievance channel to monitor progress on their resolution. There is a 30-day deadline to answer grievances, except in unusually complex cases.

Indigenous Peoples

In 2022, we updated our Human Rights Policy to strengthen our explicit recognition and commitment to respect indigenous peoples' rights, culture and traditions and we approved an Indigenous Peoples Engagement Standard. Relations with indigenous peoples are aligned with local legislation, ILO Convention 169 and the guidelines of the International Council on Mining and Metals (ICMM).

Social investment

We use a multi-stakeholder, open dialogue engagement 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. Projects and programmes are usually implemented in alliance with third parties, such as organisations and state institutions.

In 2022, following the Somos Choapa model, we increased our social investment budget to cover new agreements with communities in the Choapa Province to address specific operational incidents (see page 58 Environment) and the 2022 Sustainability Report).

	2022
Mining division	**$56.8m**
Transport division	**$0.6m**
Total social investment	**$57.4m**

Digital transformation

In 2022, we ramped up our En Red-Digital Community programme, comprising more than 20 initiatives to address the deficit of digital infrastructure and skills in rural and underprivileged communities near our operations.

One of the year's highlights was the installation of fibre-optic cables to the Caimanes and Limahuida communities in Choapa, allowing over 500 families the opportunity to connect to the internet. Both communities also received digital literacy training from partners in the programme.

In September, in alliance with La Serena University, we launched a 30-month project to digitalise the 80 Rural Sanitary Services (SSRs) that provide water to homes in the Choapa Province. The initiative involves designing a telemetry and big data system to automate and optimise water management, enabling the integrated management of the water basin in this drought-stricken area. The local volunteers who run the SSRs will be trained to use the technology.

Similarly, in October we opened a pharmacy in María Elena in the Antofagasta Region, in alliance with the pharmacy startup Fracción and the municipality. It serves as a distribution centre for the surrounding area and allows locals to buy low-cost medicine in person or online, without travelling long distances to the nearest cities. The aim is to follow up with a telemedicine centre, an initiative we are also developing for Chillepín's primary health centre in Choapa.

En Red is underpinned by a focus on digital literacy and in 2022 we launched a LinkedIn Learning platform to teach digital skills to 60 scholarship students, entrepreneurs and suppliers in our areas of influence. Likewise, 80 small businesses in the tourism sector in Choapa benefited from a pilot programme to use platforms such as booking.com to grow their business.

Combatting drought

In 2022, we stepped up efforts to ensure continuous water availability for human consumption and irrigation in the drought stricken Choapa Province, through our Aproxima and Confluye programmes. Among other measures, we took advantage of heavier than usual snowfall to fund the construction of two artificial ponds to capture snowmelt in the Spring and relined 54.9 km of irrigation canals to reduce water losses (see En Red programme above).

Economic development

Centinela's "new way of operating" plan seeks to reduce contractors' use of mine camps and to house them in the near-by town of Sierra Gorda. This builds on the success of our Safe Return Plan that allowed the town's hospitality sector to reopen after the COVID-19 pandemic. Almost 50 hostels have met the required safety standards, enabling up to 1,000 contractor employees to stay in Sierra Gorda, significantly boosting the local services sector.

160+

young people from Choapa were offered apprenticeships in 2022

In the Choapa Province, we run various programmes to support local entrepreneurs, micro and small businesses, and farmers. Among 2022's highlights was the Integral Support for Agriculture (AIA) programme, which awarded 360 grants to farmers in the Salamanca area to increase yields and improve irrigation. In addition, the Cosecha initiative provided training and funding to boost the competitiveness of 129 small farmers, craftworkers and tourism entrepreneurs in Salamanca and Canela districts.

Cultural heritage

Our Transport division owns some of the city of Antofagasta's most historic buildings and is keen to preserve the city's cultural heritage, support local tourism and improve the city's life quality. In 2022, as part of these efforts, the disused railway station Estación Valdivia was declared a national heritage site and the adjoining railyard a "typical area" by the National Heritage Council and we are working with the council and community on a restoration plan.

We also began planning the conversion of a nine-hectare railyard, the administration offices and the former colonial homes of the division's executives into a heritage neighbourhood area, with green spaces and a pedestrian walkway. The project forms part of a broader plan to vacate all the division's railyards in the city and prepare them for urban development.

Building local skills

We seek to stimulate the generation of economic, social and human capital in the regions where we operate by promoting local employment, supporting local suppliers and offering education and training opportunities. In 2022, 72% of our employees were from the Antofagasta and Coquimbo Regions, where our operations are based.

The apprenticeship programmes offered by our Transport division and four mining operations are a key vehicle for this commitment. In 2022, over 230 young people from these regions, mainly women, were accepted as apprentice engine drivers, maintenance workers and truck drivers, or in plant, tailings and port roles. Most apprentices will be offered permanent jobs at the end of the programme.

Antucoya and Los Pelambres also initiated Relevos (Relief Workers), a programme under which people who live near the operations are trained to drive mine trucks to cover breaks during shifts. It is aimed at people who cannot work a full shift, frequently for family reasons.

In another example, 35 technical secondary school pupils did their internships at Antucoya under the Eleva programme, a public-private partnership that seeks to improve technical training and young people's job prospects.

In the Antofagasta Region, these efforts form part of the Antofagasta Mining Cluster Corporation, a public-private initiative that seeks to stimulate the region's economic development and through which we have committed to building human capital and developing innovative suppliers.

Under this framework, we provided over 800 scholarships for local school and university students in 2022, among other education initiatives.

We also work with local suppliers to enhance their capabilities and opportunities to provide us with goods and services (see page 67-69 Suppliers). Likewise, we encourage national and international suppliers to post jobs on the new regional job portal in order to boost local employment.

In the Choapa Province, we awarded 887 scholarships to young people undertaking technical or university studies in 2022, almost twice as many as those given in 2021. Work also continued with Education 2020, an NGO, to support 18 schools to implement project-based learning techniques, benefitting 192 teachers and 2,158 pupils. We also support the province's five technical-professional schools to strengthen links with local companies and higher education centres.

Los Pelambres' employment programme has trained 2,885 people from Choapa since 2015, mainly in mining trades but also in the services sector and in self-employment. The programme has a jobs' portal for contractor companies to post vacancies and, in 2022, 48% of their employees came from the province.

In 2022, we opened places on our young graduates' programme to university leavers from Choapa Province. Two were accepted onto Antofagasta's corporate programme in December 2022 and eight took on roles at Los Pelambres in January 2023.

Environment

At Antofagasta, we recognise that we have a responsibility towards our stakeholders and the environment in which we operate. We believe it is possible to mine sustainably by prioritising environmental protection and the efficient use of natural resources.

48,000

native trees being planted by Los Pelambres

Our Environmental Management Model covers leadership, operational events reporting, operating risk management and regulatory risk management. It seeks to prevent, control and mitigate the impacts we may have on the environment and, if there is an impact, to compensate for it appropriately. In 2022, we focused on regulatory risk, reviewing environmental requirements and auditing our operations. We report our environmental performance monthly to the Executive Committee and twice a year to the Board's Sustainability and Stakeholder Management Committee.

The Internal Audit area performed environmental audits on all our operations in 2022. These were to verify their state of compliance with environmental requirements and the measures committed to by our operations within the framework of their environmental permits. No significant negative findings were reported.

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 the prevention and mitigation of the project's impact on the environment and any necessary compensation measures. Compliance with commitments is verified by the Superintendency for the Environment (SMA).

Antofagasta has a total of 77 RCAs, which include over 10,000 commitments on matters such as water use, air quality, biodiversity and the projects' construction, operation and closure. In 2022, the Group obtained no new RCAs. The SEA is currently reviewing the Environmental Impact Assessment (EIA) for the second phase of the Los Pelambres Expansion project, which includes doubling the capacity of the desalination plant near Los Vilos to 800 l/s, and the installation of a new concentrate transportation system, which will avoid populated areas.

In 2022, the Transport division received all the permits and completed engineering studies to allow it to remediate 48 hectares of soil in its railyard in the city of Antofagasta. Work is scheduled to start in the second half of 2023 and is an important step in the division's plans to move its operations out of the city centre.

Reporting on operational events with environmental consequences

Operational events with environmental consequences are classified as Actual (high, medium or low) or Potential (high or low) if they could have caused an incident. Actual high or medium severity incidents are investigated by a committee established specifically for this purpose.

Under the criteria established in the environmental assessment of each operation or project, 29 events with no severe environmental consequences were reported to the SMA. Of those events, two were high-profile operational incidents:

- On 31 May, a leak was detected from the Los Pelambres concentrate pipeline in the Llimpo sector in the Salamanca municipal district. A thorough review detected no material environmental impact and the pipeline resumed operations on 26 June after approval from the relevant local regulator.
- On 15 August, unusually high sea swells overturned a construction platform at the marine works of Los Pelambres' desalination plant project, and marine works were temporarily halted pending the recovery of lost equipment and materials from the seabed. Since the event, to date the SMA-accredited laboratory has found no trace of contamination. The marine works resumed on 4 October and are expected to be completed in the first half of 2023.

Responsible production

Sustainability practices at our four mining operations have been assured by the Copper Mark, a global standard which demonstrates that the operation produces copper according to the best international sustainability standards – in 2021 at Centinela and Zaldívar, and in 2022 at Antucoya and Los Pelambres. Under the Copper Mark, operations commit to renew the assurance process every three years.

In 2022, we also submitted updated information to renew our registration with LMEpassport, the sustainability credentials register of the London Metal Exchange (LME), including an executive summary of the Copper Mark, which is recognised by the LME.

As members of the International Council on Mining and Metals (ICMM), our four mining sites underwent independent audits on their compliance with the ICMM's Mining Principles Performance Expectations. The ICMM has assessed the equivalency of its 38 Performance Expectations against the Copper Mark and, therefore, the process focused on those not covered (six) or only partially covered (nine) by the Copper Mark. All our sites complied with the Performance Expectations.

The assurance process ensures that ICMM's 27 member companies are being held to the same high standards and will be repeated every three years.

Tailings

Our mining operations have three main tailings storage facilities (TSFs): Los Pelambres' conventional tailings dams at El Mauro and Los Quillayes (no longer in regular use) and a thickened tailings deposit at Centinela. Zaldívar has a small TSF as it produces a small amount of concentrates.

We have an Independent Tailings Review Board for the three main TSFs and their stability and compliance were once again confirmed under international criteria in 2022.

During 2022, we continued with our implementation of the Global Industry Standard on Tailings Management (GISTM) and are on schedule to complete it at Los Pelambres by August 2023 at Centinela by December 2023 and Zaldívar by August 2025. We are strengthening our governance of TSF management and are also reinforcing our social and environmental controls to comply with the standard's main focus of zero environmental and social damage.

Consistent with the GISTM's focus on transparency, El Mauro continued to serve 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, with an end-goal of applying this monitoring to all TSFs in Chile. The pilot is scheduled for completion in 2023.

We have also improved production rates and compaction of sand in the El Mauro TSF wall. In 2021, rates were approximately 300,000 tonnes per month and, in 2022, this was raised to 450,000 tonnes, further increasing the TSF's stability.

At Centinela's TSF, we began increasing the height of the raise, with completion expected during the first half of 2024. We also improved the stability of the tailings thickening process, where the percentage of solids sent to the TSF remained above 66%. Each percentage point of solids represents a saving of some 30–40 l/s of water.

In 2022, we completed the feasibility studies for an innovative project to store tailings in abandoned mine pits at Centinela, which would complement the operation's thickened tailings deposit. The Declaration of Environmental Impact (DIA) was approved in 2021 and further engineering studies are underway. In-pit storage has safety and environmental advantages compared to conventional TSFs and would extend the life of Centinela's current TSF.

Air quality

All our 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 regularly reported to the regional authorities.

In 2022 there were no incidents of dust visibility or expressions of concern from communities near Los Pelambres regarding dust from the mine itself or the El Mauro TSF. Coupled with more favourable climatic conditions, this was the result of a series of additional voluntary controls implemented at the TSF. These measures have been verified on site by a committee representing the neighbouring Caimanes community.

At the mine, an interdisciplinary working group examined the phenomenon of climate change (including drought and wind pattern intensification) to produce hard data with which to review existing measures and consider others that could be implemented, and to adjust our preventive model accordingly.

At the Quillayes TSF, Los Pelambres is planting 48,000 native trees and shrubs on the 300 hectares site, of which 120 hectares have been planted so far. The vegetation requires little irrigation, easily adapts to extreme environments and serves to control particulate material events while blending the dam with its surroundings.

Biodiversity

Our Sustainability Policy provides the framework to position biodiversity stewardship throughout the mining cycle.

In 2022, we updated our Biodiversity Standard as part of the implementation of our Climate Change Strategy and to improve its alignment with the position statement from the ICMM on Mining and Protected Areas. Under this standard, we seek to promote the generation of net gains in biodiversity. This includes avoiding and minimising our impact on biodiversity and mitigating and compensating for any impact that does occur to ensure a net zero loss of biodiversity.

In addition to managing four nature sanctuaries and other extensive protected areas, our activities encompass protecting species and outreach and research initiatives.

SMART ROAD INITIATIVE

In 2022, Centinela piloted an initiative to reduce dust levels at the Esperanza Sur pit, leading to a 30% reduction in particulate matter emissions and better management of water resources. Levels of particulate matter are monitored online using dust control devices installed on haulage trucks and a centralised system identifies where the most critical areas are and assigns tanker trucks to irrigate them.

Circular economy

We have approved our new Circular Economy Strategy which will be implemented in 2023. The Strategy has three pillars: reduction in the use of resources, expanding the lifecycle of material and equipment, and conversion of waste into new resources. For the Procurement area, this will involve issues such as packaging, pallets and the logistics of goods transportation, as well as the potential reuse of products such as tyres and steel.

Mine closure

As required under Chilean law, all our operations have closure plans approved by the Chilean government's National Geology and Mining Service (SERNAGEOMIN). In addition, we have our own more demanding Integrated Mine Closure Standard. In 2022, we updated this standard to incorporate guidelines from our Biodiversity and Climate Change Standards as well as our Tailings Policy, all of which are aligned with the ICMM's Integrated Mine Closure–Good Practice Guide.

In 2022, SERNAGEOMIN approved Antucoya's five-year update of its closure plan and the update of Centinela's closure plan, which incorporates new facilities installed at the operation.

Climate change

Our Climate Change Strategy sets ambitious goals not only for emissions and water use, but also to build the resilience of our operations and their areas of influence.

As a Group, we recognise climate change as one of the world's greatest challenges and acknowledge that we are 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 is central to our overall Group Strategy. It sets the framework to co-ordinate and realise synergies among the Group's many initiatives to mitigate and adapt to a changing climate, according to its five pillars: development of resilience to climate change, reduction of greenhouse gas 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 Board of Directors has ultimate responsibility for the Group's climate-related objectives and strategy, integrating a deeper awareness of climate change into our decision-making processes. It has recognised climate change as one of the principal risks facing the Group and defined its risk appetite accordingly. 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. A corporate Climate Change Committee, formed in 2021, advises the Environment team and meets fortnightly to review advances and consider issues that may be adopted for future implementation, such as nature-based solutions.

Carbon emissions are linked to a proportion of our executives' long- and short-term performance incentives, as well as to the annual performance incentive for employees (see pages 156 and 158).

In 2019, we committed to implementing the recommendations of the Task Force on Climate-related Financial Disclosures (TCFD), and disclosed against these recommendations for the first time in our 2021 Annual Report.

Our metrics and targets are aligned with the TCFD's seven cross-industry climate-related metric categories, including for GHG emissions and internal carbon prices. We also report in our Climate Scenario Analysis the potential financial impact of the transition and physical risks (see page 66), and our investment related to mitigation and adaptation, which includes the construction of a desalination plant at Los Pelambres.

We are also considering how to reflect the benefits that come from copper's use in applications, such as renewable power and electric vehicles, that make a significant contribution to reducing global GHG emissions, and which are also expected to be reflected in an increase in the copper price. However, the correlation between decarbonisation and the copper price is difficult to model.

Climate change scenario analysis

In 2022, Antofagasta enhanced its understanding of the financial impact of the physical risks of climate change by considering a 'middle of the road' climate change scenario analysis known as SSP2-4.5.[1] This scenario takes advantage of the latest generation climate models (CMIP-6) and is considered an intermediate scenario where emissions peak in around 2040 and then decline, leading to warming by 2100 of 2.5 to 3°C compared to pre-industrial temperatures. This scenario aligns with the path implied by current policies that are in place.

To better understand how physical climate changes could impact our business, we have focused on particular climate change vectors such as higher temperatures, water stress, extreme rainfall events, conditions that generate particulate matter, storm surges and wave events. Each of our operations analysed the potential effect of these factors on their production, cost performance, and the cost of adaptation measures and control options.

To understand the financial impact of transition risks, we continue to use the International Energy Agency's Sustainable Development Scenario (IEA's SDS), an ambitious and widely recognised scenario that provides a global view and context on 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 encourage the low-carbon transition. In alignment with this scenario, we have quantified the financial impact of the introduction of a carbon tax, including an analysis of core measures to decarbonise our mining operations and identifying cost efficient opportunities.

To align the potential impact of both physical and transition risks 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.

Once the risks and opportunities were identified the most material risks and opportunities were screened and quantified at an operational level, their financial impact was estimated using assumptions from these scenarios. 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 66.

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. In 2023 we plan to improve our climate change risk management by determining the levels at which particular climate risks would trigger us taking preventative actions.

1. A Shared Socioeconomic Pathway scenario used by the Intergovernmental Panel on Climate Change (IPCC) in its 2021 Sixth Assessment Report.

Greenhouse gas emissions and climate metrics

At Antofagasta, we recognise our responsibility for upstream and downstream emissions and have proactively adopted measures to mitigate the carbon footprint of our operations. We achieved our first Scope 1 and 2 emissions reduction target set in 2018 two years early in 2020.

In 2021, we set more ambitious targets: to reduce our Scope 1 and 2 emissions by 30% by 2025 compared to the 2020 baseline, equivalent to a reduction of 730,000 tCO_2e, and to achieve carbon neutrality by 2050 or earlier, technology permitting. However, since April 2022 all our electricity contracts have been for renewable energy, reducing our Scope 2 emissions to almost zero and allowing us to achieve our 30% reduction commitment three years earlier than anticipated. During 2023, we will establish a new medium-term emission reduction goal for 2030.

In 2022, we began working on a decarbonisation plan for all our operations, defining the baselines, the truck replacement plan, energy input projections and the assumptions for current and future technologies. The final plan will set out the steps needed to achieve carbon neutrality by 2050.

42%

reduction in Scope 1 and 2 emissions since 2020

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 diesel consumption. We also track and monitor several other environmental indicators, the most important of which is measuring our water withdrawal. This helps us manage water security risks at our operations and in our local communities, and drives us to reduce our reliance on continental sources.

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								
2022	**250,545**	**529,075**	**128,440**	**205,332**	**189**	**1,113,581**	**91,068**	**1,204,649**
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**
Scope 2[3, 4]								
Indirect emissions								
2022	**93,142**	**1,634**	**0**	**0**	**460**	**95,236**	**717**	**95,953**
2021	286,848	556,616	0	124,467	894	968,825	823	**969,648**
2020	334,376	542,020	86,563	120,087	603	1,083,649	858	**1,084,507**
Total emissions (Scope 1 and Scope 2)								
2022	**343,687**	**530,709**	**128,440**	**205,332**	**649**	**1,208,817**	**91,785**	**1,300,602**
2021	513,047	996,100	156,500	290,108	1,018	1,956,773	91,601	**2,048,374**
2020	592,177	1,034,516	238,903	272,664	711	2,138,971	89,794	**2,228,765**
CO2e emissions								
tCO_2e/t[5]								
2022	**1.25**	**2.14**	**1.44**	**2.59**	**–**	**1.75**	**12.91**	**–**
2021	1.58	3.63	1.78	3.69	–	2.56	13.67	**–**
2020	1.65	4.19	1.79	3.44	–	2.79	13.93	**–**

1. 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. All Scope 2 figures have been independently verified.
4. Scope 2 figures for 2020 and 2021 have been restated applying the market-based method of reporting acording to the GHG Protocol. This method reports Scope 2 emissions specific to each individual operation and is considered by the Company to be a more accurate method of reporting. Under the previously used method, average emission factors for the whole of Chile were used. Emissions using both methods of reporting are included in our Sustainability Report.
5. Tonnes of CO_2 equivalent per tonne of copper produced or per tonne transported in the case of the Transport division.

Energy supply

In 2022, we implemented our new Energy Policy, recognising energy as a strategic resource whose management must ensure a safe, economic, efficient and sustainable supply for our operations. We are committed to implementing, maintaining, operating and continuously improving our Energy Management System to incorporate technological innovation and clean energy to reduce GHG emissions. During the year, we completed our alignment of the system, which is based on the ISO 50001:2018 energy management standard, to the requirements of Chile's Energy Efficiency Law.

Our conversion of all electricity supply to our mining sites to renewable contracts was led by Zaldívar in 2020. It was followed by Antucoya and Centinela in January 2022 and Los Pelambres in April 2022, leading to a reduction of 873.695 tCO_2e in our Scope 2 emissions in 2022 compared to 2021.

At the end of 2022 a renewable energy supplier informed Los Pelambres of an issue at its hydroelectric generation facility that would temporarily prevent it from supplying energy from the facility. The supplier is continuing to provide energy from other sources, including third parties, but these may not always be renewable. As a result, Scope 2 emissions from Los Pelambres may increase in 2023.

Mine haulage and transport

In 2022, approximately two-thirds of our Scope 1 emissions were attributable to diesel combustion in our mine haulage trucks. We are positioning ourselves to be early adopters of technology, including electric-powered and hydrogen-fuelled machinery, that will drastically reduce these emissions or possibly eliminate them altogether.

In 2022, Antofagasta participated in pilot projects to develop electric-powered haulage trucks at Antucoya and electric-powered trolleys to assist haulage trucks at Los Pelambres. Pilot tests were also undertaken on electric buses and pickup trucks for the transport of employees at Los Pelambres. In addition, Antofagasta is a sponsor of Charge On, an international open innovation challenge for suppliers to develop solutions to safely, sustainably and quickly recharge battery-powered mining trucks.

As part of Hydra, a consortium that includes French utility Engie and Australian technology think tank Mining 3, we tested a prototype hydrogen fuel cell and battery propulsion system designed to simulate the operation of a hydrogen-fuelled mine haulage truck. The testing took place at Centinela, the first time at a Chilean mine, to see how this fuel would perform at high altitudes and under extreme temperatures. It showed that altitude, low temperatures and low humidity all affect performance and these factors will be considered when developing this technology.

In October 2022, our Transport division agreed to purchase a 100% hydrogen-fuelled cargo train locomotive, the first in Chile. It is expected to start operating in 2024 and, if successful, the division plans to convert its existing fleet to hydrogen.

Scope 3 emissions

Besides our focus on Scope 1 and 2 emissions, we have worked over the last two years to improve our understanding of our Scope 3 emissions. These are indirect emissions related to our activities but generated by upstream (suppliers) and downstream processes that we do not control or own. These represent about 75% of the Group's carbon footprint.

In 2022, we made a preliminary calculation of our 2021 Scope 3 emissions, which indicated that nearly 60% were from purchased goods and services. This calculation is being refined and in 2023 we expect to report our 2022 Scope 3 emissions. We expect to set a reduction target as soon as possible.

An important challenge faced by the mining industry globally is to define a consistent methodology to calculate Scope 3 emissions. In this context, we are working with ICMM member companies to develop a guide to measure and report the industry's Scope 3 emissions with a view to having a common standard to define our own reduction goals.

While all Scope 3 action depends on the combined efforts of producers, suppliers and customers, some commodities face greater technological and collaborative barriers than others. We will work to overcome these barriers, mainly through collaborative partnerships across the value chain.

ESG in the supply chain

Antofagasta requires improved sustainability practices from suppliers as a key part of its purpose to develop mining for a better future. This will gradually bring suppliers into line with our own internal standards on environmental, social and governance (ESG) matters. Our priority is that suppliers reduce their GHG emissions in line with our Climate Change Strategy, but we are also focused on their governance, local hiring and diversity and inclusion practices.

ESG criteria are used to evaluate bids for contracts worth over $10 million, complementing the energy efficiency and safety criteria we already apply. In the environmental area, we also now favour companies with robust emission reduction strategies and targets.

The GHG emission calculations included in bids are checked by applying an internal carbon price, thus assigning a cost to the emissions for the first time. Internally, we use the carbon price in capital allocation decisions and growth project evaluation, as well as incorporating it into our financial planning cycles.

Additionally, as climate-related risks and opportunities have impacted our supply chain and with the increasing severity of sea swells which have delayed the delivery of some critical resources, Antofagasta has decided to strengthen its resilience by increasing its storage capacity and revising some of its supply chain strategies, particularly for diesel and acid.

See P68 in Suppliers for more information

Water management

Water management and efficiency have long been at the forefront of our Mining division's concerns. Three of our four mining operations are located in the Atacama Desert and the fourth, Los Pelambres, is in an area that has been suffering a severe drought for the past 13 years, which, according to various climate scenarios, is expected to continue. Consistent with these concerns, our Climate Change Strategy supports our operations' reduced dependence on continental water sources through improved water use efficiency and the increased use of sea water. With the completion of the Los Pelambres desalination plant in 2023, the proportion of continental water used will decrease even further.

Our total water withdrawal in 2022 was 73 Gigalitres of which 45.4% was sea water. Total water withdrawal increased by 5.4% as precipitation tripled in 2022 from the low levels in 2021, and Centinela Concentrates and Antucoya achieved record annual throughput.

In 2022, we approved a new Water Policy to have a water position statement as a Group and launched a Water Management Standard in August. The Policy recognises water as a strategic resource and as an essential element for life on our planet. We are committed to safeguarding the availability of water resources for our operations, communities and the environment, under practices aligned with the ICMM's Water Management Framework.

We will also progressively reduce water withdrawal, seek multiple alternative sources of supply and implement innovative technological solutions to improve water efficiency and recirculation. These alternatives include Centinela's complete cessation of water extraction from wells in December 2022 and the expected reduction of continental water extraction by 50% when Phase 2 of the desalination plant at Los Pelambres is complete.

45%

of water withdrawals were sea water

Phase 1 (400l/s) of the Los Pelambres desalination plant will be completed in 2023 and an expansion to 800 l/s is expected to be completed in 2026, subject to permitting. This will allow Los Pelambres to stop using water from the Choapa River for operational purposes.

Zaldívar extracts continental water from wells located some 100 km from the mine. These withdrawal permits will expire in 2025, and we are looking to extend them and move to alternative water sources towards the end of the decade as part of the plans to extend the operation's life.

Antofagasta has been a pioneer of the use of sea water in the Chilean mining industry since the 1990s. In 2022, sea water accounted for 45.4% of our Mining division's water withdrawal, led by Antucoya (97%) and Centinela (87%).

In 2022, water reuse rates at our mining operations ranged from 79% at Los Pelambres to 94% at Zaldívar. Our target is for sea water and reused or recycled water to supply more than 90% of the division's operational water withdrawal by 2025.

Operational water[1] withdrawals by source, 2019-22, Mining division

		2022	2021	2020	2019
	Total	**29,350**	26,817	27,847	21,633
	Surface water	**20,093**[2]	15,790	19,481	13,898
	Groundwater	**9,249**	11,018	8,358	7,726
Los Pelambres	Supplied by third parties	**9**	9	9	9
	Total	**30,902**	29,223	27,178	26,369
	Sea water	**26,762**[2]	25,251	23,316	22,602
	Groundwater	**4,140**	3,972	3,862	3,356
Centinela	Supplied by third parties	**–**	–	–	410
	Total	**6,521**	6,315	5,923	5,804
	Sea water	**6,299**[2]	6,081	5,720	5,623
Antucoya	Groundwater	**221**	234	204	181
	Total	**5,993**	6,653	7,015	7,015
Zaldívar	Groundwater	**5,993**	6,653	7,015	7,015
	Total	**72,766**	69,008	67,963	60,821
	Sea water	**33,061**	31,332	29,036	28,225
	Surface water	**20,093**	15,790	19,481	13,898
	Groundwater	**19,603**	21,877	19,438	18,279
	Supplied by third parties	**9**	9	9	419
Mining division	Sea water as a percentage of total	**45%**	45%	43%	46%

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. Water withdrawal increased as precipitation in Los Pelambres tripled in 2022 from the low levels in 2021, and Centinela Concentrates and Antucoya achieved record annual throughput.

Task Force on Climate-related Financial Disclosures (TCFD)

The Group's Task Force on Climate-related Financial Disclosures (TCFD) recommendations are integrated into this report in accordance with the Financial Conduct Authority Listing Rule LR.9.8.6(8). Progress against the recommendations is summarised below, together with an index showing where more detailed disclosures can be found.

We are not yet fully consistent with three areas of the TCFD recommendations, which we will progress during 2023.

- **Strategy, impact on business – Decarbonisation Plan:** We have assessed how our emission reduction plans will achieve our decarbonisation targets and further evaluation is underway on the feasibility and implementation of the planned measures at all our operations. Completion is expected during 2023.
- **Metrics & Targets, climate-related metrics – Climate Metrics & Targets:** Our climate change analysis is helping us to define additional metrics to the ones we already use (mainly to measure and manage emission targets), such as the amount of capital that will be required to mitigate and adapt to climate change. We continue to improve our climate change risk management by determining the levels at which particular climate risks would trigger us taking preventative actions.
- **Metrics & Targets, GHG emissions and related risks – Scope 3:** Over the last two years we have improved our understanding of our Scope 3 emissions and calculated our 2021 Scope 3 emissions in 2022. However, we need to further improve our methodology before we set our Scope 3 reduction targets, which we expect to do and disclose in 2023 or as soon as possible thereafter.

TCFD RECOMMENDATIONS AND PROGRESS IN 2022

GOVERNANCE

Recommendations

- Board oversight
- Management's role

Progress

- Climate change scenario analysis (scenarios SSP2-4.51 for physical risk analysis and IEA's SDS for transition risk analysis) was presented to the Board and incorporated into the annual long-term financial planning process for the first time.
- We have separately reported on Board members' experience relating to climate change issues.
- Since the establishment of the corporate Climate Change Committee in 2021, it has continued to enhance the understanding and appreciation of the importance of our Climate Change Strategy within the organisation and provide advice to our Executive Committee.

STRATEGY

Recommendations

- Identified risks and opportunities
- Impact on business
- Business resilience

Progress

- We reviewed the impact of climate change risks and opportunities as part of our 2022 long-term financial planning process and this allowed us to assess the impact of climate change risks during the life of each mining operation (LOM).
- In 2022 Los Pelambres and Antucoya were awarded the Copper Mark, the copper industry's new responsible production assurance framework, joining Centinela and Zaldívar who were awarded the Mark in 2021.
- Following our evaluation of climate change issues that could affect our supply chain, we have strengthened the resilience of our supply chains for some of our critical resources, such as diesel and acid.
- This year, to improve our understanding of the financial impact of the physical risks of climate change, we analysed a "middle of the road" climate change scenario (SSP2-4.5[1]), rather than the worst case scenario we used in our 2021 analysis (RCP8.5[2]).

1. Shared Socioeconomic Pathway in which CO_2 emissions hover around current levels before starting to fall mid-century, but do not reach net-zero by 2100. Used by the Intergovernmental Panel on Climate Change (IPCC) in its 2021 Sixth Assessment Report.
2. Representative Concentration Pathway 8.5 assumes emissions continue to increase for the rest of the 21st century. Considered as a very unlikely and worst-case scenario.

RISK MANAGEMENT

Recommendations

- Identifying and assessing risks and opportunities
- Managing risks and opportunities
- Integrating climate change into overall risk management

Progress

- The Board has assessed the Company's risk appetite for climate change as medium.
- Control metrics for measuring climate change risks were monitored during the year and the owners of the risks at each operation were identified.
- Climate change physical risks were assessed using the SSP2-4.5 "middle of the road" scenario. The estimated financial impact on operating costs and capital expenditure was calculated for three situations: no mitigation or adaptation; controls already in place; and plans and actions implemented in the future.

METRICS AND TARGETS

Recommendations

- Climate-related metrics
- GHG emissions and related risks
- Targets and performance

Progress

- We continue to use Scope 1 and 2 emissions and emission intensity (tCO_2e/tCu) to monitor our exposure to transition risks.
- In 2022, we calculated our 2021 Scope 3 emissions and are refining our methodology with a view to setting reduction targets in 2023 or as soon as possible thereafter.
- In April 2022, the last of our mining operations started using power solely from renewable sources, reducing our Scope 2 emissions by over 95% since 2021 and achieving our 2025 30%-reduction target three years early.
- From the beginning of the year, we have been using an internal carbon price in the economic evaluation of bids from suppliers for specific goods and services.

TCFD INDEX

The Company has considered the relevant sections of the TCFD all-sector guidance and additional information relating to the required disclosures can be found on the pages indicated in the table below:

Pillar	Disclosure	Page
Governance	Description of the Board's oversight of climate-related risks and opportunities.	107
	Description of management's role in assessing and managing climate-related risks and opportunities.	60
Strategy	Description of the climate-related risks and opportunities the Company has identified over the short, medium and long term.	60 and 66
	Description of the impact of climate-related risks and opportunities on the Company's businesses, strategy and financial planning	58, 60, 62 and 63
	Description of the resilience of the Company's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	66
Risk Management	Description of the Company's processes for identifying and assessing climate-related risks	30
	Description of the Company's processes for managing climate-related risks.	60
	Description of how processes for identifying, assessing and managing climate-related risks are integrated into the Company's overall risk management.	30
Metrics and Targets	Disclosure of the metrics used by the Company to assess climate-related risks and opportunities consistent with its strategy and risk management process.	60 and 65
	Disclosure of Scope 1, Scope 2 and, if appropriate, Scope 3 greenhouse gas (GHG) emissions and the related risks.	61
	Description of the targets used by the Company to manage climate-related risks and opportunities and performance against targets.	61 and 63

RESULTS OF CLIMATE SCENARIO ANALYSIS, EXCLUDING COPPER MARKET BENEFIT

Impact calculated over operations' Life-of-Mines (LOMs)

To improve our understanding of how climate risks may develop and impact our operations, we carried out a new climate scenario analysis exercise in 2022. This also helped us develop our investment plans and enhance our prevention and recovery control measures.

In general, our 2022 analysis showed that the potential exposure of our business under the physical warming scenario decreased compared to the analysis done in 2021. This was mainly due to the change of modelling scenario used, and our improved understanding of the physical impact of climate change on our operations that we learned from the 2021 analysis.

The increased financial impact of transition risk, compared with 2021, is mainly due to the better-quality information used in the 2022 analysis and the longer LOMs incorporated in the modelling. Although the likelihood of value-at-risk is uncertain, the analysis provides a useful reference point against which to assess and prioritise the mitigation and adaptation measures we need to reduce our exposure and strengthen our resilience.

The analysis below does not include an estimate of the potential impact of climate change on copper demand or the copper price, which is expected to be positive but is difficult to quantify.

Transition[1]: IEA's SDS

$1,000 - 1,500m	$1,000 - 1,500m	$50 - 100m	$500 - 100m	Transition risks and opportunities have been identified over the short, medium and long term
Carbon tax	Investment in mitigation	Change in energy costs due to mitigation	Carbon tax avoided by mitigation	

Physical[2]: IPCC's SSP2-4.5

Northern Zone
(Centinela, Antucoya, Zaldívar, FCAB)

Central Zone
(Los Pelambres)

	Northern Zone	Compared with 2021 analysis	Risk timeline	Central Zone	Compared with 2021 analysis	Risk timeline
Decrease and/or loss of water supply	$0 - 50m	=	Medium term	$100 - 200m	=	Short and medium term
Extreme rainfall events	$50-100m	↘	Medium term	$0-50m	↘	Medium term
High and/or sustained temperatures	$0-50m	↘	Medium term	$0 - 50m	↗	Medium and long term
Particulate matter	$50 - 100m	=	Short and medium term	$0 - 50m	↘	Short and medium term
Logistics disruption	$50 - 100m	=	Short and medium term	$0 - 50m	=	Medium and long term

● 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. Examples of adaptation to the short-term impact of physical risks are shown in the section on "Water consumption" (desalination plant), and "ESG in the supply chain" (increase in acid and diesel autonomy).

Suppliers

Responsible supply through the robust oversight of suppliers' ESG practices is vital for the successful management of our long-term relationship.

26%

Increase in purchases from SMEs ($510m)

Suppliers provide a range of goods and services from heavy equipment to catering and are vital to our ability to operate continuously, safely and efficiently. In 2022, our Mining and Transport divisions purchased $4.6 billion of goods and services from 3,982 companies of which 91% were based in Chile. Contractor workers, employed by some of our suppliers, make up 77% of our workforce.

In December 2022, we launched our Suppliers for a Better Future programme, seeking to align contractor companies' practices with our Purpose of developing mining for a better future. The programme provides support and sets targets on local recruitment, hiring women and reducing emissions for suppliers to achieve by 2025. It also aims to strengthen the development of local suppliers and their use of innovation and, in alliance with the Catholic University of the North (UCN), to develop the capabilities of local small and medium-sized companies (SMEs).

Governance

We use a digital sourcing platform (Ariba) for all procurement in order to make acquisition processes traceable, transparent and fair. We require a minimum number of companies to participate in large tenders to ensure a competitive process.

Due diligence is conducted on all potential suppliers prior to awarding a contract. We assess Company ownership, participation of politically exposed persons, antitrust issues, commercial behaviour, legal cases, conflicts of interest, compliance models and procedures for the prevention of slavery and human trafficking. We have in place control and management systems covering the procurement of minerals which we use to manufacture our products, in line with the OECD's due diligence guidance for responsible supply chains for minerals.

Antofagasta's 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 2022, we increased the frequency of financial evaluations and introduced several measures, such as shorter payment times, to address greater insolvency rates among suppliers.

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 anonymous complaints. We have raised awareness of this mechanism in meetings and in written communications with our contractor workers.

For more information, see our Crime Prevention Manual

For more information, see our 2022 UK Modern Slavery Act Statement

Suppliers ESG

In 2022, we began applying additional environmental, social and governance (ESG) criteria to evaluate bids for contracts worth over $10 million, in order to complement the energy efficiency and safety considerations already in place. Extra points are assigned to bids from companies with robust governance, local recruitment, diversity and inclusion, as well as carbon emission reduction strategies and targets. We also started applying an internal carbon price in tenders for specific goods and services, such as explosives, mine haulage trucks and transporting personnel.

Our strategy involves training small and medium-sized (SMEs), local suppliers and service providers in the Antofagasta and Coquimbo Regions on ESG concepts to help them adopt sustainable practices and to meet the ESG goals set in our Suppliers for a Better Future programme. In 2022, we held two training sessions on ESG matters directed at SMEs in the Antofagasta Region and another four aimed at suppliers from other regions. More than 200 national and regional suppliers took part.

As part of our Suppliers for a Better Future programme, we also began working with supply chain sustainability rating consultants EcoVadis, in a trial to determine the ESG ratings of our suppliers. Following the evaluation, a scorecard is prepared that highlights areas for the suppliers to improve and monitor. By the end of the year, around 50 of our largest suppliers, based on spending, were participating and more will be added in 2023.

We continued to address Scope 3 emissions, which are indirect emissions related to our activities caused by upstream (suppliers) or downstream processes that we do not control or own. During the year, we worked on specific supplier categories, such as explosives, grinding balls and linings, to further refine our Scope 3 emissions calculation for 2021. We plan to set a Scope 3 emissions reduction target in 2023 or as soon as possible thereafter, and include reduction targets in contracts for specific categories of suppliers.

We agreed Greenhouse Gas Agreements with mining equipment suppliers Komatsu and Caterpillar to advance the development of zero-emission vehicles and machinery, which currently account for approximately 50% of our Scope 1 emissions.

In addition, we worked on long-term strategies to reduce Scope 3 emissions in nine categories and began collaboration initiatives with 15 suppliers. We also signed agreements to pilot four types of electric battery vehicles in 2023 at our operations (excavators, front-end loaders, dump trucks and pickup trucks).

As a member of the International Council on Mining and Metals (ICMM), we helped design ICMM's Scope 3 self-assessment tool and used it to measure our emissions. It placed us in the top three of the 26 ICMM member companies that undertook the evaluation with regard to the completeness and quality of our measurement of Scope 3 emissions.

For more information, see our 2022 Sustainability Report, our 2022 Climate Change Report and antofagasta.co.uk/suppliers22

Supporting local growth

At Antofagasta, we seek to foster economic development in the Antofagasta and Coquimbo Regions, where our operations are based, through sourcing and promoting local goods and services.

In line with our objectives, the Mining division increased the number of tender invitations to suppliers headquartered in these regions in 2022. In total, the number and value of tenders awarded by our Mining division to local suppliers increased by 49% to 7,139 and 10% to $374m respectively against 2021. On average, these local suppliers were paid within eight days or less. Due to our policy, purchases from SMEs have continued to grow to $510 million and represented 26% of increase compared to 2021.

At the end of 2022, we updated our guidelines on regional procurement and recruitment that seek to promote local purchases by reducing administrative and financial barriers for SMEs in the Antofagasta and Coquimbo Regions. In response to feedback from contractor companies, we changed the guidelines to give more scope to award contracts to local companies even if they do not submit the lowest-priced bid and enable closed tenders for regional suppliers for specific contract categories.

Accessing opportunities

We continued to hold business roundtables to launch and discuss tenders as part of our efforts to help local suppliers access opportunities to bid for contracts. In November, we presented 10 tenders in a meeting with over 150 suppliers in the Antofagasta Region. In December, over 250 suppliers from the Coquimbo Region joined a meeting to discuss upcoming tenders and requirements. We also held in-person forums to get feedback on our tender processes and requirements from suppliers in the Antofagasta Region.

As part of the Suppliers for a better Future programme, Los Pelambres worked with 150 suppliers over the year to improve the ability of local businesses in the Choapa Province to bid in tenders. A key component of the initiative is the one-on-one business coaching provided to participants.

We also have an agreement with the Antofagasta Industrialists' Association (AIA) to use its digital database of certified suppliers (known as SICEP) to publicise upcoming tenders and update our register of potential local suppliers.

PROMOTING INNOVATIVE SUPPLIERS

Our open innovation model encourages partners and potential suppliers to understand the requirements and participate in finding solutions for our main operational challenges.

A key initiative is the Pitch Days our mining operations organise in alliance with Expande, a Fundación Chile initiative that seeks to solve specific mining operation challenges with innovative solutions. In 2022, we hosted 24 Pitch Days, which led to us doing further work with the proposers on 13 of the suggested solutions.

The Group's main operational challenges are also published on our Innovaminerals open platform to capture original ideas from inside and outside the Company.

Fostering local employment

We encourage contractor companies to recruit employees from the Antofagasta and Coquimbo Regions and in 2022 an average of 35% of their employees were from these regions. During the year, we set a target for suppliers to hire 45% of their workforce locally by 2030.

In the Choapa Province, Los Pelambres has an employment programme for contractor companies that includes a skills training programme, a job portal aimed at locals and a KPI for suppliers of labour-intensive services to recruit at least 30% of their employees locally. Since being launched in 2014, the programme has increased the proportion of people from the province hired by contractors from 15% to 48.3% in 2022.

In the Antofagasta Region, we have trialled similar efforts and are encouraging contractors to publish local jobs on the new regional employment portal, rather than bringing in workers from other parts of the country.

We reinforce these efforts by building human capacity in the regions where we operate through scholarships and other local training initiatives.

For more information, see P56 in Communities

ETHICAL MINIMUM WAGE

Since 2020 we have required contractor companies to pay their employees an ethical wage that supports minimum living standards. In 2022, we increased the ethical minimum wage to Ch$552,000, 38% higher than Chile's legal minimum wage of Ch$400,000 at the end of 2022.

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.

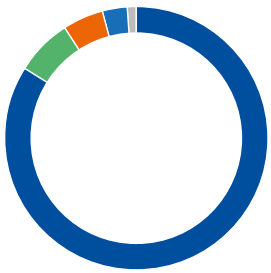
Similarly, our molybdenum contracts are made under medium- and long-term framework agreements, with pricing usually based on Platts' average prices for Technical Molybdenum Oxide with a deduction to reflect the cost of converting molybdenum sulphide concentrate into molybdenum oxide.

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.

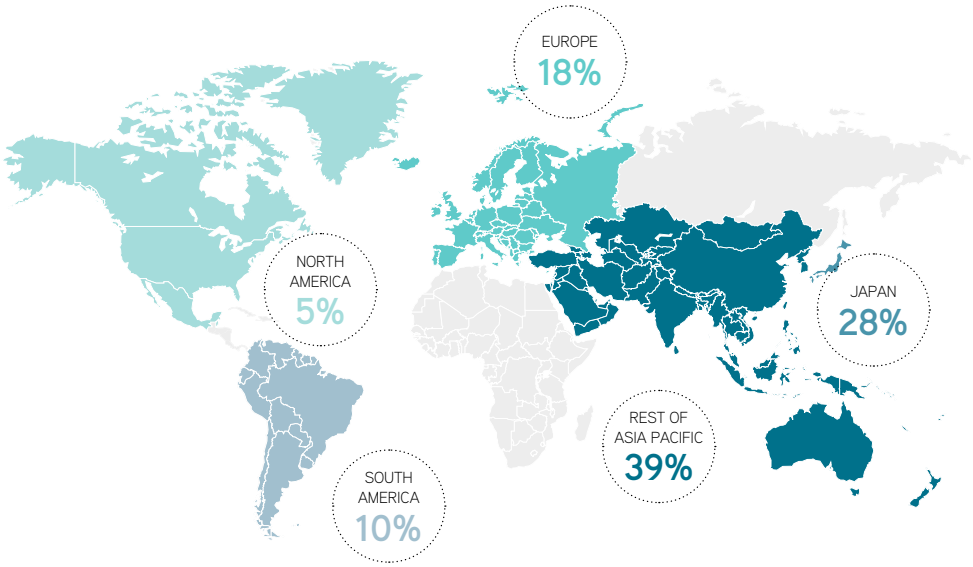
In line with industry practice, our sales agreements generally provide for provisional pricing at the time of shipment, with final pricing based on the average market price in the month in which settlement takes place.

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	84%
Molybdenum	7%
Gold	5%
Transport	3%
Silver	1%



Shareholders

The Company is listed on the main market of the London Stock Exchange and is a constituent of the FTSE100 index. As explained in the Directors' Report on page 168, the controlling shareholders of the Company hold approximately 65% of the Company's total capital. The majority of the Company's ordinary shares not held by the controlling shareholder 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.

As the travel restrictions imposed by the COVID-19 pandemic lifted during 2022, we held an increasing number of in-person meetings with institutional investors and sell-side analysts, including during international investor roadshows, at industry conferences and panel events and with banks' equity sales teams. These were attended by the CEO and/or various members of the senior management team, including the CFO, the Vice President of Corporate Affairs and Sustainability and the Vice President of Strategy and Innovation. We also visited major shareholders and proxy voting agencies as part of a corporate governance roadshow led by our Senior Independent Director and the Chair of our Remuneration and Talent Management Committee.

We publish quarterly production figures as well as half-year and full-year financial results. Copies of our production reports, financial results, presentations and other ad-hoc press releases are available on our website. During 2022 we also published Sustainability Reports for our Mining and Transport divisions, as well as a Tax Report, all of which are available on our website.

What investors focused on most in 2022

- Our ability to achieve our full-year production and cost guidance
- The drought in central Chile and its impact on the Company
- The progress and potential impact of the planned revisions to the Chilean mining royalty and tax legislation and the rewriting of the Chilean constitution
- ESG issues, particularly water availability and emissions, and our response to climate change
- Progress on the Los Pelambres Expansion project, including the Desalination Plant
- Free cash flow generation and capital allocation
- Our capital expenditure programme and the potential of our longer-term growth projects
- Supply and demand factors in the world copper market
- Labour negotiations at our operations

2022 Shareholder engagement calendar

Q1	CEO presented at an industry conference for institutional investors in the US
	In-person and virtual one-on-one and small group meetings with some 100 investors, of which senior management participated in 69%
	Virtual presentation of full-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
	Investor relations team attended two virtual investor conferences
Q2	CEO presented at an industry conference for institutional investors in the US
	Video conference question and answer call open to all investors by the CEO, CFO and Vice President of Corporate Affairs and Sustainability, following the release of the Q1 production report
	Virtual one-on-one and small group meetings with some 125 investors, of which senior management participated in 65%
	Annual General Meeting in London
	Investor relations team attended four virtual investor conferences and two in-person conferences in the US
Q3	Virtual presentation of half-year 2022 results by the CEO, CFO and Vice President of Corporate Affairs and Sustainability, followed by a question and answer session open to all investors
	London (in-person) and Frankfurt (virtual) roadshow
	US East Coast roadshow
	Virtual one-on-one and small group meetings with some 100 investors, of which senior management participated in 63%
	Investor relations team attended two virtual investor conferences
Q4	Video conference question and answer call open to all investors by the CEO and CFO following the release of the Q3 production report
	Virtual one-on-one and small group meetings with some 60 investors, of which senior management participated in 27%
	Corporate Governance roadshow with our Senior Independent Director and Chair of the Remuneration and Talent Management Committee
	Investor relations team attended one investor conference in London

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 2022 totalled $800 million of which over 99% was paid in Chile.

Chilean law allows political donations to be made subject to certain requirements, but Antofagasta made no political donations in 2022. However, we often contribute towards the financing of projects benefitting 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 was conducted through a Constitutional Assembly of 155 members elected in a national vote in May 2021.

The Constitutional Assembly proposed the text of a new constitution, which was rejected in a national referendum in September 2022.

Congress has now adopted a new plan for drafting the constitution which includes specific boundaries for the scope of the drafting process with the election of a Constitutional Council in May 2023 and the appointment of a Committee of Experts. The new constitution will be put to a vote in a national referendum in December 2023.

Proposed mining royalty

The Government presented a revised draft mining royalty bill to Congress in October 2022 which changes the structure and increases the rates compared with the current royalty.

This draft was approved by the Senate Mining and Energy Committee in January 2023 and passed to the Senate Treasury Committee for discussion. The bill will then be debated in the full Senate before being passed to the lower house for its 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	Letter from the Chairman	6	How we engage with our stakeholders	46
	Sustainability Policy	Letter from the CEO	9		
	ICMM Guidelines	Our approach to sustainability	42	Sustainability and Stakeholder Management Committee	137
Safety and health	Safety and Occupational Health Strategy	Safety and Occupational Health Strategy	51	Safety risk management	52
	Special Corporate Safety and Health Regulation for Contractors and Subcontractors (RECCS)	Occupational health risk management	52	Performance	53
	Fatal Risk Standard (ERFT)				
	Occupational Health Standard (ESO)				
Environmental matters	Environmental Management Model	Environmental management	57	Climate change	60
	Integral closure of mining operations standard	Environmental compliance	57	Carbon footprint	61
		Responsible production	58	Energy management	62
	Climate change standard	Circular economy	59	Water management	63
	Water management standard	Biodiversity	59	TCFD	64
	Biodiversity standard	Air quality	59		
	Tailings policy	Mine closure	59		
	Global Industry Standard on Tailings Management				
Our people	People Strategy	Employee wellbeing	48	Labour relations	50
	Diversity and Inclusion Strategy	Inclusive culture	49	Aligning contractors	50
		Building human capital	50		
Social matters	Social Management Model	Social Management Model	54	Open social innovation	55
	Engagement Standard	Addressing social concerns	54	Culture and heritage	56
	Management of initiatives standard	Flagship programmes	55	Local jobs	56, 61
		Impact measurement	55	Engagement mechanisms	56
Suppliers	Code of Ethics	Suppliers	67	Local alliances	69
	Purchase and contracts guidelines	Suppliers ESG	68	Supplier development	69
	Direct award procedure	Local suppliers	69		
	Material management policy				
Human Rights69	Code of Ethics	Modern Slavery Act	36	Respectful, diverse and inclusive work culture	49
	Human Rights Policy				
Anti-corruption and anti-bribery	Code of Ethics	Business integrity and compliance	36	Compliance management	36
	Compliance Model	Code of Ethics	36		
	Anti-Corruption Model				
	Antitrust Protocol				
Description of principal risks and impact on business activity		Risk Management Framework	24		
		Principal risks	26		
Description of the business model		The mining life cycle	16		
Non-financial Key Performance Indicators		2022 highlights	2		
		Key Performance Indicators	22		
		Total economic contribution	41		

Operating and Financial Review

Operating review

Mining division	76
Los Pelambres	78
Centinela	80
Antucoya	82
Zaldívar	83
Transport division	84
Growth projects and opportunities	86
Exploration activities	89
Key costs	90
Operating excellence and innovation	92
Financial review	94

"Our financials remain robust, driven by operational and cost discipline across our assets. However, the continuing drought in Chile and increasing inflation is reflected in our full year financial performance compared to the exceptional 2021."

Mauricio Ortiz
Chief Financial Officer

Mining division

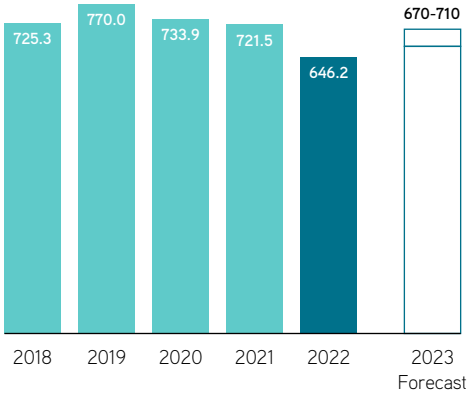
Antofagasta owns and operates four mines. Los Pelambres is located in the Coquimbo Region of central Chile and Centinela, Antucoya and Zaldívar are in the Antofagasta Region of northern Chile.

"Our operational reliability and utilisation rates continue to improve with Centinela and Antucoya reporting record throughput rates for the year."

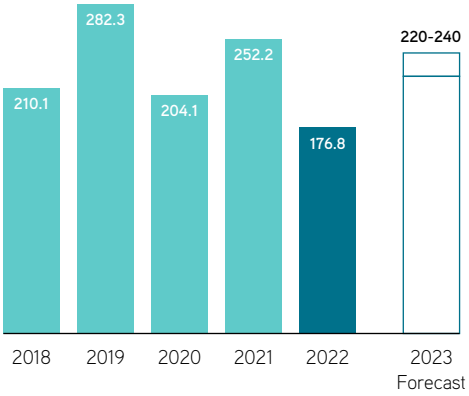
Mauricio Larraín
Vice President of Northern Operations

Production highlights

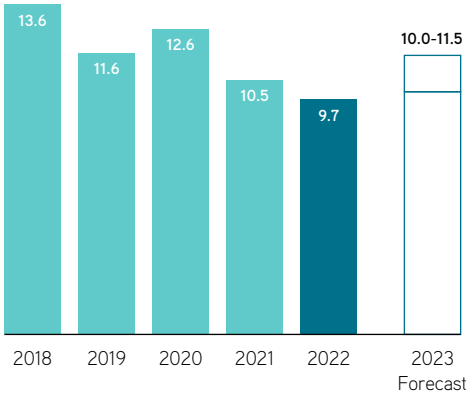
646.2k tonnes
of copper produced



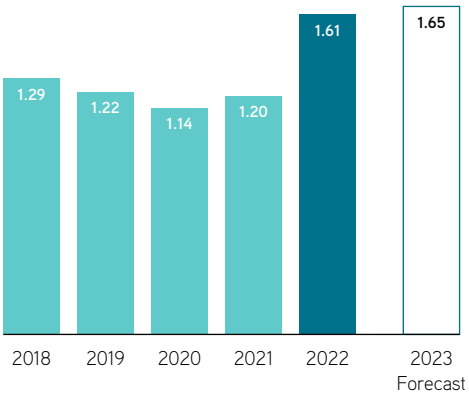
176.8k ounces
of gold produced

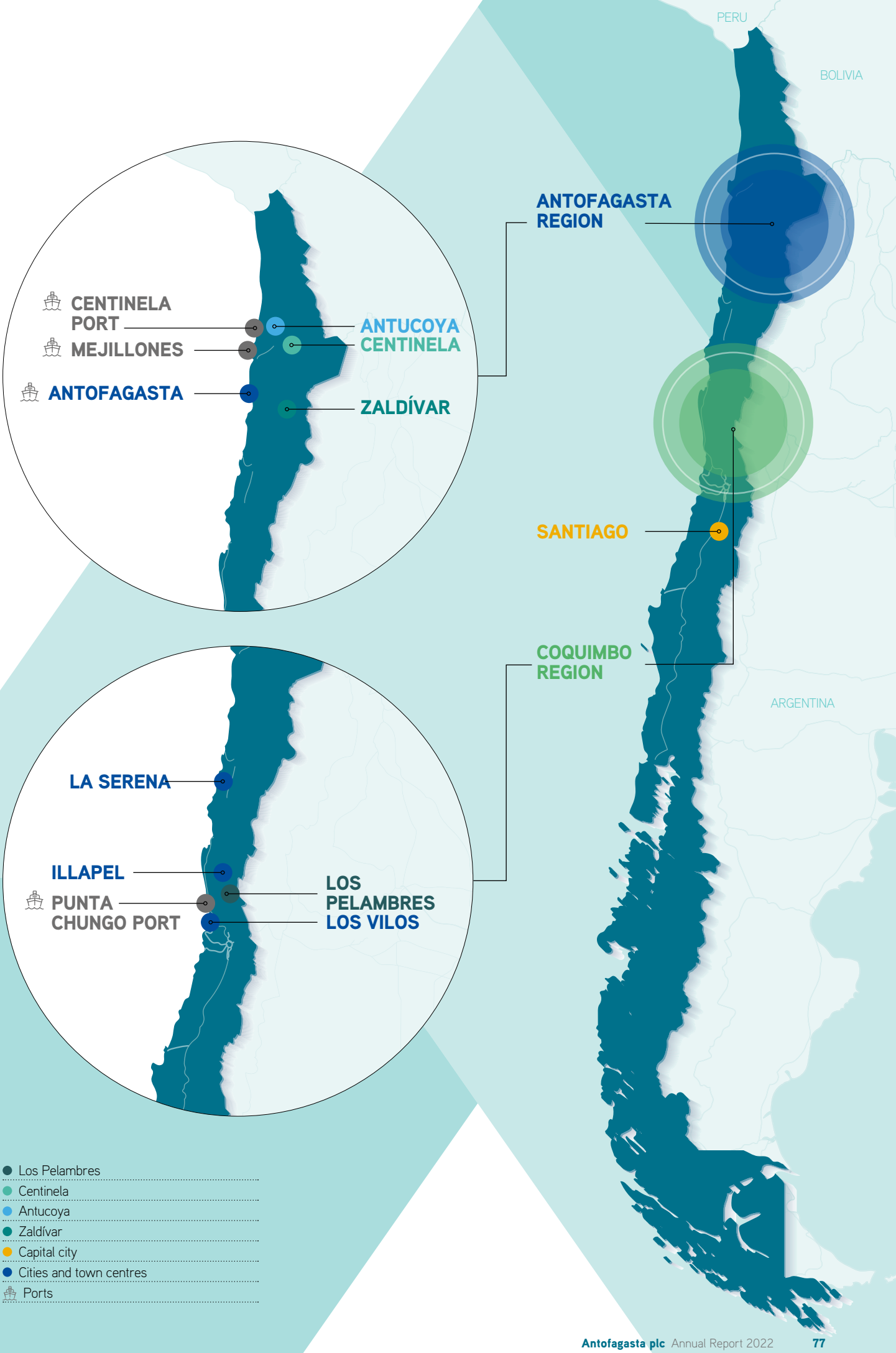


9.7k tonnes
of molybdenum produced



$1.61/lb
Net cash costs



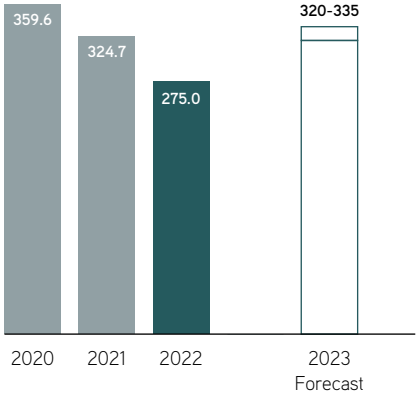

PERU
BOLIVIA
ANTOFAGASTA REGION
CENTINELA PORT
MEJILLONES
ANTOFAGASTA
ANTUCOYA
CENTINELA
ZALDÍVAR
SANTIAGO
COQUIMBO REGION
ARGENTINA
LA SERENA
ILLAPEL
PUNTA CHUNGO PORT
LOS PELAMBRES
LOS VILOS
Los Pelambres
Centinela
Antucoya
Zaldívar
Capital city
Cities and town centres
Ports

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.

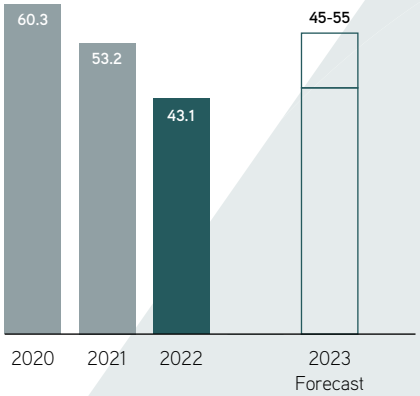
Copper production

275.0k tonnes



Gold production

43.1k ounces



Revenue

$2,559m

-29.3%

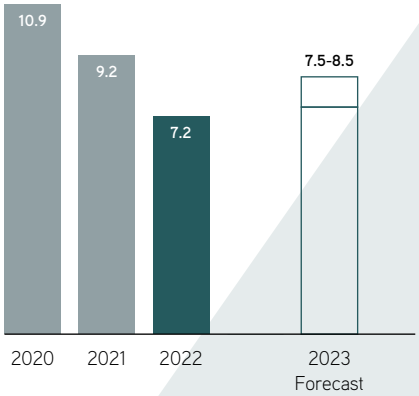
EBITDA

$1,473m

-41.7%

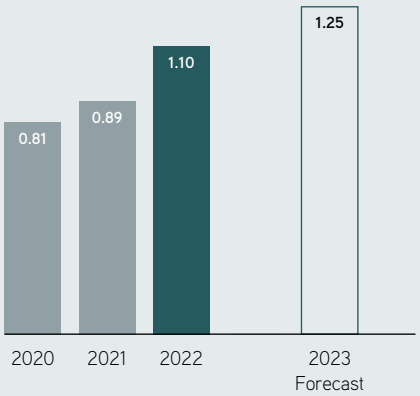
Molybdenum production

7.2k tonnes

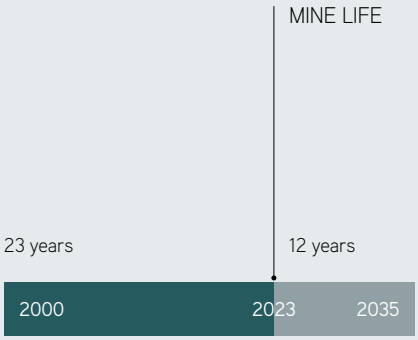


Net cash costs

$1.10/lb



Lifecycle of the mine



2022 Performance

Operating performance

As expected, the prolonged drought at Los Pelambres impacted copper production, which was also affected by the concentrate pipeline incident.

EBITDA was $1,473 million, compared with $2,526 million in 2021, reflecting lower copper realised prices, lower sales volumes and higher operating costs.

Production

Copper production for the year decreased by 15.3% to 275,000 tonnes, to mainly due to the lower throughput due the expected restrictions on water availability during 2022 as a result of the accumulated impact of the long-running drought conditions in the Los Pelambres area, and the pipeline incident. Molybdenum production in 2022 was 7,200 tonnes, 21.7% lower than in 2021 due to a decline in throughput and grades. Gold production was 43,100 ounces, 19.0% lower than the previous year.

Cash costs

Cash costs before by-product credits were $1.84/lb, 15.7% higher than in 2021. This was due to the lower production, higher input prices (mainly diesel, explosives and energy) and general inflation, partially offset by the weaker Chilean peso.

By-product credits increased from $0.70/lb in 2021 to $0.74/lb in 2022 due to higher realised by-product prices despite lower production.

Net cash costs were $1.10/lb, 21c/lb higher than in 2021, reflecting the increase in cash costs before by-product credits, partially offset by higher by-product credits.

Capital expenditure

Capital expenditure during 2022 was $890 million, including $251 million on sustaining capital expenditure and $496 million on growth projects.

As at the end of 2022, the Los Pelambres Desalination Plant and Concentrator Expansion projects, including design, procurement and construction, were 93% complete, and both are due to be in production during the second quarter of 2023.

Outlook for 2023

The forecast production for 2023 is 320–335,000 tonnes of copper, 7.5–8,500 tonnes of molybdenum and 45–55,000 ounces of gold. Higher production is due to higher throughput, as the desalination and concentrator expansion are expected to be in production by the end of Q2 2023.

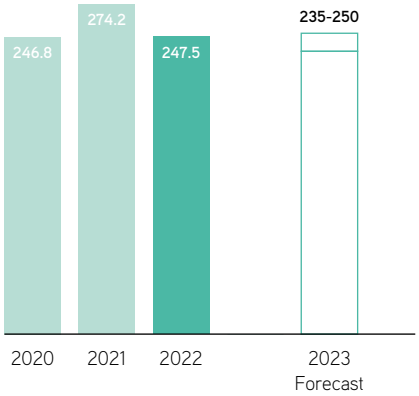
Cash costs before by-product credits are forecast to be approximately $1.85/lb and net cash costs $1.25/lb, reflecting higher production and decreased input costs, offset by inflation and a stronger Chilean peso.

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.

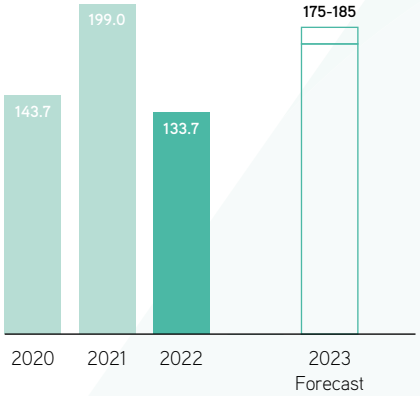
Copper production

247.5k tonnes



Gold production

133.7k ounces



Revenue

$2,406m

-19.3%

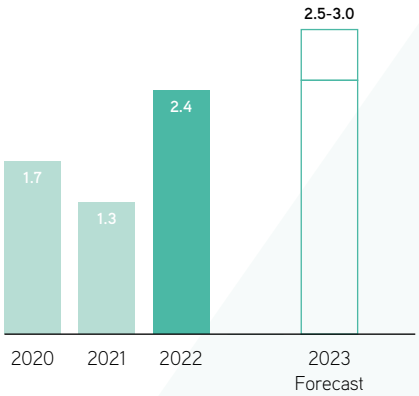
EBITDA

$1,157m

-39.7%

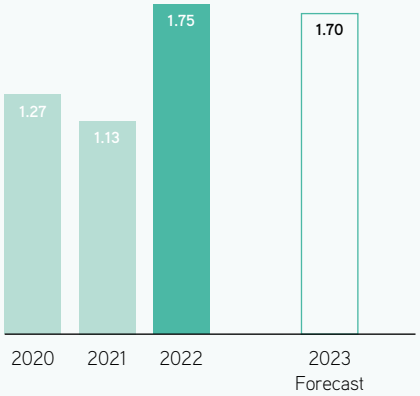
Molybdenum production

2.4k tonnes

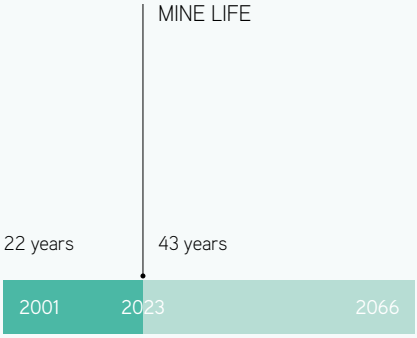


Net cash costs

$1.75/lb



Lifecycle of the mine



2022 Performance

Operating performance

Centinela Concentrates' grades declined in 2022. However, operational reliability continued to improve and throughput averaged above design capacity for the year as a whole.

EBITDA at Centinela was $1,157 million, compared with $1,919 million in 2021, on lower copper and gold sales volumes, lower copper realised prices and higher unit costs.

Production

Copper production was 247,500 tonnes, 9.7% lower than last year due to expected lower ore grades at Centinela Concentrates, partially offset by higher throughput.

Production of copper in concentrate was 149,300 tonnes, 19.5% lower than in 2021, reflecting expected lower ore grades (18.3%), partially offset by throughput above the design capacity of 105,000 tonnes of ore per day. Copper cathode production was 98,200 tonnes, 10.6% higher than in 2021 mainly due to expected higher grades and recoveries, despite lower throughput.

Gold production was 133,700 ounces, 32.8% lower than in 2021, as grades, which are correlated to copper grades, and recoveries decreased. Molybdenum production was 2,400 tonnes on increased grades.

Cash costs

Cash costs before by-product credits in 2022 were $2.44/lb, 30.5% higher than in 2021 due to the impact of lower copper production and higher input costs.

By-product credits were $0.69/lb, 5c/lb lower than in 2021 due to lower gold production partially offset by higher molybdenum production and price.

Net cash costs were $1.75/lb, 62c/lb higher than 2021.

Capital expenditure

Capital expenditure was $857 million, including $431 million on mine development, $252 million of sustaining capital expenditure and $174 million on development capital expenditure.

Outlook for 2023

Production is forecast at 235–250,000 tonnes of copper, 175–185,000 ounces of gold and 2.5–3,000 tonnes of molybdenum. Copper production will decrease compared with 2022 as grades fall at Centinela Cathodes.

Cash costs before by-product credits are forecast to be approximately $2.55/lb and net cash costs $1.70/lb.

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.

Revenue

$704m

+0.8%

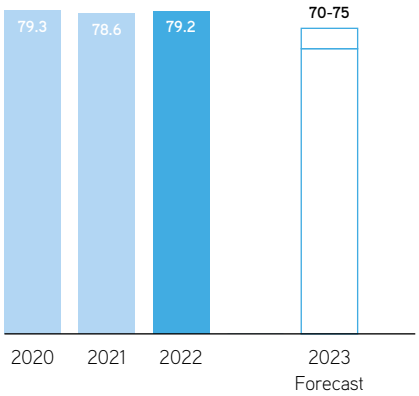
EBITDA

$261m

-22.5%

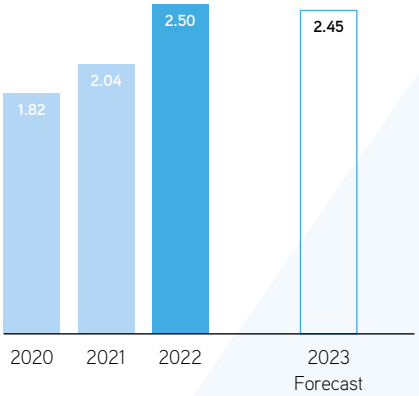
Copper production

79.2k tonnes

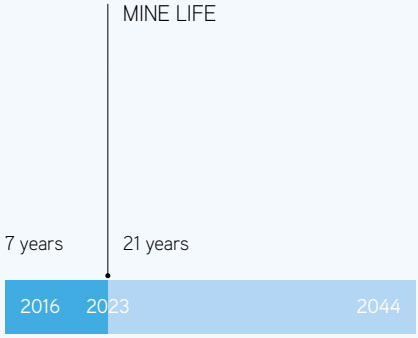


Net cash costs

$2.50/lb



Lifecycle of the mine



2022 Performance

Operating performance

Antucoya continued to improve its operational reliability and consistency during the year with throughput increasing by 4.6% compared with 2021.

EBITDA was $261 million compared with $337 million in 2021, reflecting higher operating costs and the lower realised copper price.

Production

Antucoya produced 79,200 tonnes, 0.8% higher than last year due to higher throughput, which averaged 89,400 tonnes per day for the year, the plant's design capacity.

Cash costs

Cash costs for 2022 were $2.50/lb, 22.5% higher than in 2021 due to increased input costs, particularly for sulphuric acid, diesel and explosives.

Capital expenditure

Capital expenditure was $67 million, including $58 million on sustaining capital expenditure.

Outlook for 2023

Production is forecast to be 70–75,000 tonnes of copper and cash costs are expected to be approximately $2.45/lb.

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.

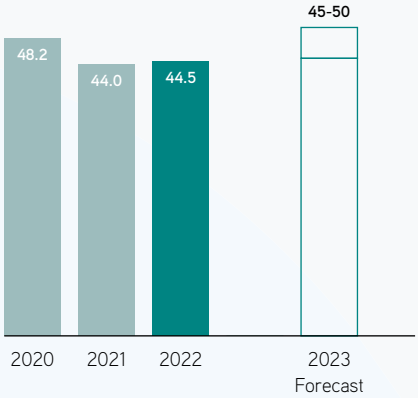
EBITDA

$147m

-14.8%

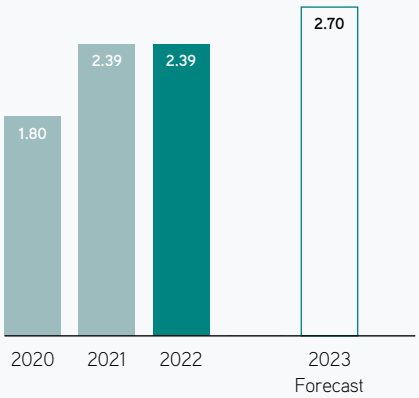
Copper production

44.5k tonnes

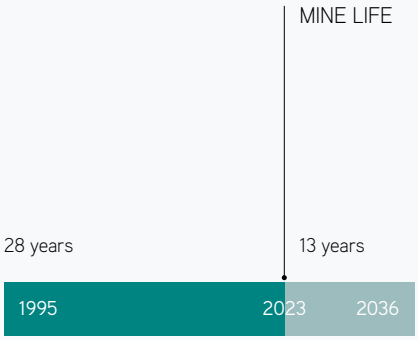


Net cash costs

$2.39/lb



Lifecycle of the mine



2022 Performance

Operating performance

During 2022, Zaldívar completed construction of its Chloride leach project, which is being ramped up in 2023.

Attributable EBITDA was $147 million compared with $173 million in 2021.

Production

Attributable copper production was 44,500 tonnes, 1.1% higher than in 2021 mainly due to higher grades, partially offset by lower throughput.

Cash costs

Cash costs were $2.39/lb, unchanged from the previous year. The long leach cycle of approximately 210 days generates a time lag in costs, so the full effect of higher input prices is not fully reflected.

Capital expenditure

Attributable capital expenditure in 2022 was $55 million, of which $44 million was sustaining capital expenditure.

Outlook for 2023

Attributable copper production is forecast to be 45–50,000 tonnes at a cash cost of approximately $2.70/lb.

Other matters

Zaldívar submitted an Environmental Impact Assessment (EIA) in 2018 which included an application to extend its water extraction and mining permits to 2029 (with decreasing activity levels in 2030-2031). Currently, Zaldívar is permitted to extract water and mine into 2025 and 2024, respectively. Zaldívar continues to work diligently with the authorities and consult with the local indigenous community.

To ensure the continuity of the operation, in March 2023 Zaldívar submitted a DIA (Declaration of Environmental Impact), a more limited scope and simplified procedure than an EIA, requesting that the mining permit be extended from 2024 to 2025 so as to expire at the same date as the current water permit. At the same time Zaldívar withdrew the 2018 EIA application. It is expected that an alternative and updated EIA application to extend the water and mining permits beyond 2025 will be submitted which will also include a plan for a transition from the current continental water source on completion of the extended water permit, to either procuring water from a third party or using raw sea water.

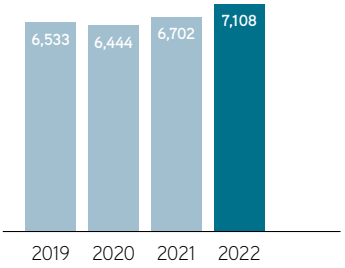
Zaldívar's final pit phase, which represents approximately 20% of current ore reserves, impacts a portion of Minera Escondida's mine property, as well as infrastructure owned by third parties (road, railway, powerline and pipelines). Mining of the final pit phase is subject to agreements or easements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

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.

2022 Tonnage transported

7,108k tonnes



Revenue

$193m

+13.8%

EBITDA

$80m

+17.3%

Customer map

- Road route
- Rail route
- FCAB customers

2022 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 2022 increased by 6.1% to an all-time record 7.1 million tonnes as new transport contracts have ramped up during the year.

EBITDA was $80 million, 17% higher than in 2021, reflecting the higher revenue from increased volumes and better contracted sales prices.

Costs and operating efficiency

The division has implemented several operational efficiency improvements this year with positive results that led to increased volumes and cost optimisation which will ensure its long-term competitiveness. In addition, it continued its Cost and Competitiveness Programme to improve its cost structure, revenue stream and operating standards, achieving benefits of some $9 million during the year.

Sustainability

The maturity of the safety processes applied at the division continued to show improvement, with the division recording its sixth 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.

Also, in line with the Group's Diversity and Inclusion Policy, the number of women and people with disabilities in the division increased to 19.9% and 1.4% of the total workforce respectively.

Outlook for 2023

The division has won or renewed nine contracts in 2022 and will continue with the same focus in 2023. Over the coming years, the division has a portfolio of projects that will allow it to increase its bulk materials transport volumes, mainly for the copper and lithium industries.

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. Remediation work will start in 2023.

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.

The Zaldívar Chloride Leach project was completed on time and on budget early in the year, pre-stripping of the Esperanza Sur pit was completed in July, the Los Pelambres desalination plant started its pre-commissioning in November and the concentrator expansion at Los Pelambres will be completed by the end of March 2023.

Los Pelambres Expansion

This expansion project is divided into two phases. Phase 1 is expected to be in production in the second quarter of 2023 and Phase 2 by the end of 2025.

Phase 1

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

As mining progresses at Los Pelambres, ore hardness will increase. The expansion is designed to compensate for this, increasing plant throughput from its current capacity of 175,000 tonnes of ore per day to an average of 190,000 tonnes of ore per day. The expansion is divided into two sub-projects, the construction of a desalination plant and water pipeline from the coast to the El Mauro tailings storage facility, and the expansion of the concentrator plant, which includes the installation of an additional SAG mill and ball mill, and six additional flotation cells.

Annual copper production will be increased 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 per year for the rest of the period as the hardness of the ore increases and the benefit of the higher milling capacity is fully realised.

In 2020, the decision was made to change the scope of the project and double the planned capacity of the desalination plant from 400 l/s to 800 l/s. However, the additional work on this expansion that can be carried out during Phase 1 is limited by what is allowed under the permits that have already been issued so the remaining work will be treated as a separate project subject to the receipt of the necessary permits. The cost of the additional work is included in the Phase 1 capital cost.

By the end of 2022, the desalination plant and the water pipeline were 95.7% complete and commissioning was under way, with production expected in the second quarter of 2023. At the concentrator plant expansion site, progress was 91.0% with production also expected in the second quarter of 2023.

A detailed review of the project schedule and costs in early 2022 resulted in the capital cost estimate for Phase 1 being increased to $2.2 billion (from $1.7 billion). Of this increase, approximately $220 million was related to the impact of COVID-19 on costs and the construction schedule, and $170 million was related to general inflation, including increased input prices, wages, labour incentives and logistics costs, with the balance reflecting other adjustments to implementation plans and an updated contingency provision.

Phase 2 – Future expansion

Following the decision in 2020 to increase the size of the desalination plant, Phase 2 of the expansion now requires two separate Environmental Impact Assessment (EIA) applications; one for the expansion of the desalination plant and one for the extension of the mine life of Los Pelambres through an increase in the size of the El Mauro tailings storage facility. The latter EIA will also provide the option to further increase the throughput capacity of the concentrator plant.

Desalination plant expansion

This project will protect Los Pelambres from the future impact of climate change and the deteriorating availability of water in the region. The project cost will be reported as part of the Group's sustaining capital expenditure.

The project includes 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. In 2021 Los Pelambres submitted the EIA required for this project, which includes the desalination plant expansion and two other sustaining capital infrastructure projects, the replacement of the concentrate pipeline and the construction of certain planned enclosures at the El Mauro tailings storage facility. EIA approval is expected in time for the project to be completed in 2025/26, by which time over 95% of Los Pelambres's water needs will be fulfilled by desalinated or recirculated water.

Mine life extension

The current mine life of Los Pelambres is 12 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 and the mine waste storage. This will extend the mine's life by a minimum of 15 years, accessing a larger portion of Los Pelambres's six billion tonnes of mineral resources. The EIA will also provide for the option to increase throughput to 205,000 tonnes of ore per day, increasing copper production by 35,000 tonnes per year.

The capital expenditure to extend the mine life was estimated at approximately $500 million in a 2014 pre-feasibility study, with most of the expenditure on mining equipment and increasing the capacity of the concentrator and the El Mauro tailings facility. Key studies on tailings and waste storage capacity have advanced and community consultation is under way. The environmental and social studies are being prepared and should be submitted to the authorities during 2023/24 as part of the EIA application.

Zaldívar Chloride Leach

This project is expected to increase copper recoveries by approximately 10 percentage points, with further upside in recoveries 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.

The project was completed in early 2022 at a total capital cost of $190 million. The project included an upgrade of the Solvent Extraction (SX) plant, new reagents facilities and the construction of additional washing ponds for controlling the chlorine levels. Ramp-up is currently underway to achieve the full improvement in recoveries and will extend into 2023.

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

Esperanza Sur pit

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

Pre-stripping by a contractor was completed in July and Centinela has taken over the operation of the pit using a fleet of 11 autonomous trucks, the first to be used by the Group. Ore from the pit is now being processed at the Centinela concentrator.

The opening of the Esperanza Sur pit improves Centinela's flexibility in supplying its concentrator and, 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 with production levels if the material was supplied solely from 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.

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. The EIA for both phases was approved in 2016. Detailed engineering plans and costings have recently been updated for Phase 1 of the project and key contracts finalised, subject to Board approval of the project. The capacity of the new concentrator will be 95,000 tonnes of ore per day, producing on average approximately 170,000 tonnes of copper equivalent (copper, gold and molybdenum) a year over the first ten years of operation. This will move Centinela into the first cost quartile of global producers.

The Phase 1 capital cost is estimated at $3.7 billion, including the cost of the new water supply system. The increase on the previously quoted 2015 pre-feasibility estimate of $2.7 billion reflects inflation, design improvements, heightened environmental and other regulatory requirements, and the results of advanced engineering and a more detailed execution plan. The estimate includes a concentrator plant, capitalised stripping, mining equipment, a new tailings storage facility, a water pipeline and other infrastructure, pre-commercial production operating costs, and owner's and other costs.

The decision by the Board on whether to proceed with the project is expected in 2023, with timing dependent on the outcome of ongoing discussions on the tax reform and mining royalty bills and the rewriting of Chile's constitution. Work on Phase 2 would only start once construction of Phase 1 is completed and it is operating successfully.

The second concentrator and its potential further expansion to 150,000 tonnes of ore per day will source ore initially from the recently opened Esperanza Sur pit and later from the Encuentro pit. The sulphide ore in the Encuentro pit lies under the Encuentro Oxides reserves, which are expected to be depleted by 2026. These expansions will further progress maximising the potential of Centinela's large mineral resource base.

During 2022, the Company continued the tender process inviting third parties to provide water for Centinela's current and future operations by acquiring the existing water supply system and building the new water pipeline. This process is expected to be completed in 2023. The outsourcing of the water supply will only proceed if it improves the net present value of the project.

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 and PGM deposits in north-eastern Minnesota, US. The planned project is over a portion of the total resource and envisages mining and processing 18,000 tonnes of ore per day for 25 years and producing three separate concentrates – copper, nickel/cobalt and PGM.

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

In 2021, the BLM rejected advancing Twin Metals' preference right lease applications (PRLAs) and prospecting permit applications (PPAs).

In early 2022, the Department of Interior (DOI) took an additional action through a legal opinion issued by the Office of the Solicitor (M-Opinion). This action arbitrarily cancelled Twin Metals' federal mining leases 1352 and 1353, citing concerns with the reinstatement and renewal process.

Also in early 2022, the BLM stopped its evaluation of Twin Metals' MPO and an administrative court dismissed Twin Metals' appeal of that decision.

In August 2022, Twin Metals filed a claim in federal court challenging the administrative actions resulting in the rejection of the PRLAs, the cancellation of its federal leases 1352 and 1353, the rejection of its MPO and the dismissal of the administrative appeal of the MPO rejection. Twin Metals considers the actions of the government to be arbitrary and capricious, contrary to the law and in violation of its rights. This action is pending.

In January 2023, the DOI issued an order effectively banning mining in approximately 225,000 acres of the Superior National Forest for 20 years, subject to valid existing rights. This action alone does not prevent Twin Metals from proceeding with the project since it does not affect its pre-existing rights.

Reko Diq project

In 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 ("Barrick"), 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.

In March 2022, the Company reached an agreement in principle with Barrick and the Governments of Pakistan and Balochistan on a framework that provided for the reconstitution of the Reko Diq project, and a pathway for the Company to exit the Reko Diq project.

In December 2022, the parties entered into definitive agreements under which the project was reconstituted under Tethyan and a consortium of Pakistani state-owned enterprises acquired shares in the Tethyan subsidiary which holds the project, and the ICSID award was resolved.

The proceeds from the acquisition of the shares of Tethyan's subsidiary will be held by Tethyan until they are distributed to the Company before the end of 2023. An exceptional gain of $945 million has been recognised in 2022 and is subject to final payment during 2023. For more information please see Note 17 to the financial statements.

Exploration activities

Our aim is at least to replace the mineral resources mined at our operations each year and to ensure Antofagasta's sustainable and long-term growth. In 2022 our mineral resources increased by 1 billion tonnes.

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

After the lifting of restrictions imposed during the COVID-19 pandemic, exploration activities resumed as normal, subject to a few additional control protocols. We remain focused on favourable jurisdictions in the Americas, particularly in 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.

The Global Exploration Management (GEM), team based in Santiago leads all the Group's exploration activities with the local offices in Lima and Toronto reporting to the GEM on progress in Peru and North America, respectively.

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 $10 million compared to 2021, to $113 million.

Chile

Our exploration programmes remain focused on highly prospective areas in northern and central Chile, mainly in metallogenic belts hosting porphyry, manto and IOCG (Iron Oxide Copper Gold) deposit types.

During the year, we did 80,000 metres of drilling, 27% more than in 2021, mainly at our two advanced projects, Cachorro and Encierro.

Cachorro is in the western Atacama Desert in northern Chile, 100 km north-east of the city of Antofagasta and 1,100 km north of Santiago. It reported its maiden inferred resources in 2021 and these were increased by over 70% during 2022 to 242.4 Mt at 1.21% copper (cut-off grade of 0.5% copper), making the project one of the most important manto-type deposits in the northern coastal belt in Chile. It lies between Antucoya and Centinela and may benefit from the use of their facilities.

The Encierro project is in the Chilean High Andes, 100 km east of the city of Vallenar and 600 km north of Santiago. The deposit is a complex Cu-Au-Mo Miocene porphyry copper and we announced its maiden inferred resources of 522 Mt at 0.65% copper, 0.22 g/t gold and 74 ppm molybdenum (cut-off grade of 0.5% copper) in June 2022.

The project is jointly held with Barrick Gold, with Antofagasta the majority shareholder and operator.

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

International

Our international programme has a strong focus on Peru, including the development of a diversified land portfolio with long-term and significant potential in the prospective coastal and Miocene belts. As at the end of the year, permits are being sought to test an exploration target in the country's southern coastal belt.

Exploration efforts in North America remain concentrated on the key copper belts in British Columbia and Arizona/Nevada, with the GEM team seeking joint venture opportunities with companies that have attractive land holdings, local knowledge and resources.

Key costs

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

Contractor services, maintenance and spare parts account for 42% of the Mining division's total production costs, and energy and labour are the largest direct costs, accounting for 11% each. As concentrate producers, Los Pelambres and Centinela require reagents and grinding media. As cathode producers, Centinela, Antucoya and Zaldívar use the SX-EW process and require sulphuric acid. The availability, cost and supply 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.

All of our operations are on the country's main grid, the National Electrical System (SEN), and source 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 of the country. The cost of renewable power is significantly lower than power from conventional sources.

The transition to using solely renewable power, with its lower costs and lower emissions, has been important for both the Company's carbon footprint and its costs. Energy accounted for 11% of our total production costs in 2022.

> "The transition to using solely renewable power has been important for both the Company's carbon footprint and its costs."

Labour

Accessing a diverse and talented workforce is key to our success.

Our employees accounted for 11% of our production costs. Labour agreements are in place with each of the unions at our operations and generally last for a period of three years, at the end of which they are renegotiated.

Our employees' wages are adjusted quarterly for inflation. This means labour costs structurally increase by more than inflation, but we aim to compensate for this with productivity improvements.

Service contracts and key supplies

For key commercial contracts, such as mining equipment, fuels, lubricants, critical spares, tyres, reagents, grinding balls, explosives and mine maintenance, negotiations are managed centrally to generate synergies and economies of scale. The significant savings this achieves 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 minimise the impact on our margins.

We have a challenging optimisation programme at 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.

The successful management of supplier relationships contributes to our long-term success, which is why we hold strategic meetings with our key suppliers to address operational challenges while also taking a long-term view. This allows us to work collaboratively on key challenges such as developing zero-emission trucks and other initiatives linked to our emission reduction commitments.

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, thus ensuring operational continuity and cost containment. As disruption continues due to the war in Ukraine, we have strengthened control of our supply chain by adopting new technologies for the continuous monitoring of our sources of supply.

In 2022, we had around 3,800 different suppliers of goods and services, of which 93% are based in Chile.

Fuel and lubricants

Fuel and lubricants represent approximately 11% of our 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 shipping rates for supplies and products, and the cost of items such as tyres and conveyor belts, which contain oil-based products. In June 2022 the oil price, which is the main input for fuels, increased to levels above $100 per barrel, partly due to supply constraints arising from the war in Ukraine and partly due to the recovery in consumption as COVID-19 restrictions were lifted around the world. Year-on-year, the WTI oil price has increased from an average of $68 per barrel in 2021 to $94 per barrel in 2022. However, prices decreased in the second half of 2022 stabilising at around $80 per barrel by the end of the year.

Explosives

The price of explosives continued the upward trend observed in 2021, in line with the ammonia price which was highly affected by the increase in gas prices and supply constraints related to the war in Ukraine. In 2022 explosives prices increased on average by around 55% compared to the previous year. At Centinela, we increased our use of non-fuel-based explosives in certain areas of the mine to reduce carbon emissions and contain costs.

We are evaluating the feasibility of HyEx, a project to produce green ammonia in northern Chile, led by energy multinational Engie and a Chilean explosives Company.

Grinding balls and mill liners

Steel is used in the grinding balls and mill liners which account for approximately 8% of a concentrator plant's costs and 2% of the Group's production costs. Steel prices showed an upward trend during the first half of 2022 (although averages prices were lower than in 2021) and grinding balls and liner prices also rose during 2022 before weakening towards the end of the year.

Throughout 2022 we have implemented circular economy initiatives focused on steel recycling to mitigate rising costs and reduce carbon emissions.

Sulphuric acid

Sulphuric acid is one of the main inputs for the SX/EW leaching process used to produce copper cathodes and in 2022 it accounted for approximately 9% of the Group's production costs.

Centinela, Antucoya and Zaldívar use a total of approximately 1.5 million tonnes of sulphuric acid per year, mainly contracted under one-year agreements to secure supply.

During 2022, the acid price was about $250 per tonne in Chile, an increase of over two times compared to 2021. The spot price had an upward trend throughout the first half of the year, reaching prices of $280 per tonne. From August 2022 the price weakened, ending the year at around $150 per tonne.

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

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 currency earnings, therefore if the copper price strengthens so does the Chilean peso, and vice-versa, providing a natural hedge for the Company. During 2022 the copper price weakened and the US dollar strengthened, largely explained by increases in interest rates by the Federal Bank in the US in response to high inflation. The Chilean peso weakened 1.3% over the US dollar, closing the year at CLP856/$1, in part explained by the copper price decrease, offset by a better political environment in Chile than the previous year.

Operating excellence and innovation

Innovation is one of our five strategic pillars, designed to create and add value across the Group by enabling the progression 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 business growth and to develop the next generation of mining practices, including game-changing process technology and the reduction of our environmental footprint.

Operating excellence drives our Competitiveness strategic pillar by embedding a continuous improvement culture in the Group to raise the full potential of our assets and our people.

Operating excellence

During 2022, our operating excellence strategy focused on achieving the maximum theoretical capacities of our production processes using our Full Potential 2.0 programme.

Full Potential 2.0 is a methodology that allows the systematic and standardised identification of bottlenecks in our production processes. It seeks to maximise the capture value of our mining operations through an indicator, OEE (Overall Equipment Efficiency), that measures the overall efficiency of equipment and processes. This process has allowed us to identify the main gaps and opportunities for process improvement at our operations, as well as indicating initiatives that are key to creating value. The most important of these are the use of continuous improvement methodologies and advanced analytics to improve data-driven decision-making. To sustain these improvements, we also deploy Lean practices throughout the organisation to ensure that the value of the improvements achieved is locked in.

Data analytics

During 2022, Data & Advanced Analytics focused on three main work areas: growing our Data Governance programme by adding five new Data Domains (corporate areas) and deepening skills in older domains (operations); stabilising and strengthening our Data Platform – data lake – to support current and new analytics use cases; and automating business intelligence (BI) tools, dashboards and reports.

Operational innovation

Our open innovation model is effective in enabling our employees, contractors and external parties such as suppliers to understand our main operational challenges. They can propose their own ideas and solutions through the online collaborative platform Innovaminerals and at supplier Pitch Days. During 2022 we hosted 12 Pitch Days aiming to solve 12 operational challenges in collaboration with our ecosystems.

Cost and Competitiveness Programme

The Cost and Competitiveness Programme (CCP) was introduced in 2014 to capture the gains from initiatives introduced to reduce our cost base and improve our competitiveness.

The programme focuses on five areas designed 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 2022, we achieved benefits of $124 million, equivalent to $7.0c/lb for the year.

The benefits were mainly achieved through higher utilisation of our processing facilities, such as at Centinela where the concentrator operated at 4% above design capacity and at Antucoya, which achieved record throughput for the year. Also, the consumption rates for some key inputs were improved through enhanced operational practices and the use of data analytics. These initiatives were especially beneficial this year, partially offsetting the impact of lower production and increased industry-wide input prices.

For 2023, the target is to achieve at least $60 million of further savings.

New ways to operate

Our digital roadmap comprises transformational strategic programmes that draw on the adoption of new technologies to improve productivity and safety. This helps us maintain or improve our competitive position through continual productivity improvements that both optimise margins and advance our growth projects and innovations portfolio.

Integrated Remote Operations Centre (IROC)

Centinela's Integrated Remote Operations Centre (IROC) in the city of Antofagasta went fully operational during 2022 and Los Pelambres' IROC in Santiago was completed at the end of the year.

These projects allow not only remote operations and improved process control, but better decision-making and greater efficiency and productivity from the mine to the port.

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, three electric and two diesel, which have significantly improved productivity and safety.

Meanwhile, at Centinela's Esperanza Sur pit, we completed the commissioning of our new autonomous fleet, with the 11 autonomous trucks and two autonomous production drills performing as planned.

Next generation in mining technologies

We continue to advance the development and validation of new technologies that could enable new growth and mining practices, through the achievement of better and more sustainable mining as shown by the examples below.

Cuprochlor®-T – our patented primary sulphide leaching technology

The Cuprochlor®-T patent was granted in Chile in 2022 and after the successful completion of the industrial-scale trial at Centinela new tests have been started using primary sulphides from our other operations.

The pre-feasibility study and preparation for a semi-industrial heap at Zaldívar is underway and we expect to complete the study by the end of 2023.

The technology is incorporated as an option in our mine planning for the long-term development of the mineral resources at our operations and we expect its use to be phased in over the coming years.

Green hydrogen

In 2022 the prototype of the Hydra project, installed in the Esperanza pit at Centinela, completed its six-week trial to test the behaviour of hydrogen fuel cells in the demanding environmental conditions of the mine (particularly with regard to altitude and dust). If successful, hydrogen could replace diesel as the fuel for large mining equipment.

AGILE DECISIONS ASSISTANT (ADA)

LOS PELAMBRES

During 2022, Los Pelambres started using an advanced analytics tool that provides situational awareness for integrated operations. Based on real time data architecture, key process indicators (mine to port) are continuously monitored in the IROC, allowing operational constraints to be quickly detected and solved. The tool was developed in-house and we are in process of designing and building an updated version with additional features and an improved user experience.

SMART PLS

CENTINELA

Smart PLS is software that uses Artificial Intelligence algorithms to optimise decision making and operational leach processes in order to maximise copper recoveries. The online platform helps the operating team to use control charts, irrigation simulations and automatic reportability, to track and optimise acid and water consumption, increase productivity and enable intelligent irrigation based on expert judgement. We are currently working on the implementation of this technology at our Tesoro plant.

IMPROVED HEAP LEACH RECOVERY ENABLED BY DATA ANALYSIS

ANTUCOYA

During 2022, multivariable data analysis was developed to identify the key variables and improve recoveries in the heap leach process. This project allowed zones in the heap to be identified that required permeability improvement, increasing ore recovery by over 3%.

SPENT ORE BEHAVIOUR PREDICTOR

ANTUCOYA

During 2022, a machine learning module was developed to predict the behaviour of spent ore and to prevent delays in the mining process by anticipating changes in the fluidity of the spent ore.

HEAP PERFORMANCE OPTIMISATION

ZALDÍVAR

We implemented multivariable data analysis at Zaldívar during 2022, using machine learning algorithms to identify the most important variables that impact recoveries. The analysis showed that, among other variables, the most important variable is the height of the heap which has a significant impact on recoveries given the variability of the ground level below the heap and the difference in height of each strip. This multivariable analysis allows us to identify the heap conditions and optimise recoveries.

CATHODE CLEANING

ZALDÍVAR

The innovation project "Cathode Cleaning with Wax" was implemented during 2022, removing wax in the cathode harvesting process via an innovation where "edge covers" were installed, not only allowing the adequate isolation of the material but also increasing our workers' safety, saving up to 20% of costs and improving the quality of the cathodes.

Robust results in a year of transition

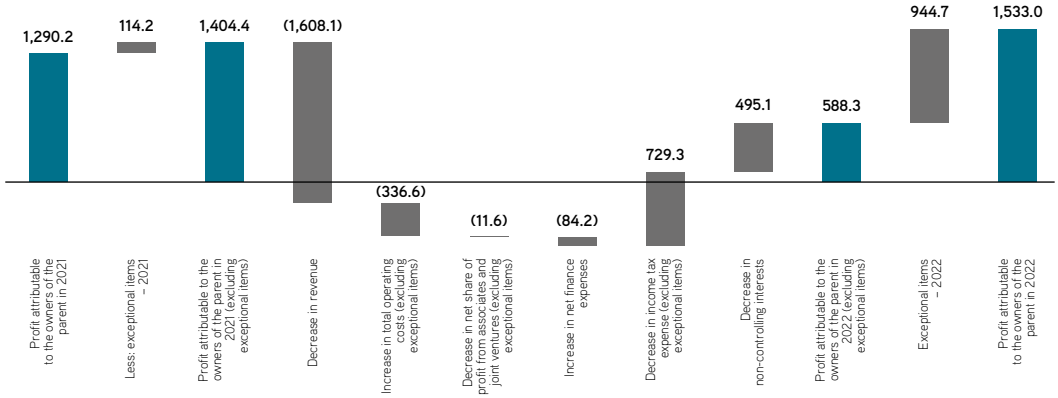
Financial review for the year ended 31 December 2022

	Year ended 31.12.2022			Year ended 31.12.2021		
	Before exceptional items $m	Exceptional items $m	Total $m	Before exceptional items $m	Exceptional Items $m	Total $m
Revenue	5,862.0	–	**5,862.0**	7,470.1	–	7,470.1
EBITDA (including share of EBITDA from associates and joint ventures)	2,929.7	–	**2,929.7**	4,836.2	–	4,836.2
Total operating costs	(4,227.7)	–	**(4,227.7)**	(3,891.1)	(177.6)	(4,068.7)
Operating profit from subsidiaries	1,634.3	–	**1,634.3**	3,579.0	(177.6)	3,401.4
Net share of results from associates and joint ventures	48.1	–	**48.1**	59.7	–	59.7
Gain on disposal of investment in joint venture	–	944.7	**944.7**	–	–	–
Operating profit from subsidiaries, and total profit from associates and joint ventures	1,682.4	944.7	**2,627.1**	3,638.7	(177.6)	3,461.1
Net finance expense	(68.2)	–	**(68.2)**	16.0	–	16.0
Profit before tax	1,614.2	944.7	**2,558.9**	3,654.7	(177.6)	3,477.1
Income tax expense	(603.6)	–	**(603.6)**	(1,332.9)	90.6	(1,242.3)
Profit from continuing operations	1,010.6	944.7	**1,955.3**	2,321.8	(87.0)	2,234.8
Profit for the year	1,010.6	944.7	**1,955.3**	2,321.8	(87.0)	2,234.8
Attributable to:						
Non-controlling interests	422.3	–	**422.3**	917.4	27.2	944.6
Profit/loss attributable to the owners of the parent	588.3	944.7	**1,533.0**	1,404.4	(114.2)	1,290.2

Basic earnings per share	cents	cents	**cents**	cents	cents	**cents**
From continuing operations	59.7	95.8	**155.5**	142.5	(11.6)	130.9

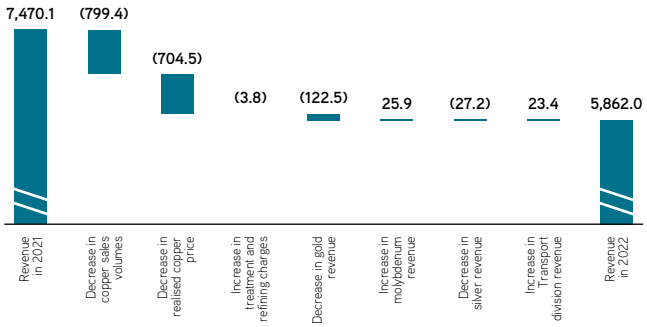
The profit for the financial year attributable to the owners of the parent (including exceptional items) increased from $1,290.2 million in 2021 to $1,533.0 million in the current year. Excluding exceptional items, the profit attributable to the owners of the parent decreased by $816.1 million to $588.3 million.

The full reconciliation between 2021 and 2022, including exceptional items, is as follows:



Revenue

The $1,608.1 million decrease in revenue from $7,470.1 million in 2021 to $5,862.0 million in the current year reflected the following factors:



Revenue from the Mining division

Revenue from the Mining division decreased by $1,631.5 million, or 22%, to $5,668.6 million, compared with $7,300.1 million in 2021. The decrease reflected a $1,507.7 million reduction in copper sales and a $123.8 million decrease in by-product revenue.

Revenue from copper sales

Revenue from copper concentrate and copper cathode sales decreased by $1,507.7 million, or 24%, to $4,905.5 million, compared with $6,413.2 million in 2021. The decrease reflected the impact of $799.4 million from lower sales volumes, $704.5 million from lower realised prices and $3.8 million from higher treatment and refining charges.

(i) Copper volumes

Copper sales volumes reflected within revenue decreased by 12.2% from 681,000 tonnes in 2021 to 598,100 tonnes in 2022, decreasing revenue by $799.4 million. This decrease was due to lower copper sales volumes at Los Pelambres (53,300 tonnes decrease) as a result of its decreased production due to the concentrate pipeline issue and water shortage, and lower sales volumes at Centinela (30,000 tonnes decrease) due to decreased production volumes reflecting expected lower ore grades.

(ii) Realised copper price

The average realised copper price decreased by 12% to $3.84/lb in 2022 (2021 – $4.37/lb), resulting in a $704.5 million decrease in revenue. The decrease in the realised price reflected the lower LME average market price, which fell by 5% to $4.00/lb in 2022 (2021 – $4.23/lb), and a negative provisional pricing adjustment of $169.7 million. The provisional pricing adjustment mainly reflected the decrease in the year-end mark-to-market copper price to $3.80/lb at 31 December 2022, compared with $4.42/lb at 31 December 2021. In addition, during 2022 there was no impact in respect of commodity hedging instruments as no hedges were in place during the year, whereas the prior year revenue included a $126.8 million negative impact in respect of hedging instruments which matured during 2021.

Realised copper prices are determined by comparing revenue (after adding back 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 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.

(iii) Treatment and refining charges

Treatment and refining charges (TC/RCs) for copper concentrate increased by $3.8 million to $155.8 million in 2022, compared with $152.0 million in 2021 reflecting higher average TC/RC rates, offset by the decrease in concentrate sales volumes at Los Pelambres and Centinela.

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" (TC/RC) 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 invoiced amount, which is 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 increase in these charges has had a negative 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 decreased by $123.8 million or 14.0% to $763.1 million in 2022, compared with $886.9 million in 2021.

Revenue from gold sales (net of treatment and refining charges) was $313.9 million (2021 – $436.4 million), a decrease of $122.5 million which reflected a decrease in volumes slightly offset by a higher realised price. Gold sales volumes decreased by 28.6% from 244,700 ounces in 2021 to 174,700 ounces in 2022 as the gold grades, which are often correlated to copper grades, decreased, as did recoveries at Centinela. The realised gold price was $1,801/oz in 2022 compared with $1,788/oz in 2021, reflecting the average market price for 2022 of $1,800/oz (2021 – $1,799/oz) and a positive provisional pricing adjustment of $3.5 million.

Revenue from molybdenum sales (net of roasting charges) was $392.3 million (2021 – $366.4 million), an increase of $25.9 million. The increase was due to the higher realised price of $20.8/lb (2021 – $17.4/lb), partially offset by decreased sales volumes of 9,200 tonnes (2021 – 10,400 tonnes).

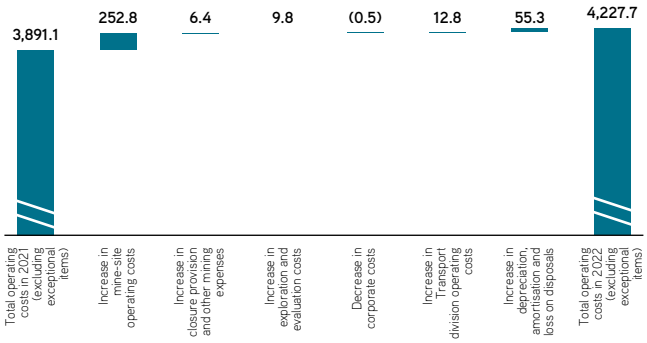
Revenue from silver sales decreased by $27.2 million to $56.9 million (2021 – $84.1 million). The decrease was due to lower sales volumes of 2.7 million ounces (2021 – 3.4 million ounces) and the lower realised silver price of $21.2/oz (2021 – $24.9/oz).

Revenue from the Transport division

Revenue from the Transport division (FCAB) increased by $23.4 million or 13.8% to $193.4 million (2021 – $170.0 million), mainly due to increased volumes and better pricing in some contracts.

Total operating costs (excluding exceptional items)

The $336.6 million increase in total operating costs (excluding exceptional items) from $3,891.1 million in 2021 to $4,227.7 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 $268.5 million to $2,965.4 million in 2022, an increase of 10.0%. Of this increase, $252.8 million was attributable to higher mine-site operating costs. This increase in mine-site costs reflected higher key input prices and general inflation, partly offset by the impact of the decreased sales volumes, the weaker Chilean peso and cost savings from the Group's Cost and Competitiveness Programme.

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 $1.68/lb in 2021 to $2.05/lb in 2022.

The Cost and Competitiveness Programme was implemented to reduce the Group's cost base and improve its competitiveness within the industry. During 2022 the programme achieved benefits of $124.0 million in the Mining division, of which $88.0 million reflected cost savings and $36.0 million reflected the value of productivity improvements. Of the $88.0 million of cost savings, $55.9 million related to Los Pelambres, Centinela and Antucoya, and therefore impacted the Group's operating costs, and $32.1 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 increased by $6.4 million. Exploration and evaluation costs increased by $9.8 million to $113.0 million (2021 – $103.2 million), reflecting increased exploration expenditure principally in respect of the Cachorro and Encierro projects, and also increased expenditure on geotechnical drilling at Los Pelambres, partly offset by lower costs at Twin Metals.

Corporate costs decreased by $0.5 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 $12.8 million to $119.1 million (2021 – $106.3 million), mainly due to an increase in the price of diesel used for locomotives and trucks as well as the impact of the higher inflation rate on labour, material and contractor costs.

Depreciation, amortisation and disposals (excluding impairments)

The expense for depreciation, amortisation and loss on disposals increased by $55.3 million from $1,087.9 million in 2021 to $1,143.2 million. This increase is mainly due to higher amortisation of IFRIC 20 stripping costs at Centinela, offset by the impact of depreciation deferred in inventory, also largely at Centinela.

Operating profit from subsidiaries

As a result of the above factors, operating profit from subsidiaries decreased by $1,935.7 million or 54.1% in 2022 to $1,634.3 million (2021 – $3,579.0 million).

Share of results from associates and joint ventures

The Group's share of results from associates and joint ventures was a profit of $48.1 million in 2022, compared with $59.7 million in 2021.

EBITDA

EBITDA (earnings before interest, tax, depreciation and amortisation, and impairments) decreased by $1,906.5 million or 39.4% to $2,929.7 million (2021 – $4,836.2 million). EBITDA includes the Group's proportional share of EBITDA from associates and joint ventures.

EBITDA from the Mining division decreased by 40.2% from $4,768.0 million in 2021 to $2,849.7 million this year. This reflected the lower revenue and higher mine-site costs explained above, and to a lesser extent a lower EBITDA from associates and joint ventures.

EBITDA at the Transport division increased by $11.8 million to $80.0 million in 2022 (2021 – $68.2 million), reflecting the higher revenue and slightly increased EBITDA from associates and joint ventures, offset by higher operating costs, mainly due to inflation and the increased price of diesel.

Commodity price and exchange rate sensitivities

The following sensitivities show the estimated approximate impact on EBITDA for 2022 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 2022, 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 31.12.22	Impact of a 10% movement in the commodity price/exchange rate on EBITDA for the year ended 31.12.22 $m
Copper price	**$4.00/lb**	566
Molybdenum price	**$18.7/lb**	38
Gold price	**$1,800/oz**	31
US dollar/Chilean peso exchange rate	**872**	153

Net finance (expense)/income

Net finance expense of $68.2 million reflected a variance of $84.2 million compared with the $16.0 million gain in 2021.

	Year ended 31.12.22 $m	Year ended 31.12.21 $m
Interest income	**40.2**	5.0
Interest expense	**(78.6)**	(63.4)
Other finance items	**(29.8)**	74.4
Net finance expense	**(68.2)**	16.0

Interest income increased from $5.0 million in 2021 to $40.2 million in 2022, mainly due to an increase in average interest rates.

Interest expense increased from $63.4 million in 2021 to $78.6 million in 2022, again mainly reflecting an increase in average interest rates, partially offset by the decrease in the average relevant borrowing balances (after taking account of borrowings where the interest is capitalised).

Other finance items were a net loss of $29.8 million, compared with a net gain of $74.4 million in 2021, a variance of $104.2 million. This was largely due to the foreign exchange impact of the retranslation of Chilean peso denominated assets and liabilities, which resulted in a $12.8 million loss in 2022 compared with a $49.7 million gain in 2021. In addition, there was a negative year-on-year variance of $41.7 million related to the discounting of long-term provisions, largely driven by the increase in discount rates in 2021 resulting in a decrease in the provision balances and a corresponding credit recognised in other finance items in the prior year.

Profit before tax

As a result of the factors set out above, profit before tax decreased by 26.4% to $2,558.9 million (2021 – $3,477.1 million).

Income tax expense

The tax charge for 2022 excluding exceptional items decreased by $729.3 million to $603.6 million (2021 – $1,332.9 million) and the effective tax rate for the year was 37.4% (2021 – 36.5%). Including exceptional items, the tax charge for 2022 was $603.6 million and the effective tax rate was 23.6%.

The following table provides a numerical reconciliation between the accounting profit before tax multiplied by the applicable statutory tax rate and the total tax expense (including both current and deferred tax).

	Year ended excluding exceptional items 31.12.2022		**Year ended including exceptional items 31.12.2022**		Year ended excluding exceptional items 31.12.2021		Year ended including exceptional items 31.12.2021	
	$m	**%**	**$m**	**%**	$m	%	$m	%
Profit before tax	**1,614.2**		**2,558.9**		3,654.7		3,477.1	
Profit before tax multiplied by Chilean corporate tax rate of 27%	**(435.9)**	**27.0**	**(691.0)**	**27.0**	(986.8)	27.0	(938.8)	27.0
Mining Tax (royalty)	**(94.5)**	**5.8**	**(94.5)**	**3.7**	(243.8)	6.7	(243.8)	7.0
Deduction of mining royalty as an allowable expense in determination of first category tax	**23.1**	**(1.4)**	**23.1**	**(0.9)**	67.8	(1.9)	67.8	(1.9)
Items not deductible from first category tax	**(33.9)**	**2.1**	**(33.9)**	**1.3**	(31.6)	0.9	(31.6)	0.9
Adjustment in respect of prior years	**(2.6)**	**0.1**	**(2.6)**	**0.1**	(12.1)	0.3	(12.1)	0.3
Withholding tax	**(73.0)**	**4.6**	**(73.0)**	**2.9**	(195.0)	5.3	(195.0)	5.6
Tax effect of share of profit of associates and joint ventures	**13.0**	**(0.8)**	**13.0**	**(0.5)**	16.1	(0.4)	16.1	(0.5)
Impact of unrecognised tax losses on current tax	**0.2**	**–**	**0.2**	**–**	52.5	(1.4)	52.5	(1.5)
Recognition of previously unrecognised tax losses on deferred tax	**–**	**–**	**–**	**–**	–	–	90.6	(2.6)
Provision against carrying value of assets	**–**	**–**	**–**	**–**	–	–	(48.0)	1.4
Gain on disposal of investment in joint venture	**–**	**–**	**255.1**	**(10.0)**	–	–	–	–
Tax expense and effective tax rate for the year ended	**(603.6)**	**37.4**	**(603.6)**	**23.6**	(1,332.9)	36.5	(1.242.3)	35.7

The effective tax rate excluding exceptional items of 37.4% varied from the statutory rate principally due to the mining tax (royalty) (net impact of $71.4 million/4.4% 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 $73.0 million/4.6%), items not deductible for Chilean corporate tax purposes, principally the funding of expenses outside of Chile (impact of $33.9 million/2.1%) and adjustments in respect of prior years (impact of $2.6 million/0.1%), partly offset by 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 $13.0 million/0.8%).

The impact of the exceptional items on the effective tax rate including exceptional items was $255.1 million/10.0%. Further details of the exceptional gain on the disposal of the Group's investment in the Tethyan joint venture, including relevant tax aspects, are set out in Note 17 to the financial statements.

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 underlying earnings generated by the ongoing businesses of the Group.

Disposal of investment in Tethyan joint venture

On 15 December 2022 Antofagasta entered into definitive agreements to exit its interest in the Tethyan joint venture. As a result, Antofagasta has recognised a gain on disposal of its investment in the joint venture as at 15 December 2022 of $944.7 million. Full details of the agreements and gain on disposal are set out in Note 17 to the financial statements.

2021 – Impairment of Twin Metals' assets

In 2021 an impairment was recognised 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, reflecting the improved actual and forecast profitability of the relevant Group entity (Antucoya).

Non-controlling interests

Profit for 2022 attributable to non-controlling interests (excluding exceptional items) was $422.3 million, compared with $917.4 million in 2021, a decrease of $495.1 million. This reflected the decrease in earnings analysed above.

Earnings per share

	Year ended 31.12.22 $ cents	Year ended 31.12.21 $ cents
Underlying earnings per share (excluding exceptional items)	**59.7**	142.5
Earnings per share (exceptional items)	**95.8**	(11.6)
Earnings per share (including exceptional items)	**155.5**	130.9

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) was $588.3 million compared with $1,404.4 million in 2021, giving underlying earnings per share of 59.7 cents per share (2021 – 142.5 cents per share). The profit attributable to equity shareholders (including exceptional items) was $1,533.0 million, resulting in earnings per share of 155.5 cents per share (2021 – 130.9 cents per share).

Dividends

Dividends per share proposed in relation to the period are as follows:

	Year ended 31.12.22 $ cents	Year ended 31.12.21 $ cents
Ordinary dividends:		
Interim	**9.2**	23.6
Final	**50.5**	118.9
Total dividends to ordinary shareholders	**59.7**	142.5

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 2022 of 50.5 cents per ordinary share, which amounts to $497.6 million and will be paid on 12 May 2023 to shareholders on the share register at the close of business on 21 April 2023.

The Board declared an interim dividend for the first half of 2022 of 9.2 cents per ordinary share, which amounted to $90.7 million.

This gives total dividends proposed in relation to 2022 (including the interim dividend) of 59.7 cents per share or $588.3 million in total (2021 – 142.5 cents per ordinary share or $1,404.8 million in total) equivalent to a payout ratio of 100% of underlying earnings.

Capital expenditure

Capital expenditure increased by $101.7 million from $1,777.5 million in 2021 to $1,879.2 million in the current year, mainly due to increased sustaining capex at Centinela, Los Pelambres and Antucoya, increased mine development at Los Pelambres and Centinela, offset by lower expenditure on the Esperanza Sur pit at Centinela and the Los Pelambres Expansion project.

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 2022 there were no derivative financial instruments in place (2021 – nil).

Cash flows

The key features of the cash flow statement are summarised in the following table.

	Year ended 31.12.22 $m	Year ended 31.12.21 $m
Cash flows from continuing operations	**2,738.3**	4,507.7
Income tax paid	**(787.1)**	(776.9)
Net interest paid	**(45.2)**	(53.3)
Capital contributions and loans to associates	**–**	(33.5)
Purchases of property, plant and equipment	**(1,879.2)**	(1,773.0)
Acquisition of mining properties	**–**	(4.5)
Acquisition of equity investments	**(66.5)**	–
Dividends paid to equity holders of the Company	**(1,262.9)**	(710.8)
Dividends paid to non-controlling interests	**(80.0)**	(604.5)
Dividends from associates and joint ventures	**50.0**	142.5
Other items	**0.1**	1.4
Changes in net debt relating to cash flows	**(1,332.5)**	695.1
Other non-cash movements	**(70.4)**	(73.8)
Effects of changes in foreign exchange rates	**(23.4)**	1.2
Movement in net debt in the period	**(1,426.3)**	622.5
Net cash/(net debt) at the beginning of the year	**540.5**	(82.0)
(Net debt)/net cash at the end of the year	**(885.8)**	540.5

Cash flows from continuing operations were $2,738.3 million in 2022 compared with $4,507.7 million in 2021. This reflected EBITDA from subsidiaries for the year of $2,777.5 million (2021 – $4,666.9 million) adjusted for the negative impact of a net working capital increase of $12.7 million (2021 – working capital increase of $140.2 million) and a non-cash decrease in provisions of $26.5 million (2021 – decrease of $19.0 million).

The working capital increase in 2022 was mainly due to the increase of work in progress inventories in the Mining division and an increase in finished goods inventories at Centinela, partially offset by a decrease in receivables, reflecting the lower average mark-to-market price at 31 December 2022 of $3.80/lb (31 December 2021 – $4.42/lb) and lower sales volumes towards the end of the current period compared with the end of 2021, and an increase in creditors.

The net cash outflow in respect of tax in 2022 was $787.1 million (2021 – $776.9 million). This amount differs from the current tax charge in the consolidated income statement (including exceptional items) of $448.8 million (2021 – $1,035.5 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 $332.2 million (2021 – $30.9 million), withholding tax payments of $24.5 million, payments on account for the current year based on the prior year's profit levels of $435.6 million, as well as the recovery of $5.1 million relating to prior years.

Contributions and loans to associates and joint ventures were nil (2021 – $33.5 million, relating to Hornitos and Tethyan).

Capital expenditure in 2022 was $1,879.2 million compared with $1,777.5 million in 2021. This included expenditure of $889.7 million at Los Pelambres (2021 – $880.4 million), $857.0 million at Centinela (2021 – $791.8 million), $66.9 million at Antucoya (2021 – $49.6 million), $10.8 million at the corporate centre (2021 – $24.4 million) and $54.8 million at the Transport division (2021 – $31.3 million). The increase in sustaining capex at Centinela and Los Pelambres, and increased mine development at Los Pelambres and Centinela, was partially offset by less expenditure on the Esperanza Sur pit at Centinela.

Dividends paid to equity holders of the Company were $1,262.9 million (2021 – $710.8 million) of which $1,172.1 million related to the payment of the previous year's final dividend and $90.7 million to the interim dividend declared in respect of the current year.

Dividends paid by subsidiaries to non-controlling shareholders were $80.0 million (2021 – $604.5 million).

Dividends received from associates and joint ventures were $50.0 million for 2022 (2021 – $142.5 million).

Financial position

	At 31.12.22 $m	At 31.12.21 $m
Cash, cash equivalents and liquid investments	**2,391.2**	3,713.1
Total borrowings	**(3,277.0)**	(3,172.6)
(Net debt)/net cash at the end of the period	**(885.8)**	540.5

At 31 December 2022, the Group had combined cash, cash equivalents and liquid investments of $2,391.2 million (31 December 2021 – $3,713.1 million). Excluding the non-controlling interest share in each partly-owned operation, the Group's attributable share of cash, cash equivalents and liquid investments was $1,990.9 million (31 December 2021 – $3,299.9 million).

Total Group borrowings at 31 December 2022 were $3,277.0 million, an increase of $104.4 million on the prior year (31 December 2021 – $3,172.6 million). The increase was mainly due to the $488.5 million from the issue of the new corporate bond, $327.4 million of additional drawdown for the Los Pelambres Expansion project, a $50.0 million refinancing of the senior loan at Antucoya and $51.3 million of new finance leases, partly offset by a $686.1 million repayment of the senior loans at Corporate ($500.0 million), Centinela ($111.1 million), Los Pelambres ($50.0 million) and Antucoya ($25.0 million), $35.0 million repayment of Antucoya's short term loan and $19.6 million of subordinated debt repayment by Antucoya.

Excluding the non-controlling interest share in each partly-owned operation, the Group's attributable share of the borrowings was $2,449.7 million (31 December 2021 – $2,409.6 million).

These movements resulted in net debt at 31 December 2022 of $885.8 million (31 December 2021 – net cash $540.5 million). Excluding the non-controlling interest share in each partly-owned operation, the Group had an attributable net debt position of $458.7 million (31 December 2021 – net cash $890.3 million).

Going concern

The consolidated 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 and decisions relating to permitting. 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	Tony Jensen
Chairman	Senior Independent Director

Governance

Applying the Code in 2022 104

Board leadership and Company purpose

Chairman's introduction 106

Senior Independent Director's introduction 108

Group corporate governance overview 110

Board activities 112

Stakeholder engagement 114

Workforce engagement 116

Division of responsibilities

Directors' biographies 118

Board balance and skills 120

Roles in the boardroom 121

Executive Committee biographies 122

Introduction to the Committees 124

Composition, succession and evaluation

Nomination and Governance Committee report 125

Board effectiveness 128

Audit, risk and internal control

Audit and Risk Committee report 129

Sustainability and Stakeholder Management Committee report 137

Projects Committee report 140

Remuneration

Remuneration and Talent Management Committee Chair's introduction 142

Remuneration at a glance 146

2023 Directors' and CEO's Remuneration Policy 148

2022 Directors' and CEO's Remuneration Report 155

Remuneration and Talent Management Committee report 163

Implementation of the Directors' and CEO's remuneration policy in 2023 165

Directors' Report 168

Statement of Directors' responsibilities 171

"As the impacts of the COVID-19 pandemic began to fade, I was delighted that our entire Board was able to meet in person for the first time since early 2020.

Our experiences during the pandemic have allowed us to become more flexible while at the same time reminding us of the importance of human connection and the opportunity to share ideas and perspectives."

Jean-Paul Luksic
Chairman

PR 556
38 3/4"
OLOMBIANA

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 2022.

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 2022 except for Code Provisions 9 and 19. Code Provision 9 recommends that the Chairman should be independent on appointment when assessed against the circumstances set out in Provision 10 and Code Provision 19 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 CEO 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, a role he has continued to hold since then. 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 ensure that the interests of shareholders, together with the interests of other stakeholders (many of whom are based in Chile), are taken into account to promote the long-term sustainable success of the Company and 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 roles as Chairman of the Board and Chair of the Nomination and Governance Committee, he has overseen the design and implementation of succession plans to increase diversity, including gender, and continually refresh the Board.

The Board considers that Mr Luksic continues to demonstrate objective judgement and provide constructive challenge and leadership, and believes that his continued appointment is appropriate without fixing a limit to his length of service. The Company's major shareholders were invited by the then Senior Independent Director to discuss this subject ahead of the 2020 AGM when Code Provision 19 was introduced 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 Provisions 9 and 19, good governance is maintained.

Further details on the composition of the Board and its Committees are set out on page 118 and further details of the role of the Senior Independent Director are set out on pages 108 and 121.

The UK Corporate Governance Code is available on the Financial Reporting Council website at www.frc.org.uk.

How the Code principles were applied in 2022

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 – pages 18-21 and 112.
- 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 24-35.
- The Board ensures effective engagement with, and encourages participation from, shareholders and other stakeholders to ensure that its responsibilities are met – pages 38-73, 106, 108, 114-115, 121, 143 and 164.
- The Board ensures that workforce policies and practices are consistent with the Company's purpose, vision and values and supports its long-term sustainable success. The workforce can raise any matters of concern anonymously through the Group's whistleblowing channels – pages 36, 48-50, 116-117, 134-135 and 142-167.
- The Board considers the matters set out in section 172 of the Companies Act 2006 in Board discussions and decision-making – pages 38-73. Detailed examples can be found on pages 114-115.

Division of responsibilities

- The Board is structured to ensure that no one individual or small group of individuals dominates its decision-making, as demonstrated throughout this Corporate Governance Report.
- The CEO is not a Director of the Company and is therefore not a member of the Board – page 121.
- There is a clear division of responsibilities between the Board and the executive leadership of the Company's business – pages 110, 120 and 121.
- 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, all of 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 111 and 126.

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 121.
- The Board considers that the Chairman demonstrates objective judgement and promotes a culture of openness, healthy challenge and debate – pages 104 and 108.
- The Chairman facilitates constructive Board relations and the effective contribution of all Directors. He is responsible for setting the Board's agenda and ensuring that Directors receive accurate, timely, relevant and clear information – pages 111, 121 and 126.

Non-Executive Directors

- The Non-Executive Directors provide constructive challenge and strategic guidance, offer perspectives across various specialisms and hold management to account – pages 118-120.

Commitment

- All Directors have confirmed that they are able to allocate enough time to meet the expectations of their role – page 118.
- Directors do not undertake additional external appointments without the Board's prior approval – page 118.
- Time commitment is considered during Board effectiveness reviews and when electing and re-electing Directors – pages 125-128.
- A review of Directors' external directorships is carried out annually – pages 109 and 169.

Information and support

- The Board is provided with appropriate information in a form and of a quality to discharge its duties – page 111.
- The Board has access to independent professional advice and to the advice and services of the Company Secretary – pages 121 and 126.
- The Board is regularly updated on the Group's performance between scheduled Board meetings – page 111.

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 were independent in 2022 and five of whom continue to be independent as at the date of this Annual Report – pages 118-121.
- 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 – pages 118-119.
- The Board and its Committees comprise Directors with the requisite combination of skills, experience and knowledge to fulfil their roles – pages 118-121.
- 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 120 and 125-127.

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 125-127.
- Independent external search consultancies are used for appointments to the Board – pages 126-127.
- An effective succession plan is maintained for Board and senior management appointments – pages 126-127 and 164.
- 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 – page 126.

Development

- New Directors receive a thorough induction upon joining the Board – pages 126 and 128.
- Directors are regularly updated with information and training and, as a minimum, receive an annual briefing on legal, regulatory, market and other developments relevant to Directors of UK-listed companies – page 126.

Evaluation

- Annual evaluation of the Board considers composition, diversity and how effectively members work together to achieve objectives – page 128.
- Individual evaluation is part of the annual Board evaluation and assesses whether each Director continues to contribute effectively – page 128.
- An externally facilitated Board and Committee effectiveness review was conducted in 2022 – page 128.

Re-election

- All Directors stand for re-election by shareholders 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 129-136.

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 171.

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 principal risks the Company is willing to take in order to achieve its long-term strategic objectives – pages 24-35 and 134-136.

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 118-120.

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, which is being submitted for approval by shareholders at the 2023 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 142-143, 148-154 and 161.
- 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 142-166.

Procedure

- The Board has a formal and transparent procedure for developing policy on executive remuneration and determining Director and senior management remuneration – pages 142-167.
- 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 142-148.

Our governance framework

Jean-Paul Luksic
Chairman

Dear shareholders

Welcome to the Corporate Governance section of our 2022 Annual Report.

My introductory letter to this Annual Report sets out some of the Group's key challenges and achievements in 2022 and my reflections on the outlook for 2023, and illustrates the Board's ability to navigate these scenarios supported by our strong and effective governance framework.

As the impacts of the COVID-19 pandemic began to fade, I was delighted that our entire Board was able to meet in person for the first time since early 2020. Our experiences during the pandemic have allowed us to become more flexible while at the same time reminding us of the importance of human connection and the opportunity to share ideas and perspectives.

Shareholder engagement

We were pleased to welcome shareholders to our first hybrid AGM in 2022, opening the doors for shareholders to attend in person while also allowing shareholders to engage from afar. Once again, we will be hosting a hybrid AGM in 2023.

As the year progressed, our Senior Independent Director and Chair of the Audit and Risk Committee, Tony Jensen, and our Chair of the Remuneration and Talent Management Committee, Francisca Castro, met with shareholders and proxy voting agencies in a mix of in-person and virtual meetings. They discussed our approach to corporate governance and Antofagasta's 2023 remuneration policy, which is being tabled for shareholder approval at the 2023 AGM, while providing shareholders and proxy advisers with the opportunity to share their perspectives.

Details of these meetings can be found in the Senior Independent Director's introduction on page 108 and the Remuneration and Talent Management Committee Chair's introduction on page 142.

Diversity and Inclusion

An issue that was discussed with shareholders, which is important to our Board, was diversity–particularly gender diversity. Since 2014, half of our appointments to the Board have been female and women now make up 30% of our Board. However, we are actively searching for another female director to join our board and aim to meet the UK's new targets on gender diversity, while also continuing to build a pipeline of female talent across the organisation.

Further information on the Board's diversity policy can be found in the Nomination and Governance Committee Report on page 126.

Audit and Risk Management

The Board, led by the Audit and Risk Committee, conducted a tender process for the appointment of the Group's auditor in 2024. This was done a year earlier than is required by regulation to give time to ensure a smooth transition of audit and non-audit services, and in anticipation of the implementation of UK audit and corporate governance reforms. Deloitte will take over the external audit from PwC for the 2024 financial year onwards and shareholders will be asked to confirm this appointment at the 2024 AGM.

Our Commitment to Environmental, Social and Governance (ESG) Issues

Our efforts on climate change are an integral part of our ESG strategy, but far from the only ones. The copper we produce has a key role to play in a net-zero world: our responsibility is to produce it sustainably, efficiently, and with respect for local communities and the environment.

ESG considerations are integrated into our business and we are working with our suppliers, not just in the application of our safety standards, but also of our sustainability practices. In 2022, Antofagasta set new standards for sustainability for our suppliers, and by doing so we plan to gradually align their ESG capabilities with our own. Whether it's lowering emissions or ensuring that mining becomes more diverse and inclusive, such partnerships will deliver progress in areas that are fundamental to our purpose: "Developing Mining for a Better Future".

Stakeholder engagement

With the pandemic subsiding, our Directors have been making site visits to at least one of our operations, including to the desalination plant and concentrator plant expansion projects, and to Los Pelambres' tailings dams. The insights from these visits were shared at board and committee meetings, deepening the directors' understanding of our activities.

External Board evaluation

We always seek for continuous improvement in all that we do, and the Board and its governance are no exception. During 2022, Clare Chalmers conducted an external comprehensive independent Board evaluation. Clare attended several Board and Committee meetings, interviewed Directors, senior management and key external advisers, and travelled to Chile to deliver her findings to the Board.

Further details regarding Clare's evaluation can be found on page 128.

Board changes and succession planning

Vivianne Blanlot has served on our Board with dedication for nine years as of 27 March 2023. Although she has agreed to continue as a Director, she is no longer considered to be "independent" according to the Board's tenure policy, which aligns with the Code's guidance. As a result, she has rotated off the Nomination and Governance Committee and Remuneration and Talent Management Committee, and has been appointed to the Projects Committee. She has also agreed to continue serving as Chair of the Sustainability and Stakeholder Management Committee.

To fill these vacancies, Francisca Castro has joined the Nomination and Governance Committee and Eugenia Parot has joined the Remuneration and Talent Management Committee.

At its core, Antofagasta is a long-term business. Our mines operate on decades-long timelines, and our governance structures and processes are designed to help us achieve long-term sustainable success.

I'd like to thank you all for your ongoing engagement and look forward to having the opportunity to meet with you at our AGM.

Jean-Paul Luksic
Chairman

BOARD OVERSIGHT OF CLIMATE-RELATED RISKS AND OPPORTUNITIES

The Board has ultimate responsibility for the Group's climate-related objectives and strategy. The Board's oversight of climate-related risks and opportunities is fully integrated within our governance structures. This responsibility and oversight includes specific climate related activities such as approving the Group's Climate Change Strategy, approving emission reduction targets, monitoring implementation of the Climate Change Strategy and approving the Company's TCFD disclosures. This also includes more general approval and oversight responsibilities which incorporate climate-related risks and opportunities such as reviewing and approving the Group's capital allocation framework which includes criteria relating to climate resilience and an internal carbon price, reviewing and approving the Group's base and development case models which include adjustments for physical and transition risks associated with climate change, approving the Group's annual budget, reviewing the Group's principal and emerging risks which include climate change and approving KPIs in the Group's remuneration structures that reward our employees for progress in relation to achieving the Group's climate-related objectives.

In 2022, the Board dedicated part of its annual strategy session to reviewing the financial implications of climate change on the Group.

The Board is supported by all of the Board's committees in ensuring that climate-related considerations are fully integrated into the Board's governance structures. For example:

- As shown on pages 125-128, the Nomination and Governance Committee considers the Board's skills matrix when making appointments to the Board. This matrix includes sustainability experience (which includes competence on climate related issues) as a key skill and the Board ensures that there is an adequate depth of climate change knowledge and awareness on the Board when making new appointments. In 2022, the Board's externally facilitated evaluation also included a review of the Board's ESG focus, including in relation to climate related matters.
- As shown on pages 129-136, the Audit and Risk Committee assists the Board in overseeing the Group's risk management framework, including climate change risk.
- As shown on pages 137-139, the Sustainability and Stakeholder Management Committee considers climate change when reviewing and monitoring relevant strategy, policies and performance matters. In 2022, this included reviewing a progress report on the development of an inventory of Scope 3 emissions and next steps and reviewing the water situation in the Choapa Valley after 13 years of lower-than-normal rainfall and Los Pelambres' water strategy.
- As shown on pages 140-141, the Projects Committee considers climate change when reviewing and monitoring the Group's major capital projects. In 2022, this included reviewing ore transport alternatives for the Polo Sur project taking into account the Group's internal carbon price.
- As shown on pages 142-167, the Remuneration and Talent Management Committee monitors executives and managers' short- and long-term incentive plans which include KPIs relating to climate change such as progress towards the achievement of climate targets, alignment to the Copper Mark and implementation of the Climate Change Strategy.

Board balance

Tony Jensen
Senior Independent Director

"The feedback we received from our meetings with shareholders was reported to the Board and is reflected in the decisions that have been made in the preparation of this Corporate Governance report."

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 oversee the closure of any gaps identified by internal and externally facilitated reviews of the Board's and the Committees' performance.

I discharge these responsibilities through close co-ordination with the Chairman, Directors, Company Secretary and the management team. I met various shareholders and proxy advisers during the year to understand their views of the Company, Board and senior management team. 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. Why did you meet with shareholders and proxy advisers during the year and what issues did you discuss?

As Senior Independent Director and Chair of the Audit and Risk Committee, I aim to meet with shareholders every one to two years to gain a first-hand understanding of the subjects that matter to them. This year, I joined the Chair of our Remuneration and Talent Management Committee, Francisca Castro, in inviting the Company's 15 largest investors as well as the Investment Association, Glass Lewis and Institutional Shareholder Services to meet with us to discuss Corporate Governance matters, the Company's proposed 2023 remuneration policy (as explained in more detail on pages 149-154) and to allow shareholders to raise any concerns that they would like to discuss without the presence of the senior management team. The feedback we received was very positive and no major concerns were raised. Apart from the discussion of remuneration-related matters, which is outlined in more detail by Francisca on page 149, we engaged in discussions relating to the Board's diversity policy and progress towards achieving the new targets set out in the Listing Rules, the Board's oversight of ESG matters, including carbon emission reduction targets, Directors' time commitments and the role of the controlling shareholder in the Board's governance arrangements. The feedback we received from these meetings was reported to the Board and is reflected in the decisions that have been made in the preparation of this Corporate Governance report.

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 shareholders 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 invaluable 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 169.

In 2014, the Company entered into relationship agreements with 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 2022.

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 related entities to a committee of Directors independent from the controlling shareholders, to assess whether the Company should enter into such transactions and, if so, to oversee the 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 $40 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 handling of related party transactions 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 potential conflicts of interest under section 175 of the Companies Act. See page 169 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 whether 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 that, where appropriate or necessary, 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 $40 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 $40 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

Our governance framework

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:

Key responsibilities

The key responsibilities of each Committee and their focus areas for 2022 are set out on page 124.

- NOMINATION AND GOVERNANCE
- AUDIT AND RISK
- SUSTAINABILITY AND STAKEHOLDER MANAGEMENT
- PROJECTS
- REMUNERATION AND TALENT MANAGEMENT

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

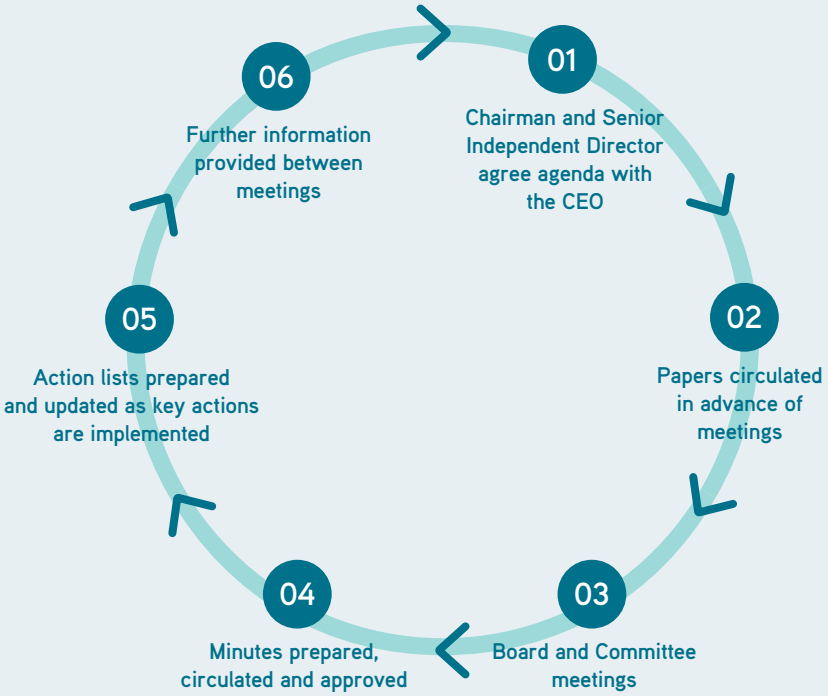
Members of the Executive Committee also sit on the boards of the Group's operating companies and report on the activities of those companies to the Board, Mr Arriagada and the Executive Committee.

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 and Senior Independent Director agree agenda with the CEO and the Company Secretary

The Chairman and Senior Independent Director, in consultation with the CEO and the Company Secretary, maintain 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.

Ad hoc Board and Committee meetings are also called, as appropriate.

02

Papers circulated in advance of meetings

Materials are sent to Board and Committee members a week in advance of each meeting.

Presentations include a summary sheet setting out the objective, background, proposal, justification, risk analysis and next steps associated with that topic. 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 which includes detailed information on the Group's performance against key safety, health, environmental, community, financial, workforce, project development and organisational culture indicators.

03

Board and Committee meetings

Board and Committee meetings include regular 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. 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 meeting.

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

Further information provided between meetings

Between Board meetings, Directors receive flash reports with monthly and year-to-date production and financial results, 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 oversight in 2022

During 2022, 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, while seeking to align these with the values of the Group and stakeholders' best interests.

Our strategic framework

The Board has 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 for our operating efficiency, creation of sustainable value, high profitability and as a preferred 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 responsibly managing our risks. To achieve this, we rely on the talent and capabilities of our workforce. Our flexible and resilient organisation allows us to overcome current and future challenges.

Below are examples of how the Board's activities in 2022 have furthered the Group's strategy.

Read more about our strategic framework on P18

Culture

- Monitored operational and projects performance and its 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.
- Reviewed workforce engagement survey results.
- Received feedback on meetings with representatives of the Group's labour unions.

Governance and engagement

- Reviewed Board and Executive Committee succession plans.
- Interviewed potential future Board candidates.
- Reviewed Directors' independence and skills on the Board.
- Reviewed Directors' conflict of interest declarations.
- Reviewed requests by Directors to undertake additional external appointments.
- Oversaw the 2022 externally facilitated Board and Committees effectiveness review.
- Monitored feedback from investors and proxy agencies regarding the Group's corporate governance arrangements.
- Reviewed the results of perception studies carried out within certain stakeholder groups in Chile.
- Reviewed and approved updates to the Group's Sustainability and Human Rights policies and reviewed new Water and Energy policies.
- Reviewed and approved the Company's 2022 Modern Slavery Act statement.

Internal controls, risk management and compliance

- Reviewed the risk management system's maturity level.
- Reviewed the Group's principal and emerging risks; conducted the annual review of the Group's risk appetite statements, which are aligned with the Group's strategic pillars and approved amendments to four risk appetite declarations.
- Reviewed and updated the Group's risk matrix, materialised risks and risk mitigation activities.
- Reviewed budgets for initiatives designed to mitigate material identified risks.
- Reviewed physical and transition risks associated with climate change as part of the Base Case and Development Case review.
- Attested to the effectiveness of the Group's risk management and internal control systems.
- Reviewed actions planned for 2023 to prepare for the UK Government's audit and corporate governance reforms.
- Reviewed half-yearly compliance reports.
- Reviewed results of the Group's whistleblowing processes.
- Reviewed Internal Audit department's progress and 2023 audit plan.
- Selected a new External Auditor following a tender process for the 2024 audit onwards.

Financial and performance reporting

- Approved the Group's 2021 full-year and 2022 half-year results and corresponding announcements.
- Recommended and declared dividends paid to shareholders during 2022.
- Reviewed and approved going concern and viability statements and conducted stress tests related to a potential future resilience statement.

Our strategy is designed to enable us to achieve our Purpose. It is supported by five pillars: safety and sustainability, people, competitiveness, innovation and growth and each has defined short- and medium-term goals.

Safety and Sustainability

The safety and health of our employees and contractors is our first priority. 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 central to our decision-making processes.

- Monitored COVID-19 protocols aimed at protecting the Group's workforce and neighbouring communities and the lifting of restrictions during the year.
- Reviewed and monitored the Group's safety and health performance.
- Reviewed the Group's compliance with its environmental commitments.
- Monitored the Group's implementation of its Climate Change Strategy.
- Reviewed the implementation of water conservation and efficiency measures at Los Pelambres, addressing the water shortage generated by a 13-year drought.
- Continued to monitor independent reviews of the safety of the Group's tailings storage facilities and assessed it versus industry best practice and the ICMM's GISTM standard.
- Continued to monitor progress of local community interactions at Los Pelambres, including the execution of agreements with communities following the rupture of the concentrate pipeline.[1]
- Assessed progress in the renewal of key water extraction and mining permits at Zaldívar.
- Monitored the achievement of Copper Mark certification for all the Group's mining operations.

People

People are central to our business. We want our employees to feel recognised and to maximise their opportunities for personal and professional growth. We seek to generate a culture of diversity and inclusion which allows our employees to achieve their full potential. Our goal is to be the best employer in the Chilean mining industry. To achieve this, we understand the importance of creating an environment of trust and collaboration focused on the long term.

- Continued to oversee the implementation of 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, adaptable and resilient organisation.
- Reviewed the results of employee engagement surveys conducted during the year.
- Reviewed the annual talent management exercise, including succession plans for Directors, the CEO and the Executive Committee.
- Reviewed employee performance, including the Company's short-term and long-term incentive scorecards.
- Monitored progress on the implementation of the Group's Diversity and Inclusion Strategy and approved a more ambitious goal for women to represent 30% of the workforce by the end of 2025.
- Monitored labour relations at the Group's mining and transport operations and reviewed results of collective bargaining negotiations, which were completed in an atmosphere of respect and trust.
- Monitored progress of the annual Human Resources plan.
- Reviewed development of the 2023 Directors' and CEO's Remuneration Policy, to be submitted for shareholder approval at the 2023 AGM.

Competitiveness

Competitiveness is based on productivity gains, controlling costs 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 tax legislation in Chile which would affect the Group.[1]
- Monitored proposed labour legislation.
- Reviewed actions taken to enhance cyber security.

Innovation

We innovate as a means of improving social, environmental and economic performance while delivering strong returns for our shareholders. Innovation is key to improving productivity and efficiency and promoting growth, especially in the medium and longer term.

- Oversaw progress on the Group's innovation portfolio, including operational and data analytics initiatives.
- Reviewed progress on the implementation of the Group's digital transformation programme.
- Monitored progress on Centinela's and Los Pelambres' integrated remote operations centres.
- Reviewed Centinela's In-pit tailings deposition project which aims to allow for tailings deposition in pits no longer in use.[1]
- Reviewed the potential application of the Group's proprietary Cuprochlor®-T primary sulphide leach technology.

Growth

We have a portfolio of growth projects that allows us to remain competitive by developing sustainable operations over the long term.

- Reviewed progress on the Los Pelambres Expansion project, Los Pelambres ore transport system project, Zaldívar's Chloride Leach project and Centinela's Esperanza Sur project.
- Reviewed progress on Phase 2 of the Los Pelambres Expansion project and approved a funds advance to address critical path items including key acquisitions and engineering.
- Reviewed progress on the Centinela Second Concentrator project and postponed decision on whether to proceed with the project until there is greater clarity on mining royalty, tax and constitutional reform.
- Monitored progress on the feasibility study for the Polo Sur project.
- Reviewed Zaldívar's permitting strategy to extend its water extraction permit beyond 2025.
- Monitored actions to advance the Twin Metals Minnesota project and reorganised its team.
- Reviewed business development and exploration opportunities and activities.
- Approved the Group's exit from the Reko Diq project in Pakistan.
- 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 and commercial parameters.
- Reviewed and approved the base case and development case for the Group's assets.
- Reviewed the Group's strategic growth plan (PEC), which is a mine production planning exercise without restrictions, aiming to quantify the potential to transform the Group's mineral resources into ore reserves.
- Reviewed and approved the Group's 2023 budget.
- Reviewed the Group's mineral resources and ore reserves statement.

1. Further information relating to these matters and how the Board had regard to the stakeholders and matters set out in s. 172(1) of the Companies Act 2006 are set out on pages 114-115.

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 carefully 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 38-73.

Further details on the Board's workforce engagement mechanisms are set out on pages 116-117.

Three principal 2022 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. The Board took into account the different interests of stakeholders but with an overarching focus, as required by section 172(1), on acting in a way that would be most likely to promote the success of the Company for the benefit of its members as a whole. The likely long-term consequences of each decision were, among other things, key considerations for the Board.

Board oversight of mining royalty and tax reform bills 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 the corporate tax already paid).

There is also a separate mining tax (royalty) of 5–14% of operating profits, with the rate based on the operating margin.

In 2022, the Group incurred $604 million of taxes and invested $57 million in social projects and programmes to benefit communities that live around our operations. The Group's underlying net earnings after taxes and before exceptional items amounted to $588 million. The effective tax rate (ETR) paid by the Group was 37.4% which compares with the ETRs calculated by the IMF for a typical Chilean mining company of 38% and for mining OECD countries of 39%.

In May 2021, the lower house of Congress approved a proposal to establish a new mining royalty to fund social needs, which was sent to the Senate for consideration. The lower house's royalty proposal included *ad-valorem* (revenue-based) and profit-based royalties that would have increased the ETR to over 75% at copper prices of over $4.00/lb, which would be the highest rate in the world, by a significant margin.

In July 2022, the Chilean government submitted to congress a proposed tax reform bill that aimed to increase tax collections by 4.3% of GDP when fully implemented. As part of this tax reform bill, the Government submitted a revised mining royalty reform proposal which superseded the proposal by the lower house. Although the resulting ETR of the proposed royalty was lower than the original proposal, it was still a very significant increase on current rates.

In October 2022, the Government adjusted its mining royalty proposal, reflecting in part the concerns raised by several stakeholders with respect to the impact on Chile's competitiveness. The new proposal included a flat 1% ad valorem tax rate on copper sales for large copper mines, a new variable scale profits royalty, between 8% and 26% according to the operating margin of mining companies, and other structural changes. Under this proposal, ETRs would range from 45% to 50%, continuing to reduce Chile's competitiveness in comparison with other mining countries.

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 mining royalty 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 considering the likely consequences of the proposal on the decisions that the Board makes for the long term on the interests of the Company's shareholders and the Group's employees and contractors, suppliers, customers and other business partners.

In considering the implications of the proposed royalty on these stakeholders, 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, and for 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 generated by mining an additional $78 is generated in other sectors of the economy.
- 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 $700 million after having spent over $4.8 billion in salaries, and purchases of goods and services.
- The Board authorised management to engage with stakeholders on the potential impacts of these proposals in all relevant forums to allow for this to be considered in the development of this legislation. This included the presentation to Congress of the impacts on stakeholders, as relayed to management in discussions with them.
- During 2022, the Board decided to postpone the decision on whether to proceed with the investment in Centinela's Second Concentrator project until there is sufficient clarity on the tax outcomes of the ongoing discussions on the mining royalty and tax reform bills, and the rewriting of the Chilean constitution. This is expected to be by the end of 2023.
- The Board will continue to closely monitor the situation and oversee engagement with stakeholders to ensure that the impacts of these proposals are fully understood by Congress.
- The Board will continue to take the potential impacts on stakeholders into account in its broader decision-making.

Los Pelambres – Concentrate Pipeline Incident

On 31 May, Los Pelambres detected a leak near Llimpo in the underground pipeline that transports concentrate from the concentrator plant at the mine site to the port at Los Vilos. The pipeline was immediately shut down and the location of the leak identified. The pipeline was repaired, and operation of the pipeline resumed on 26 June. A full assessment of the incident found no material or irreversible environmental impact and the pipeline was approved for reopening by the relevant local regulator.

A review was carried out to incorporate improved safety measures into pipeline operations ahead of the complete replacement of the pipeline, which is expected to be completed in 2025. The Company, together with the local authorities, successfully engaged with members of the local communities who were concerned about the safety of the pipeline.

How the Board considered, and had regard to, the interests of key stakeholders and the requirements of section 172(1)

The Board called a special meeting following the incident to understand its potential impact on the environment and on Los Pelambres' stakeholders including local communities, suppliers, customers, government authorities, regulators, and shareholders. The Board continued to monitor the response to the incident in subsequent scheduled meetings and the Board's Sustainability and Stakeholder Management Committee reviewed Los Pelambres' community relations model in the context of the incident.

In monitoring Los Pelambres' response to the incident, the Board had regard to:

- The impact of the incident on local communities and the environment, monitoring communications and dialogue with government authorities and the communities, the independent investigation into the incident, and the containment and rehabilitation of the area of the spill and repair of the pipeline.
- Customers due to the rescheduling of shipments.

An agreement was reached with the Llimpo community addressing their operational concerns related to the incident and for Los Pelambres to provide support for the development of local infrastructure.

Since the incident, Los Pelambres has been applying a precautionary conservative safety factor to ensure the safe operation of the pipeline.

Following the incident, several Directors visited the Choapa Valley with members of the management team to understand the broader context of the incident and to hear first-hand from employees, contractors and the communities their perspectives on the impact that Los Pelambres has on them.

Centinela's in-pit tailings project

Centinela is considering using its disused open pits for the storage of thickened tailings from its concentrator plant as an alternative to traditional tailings disposal methods. The project has the potential to meet Centinela's tailings management needs for a minimum of 9 to 10 years and potentially for the life of the concentrator plant.

The Board approved the project's Commitment Phase in 2022, with a potential investment decision to be made by 2024.

How the Board considered, and had regard to, the interests of key stakeholders and the requirements of section 172(1)

In making this decision the Board took into consideration that:

- The Company's purpose of 'Developing Mining for a Better Future' that has led to its pursuit of innovative tailings disposal alternatives that align with modern mining practices and are sustainable, and focus on ameliorating or removing environmental challenges.
- The project is expected to deliver additional reductions on the impact of Centinela's operations on communities and the environment. This is achieved by leveraging Centinela's thickened tailings process, which already increases the recovery of process water and lowers the emissions of particulate matter due to the saline layer that forms on the surface of the tailings. In addition, in-pit deposition enables the reuse of previously condemned areas for waste disposal, leading to significant environmental benefits and a reduction in Centinela's overall footprint.
- Maintaining a reputation for high standards of business conduct is essential, particularly given the technical, environmental and risk management advantages associated with the project. Notably, the project offers flexibility to the operation while enabling a larger deposition of tailings at a lower unit cost. This approach optimises Centinela's value by utilising more cost-effective disposition methods earlier in the mine's life, deferring higher capital expenditure on raising the height of the current tailings storage facilities' walls.
- The project will deliver economic benefits for shareholders and reduce the environmental impact of the operations' tailings disposal.

Overall, the Board believes that this project is in the best interests of Centinela and its stakeholders, and will continue to carefully consider all factors before making a final investment decision in 2024.

/ Workforce 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 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 reviewed the mechanisms 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 recommended in the UK Corporate Governance Code (a Director appointed from the workforce, a formal workforce 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 already in place.

The Group's workforce comprises 31,126 people. Approximately 23% of the workforce are Group employees and 77% are employees of contractor companies. More than 99% of the Group's employees are in Chile and approximately 72% come from communities in the Antofagasta and Coquimbo Regions, where the Group's operating companies are located.

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 key issues are raised with and discussed by the Remuneration and Talent Management Committee and the Board.

31,126
Total workforce

99%
Live in Chile

72%
Live in the Antofagasta and Coquimbo Regions

The Group has established control mechanisms to ensure that contractor companies', whose employees are often members of their own labour unions, meet the Group's standards and guidelines on labour, environmental and social and ethical matters and adopt good practices with regard to safe workplaces and the quality of employment. Contractors' employees receive the same minimum protections as the Group's employees under Chilean labour law and the Group requires contractors to pay their employees ethical wages – which as of December 2022 were 55% higher than the Chilean legal minimum – and to provide other basic benefits, including life and health insurance. These protections are reinforced through bank guarantees and contractors 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 and engage informally with the workforce. Impressions and views arising from these visits are reported to the Board and its Committees and related questions are raised with the management team.
- Labour relations matters, proposed labour negotiation limits and feedback from labour negotiations are reported directly to the Remuneration and Talent Management Committee and the Board throughout the year and typically form a key part of the CEO's general update to the Board.
- The CEO, Vice President of Northern Operations, Vice President of Los Pelambres, Vice President of Human Resources, and the General Managers and HR Managers of each relevant operation meet unions at least twice per year 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 representatives took place during 2022, enabling the CEO to share business performance and 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 across the Mining division during the year and the results were shared with the Remuneration and Talent Management Committee in a designation session to review the results of these surveys and also with the Board.
- 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 new Ways of Working, 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 significant impact on working conditions. Recent examples include the Diversity and Inclusion programme and the flexible work arrangements.
- 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.

During 2022, the Board applied feedback received from the workforce to decisions related to flexible working initiatives, the oversight of labour negotiations and the development of the Group's Diversity and Inclusion Strategy.

Members of the Board

Biographical details for each Director are set out on the following page. All Directors have confirmed that their other commitments do not prevent them from devoting sufficient time to 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 Directors' attendance at a significant number of regular and ad hoc meetings held in response to the challenges arising throughout the year demonstrated their commitment.

KEY TO COMMITTEES

- NG Nomination and Governance
- AR Audit and Risk
- ST Sustainability and Stakeholder Management
- PC Projects
- RT Remuneration and Talent Management
- ○ Committee Chair
- ● Chairman of the Board

ANTOFAGASTA PLC DIRECTORS' BOARD MEETING ATTENDANCE

	Number attended
Jean-Paul Luksic	13/13
Tony Jensen	13/13
Ramón Jara	13/13
Juan Claro	11/13
Andrónico Luksic C	11/13
Vivianne Blanlot	13/13
Jorge Bande	13/13
Francisca Castro	13/13
Michael Anglin	13/13
Eugenia Parot	13/13

From left to right: Ramón Jara, Juan Claro, Vivianne Blanlot, Michael Anglin, Francisca Castro, Jean-Paul Luksic, Jorge Bande, Eugenia Parot, Andrónico Luksic C, Tony Jensen

Jean-Paul Luksic
Chairman

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 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

Tony Jensen
Non-Executive Director

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

Ramón Jara
Non-Executive Director

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, a not-for-profit academic foundation in Chile
- Member of the Board of the Centre of Arbitration of the Chilean Chamber of Commerce
- Chairman of the Chile Australia Business Committee and Vice Chairman of the Chile Japan Business Committee of Sociedad de Fomento Fabril (Chilean Industrial Council)
- Member of the APEC Business Advisory Council (ABAC)

Juan Claro
Non-Executive Director

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 Energía Coyanco SA
- 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
- Director of Melón SA and Agrosuper SA
- Member of the Board of Centro de Estudios Públicos, a not-for-profit academic foundation in Chile
- Country Adviser, Goldman Sachs

Andrónico Luksic C
Non-Executive Director

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 Compañía Cervecerías Unidas SA, and 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 Euronext Paris and part owned by Quiñenco SA
- 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; the Global Board of Advisors at the Council of Foreign Relations; and the Brookings Institution's International Advisory Council.

Vivianne Blanlot
Non-Executive Director

Independent: No (since 27 March 2023)

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
- Director of Empresas CMPC SA, a pulp, paper and packaging Company listed in Chile
- Director of Instituto Chileno de Administración Racional de Empresas (ICARE), a business think tank in Chile
- Member of Consejo para la Transparencia (Transparency Council), the Chilean body responsible for enforcing transparency in the public sector

Current position

- Director of Colbún SA, an energy Company listed in Chile

Jorge Bande
Non-Executive Director

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 NEXT Minerals 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

Francisca Castro
Non-Executive Director

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
- 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
- Independent Director of Conexión Kimal-Lo Aguirre S.A., a power transmission Company in Chile

Michael Anglin
Non-Executive Director

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

Eugenia Parot
Non-Executive Director

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

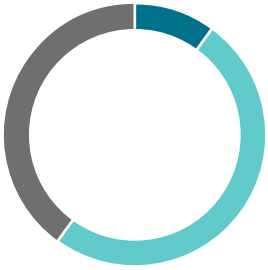
- Vice President of Latin America, Regional President for South America and Managing Director for Chile, Golder Associates
- Director on Golder's holding Company board and member of the Audit and Finance and Investments Committees.
- Member of the Boards of Golder South America, Chile, Peru and Argentina.

A balance of skills and experience

The Board comprises ten Directors with a broad and complementary set of technical skills, educational and professional experience, nationalities, personalities, cultures and perspectives.

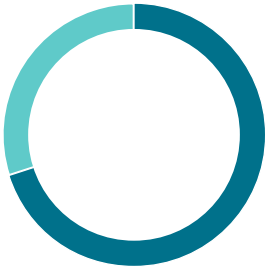
Board balance

Independence[1]



- Chairman 1
- Independent 5
- Non-Independent 4

Gender diversity[2]

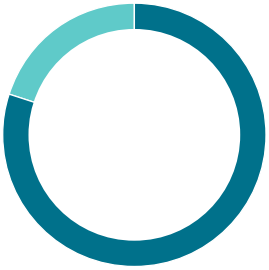


- Male 7
- Female 3

Tenure

- 1-5 years 3
- 6-10 years 4
- 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 Jorge Bande, Francisca Castro, Michael 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. The Board is also satisfied that Vivianne Blanlot was independent throughout 2022 and until 27 March 2023 which was the ninth anniversary of her appointment to the Board. Further details are provided on page 121.
2. The Board's Nomination and Governance Committee continues to work with an independent external search consultancy to identify potential female candidates who could contribute significantly to the Board in the future. Further details on the Board's diversity policy can be found on pages 126-128.
3. The Company has met the Parker Review target and in 2022 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 therefore 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[1]	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	✓	✓			✓	✓		✓	✓		✓	✓		✓	✓

1. Directors considered to have sustainability skills have self-certified that they are, or have been, responsible for sustainability as an executive or as a member of a sustainability committee of a board. This includes competence on climate-related issues.

Board and senior management's roles and responsibilities

The Group's CEO, Iván Arriagada, is not a Director, reflecting the law and practice in Chile.[1] Despite this, interaction between the Board and executive management is as you would expect 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 of exclusively Non-Executive Directors; it provides a broad range of perspectives and 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 the Senior Independent Director, CEO 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 constructive Board relations and the effective contribution of all Directors.
- Oversees Director induction, development and performance reviews.
- Leads relations with shareholders, including the Group's controlling shareholders.

Independent Non-Executive Directors[2]

Tony Jensen

Michael Anglin

Jorge Bande

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]
- Have 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.

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.

Non-Executive Directors[3]

Juan Claro

Ramón Jara

Andrónico Luksic C

Vivianne Blanlot[4]

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.

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.

Company Secretary

Julian Anderson

Ensures that Directors have access to the information they need to perform their roles.

- Provides a conduit between Board and its Committees 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 available on the Company's website at antofagasta.co.uk.

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 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.
4. Vivianne Blanlot was an independent Non-Executive Director until 27 March 2023, the ninth anniversary of her appointment to the Board.

/ Executive Committee biographies

Members of the Executive Committee

01

02

03

04

05

06

07

08

09

10

11

12

01 Iván Arriagada
CEO appointed in 2016

Joined the Group in 2015

- Commercial engineer and economist with more than 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 Base Metals, 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 with two Master of Sciences degrees (Metals and Energy Finance and Electrical Engineering) and 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 Sciences (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 at Teck Resources
- 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 at 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 a Master's degree in Strategic Human Resources Management and 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 Vice President 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 Escondida
- Senior lawyer at BHP Billiton in Chile
- Chief Legal Counsel at 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

Board committees

The Board's Committees ensure that Board deliberations are focused on key issues and that proposals are submitted after 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 2022

- Succession planning for Board and Committee roles
- Board Committee composition
- Monitoring shareholder feedback on Governance
- Board and Committee evaluation

Audit and Risk Committee

Key responsibilities

- Financial reporting
- External audit
- Internal audit
- Risk management
- Internal control
- Compliance

Focus areas for 2022

- Reviewing the Company's half year and year-end financial results
- Assessing financial controls and reporting
- Monitoring risk management and compliance
- Assisting the Board with updates to the Group's risk appetite assessment
- Assisting the Board with the 2024 external audit tender

Sustainability and Stakeholder Management Committee

Key responsibilities

- Policies and commitments
- Safety and health
- Community relations
- Environmental and social matters
- Stakeholder engagement

Focus areas for 2022

- Monitoring events at Los Pelambres following the concentrate pipeline incident
- Overseeing measures to protect the safety and health of the Group's workforce
- Endorsing key policies for the Group's long-term sustainable success
- Reviewing climate change strategy implementation
- Receiving reports on the Group's tailings storage facilities

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 2022

- Monitoring progress on the engineering and remaining project studies for the Centinela Second Concentrator project
- Monitoring progress in the execution of the Los Pelambres Expansion and Zaldívar Chloride Leach projects
- Monitoring development of the Group's organic growth opportunities

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 2022

- Determining the application of the Group's executive remuneration framework
- Considering feedback from shareholders in relation to the 2022 Directors' and CEO's Remuneration Report and the proposed 2023 Directors' and CEO's Remuneration Policy
- Monitoring Directors' and CEO remuneration
- Reviewing employee engagement survey results
- Reviewing talent management and Executive Committee succession plans

Find out more online
antofagasta.co.uk/bc

Maintaining an effective Board

Jean-Paul Luksic
Chair of the Nomination and Governance Committee

"The Committee helps ensure that the Company's long-term interests are safeguarded by a strong and effective Board."

2022 membership and meeting attendance

	Number attended
Jean-Paul Luksic (Chair)	3/3
Vivianne Blanlot	3/3
Tony Jensen	3/3

Other regular attendees included the Company Secretary.
The Committee meets as necessary and at least twice per year.
Except for the Chairman, all Committee members were independent in 2022.

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

Key activities in 2022

Corporate governance

- Monitored the fulfilment of the UK Corporate Governance Code (the Code) requirements.
- Reviewed Directors' declarations on potential conflicts of interest.
- Reviewed the Governance section of the 2021 Annual Report and recommended it to the Board for approval.
- Reviewed arrangements for the 2022 AGM which allowed for the Company's inaugural hybrid meeting and the publication of the 2022 AGM Notice.
- Reviewed feedback from investors and proxy advisers on the shareholder resolutions tabled at the 2022 AGM.

Succession planning

- Reviewed and endorsed detailed succession plans for the Board, its Committees and the CEO.
- 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.
- Managed the global search carried out for an independent Non-Executive Director.
- Interviewed and considered potential Board candidates.
- Reviewed and endorsed updates to the Board's skills matrix.

Board effectiveness reviews

- Oversaw the implementation of recommendations arising from the 2021 internal evaluation of Board and Committees' performance.
- Oversaw the 2022 externally-facilitated evaluation of the Board and Committees by Clare Chalmers Limited, an external Board evaluation consultancy.
- Requested a performance review of the Chairman by Directors, led by the Senior Independent Director, and of individual Directors, led by the Chairman with support from Clare Chalmers Limited.

Diversity, inclusion and succession planning

Q. What is the Committee's role in relation to succession planning?

The Committee oversees and develops succession plans for the Board and the CEO. Succession planning for the Executive Committee (excluding the CEO) and broader employee talent management is overseen by the Remuneration and Talent Management Committee.

The activities of the Remuneration and Talent Management Committee are set out on page 142.

Q. How does the Committee address the process of CEO succession?

The Committee regularly reviews succession plans for the CEO in the case of either a planned or unplanned departure. This involves defining the character, skills, experience and expertise required to fulfil the role, as well as the assessment of potential internal candidates and their development needs. The consideration of both external and internal candidates for the role of CEO ensures a clear assessment of relative strengths and weakness and provides a useful international benchmark.

Q. What is the scope of the Board's succession planning?

The Board's succession plan is reviewed formally at least once a 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 the appropriate 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 skills required when making new appointments to the Board and to instruct search firms to identify candidates who fit these criteria.

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 128, the Group's purpose, vision, values and strategy, as shown on pages 112-113, the Board's diversity policy (below) and the core competencies and areas of expertise on the Board, as shown on page 120.

To assist with making new appointments to the Board, the Committee appoints independent external search consultancies with no connection to the Group. Between 2019 and 2021, the Committee appointed Spencer Stuart, a signatory to the voluntary code of conduct for executive search firms to address gender diversity on corporate practices for related search processes, to assist with the search for new independent Non-Executive Directors.

They were briefed on the skills and experience of the existing Directors and asked to identify potential candidates who would best meet the required criteria including their relevant experience, skills, leadership capabilities, contribution to Board diversity and whether they had sufficient time to devote to the role. Also important for overall Board effectiveness is that potential candidates are proficient in Spanish and, preferably, have relevant mining or extractive industry experience. Members of the Committee interviewed short-listed candidates and collectively selected Tony Jensen and Eugenia Parot to be recommended to the Board for appointment in 2020 and 2021, respectively.

The searches that resulted in these appointments 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). The external search consultancy was instructed to access the widest possible talent pool and, as has been the case for many years, to specifically identify potential female candidates. For the 2020 appointment, a global search produced several hundred potential candidates for consideration, from which a shortlist of seven were interviewed, four of whom were female – and the 2021 process resulted in the appointment of a female candidate.

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 operations.

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 Company's Diversity and Inclusion Policy reflects the Board's belief in the benefits of diversity and its conviction 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.

50%

of Board appointees since 2014 have been women

100%

of our operating companies have female Board members

>50%

of our Board members identify as being from an ethnic minority background

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 more than half the Board members identify as being from an ethnic minority background according to the Parker Review criteria. 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 in support of its vision and strategy also includes Directors from outside Chile.

Gender diversity is a pillar of the Group's diversity and inclusion strategy. The Board supports the important work performed by the FTSE Women Leaders' Review in pursuing a 40% target for women on FTSE 350 boards and on executive committees and their direct reports.

Since 2014, three of the six Board appointees (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.

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 Committee, supported by an independent external search consultancy, continues to seek potential female candidates who could make an important contribution to the Board in the future and the Board is working to achieve gender diversity targets of 40% representation of women on the Board and of at least one woman in the Chair, Senior Independent Director, CEO or CFO roles. These objectives have been incorporated into the Board's succession plans and the Committee aims to achieve these goals by continually searching for candidates with the required skills and methodically preparing for ordinary Board refreshment and turnover in order to ensure continuity and performance of the Board's responsibilities.

We are committed to increasing the percentage of women on our Board, as well as in senior management positions and, just as importantly, in the Group's workforce. We believe that such an increase will benefit the Group, the industry and Chile.

Q. What policies are in place to promote a diverse pipeline of talent for the future?

The Group is committed to developing a diverse pipeline of talent that will widen the pool of female and other diverse candidates for Board and leadership positions in the future. In this, the Group is leading the way in Chile, particularly with female participation in the workforce, where Chile remains well behind more developed economies.

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 Policy was approved following an in-depth exercise to assess whether the Group's existing diversity and inclusion model was appropriate. This included interviews with stakeholders, a benchmarking exercise and a comprehensive review of the Group's policies and processes. The 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 policy.

Metrics associated with the development of the Diversity and Inclusion Policy 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 Policy on new appointments and their progress within the Company, including at the level of those who report to the Executive Committee.

As part of the Policy, female members of senior management have been appointed to the boards of all our operating companies and we have two women on the Executive Committee, the General Manager of our Transport division and the Vice President of Human Resources.

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.

Since 2017, we have more than doubled female participation to over 20% and recently set ourselves a goal of reaching 30% female participation by 2025. The gender balance at each level of the Group is monitored and reported monthly to the Executive Committee.

More detail on programmes we have introduced and the gender balance within the Group is given in the Our People section on pages 48-50.

The Board will continue to monitor developments in 2023.

Board effectiveness review

In accordance with the Code, the Board undertakes an externally facilitated effectiveness review at least once every three years. In 2022, the effectiveness review was facilitated by an external consultant, led by Clare Chalmers of Clare Chalmers Ltd, who is independent and apart from also conducting the 2019 effectiveness review, has no other connection with the Group.

The 2022 review process commenced with the Nomination and Governance Committee planning the scope of the evaluation. The Committee considered a shortlist of external evaluators for approval by the Board. Clare Chalmers Ltd is a leading provider of board evaluations in the UK, with strong experience in evaluating FTSE-listed Boards. The Board found the 2019 evaluation performed by Clare Chalmers Ltd to be insightful and agreed that it would benefit from building on this by engaging Clare Chalmers Ltd a second time. The selected evaluator discussed the process with the Chairman, Senior Independent Director and the Company Secretary and agreed the interview framework agenda to be discussed with Board members, Company Secretary, members of the Executive Committee who regularly attend Board and Committee meetings and the Company's Lead External Audit Partner and Remuneration Adviser, who all held one-on-one interviews with the evaluator. Feedback on individuals was provided to the Chairman, for him to provide feedback to Directors on a one-to-one basis, and the Senior Independent Director (holding a closed session with the Non-Executive Directors) to provide feedback to the Chairman on his performance in the year. Ms Chalmers also observed a Board meeting, Audit and Risk Committee meeting and Nomination and Governance Committee meeting and conducted a review of Board and Committee papers, terms of reference, the annual report, output of previous board evaluations, the board's calendar and forward-agenda planner. She visited Chile to deliver the findings of her review in person.

The review was designed to recognise and raise key themes identified collectively by the Directors, as well as for the evaluator to give their own perspective from meeting observations and document review, along with suggestions for improvement and of good practice, 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 2022. The findings of the review were discussed by the Board and, based on Ms Chalmers' report, the Directors were satisfied that the Board and its Committees operated effectively in 2022.

Ms Chalmers highlighted the Board's strengths as strong skills, coverage of mining and a good mix of other relevant experience and backgrounds; strong engagement from the CEO and good access to the senior team, who get airtime in meetings; thorough NED site visits, with high-quality feedback to the Board. Recommended opportunities for further improvement were also highlighted. These are set out below.

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.

Jean-Paul Luksic
Chair of the Nomination and Governance Committee

Our review process

2022

The external review was a comprehensive assessment of how the Board is working, focused on evaluating the following key areas:

- Board composition and culture (composition, succession planning, training and inductions, leadership, dynamics and decision-making)
- Board oversight (strategy, performance, risk, people and executive succession and purpose, values and culture)
- Stakeholders (workforce engagement, shareholders, customers and suppliers, ESG)
- Board efficiency (Board meetings, agendas and minutes and secretariat)
- The Committees
- Board and Committee papers

2023

The Board will focus on several areas to improve effectiveness:

- More concise presentations
- Board discussions at more preliminary stages before final decisions are required
- More proactive agenda setting
- More streamlined delivery of information to the Board that is covered in the Committees

Robust controls focused on the business

Tony Jensen
Chair of the Audit and Risk Committee

"We focus on robust risk management and control. During the year, we reviewed external and internal audit functions, internal control, compliance and risk management capabilities. The Group is stronger as a result."

2022 membership and meeting attendance

	Number attended
Tony Jensen (Chair)	7/7
Jorge Bande	7/7
Francisca Castro	7/7

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.

The Committee meets as necessary and at least twice a year. It works within the framework of a detailed annual work plan. Committee members participate in all other Board Committees, allowing the Committee to consider the full spectrum of risks faced by the Group.

All Committee members are independent and are considered to have recent and relevant financial experience, as well as 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 to risk management.

The Committee's main responsibilities include:

- 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, and
- monitoring the performance of the Group's compliance and crime prevention models.

Key activities in 2022

Financial reporting

- Reviewed the 2021 year-end and 2022 half-year financial reports, focusing on significant accounting matters relating to the Group's results.
- Reviewed accounting matters likely to impact 2022 year-end results.
- Reviewed the Group's 2021 Reserves and Resources Statement and corresponding audits. Reviewed highlights of the 2022 statement. Audits of reserves were carried out at all operating companies. Resources audits will be performed during 2023.
- Assisted the Board in ensuring that the 2021 Annual Report was fair, balanced and understandable.
- Reviewed analysis for the 2022 going concern and long-term viability statements, including preparation for a future resilience statement.
- Implemented plans to accelerate the financial reporting cycle, which enabled a successful earlier results announcement in February 2022.
- Reported under the Task Force on Climate-related Financial Disclosures (TCFD) framework for the first time in the 2021 Annual Report, with disclosures appropriately reflecting the Group's position.
- 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 strategy and tax position, including the effective tax rate, recovery of tax refunds, tax-disallowed expenses and proposed changes to the tax regime and mining royalties in Chile.

External audit

- Conducted a tender process in respect of the 2024 audit, resulting in the selection of Deloitte as the Group's external auditor.
- Reviewed and approved the 2022 audit plan, including fees. Validated that PwC incorporated feedback from both the Committee and management on the 2021 audit and engaged extensively with management to align on critical success factors.
- Assessed the effectiveness of the external audit process, reviewed PwC's independence and approved its performance.
- Reviewed the Group's policy in respect of auditor independence and non-audit services.
- Reviewed the key audit findings in respect of the 2021 audit and reviewed PwC's progress reports in respect of the 2022 audit.
- Implemented plans which resulted in the successful acceleration of the audit timetable for a February 2022 results announcement.
- Reviewed regulatory changes including the Department for Business, Energy and Industrial Strategy (BEIS) review, developments in auditing standards and the FRC's areas of focus, including its audit quality inspection and supervision report.

Internal audit

- Reviewed key findings from the internal audit reviews conducted during 2022.
- Reviewed the quality, experience and expertise of the internal audit function, confirming its suitability for the business.
- Approved an update to the internal audit mandate.
- Reviewed actions to co-ordinate audit scope with PwC to avoid duplication or double testing.
- Agreed the scope and focus areas for the 2023 internal audit plan including assurance approach and continuous auditing methodology.

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.
- Conducted detailed reviews with the General Managers of each of the Group's operations, covering the operations' key risks, residual risks, climate change risks, materialised risks and identified opportunities.
- Reviewed the draft of the proposed new Chilean constitution and its potential impact on key risks. The proposal was subsequently rejected by a national referendum.
- Reviewed the latest developments in cyber security and updated action plans to enhance the Group's risk management maturity in this key area.
- Reviewed the activities undertaken during the year to further develop the maturity of the Group's risk management processes.
- Reviewed the steps taken to ensure that slavery and human trafficking are not occurring in any part of the Group's business, including in its supply chains.

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 training on the Group's compliance model, crime prevention model and Modern Slavery Policy. Reviewed 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.

Q. What were the key areas of focus for the Committee in 2022?

We focus on robust risk management and control. During the year, we reviewed external and internal audit functions, internal control, compliance and risk management capabilities. We undertook a tender process in respect of the 2024 audit, resulting in the selection of Deloitte as the Group's external auditor from the 2024 audit onwards.

Financial reporting

Q. What were 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 that 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.

We monitored the implementation of detailed action plans to accelerate the financial reporting cycle, enabling us to announce our results in February 2022, three weeks earlier than in 2021. The 2021 Annual Report included the first report under the Task Force on Climate-related Financial Disclosures (TCFD) framework, with disclosures appropriately reflecting the Group's position. It also included additional disclosures made to address the points raised by the Financial Reporting Council's corporate reporting review team ("CRRT") following their review of our 2020 Annual Report.

We continued building our capability to prepare for new potential regulations regarding the Board's confirmation of the effectiveness of internal controls over financial reporting.

The Committee assists the Board in undertaking its assessment that the Annual Report is, when taken as a whole, fair, balanced and understandable and that it 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 used 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 fairly reflected the financial results for the year.

We also reviewed the ore reserves and mineral resources statement included in the Annual Report and the corresponding reserve and resource independent audits. All recommendations stemming from prior audits were resolved. The Committee also reviewed highlights of the 2022 statement.

The Committee reviewed the going concern basis adopted in the financial statements, as well as the detailed long-term viability statement in the Annual Report and has considered tests for an eventual future resilience statement.

The Committee reviewed the Group's tax strategy and tax position, including the effective tax rate, the status of the recovery of tax refunds, tax-disallowed expenses and the impact of the proposed changes to the tax regime and mining royalty in Chile.

Q. What significant accounting issues in relation to the financial statements were considered by the Committee during 2022?

The main accounting issues we considered were:

- Asset valuations: our analysis did not identify indicators of a potential impairment at the 2022 year-end at the Group's operations. Accordingly, we have not performed any impairment reviews. Particular focus was placed on Zaldívar, given the importance of the ongoing permits renewal process, and Antucoya, given the marginal level of headroom over recent years. An indicative valuation and sensitivity analysis was performed in order to assess the sensitivities of the Group's mining operations to key assumptions such as the copper price and the Chilean peso exchange rate, and to make appropriate disclosures within the financial statements. As part of this analysis, we considered the appropriate copper price forecasts to use, with reference to the forward curve as at 31 December 2022 and to 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 importance of the renewal of the permits for water extraction and general mining activities to the indicative valuation, and the disclosures in respect of these aspects. We considered the marginal positive headroom for both Zaldívar and Antucoya. We also reviewed the additional sensitivity disclosures included in the financial statements.
- Provision for decommissioning and restoration costs at the Group's mining operations: we reviewed updates to the mine closure provisions, including updates to the closure plans reviewed and approved by Sernageomin, the Chilean regulator, and changes to the financial parameters used in calculating the provision balance.
- Reko Diq: we reviewed the accounting for the Reko Diq transaction, including the conclusion that the agreements resulted in the Group having a legally binding right to receive the exit proceeds with no further substantive events required and no longer had joint control over the joint venture, and it was accordingly correct to derecognise the investment in the joint venture and recognise the gain on disposal in the 2022 year-end results, as well as the determination of the disposal proceeds.
- Zaldívar secondary leaching inventory balance: we reviewed Zaldívar's evaluation of its secondary leaching (ripios de alta ley or RAL) inventory balance, which is a significant item in terms of production volume and value, including the physical sampling undertaken during the year. Our conclusion was that the inventory balance is correctly stated.
- 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 reviewed robust down-side sensitivity analyses which all indicated results that could be managed in the normal course of business.

External audit

Q. What are the Committee's responsibilities 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 Chair of the Audit and Risk Committee, I have established an effective direct relationship with Simon Morley, PwC's lead audit partner.

The Committee reviews and approves the scope of the external audit, 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. The Committee formally meets with PwC without management present at least once a year. We approve the performance of the external auditor. The Committee makes recommendations to the Board in respect of the appointment, reappointment, or removal of the external auditor.

Q. How do you assess the effectiveness of the external audit process?

We work closely with PwC to ensure that external audit quality is maintained throughout the year. PwC incorporates feedback from both the Committee and management on the prior audit and engages extensively with management to align on critical success factors.

For example, during the height of the COVID-19 pandemic, we discussed in detail with PwC how to manage the external audit process, particularly considering travel restrictions. PwC implemented an appropriate mix of remote checks and on-site reviews, preserving the robustness of the audit process.

The Committee considers 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, and
- the review of the FRC's annual Quality Inspection Report on PwC.

In light of this assessment, the Committee considers it appropriate that PwC be reappointed as external auditor for 2023.

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 the Group's policy in respect of auditor independence and non-audit services, which was reviewed in 2022.

New regulatory requirements have applied since 2020 in respect of non-audit services. The FRC issued a "white list" of specifically-permitted services, with all other services prohibited. Permitted services relate to specific activities 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.

The issue of the $500 million bond in May 2022 required the Group to engage PwC UK to act as the reporting accountant for this transaction, work which is effectively required to be performed by the Group's auditor. The Committee assessed this work and determined that it was not considered to adversely affect PwC's independence, taking into account the nature of the reporting accountant work, and the level of fees relative to the Group's total audit fees. The fees for this work were expected to exceed 70% of PwC UK's average audit fees over the past three years (although it was not expected to exceed 70% of the average total Group audit fees paid to PwC over this period). Accordingly PwC UK requested a waiver from the Financial Reporting Council in respect of this work prior to performing this work, which was granted.

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 $241,000, or 12% of the total Group fees for audit and audit-related services. This related to the reporting accounting work by PwC UK for the bond issuance.

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 the most suitable provider. Pre-approval from the Committee is required before non-audit services can be performed by the external auditor, other than for services which are considered to be clearly trivial. 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 2022.

The UK regulatory requirements in respect of competitive audit tendering and other related audit committee responsibilities in 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 2022.

Q. How long has PwC been the Group's auditor?

We carried out a tender process during 2014, which resulted in PwC replacing Deloitte, the previous auditor, and being appointed with effect from 2015 onwards. 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. What are the plans for external auditor rotation?

Under UK regulations the Company's next mandatory tender would be in respect of the 2025 audit, marking the 10-year anniversary of the original audit rotation regulations. Other FTSE100 companies are facing similar anniversaries, which could result in an increased demand for audit tenders over the coming years. As previously disclosed, it was determined that the optimum approach would be to conduct an audit tender process during the second half of 2022 in respect of the 2024 audit to allow for a "cooling-in" period during 2023 and provide a significant transition period.

PwC, Deloitte, EY and BDO participated in the tender process. KPMG declined. BDO meets the mid-tier "challenger" criteria that UK regulators are seeking to promote. Tendering firms held over 50 meetings with management and in my role as Chair of the Audit and Risk Committee, I participated in meetings with all tendering firms in advance of their formal tender presentations.

The Committee reviewed proposals and recommended Deloitte to the Board as first choice, along with a second choice recommendation. The Board selected Deloitte as the next external audit firm for the 2024 audit onwards.

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 a meeting is held without management present at least once a 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 technical mining experience, IT, risk, compliance, internal control, sustainability and cyber security.

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. Internal Audit takes a risk-focused approach when planning its work, in particular utilising the risk registers maintained by each business to monitor and control their key risks. We ensure the plan is flexible and has sufficient resources to allow for special reviews that may be required during the year. During 2022, the Committee approved an updated internal audit mandate and approved the 2023 internal audit plan.

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.

> "In 2022, we assisted the Board with its annual update of the Group's risk appetite assessment and evaluation of emerging and principal risks."

During 2022, Internal Audit implemented a new system to manage its audit reports and findings. This is the system already used by the Risk and Compliance Management Department, further increasing the integration between the Risk and Internal Audit functions.

The Committee reviewed actions to co-ordinate internal audit scope with PwC to avoid duplication or double testing, ensure an efficient relationship between the internal and external audit processes, and achieve the effective and timely sharing of findings.

During 2022, Internal Audit performed part of its work remotely due to restrictions associated with the COVID-19 pandemic. The Committee monitored the quality of the audit work and is comfortable that an appropriate control environment has been maintained.

Risk management, compliance and internal control

Q. What are the Committee's responsibilities in relation to risk management and internal control?

The Committee plays an important role in assisting the Board with its responsibilities regarding 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, Internal Control and Related Financial and Business Reporting 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 2022 relating to risk management?

We continued to monitor actions designed to enhance the maturity of our risk management processes.

We assisted the Board with its annual update of the Group's risk appetite assessment and evaluation 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, complemented by a benchmarking review of emerging and principal risks that have been identified by our peers. During 2022, the Committee and the Board reviewed the Group's 18 key risks, sub-risks, preventative controls and action plans. While risk appetite levels have not changed, the Committee reviewed and the Board approved updates to the risk appetite statements for the principal environmental, operation and tailings risks.

Active risk identification and management took place, including: (1) geopolitical and macroeconomic risks with a focus on the impact of the war in Ukraine and discipline in cost management; (2) proposed changes to legislation in Chile; (3) social risks; (4) climate change; and (5) supply chains. Actions were taken during 2022 to simplify the risk management methodology and verify on-site key risks, carry out change management for the implementation of the simplified risk management methodology, increase risk management maturity and communicate our risk appetite. The business continuity plan was verified. The focus in 2023 will be on implementing a new methodology for materialised risks and reviewing financial reporting, operational control and compliance.

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, significant materialised risks as well as operational opportunities. The meeting served as a forum for sharing experiences and action steps.

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 in allowing us to emphasise the importance we attach to strong risk management processes.

We reviewed steps taken to ensure that slavery and human trafficking are not occurring in any part of the Group's business including its supply chains.

The Committee held a specific review of the latest developments in cyber security and updated action plans to enhance the Group's maturity in this key risk area.

Q. How does the Committee interact with the Board and other Committees on risk-related matters?

I report to the Board following each Committee meeting, summarising the main matters reviewed. 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 mitigating actions.

We try to ensure that the review of risk by the Board is not compartmentalised into isolated sessions but is integrated into everything considered by the Board. To this end, the overall report provided by the CEO to the Board at each meeting covers any significant materialised risks. Each proposal presented to the Board incorporates an analysis of its impact on the principal risks.

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 principal 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, principal and materialised risks.

RISK MANAGEMENT FUNCTION
The risk management function provides regular presentations covering changes in the Group's emerging and principal 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.

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 2022 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.

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 reports to the CFO, 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.

The Crime Prevention Officer presents a report directly to the Board every six months.

Q. What were the Committee's main activities in 2022 relating to compliance?

The Committee monitored the functioning of the Group's crime prevention model, in accordance with Chilean and UK anti-corruption legislation. Compliance activities centred on the three pillars of prevention, detection and action. The crime prevention model was recertified. We reviewed training on the Group's compliance model, crime prevention model and Modern Slavery Policy. We reviewed activities undertaken during the year to develop their maturity.

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 and outlining the most significant issues and the actions resulting from their investigation, along with plans to strengthen the function. The Committee reviewed the process to identify and manage Group employees' potential conflicts of interest, and reviewed the due diligence process conducted in respect of the Group's suppliers.

Q. What were the Committee's main activities in 2022 relating to internal control?

During 2022, the Committee reviewed the Company's internal control framework which consists of three lines of defence. First, business units identify and manage risks. Second, the risk management function provides oversight and support. Third, Internal Audit provides independent assurance. In addition to regular reviews, a session was held to review the effectiveness of risk management, compliance and internal control, the effectiveness of internal controls over financial reporting, and the effectiveness of internal audit and the relationship with external audit. We feel confident that the reviews undertaken by the Committee during 2022 have allowed it to perform an appropriate review of the effectiveness of the Group's risk management and internal control systems during the year. The reporting of these activities by the Committee to the Board supports the Board's confirmation that it has undertaken a review of the effectiveness of the Group's risk management and internal control systems during the year as required by the UK Corporate Governance Code.

Tony Jensen
Chair of the Audit and Risk Committee

Sustainability and stakeholder management

Vivianne Blanlot
Chair of the Sustainability and Stakeholder Management Committee

"Committee meetings provide a forum for the detailed discussion of many of the key issues that matter to our stakeholders such as environmental matters including climate change, the safety and health of our workforce and other matters that support local communities where we operate."

2022 membership and meeting attendance

	Number attended
Vivianne Blanlot (Chair)	5/5
Ramón Jara	5/5
Juan Claro	5/5
Jorge Bande	5/5
Michael Anglin	5/5
Eugenia Parot	5/5

Other regular attendees included the CEO, the Vice President of Corporate 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.

The Sustainability and Stakeholder Management Committee supports the Board in providing guidance on the Group's safety, health, environmental and social responsibility strategies and policies, in the oversight of corresponding programmes and in making 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 operational, projects and other business matters. The material subjects and results of this engagement are reported periodically to the Committee through standalone reports and as part of broader Committee discussions.

Key activities in 2022

Policies and commitments

- Reviewed the Group's Sustainability Policy and new Energy and Water policies, aligned with The Copper Mark's ESG performance evaluation and performance expectations according to ICMM's principles.
- Reviewed the implementation plan to adopt the new Global Industry Standard on Tailings Management (GISTM), published by the ICMM in August 2020. The Group has committed to fulfil its requirements by August 2023 for its critical tailings' deposits and by August 2025 for its lower-risk ones.
- Reviewed the updated Human Rights Policy.
- Reviewed progress towards the achievement of the Copper Mark registration which was achieved by all of the Company's mining operations.

Safety and health

- Reviewed the Group's safety and occupational health strategy, performance and plans. Reviewed the task risk analysis process, psychosocial risk strategy and the safety plan for the new integrated remote operating centres.
- The Board reviewed the 2022 report on the Company's tailings storage facilities, issued by the independent technical review Board appointed to advise the Group on their operation.

Community relations

- Reviewed the water situation in the Choapa Valley after 13 years of lower-than-normal rainfall and Los Pelambres' water management strategy, including operational water management initiatives in order to best support communities.
- Reviewed the public affairs strategy for the Group's northern operations.
- Reviewed the Group's communications strategy and monitored results from the Group's communications activities.
- Reviewed results from the Group's perception study, carried out every two years at a national level within the Choapa Province and Antofagasta Region and with national opinion leaders and Mining division suppliers.

Environment

- Reviewed environmental management reports.
- Reviewed the Group's response to the concentrate pipeline incident at Los Pelambres.
- Reviewed environmental reviews related to Zaldívar's water rights extension.
- Reviewed a progress report on the development of an inventory of Scope 3 emissions and next steps.

Q. How was the Group's safety performance in 2022?

This was a true highlight for 2022. We are very pleased to report that the Group recorded its strongest safety performance on record. During the year, there were no fatal accidents and the Group recorded only 42 High Potential Incidents, 35% fewer than in 2021. The Lost Time Injury Frequency Rate also improved, by 37% to 0.84. This year's challenge is to further improve on these results.

Q. What is the Committee's role in respect of the Company's policies that relate to sustainability and stakeholder management?

The Committee oversees the development of the Group's policies relating to sustainability and stakeholder management. The Committee does not review implementation – this is a matter for each individual operating Company.

During 2022 the Committee provided input in relation to the proposed update to the Group's Sustainability Policy and new Energy and Water policies, which are aligned with the Copper Mark's ESG performance and expectations of the ICMM.

The Committee also provided input on the implementation plan to adopt the new Global Industry Standard on Tailings Management (GISTM) which was published by ICMM in August 2020 and the Group's operating companies have committed to fulfil its requirements by August 2023 for critical tailings deposits and by August 2025 for lower-risk ones.

The Committee also reviewed proposed updates to the Group's Human Rights Policy.

Q. How did the Committee consider climate change during the year?

As noted by the Chairman on page 6, combatting climate change sits at the centre of Antofagasta's strategy. In particular, lowering emissions and reducing continental water use remain two issues for which we have a group-level strategy, board-level focus and Company-wide initiatives.

The Committee assisted the Board in considering various climate change-related initiatives during the year, including those in the Board's 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 Strategy, reviewed by the Committee and approved by the Board in 2020, takes a multidisciplinary approach to the challenges posed by climate change, focusing on the development of climate change resilience, the reduction of greenhouse gas emissions, the efficient use of strategic resources, the management of the environment and biodiversity, and the integration of stakeholders.

The Committee reviewed the community water situation in the Choapa Valley, which has had 13 years with lower-than-normal rainfall. As part of this, the Committee also reviewed Los Pelambres' water management strategy and operational water management initiatives.

The Committee reviewed a progress report on the development of an inventory of Scope 3 emissions and next steps. The Company has short-term and long-term Scope 1 and 2 emission reduction targets with the goal of achieving carbon-neutrality by 2050. During 2022, three years earlier than the target date of 2025, the Group achieved its Scope 1 and 2 30% reduction target and will set a new near-term goal in 2023. With respect to Scope 3 emissions, the Group has committed to define a long-term target in 2023 or as soon as possible thereafter.

Q. How does the Committee ensure that the Board considers the views and interests of stakeholders?

The Committee does not interfere in the day-to-day management and implementation of the Group's policies and procedures. However, meetings provide a forum to discuss key trends and issues that matter to local communities, our workforce, national and local governments, regulators and other stakeholders. Many of these issues are identified as part of each operating companies' risk management and community engagement processes, which are submitted by management to the Committee for their information. Communicating with our stakeholders during difficult times has been key to strengthening mutual trust and understanding. We work hard to respect 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.

Q. How does the Committee ensure that the Group's tailings storage facilities are safe?

The stability and safety of our tailings storage facilities (TSFs) is a primary concern for us and many of our stakeholders, and the Committee and the Board are focused on ensuring that the policies and procedures implemented by our operating companies ensure that the TSFs continue to be stable and safe.

Chile experiences a significant amount of seismic activity and as a consequence there are strict regulations governing the construction of TSFs 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 TSFs using the upstream method, which is commonly used in other countries but can pose significant safety risks. Current Chilean legislation also requires a stability analysis of TSFs' 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 TSFs: internal teams have reporting lines not linked to the mine operation and an independent tailings review Board (ITRB) visits our TSFs regularly, assessing risks and making recommendations to ensure their continued safety. The Committee and the Board review these reports and challenge management on their recommendations.

The Committee and the Board also receive regular reports on the operation of the Group's TSFs. Following the Group's adoption in 2020 of a tailings management policy aligned with the Global Industry Standard on Tailings Management (GISTM), the Committee has monitored operating companies' implementation of this policy, along with reports from management and the ITRB. The Group's operating companies have committed to fulfilling the GISTM requirements by August 2023 for critical TSFs and by August 2025 for lower-risk TSFs. Operating companies have established their own governance structures, plans, tailings management systems and implementation timelines.

Further information on our TSFs, including the risks and the governance measures in place, can be found on page 58.

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 this, our operating companies 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 material subjects and results of this engagement are reported periodically to the Committee through standalone reports and as part of broader Committee discussions.

"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. What are the Committee's priorities in 2023?

Our number one priority continues to be the safety and health of our employees, contractors and local communities. We will continue to provide feedback to our mining operations, encouraging them to further improve upon our record safety performance in 2022 and continue to reinforce the practices that resulted in the strong performance achieved in 2022.

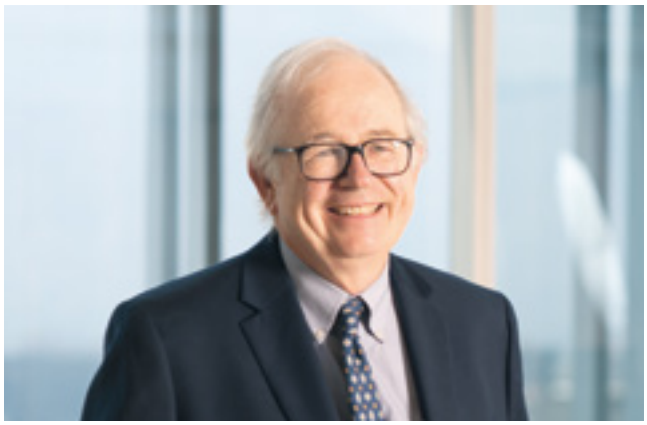
The Committee will continue to receive feedback from our mining operations on the implementation of the Group's environmental management system and we will continue to oversee the implementation of our Climate Change Strategy, aimed at meeting our greenhouse gas targets for reduced carbon dioxide emissions.

The Group has successfully contracted power supply agreements over the last few years and since April 2022 the electricity supply contracts for all of our mining operations come from renewable sources.

The Committee will continue to oversee the implementation of the Group's Climate Change Strategy during the year and to assess whether the Group's social programmes and the work done with communities close to our operations is in accordance with the Group's Social Management Model.

Vivianne Blanlot
Chair of the Sustainability and Stakeholder Management Committee

Project pipeline progressed during the year



Michael Anglin
Chair of the Projects Committee

"The Committee reviews all aspects of major projects to be submitted for Board approval, highlighting key matters for the Board's consideration."

2022 membership and meeting attendance

	Number attended
Michael Anglin (Chair)	4/4
Jorge Bande	4/4
Ramón Jara	4/4
Eugenia Parot	4/4

Other regular attendees included the CEO, the CFO, the Vice President of Projects, 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 for the Board's consideration throughout the project's development 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 Group's projects portfolio. This includes overseeing the establishment of project development guidelines, drawing from best practice, industry experience and lessons learned from other Group projects.

Key activities in 2022

Policies and commitments

- Reviewed the Group's projects portfolio, including budgets and schedules.

Project reviews – studies phase

- Reviewed progress with Centinela's Second Concentrator project's commitment phase and amendments to the timetable for a potential execution decision.
- Reviewed a proposal to ensure water supply for the construction phase of Centinela's Second Concentrator project.
- Reviewed a proposal to award the electrical power contract for Centinela's Second Concentrator project, subject to the project's investment decision.
- Reviewed a $179.5m advance of funds to cover critical path activities for Los Pelambres' Desalination Plant Expansion and Concentrator Pipeline projects.
- Reviewed the application of the Company's internal carbon price in assessing alternative materials transport cases for the Polo Sur project
- Reviewed an in-pit tailings deposition project which considers using the Tesoro Central pit at Centinela, followed by the Tesoro North East and Esperanza pits, to cover Centinela's tailings management needs for 15 years and possibly for the life-of-mine.

Project reviews – execution phase

- Monitored progress in the execution of Phase 1 of the Los Pelambres Expansion project, including the revised capital expenditure estimate of $2.2 billion. Reviewed the consequences of the marine works incident.
- Reviewed the project designed to repower and technologically upgrade Los Pelambres' coarse ore transport system, including updates to the project's capital expenditure and development programme.
- Monitored progress in the execution of the Zaldívar Chloride Leach project.

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 are following a standard, structured process using consistent analysis, execution and evaluation practices. The Committee oversees the full project development, 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.

"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 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 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.

Q. What were the Committee's key activities in 2022?

Execution – Phase 1 of the Los Pelambres Expansion project

A new capital estimate of $2.2 billion was endorsed by the Committee and approved by the Board, addressing the impact of the COVID-19 pandemic, execution plan interferences, input price increases and other deviations related to the social and geopolitical environment.

A marine works incident caused by unseasonal sea swells impacted the project schedule, delaying the start date of the desalinated water supply until the second quarter of 2023. The Committee discussed the investigation and lessons learned from the incident.

See page 86 for more information on Phase 1 of the Los Pelambres Expansion project.

Execution – Coarse ore conveyor project

The Committee reviewed developments in the execution of the project to repower and technologically upgrade Los Pelambres' coarse ore transport system, including updates to the project's capital expenditure and development programme.

Execution – Zaldívar Chloride Leach project

The Committee monitored progress following mechanical completion, achieved in December 2021, and progress towards operational transfer to Zaldívar in February 2022.

See page 87 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 desalination plant expansion and mine life extension, and recommended that the Board approve funds to advance the Los Pelambres' rerouted concentrate pipeline and water supply pipeline to cover critical path activities.

See page 87 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, currently in the commitment phase leading up to a potential investment decision, in order to progress project development with further detailed engineering, construction permitting and risk mitigation.

The Committee reviewed the project's ESG profile, noting that 100% of the power will come from renewable sources, and that it will use sea water and thickened tailings. Environmentally, the project seeks to avoid and, if necessary, control any environmental impact associated with its development, including air quality, archaeological preservation and biodiversity. Socially, the project seeks to generate positive externalities and benefits in the supply chain and manage reputational risks. It has identified all relevant stakeholders, established a community relations strategy and is developing stakeholder, community and communications plans. With respect to climate change, the objective is to facilitate early action and adaptation in relation to risks and opportunities.

The Committee reviewed the project's financing plan. It also reviewed opportunities associated with the potential outsourcing of the sea water supply system and electrical substations. The Committee endorsed a proposal to ensure water supply for the construction phase of the project through to August 2024 and reviewed an electrical power contract subject to the investment decision.

In line with our disciplined approach to capital allocation, the decision on when to submit the project to the Board for approval during 2023 will consider the completion date of the Los Pelambres Expansion project as well as ongoing discussions on the tax reform and mining royalty bills in Chile, and the rewriting of the Chilean constitution.

See page 88 for more information on Centinela's Second Concentrator project

Studies – Polo Sur project

The Committee reviewed the application of the Company's internal carbon price for the Polo Sur project used as part of the determination of the relative attractiveness of alternate conveyor, truck and road train transport cases.

Studies – In-pit tailings deposition project

The Committee reviewed an in-pit tailings deposition project which considers using the Tesoro Central pit at Centinela for tailings deposition, followed by the Tesoro North East and Esperanza pits, covering Centinela's tailings management needs for 15 years and possibly for the Base Case life of mine of the concentrator plant. This project would defer investment in raising the height of the walls of the current tailings storage facility. The Committee supported a recommendation from Centinela to start the project's commitment phase.

Q. What are the Committee's priorities in 2023?

The Committee will continue to monitor the Group's key projects.

The Committee will continue to oversee the completion of construction of 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

Enabling our strategy through pay and talent management practices

Francisca Castro
Chair of the Remuneration and Talent Management Committee

"As a Committee, we seek to ensure the best pay practices for Antofagasta in order to remain a world-class employer attracting and retaining the best talent."

2022 membership and meeting attendance[1]

	Number attended
Francisca Castro (Chair)	6/6
Michael Anglin	6/6
Vivianne Blanlot	5/6
Tony Jensen	6/6

1. During the year the Committee also met with independent remuneration consultants Willis Towers Watson 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.

- 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 in practice and at least four times a year.
- All Committee members were independent in 2022.

Key report sections:

Remuneration 'at a glance' 146

Remuneration Policy 149

Single figure remuneration table 155

Remuneration for 2023 165

Dear shareholders

I am pleased to present the 2023 Directors' and CEO's Remuneration Policy and 2022 Directors' and CEO's Remuneration Report.

- This report comprises this letter, an 'at a glance' section, the 2022 annual report on remuneration, which details the implementation of our pay policy in 2022 and the 2023 Directors' and CEO's Remuneration Policy.

2023 Directors' and CEO's Remuneration Policy

The 2023 Directors' and CEO's Remuneration Policy ("2023 Policy") is set out on pages 149-154 and is being presented to shareholders for approval at the 2023 AGM. Subject to approval, the policy will supersede the 2020 Directors' and CEO's Remuneration Policy approved by shareholders at the 2020 Annual General Meeting ("2020 Policy").

In developing the 2023 Policy, the Committee undertook a detailed review of the 2020 Policy, considering the impact of potential changes on overall quantum, developments in market practice and expectations in the UK and in Chile, the alignment between pay and performance during the current policy period and feedback from employees, shareholders and other stakeholders.

In proposing the 2023 Policy, the Committee has concluded that the Group's fundamental remuneration structures continue to be fit for purpose. For executive pay, this includes a base salary, an annual bonus plan that pays out in cash and an LTIP that consists of a combination of restricted and performance awards, with the payment of LTIP awards in cash on vesting.

While some components of these structures continue to differ from those of companies with a significant presence, headquarters and CEO based in the UK, the Committee believes that our remuneration structures have worked well. We consider that our variable remuneration arrangements are simple, easily understood and are effective for our circumstances, while incorporating an appropriate blend of local Chilean market practice and the expectations of a company with a premium listing on the London Stock Exchange.

While we recognise that some shareholders expect senior executives to maintain share ownership as a percentage of base salary both during and following employment, the Committee considers that given the Company's controlling shareholding interest and governance structures, there are sufficient checks and balances in the Group to ensure that executive pay is aligned with the long-term interests of the Company.

Although the Committee decided that no changes to core remuneration structures were necessary, the market for executive talent for successful companies remains competitive and therefore some changes were required. The Committee debated extensively the most appropriate ways to ensure that we retain and motivate our senior management within the framework of the current pay structure. Following these deliberations, we have proposed to change the CEO's policy and contract by extending the notice period and including change of control protections and an incentive to work with a successor, whenever necessary, in the future.

As part of the process of reviewing our 2020 Policy, I engaged with our key shareholders and proxy advisers on behalf of the Committee to explain these proposals and reported the feedback received to the Committee for its consideration in finalising the 2023 Policy. I received feedback that shareholders understood our unique circumstances and our 2020 Policy's longstanding application and appropriateness and were generally supportive of these proposed changes. However, the Committee did receive feedback that a payment of 12 months was the accepted norm for UK governance purposes for a termination payment to an executive director in a change of control situation and we changed our original proposal for a longer 24 months termination payment following our engagement with shareholders. I would like to thank all our shareholders who engaged with us and provided valuable input and continued support.

2022 Directors' and CEO's Remuneration Report – remuneration in context

The Committee considers a range of factors and KPIs when making decisions on remuneration, including the views of stakeholders (including shareholders and employees) and the Company's performance. A summary of these factors and KPIs is set out in the "at a glance" section of the 2022 Directors' and CEO's Remuneration Report on page 146. However, I would like to highlight a number of important perspectives for this report:

- Our CEO sets the standard in prioritising the safety and wellbeing of our employees and contractors and the Group plays a major role in supporting the Chilean economy, local communities and other stakeholders as set out in detail on page 44 of the Annual Report,
- We maintain excellent relations with our workforce and five new collective bargaining agreements were successfully concluded by October 2022. These agreements are on top of the inflation linked increases that are already built into agreements and employees' contracts providing financial security in periods of higher inflation,
- Despite a challenging year resulting in a decrease in revenue and profit before tax, primarily as a result of lower copper realised prices and lower copper sales volumes, the Group has had solid operational results meeting its adjusted production and cost targets, generating EBITDA of $2.9 billion, while continuing with essential growth and innovation projects,
- The safety and health of people remains our top priority. In 2022, the Group achieved record safety results, with no fatalities, a reduction in High Potential Incidents (HPIs) and in the Lost Time Injury Frequency Rate (LTIFR), and the implementation of a supervisors' leadership skills training programme adding to the robust framework already in place,
- We strive to create a diverse and inclusive workplace that stimulates innovation and allows our employees to reach their full potential. In 2017, the Group underwent an assessment of its diversity and inclusion maturity level and was rated as Tier 2 – Emerging. In 2022, thanks to the implementation of our robust Diversity and Inclusion Strategy and action plans, the Group reached Tier 4 – Collaboration. We are also proud to report that female direct employees' participation reached 20.6% by the end of 2022. The Group remains committed to driving transformational change in order to establish itself as a leader in diversity and inclusion, which is crucial to the success of our business strategy,
- To foster the growth and development of our workforce, our Talent Management Strategy is centred on maintaining the critical skills and abilities needed to overcome present and future business challenges. This is achieved through attracting and retaining talented individuals and providing career development opportunities within the Group,
- During 2022, the Group concluded an engagement survey across all its group operations and, as a result, implemented action plans to address areas such as reward, recognition and talent acquisition. The Committee held a stand-alone session to discuss the outcomes of this survey during the year and will consider the valuable insights gathered from the survey in its future decision-making processes,
- By the end of 2022 we had achieved our scope 2 reduction emissions for 2025, three years earlier than planned. All of our mining division's energy is now sourced through renewable contracts and during 2023 we will focus on building our decarbonisation plan for 2030, which will be aligned with our 2050 net zero ambition. In addition, we continue to focus on the climate related aspects of environmental health and sustainability through our climate roadmap, the circular economy and water efficiency.

CEO's performance and incentive outcomes for the year

Annual bonus outcome

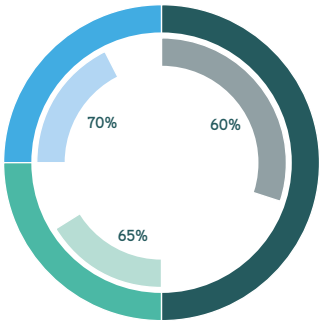
The overall bonus for the CEO was 81% of the maximum.

The result for Core Business targets was 60% of the maximum, and this reflects the challenging head winds of higher inflation and input costs during the year. The result for the Business Development targets was 65% and the Sustainability and Organisational Capabilities targets was 70%, with safety being met in full. The outcome was adjusted as there were no fatal accidents during the year. This triggered a standalone upward adjustment to the total performance score outcome, equal to + 10%.

As well as recording its best ever safety record, the Group also performed well in exploration, innovation, and Digital Transformation projects, resulting in these elements of the annual bonus paying out at 74%. Furthermore, the CEO demonstrated commitment and perseverance in delivering against challenging individual objectives, described on page 157. An illustration of the outcomes is shown below.

Find out more on P156

Annual bonus for 2022



Core Business
- Weighting 50%

Business Development
- Weighting 25%

Sustainability and Organisational Capabilities
- Weighting 25%

Total bonus payout

74%

LTIP outcome

The outcome of the relative total shareholder return measure of the LTIP performance targets will not be known until after the Annual Report is published, but it is anticipated that the overall LTIP vesting level will be 100% of the maximum. 100% of the Mineral Resources Increase target was achieved, as well as 100% of the Social and Environmental targets and 100% of the Projects' performance targets. During the performance period, the Committee amended target to remove the impact of exceptional events (Covid-19) in respect of the Los Pelambres Expansion project, reflecting delays outside of management control. The actual final vesting for the LTIP will be included in next year's report.

Mineral Resources Increase target met

100%

Social and Environmental targets met

100%

Projects' performance targets met

100%

The Committee has considered whether the overall vesting of performance awards that were granted in 2020 could give rise to windfall gains and is satisfied that the LTIP awards fully reflect the achievements and shareholder value delivered during this time and should vest in full. In reaching this conclusion, the Committee has taken into account the relatively minor impact that the declaration of a global pandemic had on the Company's share price, the fact that no adjustment was made to increase the overall vesting of 2017 performance awards which vested in cash in March 2020, that the LTIP vesting value for 2022 is similar to the value for 2021, and the strong delivery of shareholder value over the performance period. This strong performance, despite market headwinds, is likely to give rise to the full vesting of the performance awards under the LTIP.

Find out more on P158

Our approach to the CEO's remuneration in 2023

Base salary

Find out more on P165

Whilst not part of the 2020 Policy, as part of the remuneration review, the Committee acknowledged that our CEO's total pay has been consistently below comparable levels in the mining industry and those of our FTSE 100 peers, as competition for talent continues to become more global and a greater risk to the business. In accordance with the CEO's employment contract, inflationary and exchange rate adjustments were applied to the CEO's base salary in 2022. During 2022, this amounted to a cumulative CPI annual increase and an exchange rate increase. The significant market movements prompted the Committee to review the base salary positioning of the CEO.

For the implementation of the policy in 2023, we increased in January the CEO's base salary from its December level by 20% to $1,255,552. Despite this change, the level of our target total CEO remuneration remains in the lower quartile of FTSE 100 mining companies and our core global copper mining peer group. Together with the changes in respect of the notice payments under the CEO's contract, we believe these changes will effectively retain our CEO over the next policy period.

Annual bonus for 2023

Find out more on P165

Overall, our balanced scorecard for the annual bonus works well and focusses on the right KPIs. We have updated the performance measures and targets for 2023 in response to a review of our strategic priorities for the forthcoming year. For 2023, corporate expenditure has been removed from the core business metrics as a separate metric. The associated metric weight was added to the EBITDA as this metric already reflects both income and expenses including corporate expenditure. This change reduces the number of KPIs in our annual bonus plan in order to move towards a simpler and more effective scorecard. Additionally, safety and health of our employees are our top priority, and, in addition to the continued goal of High Potential Incidents reduction (HPIs), we have added a further element being the monitoring and reduction of occupational hazards risks (e.g. excessive noise, pollutants, as well as physical and mental wellbeing) of our employees. Our targets will be disclosed retrospectively in next year's remuneration report.

In respect of our performance indicators relevant to Antofagasta's Climate Change Strategy, we have included objectives relating to the development of the Final Stage of the Decarbonization Plan of AMSA, the 2022 Stage of the Decarbonization Plan in the annual mining planning process, the Goal definition of Scope 3 emissions and the definition of the Carbon Offset Strategy. In addition to these goals, we intend to rework our roadmap, timeline and process methodologies to reach our 2030 Scope 1 and 2 goals.

LTIP for 2023

Find out more on P166

Our fundamental LTIP structure and KPIs remain unchanged with a balanced scorecard measuring relative returns to shareholders, increasing resources and focusing on critical aspects of our projects portfolio, environmental and sustainability commitments.

Directors' fees

No fee changes are anticipated for Directors in 2023.

Find out more on P167

As mentioned earlier in this letter, the fundamental structure of our policy is unchanged. It is simple and aligned with delivering our business goals and shareholder value, while reflecting practices in the international mining industry and in Chile. We must continue to reflect on where our operations are based so that our policy and structure are aligned across the Group, the Executive Committee and throughout the organisation.

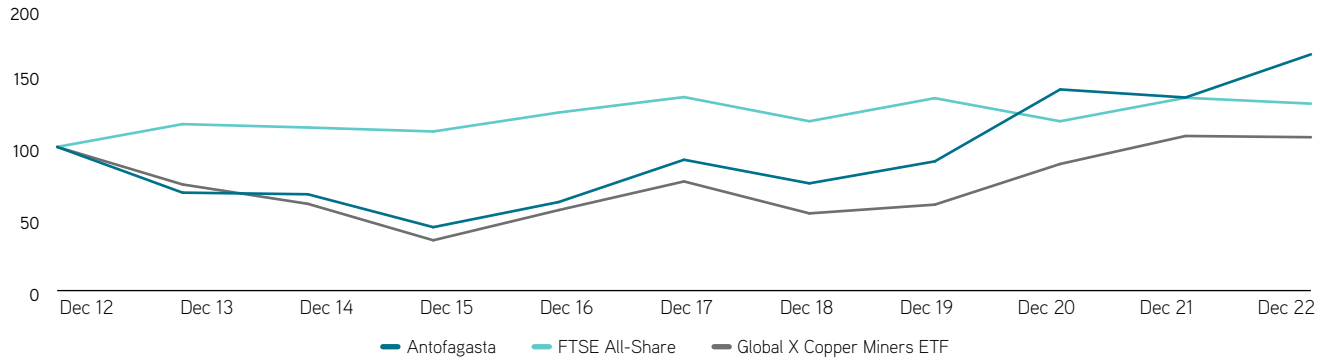
To our investors and the proxy advisers who met with us in developing the 2023 Policy, thank you for your support and constructive comments during our engagement. We look forward to your continued support for the 2023 Policy and the Remuneration Report at the AGM in May 2023.

Francisca Castro
Chair of the Remuneration and Talent Management Committee

Remuneration at a glance

Summary of business performance (strategic performance outcomes in 2022)

TSR performance



646.2k tonnes
Copper production

$0.62/ share
EPS performance

0
Fatalities

20.6%
Female employee participation

2050 net zero target
Group ESG objective

CEO's pay outcome for 2022

$4,808k
Total remuneration for the CEO

100%
CEO's individual performance

2022 Annual Bonus

Element	Measure	Weighting	Achievement (% of maximum)
Core business	EBITDA	12%	80%
	Production	22%	50%
	Cash costs	13%	55%
	Corporate expend	3%	95%
Business development	Growth	15%	50%
	Exploration	5%	85%
	Innovation	5%	85%
Sustainability and organisational capabilities	Safety	5%	100%
	People	5%	75%
	Environment	10%	50%
	Social	5%	75%
Total outcome – pre-adjustments			64%
Adjustment for meeting zero fatality target			10%
Total outcome			74%

LTIP: anticipated vesting in 2023

Element	Measure	Weighting	Achievement (% of maximum)
Relative total shareholder value	TSR v EMIX Global Mining Index performance (estimated, see page 158)	50.0%	100%
Mineral resources	Increase over three years	25.0%	100%
Projects' performance	Key projects' milestones	12.5%	100%
Environment and social performance	40% social management plan, 60% climate change and environment	12.5%	100%
Total outcome			100%

Summary of the Policy review

Following a review of the Company's policy, the Committee concluded that the remuneration structure remains fit for purpose and no material changes were required.

2023 Remuneration Policy

Element	2023 Policy
Base salary	Automatic adjustment for Chilean inflation, market review and exchange rate review, as appropriate
Pension	None – Self-funded
Benefits	Market competitive
Annual bonus	200% maximum 100% target 0% threshold
LTIP	200% maximum Exceptional limit of 325% 70% Performance Awards and 30% Restricted Awards
Malus and clawbacks	Malus on LTIP

However, as part of our proposed 2023 policy, some changes have been made to our CEO's employment contract regarding notice periods and termination payments in order to ensure that the contract remains aligned with industry and international market practices (more details on page 153). These changes have been made to ensure that our contractual provisions safeguard our talent, allow time for succession planning, if needed, and reflect industry practices and international market expectations.

Element	Previous Policy	Change
Notice period	30 days notice	6 months' notice
Succession planning payment	No provision in 2020 Policy	6 months for a successful handover and mentoring of new CEO for any future succession
Termination payment in corporate Change in Control	No provision in 2020 Policy	12 months payment in respect of a corporate change of control event, if Company terminates CEO's employment control within 2 years of change in control.

Quantum

Our CEO's base salary has been increased by 20% from 1 January 2023. However, the total target remuneration remains in the lower quartile of the CEOs of both a comparator group of mining companies in the FTSE100 and a comparator group of global copper mining peers.

How the policy will be implemented in 2023

2023 Annual Bonus – performance award KPIs

Element	Pillar of strategy	Measure	Weighting
Mining division's performance (70% of bonus opportunity)			
Core business	Competitiveness	EBITDA, Copper Production and Costs	50%
Business development	Growth Innovation	Growth, Exploration and Innovation	25%
Sustainability	People Safety and sustainability	Safety and Health, People, Environment and Social	25%
Individual performance (30% of bonus opportunity)			
Individual performance		The individual objectives for the CEO were based on critical strategic areas as part of our vision for the company – organisation, culture, people, growth, competitiveness, safety and sustainability and innovation.	30%

2023 Long-term incentive plan – performance award KPIs

Element	Pillar of strategy	Measure	Weighting
Relative total shareholder return	Competitiveness	Antofagasta's TSR compared to Global X Copper Miners ETF (CopX Index) performance	50.0%
Mineral resources increase	Growth	Net increase of mineral resources	25.0%
Project portfolio progress	Growth	Progress of key projects portfolio, including Los Pelambres Concentrate Pipeline and Desalination Plant Expansion, Centinela Second Concentrator and Zaldivar's Operational Continuity Solution.	12.5%
Sustainability commitments	Safety and sustainability	Progress on regulatory commitments made by the mining operations and climate change strategy implementation.	12.5%

Our remuneration philosophy

Our remuneration philosophy reflects local regulations and market practices while aligning with UK best practices and governance.

Local regulations, market practices 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 because, until recently, in Chile they were taxable in full at the date they were granted. Considering the potential future uncertainty on taxation and the use of real shares continues to be uncommon in Chile, all the Company awards continue as cash awards linked to a notional number of shares and share price performance.

Although our CEO is not a Director of the Company, we have voluntarily disclosed his remuneration since 2014 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 implementation in 2019, these disclosures have become mandatory and are included in this report. The final decisions in respect of the CEO's remuneration are always made by the Committee and the CEO is not present for this part of the meeting, ensuring that the Committee makes independent decisions in the best interest of Antofagasta.

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	2023 Policy
Clarity Remuneration arrangements are transparent and promote effective engagement with shareholders and the workforce.	Our rationale for operating two long-term (performance and restricted) incentive plans is straightforward and well communicated. The performance measures used in the Annual Bonus Plan and LTIP are used internally and externally in tracking and communicating business performance, ensuring that participants understand them well. The Committee Chair continues to engage with and seek the views of our shareholders on material changes to Executive Remuneration. Feedback from shareholders on the proposed 2023 policy update has been received and considered. Views of the workforce are taken into account via the workforce engagement mechanisms described in more detail on page 116. Remuneration-related topics on which employee views are sought include benefits, pay fairness, alignment between individual performance and pay and sharing in the Company's success.
Predictability The range of possible values of rewards for the CEO is 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 (when appropriate), with only necessary changes being made so 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 both easy to understand and consistent for the CEO and, where applicable, those below him.	Each element of pay is clearly communicated. Where appropriate, incentive arrangements flow down through the organisation to align the interests of employees and senior management 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 senior management, and performance targets are aligned with our business plan and strategy. There are clearly defined maximum opportunities, as determined in our 2023 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 promote the right behaviours and appropriate safeguards are put in place, including adjustments for safety performance. While clawback has not been introduced as such arrangements are not legally enforceable in Chile, LTIP awards are subject to malus. The Committee retains the 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 2023 Policy continues to be aligned with the business objectives to create sustainable value and high profitability. We reward strong performance aligned with our business objectives, but only if the methods used align with our safety and sustainability objectives. All Group employee performance bonuses, including the CEO's, include an assessment of individual performance related to the Group's Charter of Values.

2023 Directors' and CEO's Remuneration Policy

The Committee presents the 2023 Directors' and CEO's Remuneration Policy, which will be put to a binding vote of shareholders at the Company's 2023 Annual General Meeting.

Subject to shareholder approval, this 2023 Policy will take effect from the 2023 AGM and is intended to apply until the 2026 AGM. The new 2023 Policy will supersede the remuneration 2020 policy approved by shareholders at the 2020 AGM. Once the 2023 Policy is approved, the Company will only make remuneration payments to Directors and the CEO, or payments for loss of office, if the payment is in line with the 2023 Policy. If the Committee wishes to change the 2023 Policy, it will submit a revised policy for shareholders approval.

Policy scope

This year there has been no change to the composition of the Board of Directors, which continues to comprise only Non-Executive Directors. The Board has considered the pros and cons of having executives on the Board and continues to believe that the existing structure is effective in ensuring that the Board maintains objectivity and independence from management. In addition, the structure is appropriate since the CEO, Executive Committee and most senior managers are based in Chile, where Company law prohibits the CEOs of public companies from serving as directors of those companies.

The Company's policy is to ensure that the fees and remuneration of the Directors and the CEO reflect the responsibilities undertaken and to consider comparable remuneration packages and structures in the international mining industry, in the UK and Chile. The 2023 Policy being tabled for shareholder approval is consistent with the previous 2020 Policy and remuneration practices already in place. The Committee considers that the Company's approach to remuneration for the CEO and Non-Executive Directors is not only aligned with the Company's strategy but is effective and well understood.

Policy table for the CEO

Purpose and link to strategy	Operation	Maximum opportunity	Performance measures
Base salary			
To retain and attract high-calibre executives by offering globally competitive salary levels.	Typically, base salaries are reviewed annually. Base salaries and any increases take into account: • the individual's role, performance and experience, • the Company's performance, the external environment and cost, • salary increases for the wider workforce, and • salary levels for comparable roles at relevant comparator companies.	There is no prescribed maximum, although salary increases consider those of the wider workforce. Chilean labour contracts are adjusted periodically to reflect Chilean inflation, and adjustments may also be made due to union labour negotiations. In addition to the salary increases already mentioned, there may be additional increases when the Committee considers it appropriate, including (but not limited to): • Significant increase in the scale, market comparability or responsibilities of the role, and • Individuals appointed on a salary lower than market levels, where increases above those of the wider workforce may be made to recognise experience gained and performance in the role. Such increases will be explained in the relevant Annual Report.	Individual and mining division performance is considered when determining base salaries and increases.
Benefits			
To provide market competitive benefits.	Benefits typically include life and health insurance. Other benefits may be offered where appropriate, including, but not limited to, car allowance, pension contribution, professional fees and relocation allowances.	Benefits are reviewed periodically. There is no maximum overall.	None

Purpose and link to strategy	Operation	Maximum opportunity	Performance measures
Annual Bonus Plan			
To focus on delivering annual financial and non-financial targets designed to align remuneration with the Company's strategy and to create a platform for future sustainable performance.	The bonus is earned based on achieving one-year performance targets. It is paid in cash.	Maximum of 200% of salary	The bonus is based on financial, operational, strategic and individual measures. Performance measures and weightings are reviewed annually to ensure they continue to reflect the Company's strategic priorities. At least 50% of the bonus will be based on the Mining division's financial, operational and strategic performance. Other metrics include, but are not limited to, business development, organisational capabilities, sustainability and safety. In addition, an automatic adjustment applies to the Mining division's performance score under the Annual Bonus Plan, downwards if there is a fatality during the year and upwards if there is no fatality. This further aligns the Mining division's incentives with the core value of safety and our goal of zero fatalities. The Committee will consider whether this should continue to apply annually, considering the Mining division's safety culture and performance. The Annual Bonus starts accruing at 'threshold' performance (0% pay-out), with a pay-out of 50% of the 'maximum' when 'on-target' performance is achieved. The Committee retains the discretion to adjust bonus outcomes to ensure they reflect underlying business performance, the impact of the commodity price and any other relevant factors.
Long-Term Incentive Plan (LTIP)			
To align with the shareholders' experience and focus on long-term, sustainable performance.	Awards under the LTIP will typically comprise: • Performance Awards – performance is measured over a three-year period with vesting thereafter, comprising at least 70% of the total LTIP awards. • Restricted Awards – vest one-third each year over a three-year period, comprising a maximum of 30% of the total LTIP awards. Awards will usually be made in the form of a conditional right to receive a cash payment by reference to the value of a specified number of the Company's shares. Malus may be applied in exceptional circumstances, as detailed in the notes to this table.	Maximum of 200% of salary, increased to 325% in exceptional circumstances.	Performance Awards will be based on a combination of shareholder´s return and strategic performance measures aligned with the business priorities. The targets, measures and weightings are determined by the Committee annually. The shareholder return measures are at least 50% of the Performance Awards. Performance Awards begin vesting at 'threshold' performance, with the amount depending on the performance metric. This level is intended across all metrics to be 0% at the threshold and an aggregate average of approximately 50% of the maximum at 'on-target' performance. No performance conditions usually apply to Restricted Awards. The Committee retains the discretion to adjust payments to ensure they reflect underlying business performance, the impact of the commodity price and any other relevant factors.

Notes to the Policy table

Benefits

Employees, including the CEO, are encouraged to save for their pension, and the Company facilitates a savings plan to which employees contribute. For several employees, excluding the CEO, the Company makes a matching contribution to a pension plan up to a maximum amount. The Company makes no contributions to the CEO's pension.

Operation of incentive plans

The incentive plans are run in line with the Policy and the relevant plan's rules, subject to several areas over which the Committee retains flexibility as detailed below:

- Who participates in each plan.
- The timing and size of an award and/or payment are subject to Policy limits.
- The performance measures, weightings and targets that apply each year and any adjustments thereof.
- The treatment of awards in the event of a change of control, restructuring or other corporate events.
- Treatment of leavers.
- Amendments to a plan's rules in accordance with its terms.

In the case of the CEO, any use of discretion by the Committee will be disclosed in the following annual report and may be subject to consultation with the Company's shareholders.

The Company reserves the right to make payments under the incentive plans to some or all participants in shares rather than cash if the regulations and practice change in Chile to allow payment in shares without adverse additional costs, administrative burden or tax consequences. The latter is seen as a beneficial practice by the Committee. Any further changes will be disclosed in the following annual report and shareholder approval will be sought if required for the proposal in question.

Performance measures and targets

Awards under the Annual Bonus Plan and a significant proportion of the awards under the LTIP are subject to financial and non-financial performance metrics determined annually by the Committee. The Committee reviews the appropriate business plans over the short, median and long-term and sets appropriate targets with a range of achievement to align with the corporate goals and strategy.

The financial metrics align participants with the Group's strategy and long-term sustainable shareholder value creation.

The non-financial metrics measure the development of key projects and exploration activities essential for future mining activities. Other metrics may relate to safety and health, people, environmental and social targets, which ensure that all employees act in a way that preserves or creates social value and considers the interests of all the Group's stakeholders.

Restricted Awards are not subject to performance conditions; given market conditions in Chile, it is appropriate for part of the variable remuneration to be subject only to a time condition and continued employment.

Malus and clawback

Malus provisions apply in exceptional circumstances, including:

- Actions by a participant that, in the reasonable opinion of the Committee, amount to gross misconduct that have or may have a material effect on the value or reputation of the Company or any of its subsidiaries.
- A materially adverse error in the consolidated financial statements of the Group during the performance period.
- Any reasonable circumstances that the Committee determines in good faith to have resulted in an unfair benefit to the participant.

Clawback has not been introduced as such arrangements are not legally enforceable in Chile.

Legacy arrangements

During the term of this 2023 Policy, any payments may be made to satisfy commitments made or undertaken in respect of any LTIP award (Performance Award or Restricted Award) granted under a previous policy or payments made to meet legacy arrangements agreed upon prior to (but not in anticipation of) an employee (and not in contemplation of) being promoted to the position of CEO or the Board of Directors. All such outstanding obligations may be honoured, and payment will be permitted under the 2023 Policy.

Minor amendments

The Committee may make minor amendments to the 2023 Policy (for example, taxes, regulatory, exchange rate or administrative purposes) without obtaining shareholder approval.

The difference in CEO and employee remuneration policy

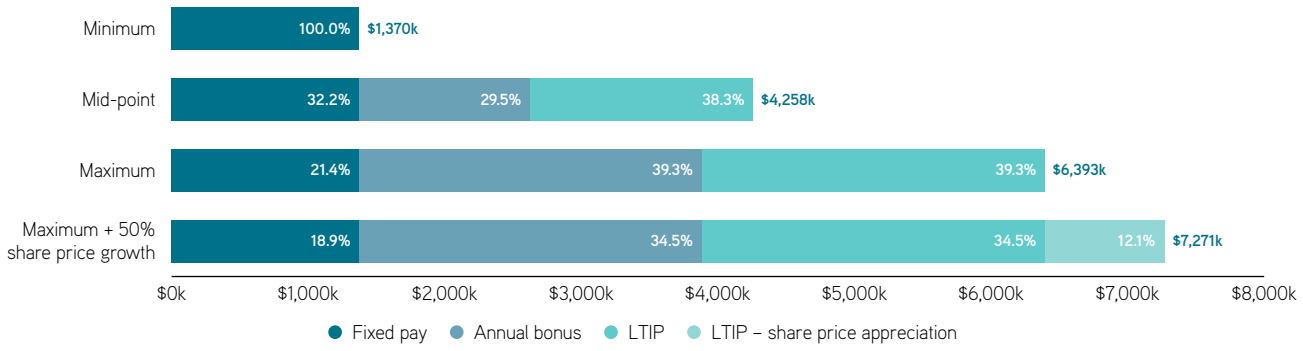
Apart from participation in the LTIP, which is limited to the Executive Committee and certain senior employees, there are no main differences between the 2023 Policy and the general remuneration policy for employees.

/ 2023 Directors' and CEO's Remuneration Policy *continued*

Illustrations of the application of the Policy

The graph below illustrates estimates of the potential remuneration opportunity for the CEO under three different performance scenarios: 'Minimum'. 'Mid-point', and 'Maximum'. In line with the reporting regulations, a scenario assuming 50% share price growth over the three-year performance period is also shown below (for the maximum performance scenario). The assumptions used for these charts are set out in the table below.

CEO total remuneration



Minimum performance	• Fixed remuneration (salary and benefits) only. • No pay-out under the Annual Bonus or LTI performance awards.
Mid-point performance	• Fixed remuneration. • Fifty percent (50%) of the maximum pay-out under the Annual Bonus Plan. • Under the LTIP, vesting is 50% of Performance Awards and 100% of Restricted Awards.
Maximum performance	• Fixed remuneration. • 100% of the maximum pay-out under the Annual Bonus Plan. • Maximum vesting under the LTIP: 100% of Performance Awards and 100% of Restricted Awards.
Maximum performance + 50% share price growth	• Fixed remuneration. • 100% of the maximum pay-out under the Annual Bonus Plan. • Maximum vesting under the LTIP: 100% of Performance Awards, 100% of Restricted Awards and a 50% increase in the share price over the three-year performance period.

Other than for the scenario 'Maximum performance + 50% share price growth', no increase in the share price has been assumed in the graph above. Also, no dividend assumptions have been included in the charts above.

Letters of appointment

All Directors' letters of appointment are available for inspection at the Company's registered office during regular business hours and at the Annual General Meeting (for 15 minutes before and during the meeting).

CEO

Mr Iván Arriagada is employed under a contract of employment with Antofagasta Minerals SA (AMSA), a subsidiary of the Company. His work contract is governed by Chilean labour law. It does not have a fixed term and can be terminated by either party on six months' notice in writing. Any payment for termination or loss of office is provided in the table below.

Under his employment contract, Mr Arriagada is entitled to 25 working days of paid holidays per year.

As Mr Arriagada's salary is paid in Chilean pesos and is adjusted quarterly for inflation, at the end of the year, a further adjustment is made if the US dollar/Chilean peso exchange rate has increased by more than 5% to maintain international competitiveness.

Chairman and Non-Executive Directors

Each Non-Executive Director has a letter of appointment from the Company and from AMSA. The Company has a policy of putting all Directors forward for re-election at each AGM, in accordance with the UK Corporate Governance Code. Under the terms of the letters, if a majority of shareholders do not confirm a Director's appointment, the appointment will terminate immediately. In other circumstances, either party may terminate the position on one month's written notice. The letters require the Directors to undertake that they have sufficient time to discharge their responsibilities.

There is a contract between Antofagasta Minerals and Asesorías Ramón F, Jara Ltda, dated 2 November 2004, for the provision of advisory services by Ramón Jara. This contract has no expiry date but may be terminated by either party on one month's notice.

No other Director is a party to a service contract with the Group.

Policy on payments for loss of office

If the Company terminates the CEO's employment contract for reasons not attributable to the CEO, six months' written notice must be given unless the Company pays compensation in lieu of notice.

If the CEO resigns, he must give at least six months' written notice.

In both cases, if the CEO's employment contract terminates for reasons not attributable to the CEO or CEO's resignation, if requested, the CEO will work with the Committee to appoint a suitable successor and ensure a smooth transition of responsibilities as well as providing mentoring. If the transfer is completed successfully, the CEO will receive an additional payment equal to six months' base salary.

If the Company terminates the CEO's employment contract within two years of a specific corporate event, for reasons not attributable to the CEO, or if the CEO's role or function has been changed without prior agreement within two years of a specific corporate event, the CEO shall be entitled to an additional payment equal to 12 months' base salary.

The treatment of any outstanding incentive awards will be determined based according to each plan's rules, as summarised in the table below:

Annual bonus	Employees who complete at least six months of service in a financial year are entitled to be considered for a bonus subject to the applicable performance targets having been met. Any payment will usually be pro-rated for the period of employment, although the Committee has the discretion to decide otherwise. If the employee's period of employment is less than six months, they will not usually be entitled to be considered for a bonus. However, the Committee has the discretion to decide otherwise.
LTIP	The default position is that any outstanding Performance Awards or Restricted Awards will be forfeited on cessation of employment except if an individual is considered a good leaver e.g. their employment ends due to their death, redundancy, ill health injury or disability, an unexpected event or force majeure, or other reason at the discretion of the Committee. In respect of dismissal by the Company's decision, or the employee's resignation with at least six months' notice, they will be entitled to receive payment of any outstanding Restricted Awards and it will be pro-rated to the time served. Performance Awards will usually vest based on the satisfaction of the relevant performance targets (if applicable) and will be pro-rated to the time served. However, the Committee has the discretion to decide otherwise.
Corporate event or change of control	In the event of a change of control or winding up of the Company, LTIP awards will vest subject to the extent the performance targets have been satisfied (if applicable) and will be pro-rated for the period of the award elapsed, unless the Committee decides otherwise. In the event of an internal reorganisation, LTIP awards may (with the consent of the acquiring entity) be replaced by equivalent awards. Alternatively, the Committee may decide that the LTIP awards will vest as in the case of a change of control, as described above. In the event of a demerger, special dividend or other corporate event that will materially impact the share price, the Committee may, at its discretion, allow LTIP awards to vest on the same basis as in the case of a change of control, as described above.

The Committee reserves the right to make other payments regarding the termination of the CEO's employment. Any such payments may include paying reasonable fees for outplacement assistance and legal or professional advice.

The letters of appointment for the Non-Executive Directors do not provide any compensation for loss of office beyond payments in lieu of notice; therefore, the maximum amount payable upon termination of these letters is limited to one month's fees.

Changes to the policy

As highlighted in the at a glance section the only changes proposed are in relation to our CEO's employment contract regarding notice periods and termination payments in order to ensure that the contract remains aligned with industry and international market practices. These changes have been made to ensure that our contractual provisions safeguard our talent, allow time for succession planning, if needed, and reflect industry practices and international market expectations.

Element	Previous 2020 Policy	Change
Notice period	30 days' notice	6 months' notice
Succession planning payment	No provision in 2020 Policy	6 months of base salary for a successful handover and mentoring of new CEO for any future succession
Termination payment in corporate Change in Control	No provision in 2020 Policy	12 months of base salary payment in respect of a corporate change of control event, if Company terminates CEO's employment within 2 years of change in control.

Policy on recruitment

When determining remuneration, the Committee will consider the new CEO's role, experience, and other factors such as relevant market data and internal comparisons. The Committee strives to pay competitively, but no more than necessary to attract the right talent. On appointment, the CEO's remuneration will generally align with the 2023 Policy, and the maximum aggregate value of incentives (excluding buyouts) will not exceed the 2023 Policy's defined maximum limits. The recruitment approach is outlined below:

Element	Policy and operation
Base salary	Base salary will be determined based on the individual's role and responsibilities, experience and skills, relevant market data and internal comparisons. The starting base salary may be set below the prevailing market rate, but with the expectation of higher-than-usual increases as the individual gains experience and performs in the role.
Benefits	Benefits in line with the 2023 Policy, including relocation benefits if appropriate.
Annual bonus	The structure described in the 2023 Policy table will generally apply for new appointees, with maximums typically pro-rated to reflect service during the year. For the first year of appointment, the Committee may determine that the annual bonus may be subject to modified terms considered appropriate in the context of the recruitment.
LTIP	LTIP awards will be on the same terms as described in the 2023 Policy table. However, the Committee has the discretion to make changes in the first year of employment, including to the performance measures applied. Any change will be fully disclosed in the next Annual Report.
Buyout awards	The Committee recognises that it may be necessary, in certain circumstances, to provide compensation for amounts forfeited from a previous employer. Generally, any buyout awards will be made on a like-for-like basis in terms of commercial value, form, application of performance conditions and timing of receipt to ensure they reflect the incentives they are replacing.

The approach towards an internal promotion will be consistent with the 2023 Policy outlined above. The Company will honour these legacy arrangements if an individual has contractual commitments or outstanding awards before their promotion.

For interim positions, a cash supplement rather than a salary may be paid (for example, if a Non-Executive Director took on an executive function on a short-term basis).

On the appointment of a new Non-Executive Director or Chairman, their remuneration will be in line with the 2023 Policy summary below.

Chairman and Non-Executive Directors Remuneration 2023 Policy Summary

Purpose and link to strategy	Operation	Maximum opportunity	Performance measures
Fees To attract and retain high calibre, experienced Directors by offering globally competitive fee levels.	The Chairman receives an annual base fee. Non-Executive Directors receive an annual base fee. Directors may receive further fees for serving as the Senior Independent Director, a Board Committee Chair or a Committee member. Separate base fees are paid for serving on the Antofagasta Minerals Board or as a Director or chair of any subsidiary or joint-venture Company. Ramón Jara also receives a base fee (adjusted for Chilean inflation) for advisory services provided to Antofagasta Minerals pursuant to his service agreement. Fees are subject to review, which will take into account time commitment, responsibilities and market practice.	Total fees paid will be within the limit stated in the Company's Articles of Association. Changes may be made to Chilean-peso-denominated fees to adjust for Chilean inflation.	None
Benefits To provide appropriate benefits and reimburse appropriate expenses that Directors incur in the performance of their duties.	Non-Executive Directors are entitled to reimbursement for reasonable expenses incurred during the performance of their duties, including any tax due on the reimbursements. Benefits may include the provision of life, accident and health insurance, professional advice and other minor benefits, including occasional spousal travel in connection with the business.	Benefits are set at a level appropriate to the individual's role and circumstances. The maximum will depend on the type of benefit and cost of its provision.	None

In line with the UK Corporate Governance Code, Non-Executive Directors do not participate in incentives, share schemes, or receive a pension provision.

Consideration of employment conditions elsewhere in the Group

When the Committee reviews the remuneration of the Directors and CEO, it considers pay conditions across the Mining division. This is done in the context of different working environments and geographies and therefore is not a mechanical process. The Committee does not currently use any other remuneration comparison metrics when determining the quantum and structure of Director remuneration. The Directors' and CEO's Remuneration Policy is well understood by employees and employees know that the CEO's remuneration policy is substantially similar to their own. The Chair of the Remuneration and Talent Management Committee has not therefore explained this to employees.

The Committee considers employee pay practices and experiences at each meeting to ensure Antofagasta remains a world-class employer, attracting and retaining the best mining talent.

Consideration of shareholder views

The Company maintains a dialogue with institutional shareholders, sell-side analysts, and potential shareholders. The Investor Relations team manages this communication, which includes announcements and a formal programme of presentations to update institutional shareholders and analysts on developments in the Group during the year.

In addition, as part of the review of Director and CEO remuneration ahead of a new 2023 Policy being tabled for approval at the 2023 AGM, a series of meetings was held with top shareholders and proxy agencies in December 2022. These meetings were led by the Chair of the Remuneration and Talent Management Committee, who afterwards briefed the Committee on the feedback she received. The latter was taken into account when determining the final 2023 Policy to be approved by shareholders.

CEO's single figure of remuneration (audited)[1]

The table below sets out the remuneration received by the CEO in respect of the years ending 31 December 2022 and 31 December 2021.

	Salary $'000	Benefits $'000[2]	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] 2022	**833**	**115**	**1,705**	**520**	**1,635**	**4,808**	**948**	**3,860**
Iván Arriagada[1] 2021	755	36	1,230	390	1,722	4,134	791	3,343

1. Mr Iván Arriagada's remuneration was calculated based on amounts paid in Chilean pesos each month of the relevant year, converted into US dollars at the closing exchange rate for the month it was paid.
2. 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 benefits, which are received in connection with fulfilling his duties. The Company makes no pension contributions on behalf of the CEO. HMRC has deemed certain services to be taxable in the UK. The Company has agreed to compensate the CEO for any double taxation that is not eventually recoverable from the Chilean revenue under the UK/Chile Double tax treaty. This tax equalisation benefit in respect of 2022 is a benefit of $6,505 and in 2021 was a benefit of $4,867.
3. Mr Arriagada's 2021 annual bonus was paid following the date of publication of the 2021 Annual Report and the exchange rate used has been updated with the rate applicable at the date the bonus was paid. The exchange rate as of March 2022, which was used to update the 2021 annual bonus, is CLP/USD 788 vs CLP/USD 844 in January 2022.
4. Restricted Award amounts are reported in the year of the grant based on the face value of the awards on the date of the grant.
5. Performance Awards are reported in the year the performance period ends. The Total Shareholder Return (TSR) performance is an estimate based on the substantial completion of the performance period, determined after this report's publication. The share price used to value these awards is the three-month average share price to the end of the 31 December 2022 performance period. £13.16/share and USD/GBP 1.18. The value at the time of the grant reached $868,004 with a USD8.24/share and USD/GBP 1.18 with an increase in the value reported as $766,499. As noted on page 148, LTIP awards, including Performance Awards, are cash awards linked to a notional number of shares and the Company's share price performance.
6. The Performance Awards included in the 2021 total vested on 29 March 2022. 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 2019 LTIP reflects the change in share price and exchange rate at vesting. The share price and exchange rate used to value this award are £17.11/share and USD/GBP 1.31. For the 2021 LTIP, the value attributable to an increase in the Company's share price is $275,330. 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 up to December 2021. The value at the time of the grant reached $944,992 with a USD12.2/share and USD/GBP 1.30 with an increase in the value reported as $777,230. There was no entitlement to dividends or dividend equivalents.

Annual bonus

Group performance (70%)

The targets and achievements for the 2022 annual bonus are set out below. 70% of the CEO and Executive Committee's 2022 annual bonuses were calculated based on the Group's performance against these criteria in 2022:

Measure	Weighting %	Threshold (0% vesting)	On-target (50% vesting)	Maximum (100% vesting)	Actual achievement	Achievement (% of maximum)
Core business	**50%**					**60%**
EBITDA – Mining division[1] ($m)	12%	2,411	2,679	2,946	2,844	80%
Copper production[2] (kt)	22%	623.9	643.8-663.7	673.7	646.2	50%
Cash costs before by-product credits[3] ($/lb)	13%	2.324	2.192	2.061	2.185	55%
Corporate expenditure[3] ($m)	3%	139.3	132.6	126.0	126.6	95%
Business development	**25%**					**65%**
Growth projects[4]	15%	Measured according to the schedule and budget, as described in more detail in the footnotes.				50%
Exploration programmes[5]	5%					85%
Innovation and digital transformation projects[6]	5%					85%
Sustainability and organisational capabilities	**25%**					**70%**
Safety – Mining division[7]	5%	Adjustments are described in more detail in the footnotes.				100%
People – Diversity and Inclusion Strategy[8]	5%					75%
Environmental performance[9]	10%					50%
Social performance[10]	5%					75%
Total outcome – pre-adjustments		Adjustments are described in more detail in the footnotes.				**64%**
Adjustment for meeting zero fatality target[11]						10%
Board discretion applied[12]						0%
Total outcome – postadjustments						**74%**

1. The EBITDA targets were adjusted for exchange rate, inflation and copper price fluctuations, and diesel and power price fluctuations, and the effect of one-off bonuses paid on conclusion of labour negotiations at Los Pelambres, Antucoya and Zaldivar, which were not included in the Group's budget. The targets for EBITDA were adjusted for the impact of the Los Pelambres Concentrate Pipeline Incident in June when there was a temporary reduction in throughput at Los Pelambres due to the reduced concentrate pipeline availability and disruption to access to the mine site, following the assessment by an independent expert which determined that the incident resulted from a factory defect not attributable to the operation's management.
2. 100% basis, except for Zaldívar (50%). The targets for production were adjusted for the impact of the Los Pelambres concentrate pipeline incident.
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 targets for cash cost were adjusted for the impact of the Los Pelambres Concentrate Pipeline Incident. The figures for corporate expenditure were adjusted for the exchange rate, inflation and the difference between budgeted annual bonus payments and actual bonus payments made to employees.
4. Split between Los Pelambres Desalination Plant (40%), Los Pelambres Concentrator Expansion (27%) and Centinela Second Concentrator (33%).
   Targets for the Los Pelambres Desalination Plant were related to execution progress and ensuring that there were no material environmental incidents. The threshold (80%) is related to mechanical completion, including pre-commissioning in Q4 2022 and (20%) is due to one serious environmental incident. Target (80%) is related to mechanical completion, including pre-commissioning in Q3 2022, and (20%) is related to non-serious environmental incidents. The maximum (80%) is reached if early pumping is achieved in July 2022 and (20%) if compliance with the approved budget is achieved. Targets for the Los Pelambres Concentrator Expansion were related to execution progress and ensuring that there were no material environmental incidents. With the threshold at (80%) completion of construction in Q4 2022 and (20%) is due to one serious environmental incident. Target at (80%) of mechanical completion, including pre-commissioning in Q4 2022 and (20%) no serious environmental incidents. The maximum (80%) if the commissioning is achieved with an advance of 70% to Q4 2022 and (20%) if compliance with the approved budget is achieved. Targets for the Second Concentrator in Centinela were based on the progress of the engineering and pre-investment studies for the project. With the threshold at (100%) a delay in detailed engineering is greater than or equal to three months. Target at (50%) the recommendation for outsourcing the Desalinated Water Drive System II (SIAM II) in Q3 2022 and (50%) Second Concentrator Project prepared to submit an investment decision request in Q4 2022. The maximum additional critical milestones are reached before the end of the year. The result was 50% of the maximum, made up of 30% of the maximum for the Los Pelambres Desalination Plant, 45% of the maximum for the Los Pelambres Concentrator Expansion and 75% of the maximum for the Centinela Second Concentrator.
5. Includes targets to assess the progress of exploration programmes and consolidation of exploration ownership interests,. split between Cachorro deposit (60%), Encierro deposit (20%) and international exploration (20%). All the programmes were advanced according to the plan. The result was 85% of the maximum.
6. Split between the implementation of the Integrated Remote Operations Management Centres (IROCs) for Los Pelambres and Centinela (33.3%), Data Analytics (33.3%) and continuation of the "New Ways of Working" project (33.3%). Targets for the IROCs were related to the progress of implementation of the IROCs. For the Los Pelambres IROC, the threshold was 60% construction progress, the target was going live in Q4 2022, and the maximum was going live in Q3 2022. Centinela's IROC threshold was completing the infrastructure in the city of Antofagasta. The target was implementing the integrated model in the mine, concentrator and port, and the maximum was implementing the remote operation of the cathode plant. Data Analytics targets were related to the accumulated impact of the projects implemented in 2022, with a threshold of $32 million, a target of $45 million and a maximum of $55 million in December 2022. Targets for the "New Ways of Working" project related to progress of the approved project plan, with a threshold of 75% progress, a target of 100% progress and a maximum of 100% progress and an evaluation by the CEO and Vice President of Operations of the deployment and evolution of the model. The result was 85% of the maximum, made up of 100% of the maximum for the Los Pelambres and Centinela IROCs, with the Los Pelambres IROC going live in Q3 2022 and the successful remote operation of Centinela's cathode plant, 100% of the maximum in Data Analytics with a $66 million impact and 50% of the maximum for the "New Ways of Working" project.
7. Performance against a reduction of the High Potential Incident (HPI) rate with a threshold of 0.19, a target of 0.17 and a maximum of 0.16. This metric considers the Lost Time Injury Frequency Rate (LTIFR) as a trigger. If the LTIFR is higher than 1, the maximum achievable score is 50%. The result was 100% of the maximum with an HPI rate of 0.11 and 0.76 frequency rate (LTIFR).
8. Performance against targets for implementation of the Diversity and Inclusion Policy. (50%) of the target was based on the results of an evaluation of the mining division's culture. With a threshold at stay as Tier-2 "emergent," on-target at Tier-4 "collaborative," and maximum at Tier-4 and an evaluation overseen by the CEO and Vice President of Operations. (50%) of the target was based on an increase in the percentage of female direct employees by the year's end, with the threshold at 17.2%, on-target at 19.3% and maximum at 20.3%. The total score was 75% of the maximum, made up of 100% of the maximum for the percentage of female direct employees, which ended the year at 20.6%, and 50% of the maximum for the culture evaluation.
9. Split between compliance with a regulatory requirements action plan (40%), and implementation of the Climate Change Roadmap (60%).
   Regulatory requirements action plan: Threshold 85% compliance with the regulatory requirements action plan or an operational event with serious environmental consequences. Target (70%) due to 100% compliance with the regulatory requirements action plan and (30%) achievement of the Copper Mark at Los Pelambres and Antucoya by November 2022. Maximum obtaining the Copper Mark at Los Pelambres and Antucoya by August 2022. Implementation of the Climate Change Roadmap: Threshold of less than 90% compliance with roadmap milestones and 0% reduction in Energy Performance Indicators compared to 2021. Target 100% achievement of roadmap milestones. Maximum is a 1.5% reduction in Energy Performance Indicators compared to 2021 and setting 2023 emissions reduction targets (Scope 3) for two mine equipment supply contracts. The result of the total target was 50% of the maximum.
10. Performance against the planned execution of social initiatives (50%) and a planned programme to measure the impact of the initiatives (50%) with no material or social incidents, with the threshold at 70% implementation of 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 total outcome was 75% of the maximum.
11. A standalone adjustment trigger of 15% of the calculated outcome is applied to the Annual Bonus Plan, upwards if there are no fatalities during the year or downwards if there are one or more fatalities. As there were no fatalities in 2022, the final Mining Division's outcome was increased by 10% (15% of 64%).
12. No discretion to the bonus outcome was applied, as the adjustment, resulting from the concentrate pipeline incident, was made to the core business metrics: EBITDA, Production and Costs.

Individual performance (30%)

The individual objectives for the CEO were based on critical strategic areas as part of our vision for the Company – organisation, leadership, culture, people, growth, competitiveness, safety and sustainability and innovation. Based on individual feedback from Directors, the Committee assessed Iván Arriagada's performance against his personal objectives as 100% of the maximum for his contribution to the individual strategic business goals during the year. All his objectives were exceeded, which count towards 30% of his annual bonus. This outcome reflects exceptional performance during a challenging year in continuing to deliver a culture of excellence as well as develop the business across its core strategic growth areas establishing a stronger foundation to build future value for all our stakeholders. Iván Arriagada's performance against each of his objectives is summarised below:

Key goals	Performance
Keeping the Board well-informed and responding to feedback received during the year.	Effective interaction throughout the year, kept the Board apprised of key developments and responsive to feedback. Actively solicited 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 visible leadership and commitment to the Group's values, demonstration of desired behaviours and effective leadership of a corporate culture of excellence. Incorporation of a special focus on operational excellence in 2022 through the development of revised full potential limits and aspirational targets.
Implementing strategy including in relation to long-term growth and the management of environment, social and governance (ESG) matters	Long-term strategic vision to strengthen the Group's operations and projects. Enhanced the Group's ESG focus, including implementation of the climate change strategy and accreditation of all four mining companies under the independent Copper Mark audit certification protocols.
Focusing on the Group's core business	Strong financial performance in a challenging business environment including record plant throughput at Centinela, the achievement of full potential at Antucoya and the progression of all the Group's key brownfield growth projects according to plan.
Developing talent, ensuring appropriate succession planning and performance management	Evident personal commitment to talent management, succession planning and performance management. Successful restructuring of the Operations Vice Presidency and compliance with the Operating Model.
Pursuing exploration and business development opportunities	Continued progress of the Group's exploration programme. Business development opportunities thoroughly evaluated and implemented throughout the year including the Group's exit from the Reko Diq project in Pakistan.
Promoting the Group's reputation, working with key stakeholders and local communities	Outstanding stakeholder management including in response to the concentrate pipeline incident and through the new release of the Somos Choapa community engagement programme. Strong contribution to the visibility and reputation of the Company including a strong profile in the international mining industry.
Addressing business challenges, including diversity and inclusion and innovation	Diversity and inclusion goals achieved ahead of schedule with new stretching goals set during the year. Strong progress in innovation including completion of Centinela's Remote Integrated Operations Centre in Antofagasta and Los Pelambres' in Santiago.

Performance adjustments, discretion and CEO's total annual bonus for 2022

Based on Iván Arriagada's performance achieved against his 2022 targets, the Committee determined that he would receive a bonus payment of $1,704,586. This figure was determined as follows:

Overall performance score (70% x 74%) + (30% x 100%) = 81% of the maximum

(As a percentage of the maximum) 81% of $2,092,586

Gross annual bonus = $1,704,586

Calculated in US dollars using the exchange rate as of 31 December 2022 of $1 = Ch$855.9

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 2023

As noted in the single-figure remuneration table on page 157, performance against the Performance Awards granted in 2020[1] will not be finally determined by the Committee until after the date of this report. The performance criteria attached to these Performance Awards and the anticipated performance against these criteria, based on estimates as of the date of this report, are as follows:

Measure	Weighting %		Threshold	On-target	Maximum	Performance	Achievement %	Discretion applied
Relative total shareholder return ESTIMATED	50%	EMIX Global Mining Index performance	Below index	Equal to index	≥5% above index	This KPI will vest on or after 27 March 2023. The estimate is based on a performance of 18.4%[2] greater than the index as of 16 Jan 2023.	100%	No
		% Score	0%	33%	100%			
Mineral resources increase	25%	Tonnes of contained copper	84.6m	86.0m	87.4m	Resources increased to 92.4 million tonnes of contained copper as of 31 December 2022.	100%	No
		% Score	0%	50%	100%			
Project portfolio progress	12.5%	Percentage (%) of progress in Los Pelambres Expansion project commissioning (INCO) (70%)	progress < 50%	75% progress	100% progress	The performance of the construction of the Los Pelambres Expansion project is 100%.[3] The performance for the Zaldívar Chloride Leach project and Phase 2 of the Los Pelambres Expansion project is 100%.[4, 5]	100%	No
		Percentage (%) in commissioning for Zaldivar Chloride Leach project (20%)						
		Environmental impact plan for Los Pelambres Phase 2 Expansion (10%).						
		% Score	0%	75%	100%			
Sustainability commitments	12.5%	Agreements reached with communities near the Company's operations (80%)	progress < 50%	75% progress	85% progress	All goals achieved[6].	100%	No
		CO_2 emissions – reduction of 300,000 tonnes and transition away from coal power purchase agreements (20%)	Not met	Partial completion	Full completion			
		% Score	0%	75%	100%			
						Total outcome	**100%[7]**	

1. The number of shares, share price used and the impact of vesting % for this award is available in the notes to the single figure table on page 155 and the table setting out long-term incentive awards outstanding for the CEO from prior periods on page 161.
2. The TSR outcome is an estimate as the performance period ends after this report is published. The actual out-turn will be included in next year's Annual Report.
3. During the performance period the Committee adjusted targets to remove the impact of exceptional events outside of management control. Los Pelambres Expansion project's construction progress target was amended for delay attributed to COVID-19 and the enabling works added to allow for the future expansion of the desalination plant from 400 l/s to 800 l/s, approved after this target was set in 2020. Additionally, the Committee considered the level of vesting and progress of the projects at the end of the performance period and were satisfied that the level of vesting reflected progress made given external factors that delayed progress.
4. Construction and commissioning were completed in the first quarter of 2022.
5. The project's scope was redefined by the Board to include the Los Pelambres Mine Life Extension project. The EIA was submitted in 2021 and achieved its targets during 2022.
6. One hundred percent (100%) compliance means agreements reached with the communities near the Company's operations, 100% compliance with commitments and agreements, and CO_2 emissions reduction following forecasts set on the grant date, and the conversion of the electricity supply contracts to 100% renewable power.
7. The impact of this vesting level on the CEO's 2022 remuneration is set out in footnote 5 of the CEO single-figure total remuneration table on page 155.

Performance adjustments and discretion

No discretion has been applied to any of the performance calculations for the 2020 LTIP outcome. As stated in notes to the table above the Committee adjusted the projects targets during the performance period to reflect the change in the project scope and issues outside of management control.

Directors' single figure of remuneration (audited)

The Directors' remuneration for 2022 and 2021 is below in US dollars. Unless otherwise noted, amounts paid in Chilean pesos have been converted at the exchange rate on the first working day of the month following the payment date. 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[4,5]	
	2022 $000	2021 $000	**2022 $000**	2021 $000	**2022 $000**	2021 $000
Chairman						
Jean-Paul Luksic	**1,015**	1,012	**16**	16	**1,031**	1,028
Non-Executive Directors						
Ollie Oliveira (departed 31 July 2021)	**–**	210	**–**	1	**–**	211
Ramón Jara[1]	**927**	965	**85**	7	**1,012**	972
Juan Claro	**280**	278	**3**	2	**283**	280
Andrónico Luksic C	**260**	260	**3**	2	**263**	262
Vivianne Blanlot	**325**	318	**3**	2	**328**	320
Jorge Bande	**320**	314	**13**	2	**333**	316
Francisca Castro	**315**	309	**21**	2	**336**	311
Michael Anglin	**335**	311	**7**	–	**342**	311
Tony Jensen	**365**	333	**12**	–	**377**	333
Eugenia Parot (appointed 20 April 2021)	**300**	199	**6**	–	**306**	199
Total Board	**4,442**	4,509	**169**	34	**4,611**	4,543

1. During 2022, $604,079 (2021 – $645,053) was paid to Asesorías Ramón F, Jara Ltda, for providing services. The reported decrease is due to an increase in the Ch$/USD exchange rate, partially offset by an annual adjustment for inflation in Chile. These payments are included in the fees attributable to Ramón Jara shown above.
2. Amounts for Jean-Paul Luksic include the provision of life, health and terrorism insurance. Amounts for Ramón Jara include the provision of life and terrorism insurances. These insurances are not in place for the other Directors.
3. Except as described in footnote 2, all "benefits" amounts included in this table arose in connection with the fulfilment of Directors' duties and, in particular, including the cost of attending Board meetings and the Company's Annual General Meeting in London. These calculations have been based on what the Company believes would be deemed by HMRC to be taxable benefits in the UK by the Non-Executive Directors or would be if the director was resident in the United Kingdom for tax purposes, alongside any personal incidental expenses. 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 individual 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. Notes relevant to single-figure disclosures for 2021 can be found on page 152 of the 2021 annual report. These remain unchanged.

Payments to former 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.

Total pension entitlements (audited)

There were no pension contribution payments made towards any Directors or towards the CEO.

Directors and CEO's shareholding and share interests (audited)

The Directors who held office on 31 December 2022 had the following interests in the ordinary shares of the Company:

	Ordinary shares of 5p each	
	31 December 2022	1 January 2022
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	**–**	–

1. Jean-Paul Luksic's interest relates to shares held by Aureberg Establishment, an entity 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 2022 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 on this page. 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-Executives.

The Chairman, Mr Jean-Paul Luksic, and Non-Executive Director, Mr 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, taken together, holds approximately 60.66% of the Company's ordinary shares and approximately 94.12% of the Company's preference shares). In addition, Mr Jean-Paul Luksic controls the Severe Studere Foundation, which, in turn, controls the 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 the Company's share price performance.

Type of award	Date of grant	Number of shares/ options	Award as % of salary[1]	Face value (market value at date of grant)	Performance period	Vesting dates
Restricted Award	29 Mar 22	22,578	60%	$520,220	N/A	29 Mar 23 29 Mar 24 29 Mar 25
Performance Award	29 Mar 22	52,686	140%	$1,213,848	29 Mar 2022 to 29 Mar 2025	29 Mar 25

1. The number of awards was calculated according to the base salary at the grant date on 29 March 2022 with the total face value described in the table. The share price used to value these awards is £17.47/share, USD/GBP 1.32 and the exchange rate used to value this award is CLP/USD 792,38 all of them calculated as the average of the closing price during a period of 5 dealing days ending with the dealing day before the grant date, according to policy.

Performance conditions attaching to long-term incentive plan awards granted to the CEO in 2022 (audited)

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%	83.1m tonnes	86.4m tonnes	87.5m tonnes	0%	50%	100%
Projects portfolio: (1) Los Pelambres Concentrate Pipeline (30%) (2) Los Pelambres Desalination Plant Expansion (40%) (3) Centinela Second Concentrator (30%)		12.5%	50% completion	75% completion	Full completion of goals (1) and (2) with an environmental impact study approved and under construction. (3) With progress in the range (of 85% – 100%) of the approved plan.	0%	75%	100%
Environmental and social commitments	(1) Social Management Plan (40%)	12.5%	Greater than 50% compliance	Greater than 75% compliance	Greater than or equal to 85% compliance[1]	0%	75%	100%
	(2) Climate change and environment (60%)		50% compliance	75% compliance	One hundred per cent (100%) compliance with the emissions budget according to the 2024 emissions reduction target; overall reduction of one million tonnes of Scope 1 and Scope 2 CO_2 emissions by 2024, compared to the 2021 level. 85 to 100% compliance with the roadmap of the climate change strategy and circular economy strategy. Score 75% + 100% compliance with extreme, high and moderate risk regulatory requirements.	0%	75%	100%

1. Compliance with initiatives in the Group's social management plan, including initiatives existing as of 31 March 2022 and added before 31 December 2024, on time and within budget.

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 the 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 2022	Vesting date
2020	Performance Awards	27 Mar 20	105,295	N/A	0	105,295	27 Mar 23
2020	Restricted Awards	27 Mar 20	30,084	15,042	0		27 Mar 22
						15,042	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	5,635	0		29 Mar 22
						5,635	29 Mar 23
						5,635	29 Mar 24
2022	Performance Awards	29 Mar 22	52,686	N/A	0	52,686	29 Mar 25
2022	Restricted Awards	29 Mar 22	22,578	0	0	7,256	29 Mar 23
						7,256	29 Mar 24
						7,256	29 Mar 25

The performance conditions and face values at grant for the awards granted in 2020 and 2021 are set out in the annual reports for 2020 and 2021. 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 remuneration for the Group's lead executive	2013	2014[1]	2015	2016[2]	2017	2018	2019	2020	2021[4]	**2022**
Chairman – Jean-Paul Luksic ($000)	3,615	2,196	–	–	–	–	–	–	–	**–**
CEO – Diego Hernández ($000)	–	688	2,445	1,525	–	–	–	–	–	**–**
CEO – Iván Arriagada ($000)	–	–	–	681	1,790	2,513	2,458	4,675	4,134	**4,808**
Annual bonus pay-out (% of maximum)	–	69%	39%	61%	79%	66%	83%	93%	72%	**81%**
LTIP pay-out (% of maximum)[3]	–	76%	16%	–	85%	60%	65%	99%	99%	**100%**

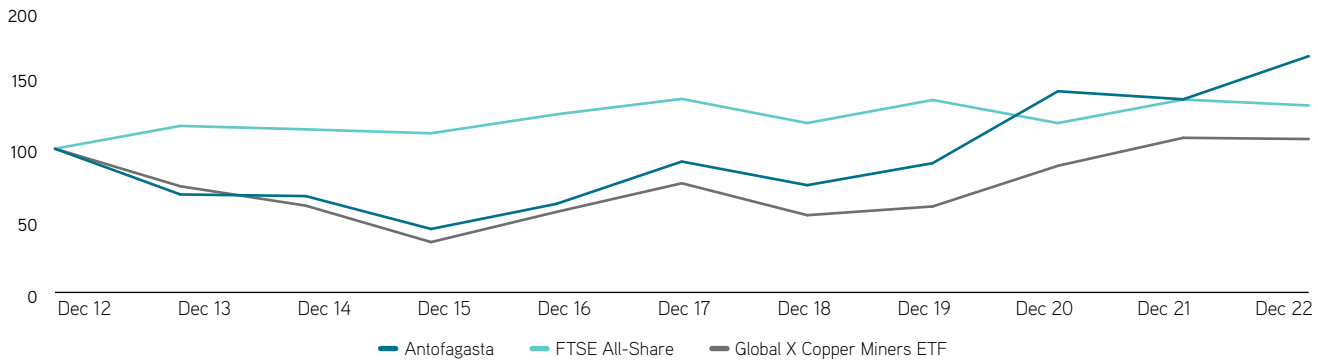
1. The single figure remuneration for the Group's lead executive in 2014 comprises Jean-Paul Luksic's remuneration until 1 September 2014 (when he became Non-Executive Chairman) and Diego Hernández's remuneration from 1 September 2014. The Chairman was not eligible for variable remuneration, so the 2014 percentage figures 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's 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 were vested to the CEO in 2016.
3. Restricted Awards do not have a performance element, so they are not included in these calculations.
4. 2021 figures have been restated to reflect actual 2021 outcomes, as explained in the CEO single-figure remuneration table on page 155.

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) have 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 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 160. Previously the Group used the EMIX Global Mining Index.

Indexed total shareholder returns

The following graph shows the value of £100 invested in Antofagasta on 31 December 2012 compared with £100 invested in the comparative indices.



Change in remuneration of Directors and Employees

The table below sets out the percentage change in key elements of the remuneration of the Directors, the CEO and employees.

	2022			2021			2020		
	Fees/base salary	**Benefits[5]**	**Annual bonus**	Fees/base salary	Benefits[5]	Annual bonus	Fees/base salary	Benefits[5]	Annual bonus
Non-Executive Directors[1]									
Jean-Paul Luksic	**0%**	**-5%**	**N/A**	1%	15%	N/A	0%	28%	N/A
Ollie Oliveira (departed 31 July 2021)	**N/A**	**0%**	**N/A**	8%	-87%	N/A	0%	-91%	N/A
Ramón Jara	**-4%**	**1,054%**	**N/A**	7%	2%	N/A	-4.3%	17%	N/A
Juan Claro	**1%**	**9%**	**N/A**	2%	-32%	N/A	0%	-64%	N/A
Andrónico Luksic C	**0%**	**9%**	**N/A**	0%	-32%	N/A	0%	23%	N/A
Vivianne Blanlot	**2%**	**9%**	**N/A**	4%	-32%	N/A	0%	-45%	N/A
Jorge Bande	**2%**	**452%**	**N/A**	6%	-32%	N/A	0%	-63%	N/A
Francisca Castro	**2%**	**771%**	**N/A**	6%	-73%	N/A	1%	-29%	N/A
Michael Anglin[5]	**8%**	**–**	**N/A**	9%	–	N/A	1%	-75%	N/A
Tony Jensen[6] (appointed 13 March 2020)	**10%**	**–**	**N/A**	34%	–	N/A	–	–	N/A
Eugenia Parot[7] (appointed 20 April 2021)	**5%**	**–**	**N/A**	N/A	N/A	N/A	N/A	N/A	N/A
CEO	**10.4%**	**218%**	**38.5%**	28.3%	51.5%	-5.7%	-8%	-65%	38.8%
Company employees[2]	**-10.3%**	**2.2%**	**-27.0%**	1.6%	-0.3%	19.7%	1.8%	19.9%	7.5%
Mining division employees[3]	**-5.8%[4]**	**-11.4%**	**-7.1%**	7.2%	16.3%	-10.6%	-9.8%	-10.1%	7%

1. The fee percentage change for Directors who served for only part of a comparator year has been annualised.
2. We do not consider this comparator group to be relevant, considering more than 99.9% of employees are not included. The parent Company, Antofagasta plc, has fewer than ten employees. Reporting these figures is mandatory.
3. Mining division employees are considered a relevant comparator group, partly because the Mining division accounts for more than 97% of the Group's revenue and partly because the Annual Bonus Plan that applies to the Executive Committee is the same plan that applies to the Mining division employees at the management and professional levels. 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 due to the conclusion of collective bargaining agreements with labour unions.
4. Chilean employees are paid in chilean Pesos. In chilean pesos terms, the average base salary for mining division employees changed in a 8.2%. The figure reported in US dollars is negative due to an increase in the Chilean peso/US dollar exchange rate, partially offset by an annual inflation adjustment in Chile.
5. There has been a small minor update to the methodology applied for reporting Directors' benefits which has resulted in the restatement of the Directors' benefits figures for 2020. Directors' benefits for 2020, 2021 and 2022 are all reported in accordance with footnote 3 at the Directors' single figure of remuneration on page 159.

The relative importance of remuneration expenditure

The table below shows the total expenditure on employee remuneration, the distributions to shareholders and tax expenses in 2021 and 2022.

	2022 $m	2021 $m	Percentage change
Employee remuneration[1]	**476.6**	498.0	-4.3%
Distributions to shareholders[2]	**588.3**	1,404.4	-58.1%
Taxation[3]	**448.8**	1,035.5	-56.7%

1. Employee remuneration includes salaries and social security costs, as set out in Note 9B 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 13 to the financial statements.
3. Tax has been included because it shows the Group's tax contribution, almost all of which is paid to the Chilean state by the Group's operations in Chile. The tax expense represents the current tax charge regarding corporate tax, mining tax (royalty) and withholding tax, as set out in Note 11 to the financial statements.

CEO pay ratio

Antofagasta has its main operations in Chile and has fewer than 10 employees in the UK. Consequently, whilst the Committee considers employee pay as part of its decision making on Director and CEO pay, there is no requirement to disclose a CEO pay ratio.

Remuneration and Talent Management Committee Report

Key responsibilities

- The Committee ensures that the Group's remuneration arrangements support both the Group's purpose and the effective implementation of its strategy to enable the recruitment, motivation, reward and retention of talent.
- The Committee is responsible for setting remuneration for the Chairman, Directors and the CEO and 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 reviewing, assessing and implementing succession plans for the Executive Committee.
- 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.

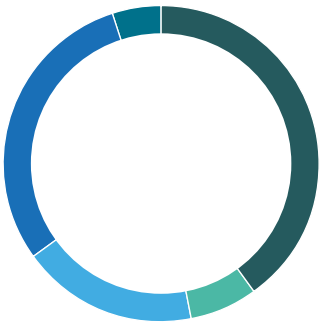
2022 Remuneration and Talent Management Committee activities

The critical matters considered by the Committee are set out in the table below:

	Jan 22	Mar 22 (x2)	Aug 22	Oct 22[1]	Nov 22
Directors' and Executive Remuneration and Governance					
2021 annual bonus and LTIP	•	•	•		
2022 annual bonus and LTIP	•	•	•		
Review of Remuneration Policy			•		•
Review of total shareholder return performance		•			
Review of 2021 performance appraisal CEO and Executive Committee individual performance	•	•			
Directors' Remuneration Report	•	•			
Annual General Meeting season governance update			•		
LTIP governance	•				
Executive benefits	•				
CEO and Executive Committee compensation benchmarks	•				
Workforce, HR policies and talent management					
Gender Pay Gap reporting	•				
CEO to worker pay ratio	•				
HR plan		•			•
Talent management and succession planning					•
Collective bargaining processes		•	•		
Engagement survey results	•			•	
2023 Mining division scorecard					•

1. The Committee held a stand-alone session to discuss the outcomes of Engagement survey.

Committee's activities during the year



- Executive remuneration 40%
- Director remuneration 7%
- Pay-related governance 18%
- Workforce and HR policies 30%
- Talent management and succession 5%

Engagement with colleagues

As explained in last year's Annual Report, when the Committee reviews the Directors' and the CEO's remuneration, it considers 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 broader pay policy. This 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 that of the CEO, seeking to drive the same aligned culture, values and behaviours across the Group.

Approximately 80% of the Group's employees are unionised, and the number is close to 100% at the operator level. The Committee reviews the 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 from shareholders and more general feedback from employees on the Group's pay policies, including 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 in July 2022 at Centinela, Los Pelambres and Zaldívar. The results are shared with the Committee and the Board. The Group also conducts ad hoc focused surveys on specific issues, which in 2022 included surveys on New Ways of Working, employee wellbeing, and diversity and inclusion. The results of the surveys were also shared with the Committee and the Board.

The Committee is regularly updated on workforce pay and benefits by the senior management team, who consult with the workforce on issues including the remuneration policy. The workforce receives regular communications throughout the year on the Group's performance targets and incentive awards, while the senior management team receives regular feedback on the performance of workforce roles and regularly engages with employees to understand their views on workforce remuneration policy and practices.

Directors visit Group operations throughout the year, individually or in small groups, to listen directly to employees' views on labour issues, including remuneration, culture and values, as well as the application of remuneration policy across the Group, including executive pay. The Board's engagement with the workforce is detailed on pages 116 and 117.

Consequently, the Committee has multiple touchpoints with the workforce for feedback on the Group's workforce remuneration policy, including 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. The Committee meetings are focused on these subjects. Following each Committee meeting, the Committee Chair reports a summary of matters considered to the full Board.

The Committee receives regular feedback on safety performance, community relations, the working environment, operations and critical projects and ensures that the workforce remuneration policy (including senior management and CEO) is fair and transparent, and its outcomes reflect the desired culture and ensure alignment with the values and behaviours of the organisation. 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 are applied to the whole workforce, including senior management and the CEO.

In 2021, the Committee took note of the views of the workforce in adjusting KPI weightings in the Annual Bonus Plan. It 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 the market practice and considered the developing environment for talent and the needs of the business before making proposals to the Committee across several areas impacting the reward and talent proposition for employees. The proposals sought to continue to maximise value, increase the overall employee experience, and ensure that the Group remains a world-class employer, attracting and retaining the best talent to succeed.

Consideration by the Directors of matters relating to Directors' remuneration

During the year, the Committee reappointed Willis Towers Watson to advise the Committee on remuneration issues. This reappointment was based on the Committee's satisfaction with 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 concerning these services. Willis Towers Watson's fees for this work were charged in accordance with time and materials and amounted to £102,192. Willis Towers Watson also provided advice and support to management during the year, primarily on general remuneration issues, benchmarking, best HR practices and ad hoc advice on topics such as equality and gender remuneration.

In determining that the advice received was independent, the Committee took into account the fact that Willis Towers Watson is an independent global professional services firm that adheres to the Code of Conduct for Remuneration Consultants, to which it is a signatory. The Code of Conduct can be found at www.remunerationconsultantsgroup.com.

During 2022, the Committee also received assistance from the Chairman, Jean-Paul Luksic, the CEO, Iván Arriagada, the Vice President of Human Resources, Georgeanne Barceló, and the Company Secretary, Julian Anderson, 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 integral to the Committee's responsibilities and directly relates to the Group's ability to achieve long-term sustainable success. The talent review is carried out annually to update succession planning for key positions, identify talent pools, define individual development plans and agree on recruitment needs.

In recent years a new approach has been taken, prioritising employees' overall experience and positioning the Group as a top-tier employer capable of attracting and retaining top talent. Talent Management is critical to ensuring the Group's ability to meet current and future business demands by focusing on the attraction, retention and development of high-potential individuals. This approach ensures the continuous growth and success of the Company.

Implementation of the CEO's remuneration policy in 2023

Base salary

The CEO's annual base salary will be $1,255,552 from 1 January 2023. This represents a 20% increase in his pay as at December 2022 and represents a market and performance adjustment determined by the Committee. The Chilean peso/US dollar exchange rate will continue to be monitored and may, if the Committee considers this appropriate, result in changes to pay during 2023.

Benefits

Benefits will be provided in line with the 2023 Policy.

Annual bonus for 2023

Assuming it is approved, the operation of the bonus for 2023 will be in line with the 2023 Policy submitted for approval at the 2023 AGM. Bonus measures, weightings and targets have been updated for 2023 in response to a review of our strategic priorities for the forthcoming year. The approach to calculating the targets and outcomes will reflect the 2022 bonus plan.

During 2023, in order to move towards a simpler and effective scorecard, corporate expenditure has been removed from the core business metrics and the associated weight added to the EBITDA as the corporate expenditure directly impacts EBITDA. Also, as safety and health of our employees is our top priority, we have added occupational hazards risks to our safety metrics.

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 ($m)	15%	≤-10%	The Group's future metals price assumptions are commercially sensitive, therefore the target for EBITDA will not be disclosed in advance. The Company will reveal the 2023 target and outcome in the 2023 Annual Report.	≥+10%
Copper production (kt)[2]	22%	651.0	671.7-692.5	702.9
Cash costs before by-product credits ($/lb)[3]	13%	2.28	2.15	2.02
Business development	**25%**			
Growth projects[4]	15%	Measured according to the schedule and budget as described in more detail in the footnotes.		
Exploration programmes[5]	5%			
Innovation and digital transformation projects[6]	5%			
Sustainability and organisational capabilities	**25%**			
Safety – Mining division[7]	5%	Measured according to the schedule and budget as described in more detail in the footnotes.		
People – Diversity and Inclusion Strategy[8]	5%			
Environmental performance[9]	10%			
Social performance[10]	5%			

1. The EBITDA targets will be adjusted for exchange rate changes, the impact of hedging arrangements, copper price fluctuations, inflation rate, key input price deviations above 20% and the impact of any one-off bonuses paid on the 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, inflation rate, key input price deviations above 20% and the impact of any one-off bonuses paid on conclusion of labour negotiations.
4. Progress of growing projects according to predefined milestones. Split between Los Pelambres Expansion project (27%), Los Pelambres Desalination Plant Expansion, Concentrate Pipeline and mine life expansion projects (13%), the Implementation of Zaldívar's Business Continuity Strategy (27%) and the Centinela Second Concentrator Detailed Engineering Project (33%).
5. Maximum and on-target are defined according to the progress of a planned exploration programme for one exploration target previously discovered to have potential mineralisation and the consolidation of exploration ownership interests, including infill drilling campaigns and increasing the mineral resources inventory.
6. Split between compliance with Integrated Remote Operation Centres value levers KPIs for Centinela and Los Pelambres (50%) and Data Analytics Impact (measured as the cumulative US dollar annual savings of all implemented data analytics projects) (50%).
7. Performance against targets for reducing high potential incidents (50%) and decrease in similar exposure group of occupational hazards (50%). This metric considers the Lost Time Injury Frequency Rate (LTIFR) as a trigger if the LTIFR is higher than 1.
8. Performance against diversity and inclusion targets with the threshold at 20.6% female direct employees, on-target at 22% female direct employees and maximum at 23.1% female direct employees and D&I Roadmap implementation. A 15% negative trigger applies if the overall target of 1% of people with disabilities is not met.
9. Split between environmental commitments (40%) and the implementation of the Group's climate change roadmap (60%), this metric considers: Development of the Final Stage of the Decarbonisation Plan of AMSA, Incorporation of the selected scenario in the 2022 Stage of the Decarbonisation Plan in the annual mining planning process, Goal definition of Scope 3 emissions and Definition of the Offset (compensation) Strategy.
10. Compliance with critical initiatives and measurement of impact according to the defined social project portfolio.

/ Implementation of the Directors' and CEO's remuneration policy in 2023 *continued*

LTIP for 2023

The operation of the LTIP for 2023 will be in line with the Remuneration Policy:

- Restricted Awards (30% of the overall award) – vest one-third each year over a three-year period following the grant.
- Performance Awards (70% of the overall award) – awards subject to a three-year performance period with no subsequent holding period.

The Performance Awards measures, weightings and objectives are set out in the table below.

Weighting	Objective	Measure[1]
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 to the index and 100% vesting at performance 5% greater than the index during the three-year period to the 2025 financial year's end.
25%	Mineral resources increase	Maximum is 88.1 million tonnes of contained copper, with an on-target and a threshold of 86.2 and 83.6 million tonnes, respectively, as of 31 December 2025.
12.5%	Projects' performance	The maximum is achievable if the Los Pelambres Concentrate Pipeline (20%) and Desalination Plant Expansion (15%) and Centinela's Second Concentrator (45%) construction progress is 75% or more of their approved plans and Zaldivar's Operational Continuity Solution (20%).
12.5%	Environmental and social commitments	This KPI is made up of 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 of 31 March 2023 and added before 31 December 2025, on time, within budget and impact evaluation, with an on-target at 75% and a 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 Decarbonisation Roadmap plan at 75%, the water efficiency target by 2025, 100% compliance with the Circular Economy Strategy Roadmap and compliance with the internal plan to address regulatory requirements.

1. The final LTIP 2023 scorecard measures will be approved after this report is published.

Implementation of the Directors' remuneration policy in 2023

Chairman

Jean-Paul Luksic's total fee for 2023 is $1,015,000, (2022 – $1,015,000) 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 reviewing these fees from time to time, in accordance with the 2023 Policy.

Benefits that were reported for 2022 will continue to apply. Directors are not expected to receive any other remuneration in 2023.

The fees payable for Committee roles and the role of Senior Independent Director from January 2023 are set out below:

Additional Director fees payable from 1 January 2023

Role	Additional fees $
Senior Independent Director	33,000
Audit and Risk Committee Chair	42,000
Audit and Risk Committee member	20,000
Nomination and Governance Committee Chair	25,000
Nomination and Governance Committee member	10,000
Projects Committee Chair	35,000
Projects Committee member	20,000
Remuneration and Talent Management Committee Chair	35,000
Remuneration and Talent Management Committee member	20,000
Sustainability and Stakeholder Management Committee Chair	35,000
Sustainability and Stakeholder Management Committee member	20,000

AGM voting history

	2021 Directors' and CEO's Annual Report on Remuneration
Votes for	97.43% 1,059,688,617
Votes against	2.57% 27,903,201
Votes cast as a percentage of issued share capital	91.71%
Votes withheld	5,663,353

	Resolution to approve the 2020 Directors' and CEO's Remuneration Policy[1]
Votes for	98.17% 1,062,750,494
Votes against	1.83% 19,832,684
Votes cast as a percentage of issued share capital	91.29%
Votes withheld	16,811

1. Meeting dated at 16th March 2020. Results were at 20th May 2020 press release.

I hope this report demonstrates the importance that we place on the transparency of our decisions and how they are reached. I look forward to meeting shareholders and answering questions at our AGM.

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 118-120.

Post-balance sheet events

There have been no post-balance sheet events.

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 decreased from $3,477.1 million in 2021 to $2,558.9 million in 2022.

The Board has recommended a final dividend of 50.5 cents per ordinary share (2021 – 118.9 cents). An interim dividend of 9.2 cents was paid on 30 September 2022 (2021 interim dividend – 23.6 cents). This gives total dividends per share proposed in relation to 2022 of 59.7 cents (2021 – 142.5 cents) equivalent to a total dividend amount of $588.3 million (2021 – $1,404.8 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 (2021 – $0.1 million). Further information relating to dividends is set out in the Financial Review on page 99 and in Note 13 to the financial statements.

Political contributions

The Group did not make any political donations during the year ended 31 December 2022 (2021 – 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 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 laws and regulations (including 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. Except as permitted by the Company's remuneration policy, 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 AGM held on 11 May 2022, 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 10 May 2023. No shares have been issued pursuant to that authority 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.

Further special resolutions passed at the 2022 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 (representing 5% of its issued ordinary share capital) without regard to the pre-emption provisions of the Companies Act 2006 and for an additional aggregate nominal amount of £2,464,641 (representing an additional 5% of its issued ordinary share capital) in connection with the financing or refinancing of an acquisition or specified capital investment. These authorities also expire on the date of this year's AGM. Since the 2022 AGM, the Pre-Emption Group's Statement of Principles and the Investment Association's guidance have been updated and permit companies to each of these authorities for up to a 10% of its issued ordinary share capital (plus, in each case, an additional 2% for the purposes of a follow-on offer as described in the Pre-Emption Group's Statement of Principles). Accordingly, the Directors will seek to renew these authorities at the increased level in line with the Pre-Emption Group's Statement of Principles and the Investment Association's guidance.

The Company was also authorised by a shareholders' resolution passed at the 2022 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 2022, are given in the Directors' Remuneration Report. No Director had any material interest in a contract of significance (other than a service contract in respect of Ramón Jara – see page 159) with the Company or any subsidiary of the 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 potential and actual conflict situations and decides the steps, if any, which need to be taken to manage each situation.

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 2022, 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 %
Metalinvest Establishment	50.72	94.12	58.04
Kupferberg Establishment	9.94	–	8.27
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 36 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 2022 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 37.

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 40-73 of the Strategic Report and pages 102-171 of the Corporate Governance Report.

Other statutory disclosures

The Corporate Governance Report on pages 102-171, the Statement of Directors' responsibilities on page 171 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 Annual Report
Future developments in the business of the Group	Pages 86-89
Viability statement	Page 37
Subsidiaries, associates and joint ventures	Pages 74-85
Employee engagement	Pages 48-50
Greenhouse gas emissions	Pages 61-62
Streamlined energy and carbon reporting	Pages 61-62

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 15 to the financial statements.
Long-term Incentive Plan (LR 9.8.4(7))	See pages 142-167 and Note 26 to the financial statements.
Relationship agreement (LR 9.8.4(14))	Page 109

By order of the Board

Julian Anderson
Company Secretary

23 March 2023

Statement of Directors' responsibilities in respect of the financial statements

The Directors are responsible for preparing the Annual Report and Financial Statements 2022 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 2022 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	Tony Jensen
Chairman	Senior Independent Director

23 March 2023

Financial Performance

Independent auditors' report	174
Consolidated income statement	181
Consolidated statement of comprehensive income	182
Consolidated statement of changes in equity	182
Consolidated balance sheet	183
Consolidated cash flow statement	184
Notes to the financial statements	185
Parent Company financial statements	234

Continuing to deliver strong returns while maintaining a robust financial position.

Independent auditors' report to the members of Antofagasta plc

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 2022 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 as applied in accordance with the provisions of the Companies Act 2006;
- the Parent Company financial statements have been properly prepared in accordance with United Kingdom Generally Accepted Accounting Practice (United Kingdom Accounting Standards, including 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 2022 (the "Annual Report"), which comprise: the consolidated and Parent Company balance sheets as at 31 December 2022; 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 (2021: 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 (2021: three) where we concluded that a full scope audit of the component financial information was warranted.
- Taken together, the components at which audit work was performed accounted for 97% of Group revenue.
- We also determined that specified procedures were necessary in respect of certain balances within the corporate and other items segment and transport division to ensure that we had sufficient coverage from our audit work over each line of the Group's financial statements.

Key audit matters

- Assessment of indicators of impairment and impairment reversal for property, plant and equipment, in particular in respect of the Zaldivar and Antucoya cash generating units (Group) and investments in subsidiaries (Parent) (Group and Parent)
- The accounting for the disposal of the Group's interest in the Reko Diq project (Group)

Materiality

- Overall Group materiality: $112 million (2021: $108 million) based on 5% of the three year average of profit before tax adjusted for one-off items.
- Overall Parent Company materiality: $20 million (2021: $26.5 million) based on 1% of total assets.
- Performance materiality: $84 million (2021: $81 million) (Group) and $15 million (2021: $19.875 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.

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.

The accounting for the disposal of the Group's interest in the Reko Diq project (Group) is a new key audit matter this year. The assessment of indicators of impairment and impairment reversal was a key audit matter in the prior year, albeit the specific areas of focus of our audit work differed this year compared 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, in particular in respect of the Zaldivar and Antucoya cash generating units (Group) and investments in subsidiaries (Parent) (Group and 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, in assessing whether an indicator of impairment, or in respect of Antucoya, impairment reversal, existed as at 31 December 2022 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 indicative estimates of movements in 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 2022 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 an area which had a significant effect on our overall audit strategy and allocation of resources in the planning for, and completion of, our audit. It was, therefore, determined to be a key audit matter. The financial statements set out the key elements of the judgements made by the Directors, which include at Zaldivar that the ongoing renewal of mining and water permits, currently due to expire in 2024 and 2025 respectively, will be successful. Refer to notes 3 and 5 to the Group financial statements and the Audit and Risk Committee's views set out on pages 131 and 132. As at 31 December 2022, the Parent Company holds investments in subsidiaries amounting to $589.1 million (2021: $529.1 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 in relation to the shares held in subsidiaries and, where triggers are identified, to determine whether the recoverable amount is no lower than the investment carrying value. Judgement is also required in determining whether an expected credit loss should be recorded against the long-term funding balances. In assessing for impairment triggers, management considered whether the underlying net assets of the investment support the carrying amount, the nature of the underlying assets and whether other facts and circumstances could also be indicative of a trigger. For the loan balances, management 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 by the Directors at the balance sheet date, and no expected credit loss on the long-term funding balances was recognised. Refer to notes 3 and 5 to the Parent Company's financial statements.	We assessed the Directors' conclusion that there were no indicators of impairment or impairment reversal as at 31 December 2022. Our procedures included evaluating management's trigger assessment, including its completeness by reference to both internal and external factors, including but not limited to operational performance in the year, potential changes in the Chilean mining royalty regime, macroeconomic 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 the case of Zaldivar, we also assessed the latest developments in respect of the permit applications. As well as considering whether any qualitative indicators of impairment existed, 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. In respect of investments in subsidiaries in the Parent Company, we evaluated and challenged management's assessment and judgements in relation to the identification of impairment triggers; 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 in the Parent Company of investments in subsidiaries; and evaluated the ability of the subsidiaries to repay the loan balances. As a result of our work, we were satisfied that the carrying value of the Parent Company's investments in subsidiaries is appropriate as at 31 December 2022.

Key audit matter	How our audit addressed the key audit matter
The accounting for the disposal of the Group's interest in the Reko Diq project (Group) On 15 December 2022 Antofagasta entered into definitive agreements to exit its interest in the Tethyan joint venture. The Directors determined that, as a result of the agreements, the Group no longer has joint control of the joint venture and has, therefore, derecognised its investment and recognised a gain on disposal of $944.7 million, representing the proceeds of the divestment net of related adjustments. The Directors have applied judgement in determining that, under the agreements, the Group no longer has joint control of the Tethyan joint venture and has an unconditional right to receive the proceeds of the sale, currently held by Atacama. Judgement has also been applied in estimating the probability of the sales proceeds being subject to Australian tax. As this is an area which had a significant effect on our overall audit strategy and the allocation of resources in the planning for, and completion of, our audit, this was determined to be a key audit matter. Refer to notes 3 and 17 to the Group financial statements and the Audit and Risk Committee's views set out on page 132.	We assessed management's analysis of the accounting for the definitive agreements and considered potential alternative interpretations. We read the definitive agreements and confirmed that the contractual arrangements supported the Directors' judgements. We read the tax advice obtained by management in respect of the transaction, and have assessed the independence, competence and objectivity of management's external tax experts. We also engaged our internal tax experts to review the advice to help us assess the appropriateness of management's estimate in respect of tax. We read the related disclosures in respect of the transaction in note 17 to the Group financial statements and in respect of the significant estimation uncertainty in note 3. We identified no material issues as a result of our work.

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 they operate.

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 offices in Chile, and specific financial statement 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 procedures in respect of the gain on disposal of the investment in the Tethyan joint venture. 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. 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 meetings, review of component auditor workpapers and participation in audit clearance meetings. In most cases communication was performed through video conferencing. However, members of the Group team also visited Chile on multiple occasions during the audit. The Group team also reviewed the component auditor working papers and reviewed other communications dealing with significant accounting and auditing issues.

Taken together, the components where we performed our audit work accounted for 97% of consolidated revenue, 94% of consolidated profit before tax and 92% of consolidated profit before tax adjusted for one-off items. This was before considering the contribution to our audit evidence from performing additional audit work at the Group level, including disaggregated analytical review procedures, which covers 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.

The impact of climate risk on our audit

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, which management has confirmed it has now achieved, and, in the long-term, to achieve carbon neutrality.

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	$112 million (2021: $108 million).	$20 million (2021: $26.5 million).
How we determined it	5% of the three year average of 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 $112 million, which equates to 6.9% 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 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 $10 million and $96 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% (2021: 75%) of overall materiality, amounting to $84 million (2021: $81 million) for the Group financial statements and $15 million (2021: $19.875 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 $5.6 million (Group audit) (2021: $5.4 million) and $1 million (Parent Company audit) (2021: $1.3 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; 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. 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 2022 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's 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 and Parent Company 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 and the Head of Internal Audit, regarding their consideration of known or suspected instances of non-compliance with laws and regulation;
- 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 the design of management's controls intended to prevent and detect irregularities, in particular their anti-bribery controls;
- 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's 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 eight years, covering the years ended 31 December 2015 to 31 December 2022.

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

23 March 2023

Consolidated income statement

For the year ended 31 December 2022

	Note(s)	Excluding exceptional items 2022 $m	Exceptional Items 2022 $m	2022 $m	Excluding exceptional items 2021 $m	Exceptional Items 2021 $m	2021 $m
Group revenue	7	**5,862.0**	**–**	**5,862.0**	7,470.1	–	7,470.1
Total operating costs		**(4,227.7)**	**–**	**(4,227.7)**	(3,891.1)	(177.6)	(4,068.7)
Operating profit from subsidiaries	8	**1,634.3**	**–**	**1,634.3**	3,579.0	(177.6)	3,401.4
Net share of results from associates and joint ventures	18	**48.1**	**–**	**48.1**	59.7	–	59.7
Gain on disposal of investment in joint venture		**–**	**944.7**	**944.7**	–	–	–
Operating profit from subsidiaries, and total profit from associates and joint ventures	8	**1,682.4**	**944.7**	**2,627.1**	3,638.7	(177.6)	3,461.1
Investment income		**40.2**	**–**	**40.2**	5.0	–	5.0
Interest expense		**(78.6)**	**–**	**(78.6)**	(63.4)	–	(63.4)
Other finance items		**(29.8)**	**–**	**(29.8)**	74.4	–	74.4
Net finance (expense)/income	10	**(68.2)**	**–**	**(68.2)**	16.0	–	16.0
Profit before tax		**1,614.2**	**944.7**	**2,558.9**	3,654.7	(177.6)	3,477.1
Income tax expense	11	**(603.6)**	**–**	**(603.6)**	(1,332.9)	90.6	(1,242.3)
Profit from continuing operations		**1,010.6**	**944.7**	**1,955.3**	2,321.8	(87.0)	2,234.8
Profit for the year		**1,010.6**	**944.7**	**1,955.3**	2,321.8	(87.0)	2,234.8
Attributable to:							
Non-controlling interests	31	**422.3**	**–**	**422.3**	917.4	27.2	944.6
Owners of the parent	12	**588.3**	**944.7**	**1,533.0**	1,404.4	(114.2)	1,290.2
		US cents	**US cents**	**US cents**	US cents	US cents	US cents
Basic earnings per share							
From continuing operations	12	**59.7**	**95.8**	**155.5**	142.5	(11.6)	130.9

Consolidated statement of comprehensive income

For the year ended 31 December 2022

	Note(s)	2022 $m	2021 $m
Profit for the year		**1,955.3**	2,234.8
Items that may be or were subsequently reclassified to profit or loss:			
Losses on cash flow hedges		**–**	(90.9)
Losses in fair value of cash flow hedges transferred to the income statement		**–**	126.8
Currency translation adjustment		**(0.4)**	(1.6)
Tax relating to these items		**–**	(4.4)
Total items that may be or were subsequently reclassified to profit or loss		**(0.4)**	29.9
Items that will not be subsequently reclassified to profit or loss:			
Actuarial (losses)/gains on defined benefit plans	27	**(18.1)**	3.1
Gains/(losses) in fair value of equity investments	19	**15.8**	(2.1)
Tax relating to these items		**5.7**	(2.5)
Total items that will not be subsequently reclassified to profit or loss		**3.4**	(1.5)
Total other comprehensive income		**3.0**	28.4
Total comprehensive income for the year		**1,958.3**	2,263.2
Attributable to:			
Non-controlling interests	31	**418.1**	952.8
Owners of the parent		**1,540.2**	1,310.4

	2022 $m	2021 $m
Total comprehensive income for the year - continuing operations	**1,958.3**	2,263.2
	1,958.3	2,263.2

Consolidated Statement of Changes in Equity

For the year ended 31 December 2022

	Share capital $m	Share premium $m	Other reserves (Note 30) $m	Retained earnings (Note 30) $m	**Equity attributable to owners of the parent $m**	Non-controlling interests $m	**Total equity $m**
At 1 January 2021	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**
Total comprehensive income for the year	–	–	20.2	1,290.2	**1,310.4**	952.8	**2,263.2**
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**
Profit for the year	–	–	–	1,533.0	**1,533.0**	422.3	**1,955.3**
Other comprehensive income/(expense) for the year	–	–	15.4	(8.2)	**7.2**	(4.2)	**3.0**
Total comprehensive income for the year	**–**	**–**	**15.4**	**1,524.8**	**1,540.2**	**418.1**	**1,958.3**
Dividends	**–**	**–**	**–**	**(1,262.9)**	**(1,262.9)**	**(80.0)**	**(1,342.9)**
At 31 December 2022	**89.8**	**199.2**	**5.0**	**8,333.5**	**8,627.5**	**3,016.9**	**11,644.4**

Consolidated Balance sheet

As at 31 December 2022

	Note(s)	2022 $m	2021 $m
Non-current assets			
Intangible assets	14	–	–
Property, plant and equipment	15	11,543.5	10,538.5
Other non-current assets		1.1	1.3
Inventories	20	347.0	270.4
Investment in associates and joint ventures	18	904.6	905.8
Trade and other receivables	21	51.0	51.2
Equity investments	19	90.5	8.7
Deferred tax assets	28	78.5	96.8
		13,016.2	11,872.7
Current assets			
Inventories	20	708.1	532.8
Trade and other receivables	21	2,087.2	1,146.1
Current tax assets		35.6	13.7
Liquid investments	22	1,580.8	2,969.7
Cash and cash equivalents	22	810.4	743.4
		5,222.1	5,405.7
Total assets		18,238.3	17,278.4
Current liabilities			
Short-term borrowings and other financial liabilities	23	(432.5)	(337.1)
Trade and other payables	24	(1,079.7)	(829.1)
Short-term decommissioning and restoration provisions	29	(33.2)	(33.8)
Current tax liabilities		(60.4)	(374.2)
		(1,605.8)	(1,574.2)
Non-current liabilities			
Medium and long-term borrowings and other financial liabilities	23	(2,844.5)	(2,835.5)
Trade and other payables	24	(8.0)	(16.8)
Liabilities in relation to joint ventures	18	–	(0.6)
Post-employment benefit obligations	27	(137.3)	(107.5)
Decommissioning and restoration provisions	29	(455.0)	(302.3)
Deferred tax liabilities	28	(1,543.3)	(1,412.5)
		(4,988.1)	(4,675.2)
Total liabilities		(6,593.9)	(6,249.4)
Net assets		11,644.4	11,029.0
Equity			
Share capital	30	89.8	89.8
Share premium	30	199.2	199.2
Other reserves	30	5.0	(10.4)
Retained earnings	30	8,333.5	8,071.6
Equity attributable to owners of the parent		8,627.5	8,350.2
Non-controlling interests	31	3,016.9	2,678.8
Total equity		11,644.4	11,029.0

The financial statements on pages 181 to 233 were approved by the Board of Directors on 23 March 2023 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 2022

	Note(s)	2022 $m	2021 $m
Cash flow from continuing operations	32	**2,738.3**	4,507.7
Interest paid		**(74.3)**	(60.7)
Income tax paid		**(787.1)**	(776.9)
Net cash from operating activities		**1,876.9**	3,670.1
Investing activities			
Capital contributions to associates and joint ventures	18	**–**	(33.5)
Dividends from associates and joint ventures	18	**50.0**	142.5
Acquisition of mining properties		**–**	(4.5)
Acquisition of equity investments	19	**(66.5)**	–
Proceeds from sale of property, plant and equipment		**0.2**	1.5
Purchases of property, plant and equipment		**(1,879.2)**	(1,773.0)
Net decrease/(increase) in liquid investments	22	**1,388.9**	(543.7)
Interest received		**29.1**	7.4
Net cash used in investing activities		**(477.5)**	(2,203.3)
Financing activities			
Dividends paid to owners of the parent	13	**(1,262.9)**	(710.8)
Dividends paid to preference shareholders of the Company	13	**(0.1)**	(0.1)
Dividends paid to non-controlling interests	31	**(80.0)**	(604.5)
Proceeds from issue of new borrowings	32	**865.9**	149.1
Repayments of borrowings	32	**(751.3)**	(694.7)
Principal elements of lease payments	32	**(105.4)**	(88.9)
Net cash used in financing activities		**(1,333.8)**	(1,949.9)
Net increase/(decrease) in cash and cash equivalents		**65.6**	(483.1)
Cash and cash equivalents at beginning of the year		**743.4**	1,246.8
Net increase/(decrease) in cash and cash equivalents	32	**65.6**	(483.1)
Effect of foreign exchange rate changes	32	**1.4**	(20.3)
Cash and cash equivalents at end of the year	22,32	**810.4**	743.4

Notes to the financial statements

1 Basis of preparation

The consolidated financial statements of the Antofagasta plc Group have been prepared in accordance with UK adopted international accounting standards and with the requirements of the Companies Act 2006 as applicable to companies reporting under those standards. The financial statements have been prepared on the going concern basis.

Going concern

The Directors have assessed the going concern status of the Group, considering the period to 31 December 2024.

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 2022, with combined cash, cash equivalents and liquid investments of $2,391.2 million. Total borrowings were $3,277.0 million, resulting in a net debt position of $885.8 million. Of the total borrowings, only 13% is repayable within one year, and 17% 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, including depreciation, deferred stripping and closure provisions. 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 standalone impact of each of:

- A significant deterioration in the future copper price forecasts by 20% throughout the going concern period.
- An even more pronounced short-term reduction of 50 c/lb in the copper price for a period of three months, in addition to the above deterioration of 20% in the copper price throughout the review period.
- The potential impact of the Group's most significant individual operational risks.
- A shut-down of any one of the Group's operations for a period of three months.
- Potential changes to the Chilean mining royalty, taking into account the Group's existing tax stability agreements.

The stability of tailings storage facilities represents a potentially significant operational risk for mining operations globally. The Group's tailings storage facilities are designed to international standards, constructed using downstream methods, subject to rigorous monitoring and reporting, and reviewed regularly by an international panel of independent experts. Given these standards of design, development, operations and review, the impact of a potential tailings dam failure has not been included in the sensitivity analysis.

The above downside sensitivity analyses indicated results which could be managed in the normal course of business, including the aggregate impact of a number of the above sensitivities occurring at the same time. 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 2024. The Directors therefore consider it appropriate to adopt the going concern basis of accounting in preparing the 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:

- Property, Plant and Equipment – Proceeds before Intended Use (Amendments to IAS 16)
- 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)
- Reference to the Conceptual Framework (Amendments to IFRS 3)

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.

The amendment to IAS 16 Property, Plant and Equipment – Proceeds before intended use may have significant impacts for the Group in future periods. Previously, the Group has deducted 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 now 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. There were no relevant projects impacted by the amendment during 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.

1 Basis of preparation *continued*

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. It is expected that where applicable, these standards and amendments will be adopted on each respective effective date (after 1 January, 2023). None of these standards are expected to have a significant impact on the Group.

- IFRS 17, Insurance Contracts
- Deferred Tax related to Assets and Liabilities arising from a Single Transaction (Amendments to IAS 12)
- Disclosure of Accounting Policies – Amendments to IAS 1 and IFRS Practice Statement 2
- Definition of Accounting Estimates – Amendments to IAS 8

The following standards are effective after 1 January, 2024 (and subject to UK endorsement):

- Classification of Liabilities as Current or Non-Current (Amendments to IAS 1)
- Lease Liability in a Sale and Leaseback (Amendments to IFRS16)
- Non-current Liabilities with Covenants (Amendments to IAS 1)

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 intercompany 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 of which two or more parties have joint control. Joint arrangements are accounted for 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 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. In these cases the customer still gains control over the material when it has been loaded at the port of loading, and so that remains the point of revenue recognition for the sale of material; however, 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.

Interest received is recognised within investing activities in the consolidated cash flow statement.

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 the construction or development of projects is capitalised as part of the cost of the asset. To the extent that borrowings have been put in place specifically to fund the construction of the asset, the capitalised amount will reflect the actual interest costs incurred on that borrowing. If the construction is funded out of general borrowings, the capitalised interest expense will be calculated based on the entity's weighted average interest rate, applied to the expenditure on the asset (with the capitalised interest amount not exceeding the entity's total borrowing cost for the period). The interest costs are 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 hours of equipment usage, 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 15).

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 typically includes milling and concentrating, resulting 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

Obligations to incur decommissioning and restoration costs can arise as a result of the development or ongoing operation of a mining property. Costs are estimated on the basis of a formal closure plan and are subject to regular formal review.

Decommissioning obligations arising from the construction of property, plant and equipment (including installation of plant and site preparation work) are provided for at their net present value as the construction of the asset gives rise to the obligation, and included within the property, plant and equipment cost. These decommissioning costs are charged against profit or loss over the life of the mine, through depreciation of the property, plant and equipment balance (recorded within operating expenses). The unwinding of the discount on the provision is recorded within other finance items. Changes in the measurement of a decommissioning provision are added to, or deducted from, the property, plant and equipment balance in the current year.

Restoration obligations, arising from ongoing operating activities, are provided for at their net present values and charged against operating expenses as the obligation arises. Changes in the measurement of a restoration provision which, relate to a change in the estimate of the closure costs or a change in the discount rate, are charged against operating expenses, and changes relating to 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, with the fair value movements recorded within investment income.

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.

Interest paid is recognised within operating activities in the consolidated cash flow statement.

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 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 2022 year-end, and accordingly no impairment tests have been performed. However, whether or not an impairment indicator exists is a critical judgement, in particular as at 31 December 2022 for Zaldívar (given the ongoing permitting process and the other factors set out in note 5) and at Antucoya (given the impairments recognised in 2012 and 2016 and, therefore, the sensitivity of the asset's value to movements in macroeconomic assumptions and other developments)

(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 2022, $231 million (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.

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 tax liabilities in respect of undistributed earnings of subsidiaries**

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 2022 deferred withholding tax liabilities of $71.6 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 $6,430.4 million (31 December 2021 – $6,483.3 million). 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 $1,076.5 million (31 December 2021 – $1,232.1 million), depending on the application of tax credits which may be available in particular circumstances.

(ii) **Disposal of investment in Tethyan joint venture**

On 15 December 2022, Antofagasta entered into definitive agreements to exit its interest in the Tethyan joint venture. As a result of those agreements:

- the Reko Diq project in Pakistan (the "Project") was reconstituted in Reko Diq Mining Company (Private Limited) ("RDMC"). RDMC is the Pakistani registered subsidiary of Tethyan Copper Company Pty Limited ("TCC"), which is itself the Australian registered subsidiary of Atacama Copper Pty Limited ("Atacama"), the joint venture company registered in Australia and owned equally by the Company and Barrick Gold Corporation ("Barrick");
- a consortium of various Pakistani state-owned enterprises acquired shares in RDMC which holds the Project (the "Sale"); and
- as the International Centre for Settlement of Investment Disputes ("ICSID") award (to TCC) was resolved by reconstituting the Project, TCC no longer has any rights or claims against the Governments of Pakistan and Balochistan arising from the suspension of the Project in 2011.

The proceeds of the Sale which, together with accrued interest up to 15 December 2022 totalled US$946.0 million, are currently held by Atacama in a segregated interest-bearing account. Antofagasta and Barrick have agreed that the proceeds of this account, including all further interest received, less any Australian tax arising, will be distributed to the Antofagasta Group during 2023, on a date to be determined by Antofagasta. Atacama is seeking a binding private ruling to confirm that the Sale proceeds and their distribution to the Antofagasta Group will not be subject to Australian tax. The Australian corporate tax rate is 30%. Although Antofagasta will retain its shareholding in Atacama until the proceeds have been distributed, it no longer has any appointees on the board of the joint venture, is not entitled to exercise voting rights in Atacama, and is not required to provide any funding to, or permitted to receive any distributions from, Atacama other than the Sale proceeds. Antofagasta has therefore ceased to have an economic interest in Atacama and its subsidiaries as of 15 December 2022 other than being entitled from that date to receive an amount equal to the Sale proceeds and related interest less any Australian tax arising (whether before or after the distribution). Accordingly, Antofagasta has recognised a gain on disposal of its investment in the joint venture as at 15 December 2022 of $944.7 million, reflecting the estimate of the Sale proceeds and related interest, working capital and other adjustments and the carrying value of the investment at that date. A receivable balance of $943.3 million in respect of the estimated proceeds due to Antofagasta has been recognised within Trade and other receivables in the balance sheet.

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 2022 was $751.9 million.

If the copper spot price at 31 December 2022 (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 $130 million (on a 50% attributable basis) at 31 December 2022. 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 $13 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.

3 Critical accounting judgements and key sources of estimation uncertainty *continued*

Other items of property, plant and equipment are depreciated over their useful economic lives, on a unit of production basis, in proportion to the volume of ore/material processed or hours of equipment usage, or on a straight-line basis. Management reviews the appropriateness of useful economic lives at least annually and, again, any changes could affect prospective depreciation rates and asset carrying values.

The operation with the most significant depreciation expense is Centinela, with a depreciation expense of $710 million in 2022, 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 $71 million on the annual depreciation charge.

(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 2022 was $488.2 million. As a simple high-level sensitivity, a 10% increase in the forecast closure costs would increase the provision balance by approximately $49 million, the capitalised decommissioning costs asset within property, plant and equipment by approximately $17 million and the ongoing annual operating expenses by approximately $2 million.

(iv) Deferred tax assets in respect of tax losses

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 typically 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 $78.5 million of net deferred tax assets as at 31 December 2022, relating to tax losses, provisions and short-term timing differences. The deferred tax position includes $79.7 million (2021 – $90.6 million) of deferred tax assets in respect of tax losses available for offset against future profits. These losses may be carried forward indefinitely.

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.

2022 – Disposal of investment in Tethyan joint venture

On 15 December 2022, Antofagasta entered into definitive agreements to exit its interest in the Tethyan joint venture. As a result, Antofagasta has recognised a gain on disposal of its investment in the joint venture as at 15 December 2022 of $944.7 million. Full details of the agreements and gain on disposal are set out in Note 17.

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, 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 2021 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 was 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, reflecting the improved actual and forecast profitability of the relevant Group entity (Antucoya).

5 Asset sensitivities

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 2022 year-end, and accordingly no impairment tests have been performed. The impairment indicator assessment included consideration of the potential indicators set out in IAS 36, 'Impairment of Assets', which included quantitative analysis based on the operations' life-of-mine models as adjusted for certain assumptions (including potential future development opportunities) ("the models"). These models provide indicative valuations and do not represent, or comply with, a formal impairment assessment prepared in accordance with IAS 36. Sensitivity analyses have been performed on the models to quantify the impact of changes in assumptions to which the models are most sensitive and to support the overall impairment indicator assessment.

As noted above, no qualitative indicators of potential impairment or potential reversal of impairment were identified. Similarly, no quantitative indicators of impairment were identified, with the models used within the impairment indicator assessment continuing to indicate positive headroom for all of the Group's mining operations, including the Zaldivar joint venture, with the indicated value of the assets in excess of their carrying value.

Relevant aspects of this process are detailed below:

Copper price outlook

The assumption to which the value of the assets is most sensitive is the future long-term 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 $3.50/lb (reflecting 2022 real terms) has been used in the models used in the impairment indicator assessment, which has increased from $3.30/lb (reflecting 2021 real terms) at the prior year-end. As an additional down-side sensitivity an indicative valuation (based on the models) was performed with a long-term copper price of $3.15/lb, reflecting a 10% reduction in the long-term price forecast. Los Pelambres and Centinela still showed positive headroom in their models in this alternative down-side scenario. However, the Antucoya valuation indicated a potential deficit of $400 million and the Zaldívar valuation indicated a potential deficit of $170 million (on a 50% basis). This was a simple sensitivity exercise, looking at an illustrative change in the forecast long-term copper price in isolation. In reality, a deterioration in the long-term copper price environment is likely to result in corresponding improvements in a range of input cost factors. In particular, given that copper exports account for over 50% of Chile's exports, historically there has often been a correlation between movements in the copper price and the US dollar/Chilean peso exchange rate, and a decrease in the copper price may therefore result in a weakening of the Chilean peso, with a resulting reduction in the Group's operating costs and capital expenditure in US$ terms. 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$850/$1 has been used in the models considered as part of the impairment indicator assessment. This compares with the long-term exchange rate of CH$770/$1 used in 2021. As an additional down-side sensitivity an indicative valuation was prepared with a 10% stronger long-term Chilean peso exchange rate assumption. Los Pelambres and Centinela still showed positive headroom in this alternative down-side scenario. However, the Antucoya valuation indicated a potential deficit of $140 million and the Zaldívar valuation indicated a potential deficit of $100 million (on a 50% basis). As noted above, historically there has often been a correlation between movements in the copper price and the US dollar/Chilean peso exchange rate, and so a strengthening of the Chilean peso may often reflect a stronger copper price environment, which could mitigate the impact of a stronger exchange rate.

Climate risks

The models incorporate estimates of the potential future costs relating to climate risks. The Group discloses in line with the recommendations of the Task Force on Climate-related Financial Disclosures ("TCFD"). This process includes scenario analyses assessing the potential future impact of transition and physical risks. The combined estimate of the potential costs of the transition risk and physical risk scenarios, have been incorporated into the models.

Chilean mining royalty

We have considered potential changes to the Chilean mining royalty (taking into account the Group's existing tax stability agreements) as part of the impairment indicator assessment.

Other relevant assumptions

In addition to the impact of the future copper price the US dollar/Chilean peso exchange rate, climate risks and the potential changes in the Chilean royalty regime, the models used in the impairment indicator assessment are sensitive to the assumptions in respect of future production levels, operating costs, sustaining and development capital expenditure, and the discount rate used to determine the present value of the future cash flows.

A real post-tax discount rate of 8% (calculated using relevant market data) has been used in determining the present value of the changes in forecast future cash flows from the assets as part of the quantitative analysis performed as part of the overall impairment indicator assessment.

5 Asset sensitivities *continued*

In the case of Zaldívar, in addition to the assumptions made in respect of the factors outlined above, the conclusion that there are no impairment indicators reflects certain assumptions about future operational considerations to which the model considered as part of the impairment indicator assessment is sensitive, in particular the following:

- Zaldívar submitted an Environmental Impact Assessment (EIA) in 2018 which included an application to extend its water extraction and mining permits to 2029 (with decreasing activity levels in 2030-2031). Currently, Zaldívar is permitted to extract water and mine into 2025 and 2024, respectively. To ensure the continuity of the operation, in March 2023 Zaldívar submitted a DIA (Declaration of Environmental Impact), a more limited scope and simplified procedure than an EIA, requesting that the mining permit be extended from 2024 to 2025 so as to expire at the same date as the current water permit. At the same time Zaldívar withdrew the 2018 EIA application. It is expected that an alternative and updated EIA application to extend the water and mining permits beyond 2025 will be submitted which will also include a plan for a transition from the current continental water source on completion of the extended water permit, to either procuring water from a third party or using raw sea water. The impairment indicator assessment assumes that the mining permit will be extended to cover the full period of the model, and the water permit can be extended, or reasonable alternative arrangements for securing water to enable the continued operation of the mine without interruption can be implemented. However, if this is not the case, this is likely to be considered an indicator of a potential impairment, requiring an IAS 36 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 (a road, railway, power line and pipelines). The impairment indicator assessment 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.

The carrying value of the Group's investment in joint venture balance in respect of Zaldívar as at 31 December 2022 was $897.3 million.

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 2022, 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.

Indicators of potential reversal of previous impairments

Antucoya recognised impairments totalling $716 million in 2012 and 2016. Of the original impairment amounts, approximately $434 million remains in effect unamortised as at 31 December 2022. Based on an assessment of both qualitative and quantitative factors, there were no indicators of a potential reversal of these previous impairments at the 2022 year-end. As noted above, the indicative valuation exercise for Antucoya at the 2022 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 $400 million; the sensitivity using a 10% stronger long-term Chilean peso exchange rate assumption indicated a potential deficit of $140 million. Given this marginal headroom position, reasonably possible changes in the general market environment or the regulatory and taxation environment in Chile could result in a potential deficit position for Antucoya and hence it was concluded that there was no impairment reversal trigger as at 31 December 2022.

6 Segment information

The Group's reportable segments, which are the same as its operating 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 containing gold and silver as a by-product, and molybdenum concentrate. 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 2022

	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	2,558.9	2,406.2	703.5	–	–	–	5,668.6	193.4	5,862.0
Operating cost excluding depreciation and loss on disposals	(1,086.1)	(1,249.0)	(442.3)	–	(113.0)	(75.0)	(2,965.4)	(119.1)	(3,084.5)
Depreciation	(276.1)	(710.2)	(105.6)	–	–	(18.7)	(1,110.6)	(30.5)	(1,141.1)
Loss on disposals	(0.5)	(1.0)	–	–	–	(0.6)	(2.1)	–	(2.1)
Operating profit/(loss)	1,196.2	446.0	155.6	–	(113.0)	(94.3)	1,590.5	43.8	1,634.3
Net share of results from associates and joint ventures	–	–	–	47.3	–	(0.7)	46.6	1.5	48.1
Gain on disposal of investment in joint ventures[3]	–	–	–	–	–	944.7	944.7	–	944.7
Total profit from operations, associates and joint ventures	1,196.2	446.0	155.6	47.3	(113.0)	849.7	2,581.8	45.3	2,627.1
Investment income	10.7	6.6	2.4	–	–	19.8	39.5	0.7	40.2
Interest expense	(3.3)	(10.6)	(19.9)	–	–	(44.2)	(78.0)	(0.6)	(78.6)
Other finance items	(5.2)	(11.3)	(6.6)	–	–	(5.0)	(28.1)	(1.7)	(29.8)
Profit/(loss) before tax	1,198.4	430.7	131.5	47.3	(113.0)	820.3	2,515.2	43.7	2,558.9
Tax	(371.8)	(130.8)	(34.9)	–	–	(50.8)	(588.3)	(15.3)	(603.6)
Profit/(loss) for the year	826.6	299.9	96.6	47.3	(113.0)	769.5	1,926.9	28.4	1,955.3
Non-controlling interests	319.3	82.9	21.2	–	–	(1,1)	422.3	–	422.3
Profit/(losses) attributable to the owners of the parent	507.3	217.0	75.4	47.3	(113.0)	770.6	1,504.6	28.4	1,533.0
EBITDA[1]	1,472.8	1,157.2	261.2	147.2	(113.0)	(75.7)	2,849.7	80.0	2,929.7
Additions to non-current assets									
Additions to property, plant and equipment	965.2	889.0	75.1	–	0.5	16.4	1,946.2	55.8	2,002.0
Segment assets and liabilities									
Segment assets	6,786.6	5,922.8	1,708.0	–	–	2,504.1	16,921.5	412.2	17,333.7
Investment in associates and joint ventures	–	–	–	897.3	–	–	897.3	7.3	904.6
Segment liabilities	(3,155.0)	(1,565.1)	(558.1)	–	–	(1,225.8)	(6,504.0)	(89.9)	(6,593.9)

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 238).
2. Operating cash outflow in the exploration and evaluation segment was $98.3 million.
3. An exceptional gain of $944.7 million has been recognised in respect of the Group's disposal of its investment in the Tethyan joint venture (see notes 3, 4 and 17)

6 Segment information *continued*

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 and loss on disposals	(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 238).
2. Operating cash outflow in the exploration and evaluation segment was $98.0 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.

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 $9.8 million (year ended 31 December 2021 – $8.2 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 $7.3 million (31 December 2021 – $5.8 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 16.

B) Entity-wide disclosures

Revenue by product

	2022 $m	2021 $m
Copper		
• Los Pelambres	**2,107.7**	3,097.0
• Centinela concentrate	**1,132.7**	1,735.4
• Centinela cathodes	**844.4**	774.1
• Antucoya	**697.5**	693.3
Provision of shipping services		
• Los Pelambres	**51.9**	57.8
• Centinela concentrate	**58.5**	46.8
• Centinela cathodes	**6.7**	4.3
• Antucoya	**6.0**	4.5
Gold		
• Los Pelambres	**75.4**	91.0
• Centinela concentrate	**238.4**	345.4
Molybdenum		
• Los Pelambres	**291.4**	329.2
• Centinela concentrate	**100.8**	37.2
Silver		
• Los Pelambres	**32.5**	46.0
• Centinela concentrate	**24.7**	38.1
Total	**5,668.6**	7,300.1
Transport division	**193.4**	170.0
	5,862.0	7,470.1

Revenue by location of customer

	2022 $m	2021 $m
Europe		
• United Kingdom	**71.0**	54.4
• Switzerland	**753.6**	1,303.7
• Spain	**1.0**	67.6
• Germany	**140.0**	121.5
• Rest of Europe	**96.5**	177.4
Latin America		
• Chile	**369.1**	282.0
• Rest of Latin America	**179.7**	214.7
North America		
• United States	**312.3**	666.5
Asia		
• Japan	**1,668.6**	1,842.3
• China	**1,072.0**	1,236.9
• Singapore	**423.8**	726.1
• South Korea	**332.2**	322.6
• Hong Kong	**178.2**	217.1
• Rest of Asia	**264.0**	237.3
	5,862.0	7,470.1

Information about major customers

In the year ended 31 December 2022, the Group's mining revenue included $785.5 million related to one large customer that individually accounted for more than 10% of the Group's revenue (year ended 31 December 2021 – one large customer representing $1,015.1 million).

6 Segment information *continued*

Non-current assets by location of assets

	2022 $m	2021 $m Restated
Chile	**12,786.1**	11,705.1
Other[1]	**10.1**	10.9
	12,796.2	11,716.0

1. The comparatives have been restated to show a reclassification of $9.9 million from the "Chile" category to the "Other" category.

	2022 $m	2021 $m
Non-current assets per the balance sheet	**13,016.2**	11,872.7
The above amounts by location reflect non-current assets per the balance sheet excluding:		
• Deferred tax assets	**(78.5)**	(96.8)
• Account receivables	**(51.0)**	(51.2)
• Equity investments	**(90.5)**	(8.7)
Total of non-current assets above	**(220.0)**	(156.7)
Non-current assets by location of asset	**12,796.2**	11,716.0

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.

The total revenue from contracts with customers and the impact of provisional pricing adjustments in respect of concentrate and cathode sales is as follows:

	2022 $m	2021 $m
Revenue from contracts with customers		
Sale of products	**5,671.2**	6,809.0
Provision of shipping services associated with the sale of products[1]	**123.1**	113.4
Transport division[2]	**193.4**	170.0
Provisional pricing adjustments in respect of copper, gold and molybdenum	**(125.7)**	377.7
Total revenue	**5,862.0**	7,470.1

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.

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 following tables set 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.

For the year ended 31 December 2022

	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	2,313.7	1,231.8	851.8	710.6	75.1	235.9	281.3	98.5
Revenue from freight services	51.9	58.5	6.7	6.0	–	–	–	–
	2,365.6	1,290.3	858.5	716.6	75.1	235.9	281.3	98.5
Effects of pricing adjustments to previous year invoices								
Reversal of mark-to-market adjustments at the end of the previous year	(12.0)	(5.2)	(0.3)	(0.8)	–	(0.3)	5.6	0.7
Settlement of sales invoiced in the previous year	10.7	23.3	0.5	1.0	–	3.6	(4.1)	(0.6)
Total effect of adjustments to previous year invoices in the current year	(1.3)	18.1	0.2	0.2	–	3.3	1.5	0.1
Effects of pricing adjustments to current year invoices								
Settlement of sales invoiced in the current year	(155.3)	(68.7)	(8.4)	(14.1)	0.4	(2.9)	16.5	4.0
Mark-to-market adjustments at the end of the current year	38.0	19.9	0.8	0.8	–	2.7	12.6	7.6
Total effect of adjustments to current year invoices	(117.3)	(48.8)	(7.6)	(13.3)	0.4	(0.2)	29.1	11.6
Total pricing adjustments	(118.6)	(30.7)	(7.4)	(13.1)	0.4	3.1	30.6	11.7
Realised losses on commodity derivatives	–	–	–	–	–	–	–	–
Revenues before deducting treatment and refining charges	2,247.0	1,259.6	851.1	703.5	75.5	239.0	311.9	110.2
Treatment and refining charges	(87.4)	(68.4)	–	–	(0.1)	(0.6)	(20.5)	(9.4)
Revenue net of tolling charges	2,159.6	1,191.2	851.1	703.5	75.4	238.4	291.4	100.8

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 6 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.

7 Group Revenue *continued*

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)	–	–	–	–
Revenues before deducting treatment and refining charges	3,245.0	1,844.0	778.4	697.8	91.2	346.2	353.6	44.4
Treatment and refining charges	(90.2)	(61.8)	–	–	(0.2)	(0.8)	(24.4)	(7.2)
Revenue net of tolling charges	3,154.8	1,782.2	778.4	697.8	91.0	345.4	329.2	37.2

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 6 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.

		2022	2021
Sales provisionally priced at the balance sheet date	Tonnes	**179,000**	177,900
Average mark-to-market price	$/lb	**3.80**	4.41
Average provisional invoice price	$/lb	**3.65**	4.37

(II) Copper cathodes

The typical period for which sales of copper cathodes remain open until settlement occurs is approximately one month from shipment date.

		2022	2021
Sales provisionally priced at the balance sheet date	Tonnes	**22,700**	15,000
Average mark-to-market price	$/lb	**3.80**	4.42
Average provisional invoice price	$/lb	**3.77**	4.39

(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.

		2022	2021
Sales provisionally priced at the balance sheet date	Ounces	**31,000**	32,300
Average mark-to-market price	$/oz	**1,828**	1,801
Average provisional invoice price	$/oz	**1,742**	1,791

(IV) Molybdenum concentrate

The typical period for which sales of molybdenum remain open until settlement occurs is approximately two months from shipment date.

		2022	2021
Sales provisionally priced at the balance sheet date	Tonnes	**2,500**	2,400
Average mark-to-market price	$/lb	**26.10**	18.60
Average provisional invoice price	$/lb	**22.20**	19.65

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	
	2022 $m	2021 $m
Los Pelambres – copper concentrate	**38.0**	12.0
Los Pelambres – molybdenum concentrate	**12.6**	(5.7)
Centinela – copper concentrate	**19.9**	5.2
Centinela – molybdenum concentrate	**7.6**	(0.7)
Centinela – gold in concentrate	**2.7**	0.4
Centinela – copper cathodes	**0.8**	0.3
Antucoya – copper cathodes	**0.8**	0.8
	82.4	12.3

8 Operating Profit From Subsidiaries, and Total Profit From Associates And Joint Ventures

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:

	2022 $m	2021 $m
Group revenue	**5,862.0**	7,470.1
Cost of sales	**(3,432.7)**	(3,120.2)
Gross profit	**2,429.3**	4,349.9
Administrative and distribution expenses	**(558.9)**	(550.4)
Other operating income	**37.9**	31.8
Other operating expenses[1]	**(274.0)**	(429.9)
Operating profit from subsidiaries	**1,634.3**	3,401.4
Net share of profit of associates and joint ventures	**48.1**	59.7
Gain on disposal of investment in joint ventures	**944.7**	–
Total profit from operations, associates and joint ventures	**2,627.1**	3,461.1

1. Other operating expenses comprise $113.0 million of exploration and evaluation expenditure (2021 – $103.2 million), $19.1 million in respect of the employee severance provision (2021 – $19.8 million), $16.9 million in respect of the closure provision (2021 – $11.3 million), nil in respect of the provision against the carrying value of assets relating to the Twin Metals project (2021 – $177.6 million) and $125.0 million of other expenses (2021 – $118.0 million).

Profit before tax is stated after (charging)/crediting:

	2022 $m	2021 $m
Foreign exchange (losses)/gains		
• included in net finance costs	**(12.8)**	49.9
Depreciation of property, plant and equipment		
• owned assets	**(1,047.2)**	(997.1)
• leased assets	**(93.9)**	(81.6)
Loss on disposal of property, plant and equipment	**(2.1)**	(9.2)
Cost of inventories recognised as an expense	**(2,381.6)**	(2,033.0)
Employee benefit expense	**(476.6)**	(498.0)
Decommissioning and restoration (operating expenses)	**(16.9)**	(11.3)
Severance charges	**(19.1)**	(19.8)
Exploration and evaluation expense	**(113.0)**	(103.2)
Provision against carrying value of assets1	**–**	(177.6)
Auditors´ remuneration	**(2.2)**	(1.9)

1. In 2021 impairment provision recognised in respect of $27.5 million of property, plant and equipment (note 15) and $150.1 million of intangible assets (note 14) relating to the Twin Metals project.

A more detailed analysis of auditors´ remuneration on a worldwide basis is provided below:

Group	2022 $000	2021 $000
Fees payable to the Company´s auditors and its associates for the audit of the Parent Company and consolidated financial statements	**1,312.5**	1,242.0
Fees payable to the Company´s auditors and its associates for other services:		
• The audit of the Company's subsidiaries	**549.6**	415.0
• Audit-related assurance services[1]	**98.0**	200.0
• Other assurance services[2]	**241.0**	–
	2,201.1	1,857.0

1. The audit-related assurance services relate to the half-year review performed by the auditors.
2. The other assurance services in 2022 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 auditors.

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 130. No services were provided pursuant to contingent fee arrangements.

9 Employees

A) Average monthly number of employees

	2022 Number	2021 Number
Los Pelambres	**1,069**	959
Centinela	**2,408**	2,226
Antucoya	**852**	817
Exploration and evaluation	**60**	71
Corporate and other employees		
• Chile	**582**	566
• United Kingdom	**4**	4
• Other	**1**	4
Mining and Corporate	**4,976**	4,647
Transport division	**1,383**	1,336
	6,359	5,983

(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:

	2022 $m	2021 $m
Wages and salaries	**(448.5)**	(469.9)
Social security costs	**(28.1)**	(28.1)
	(476.6)	(498.0)

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:

	2022 $m	2021 $m
Salaries and short-term employee benefits	**(25.0)**	(40.1)
	(25.0)	(40.1)

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 155 to 162.

10 Net finance (Expense)/Income

	2022 $m	2021 $m
Investment income		
Interest income	**19.8**	3.4
Gains on liquid investments held at fair value through profit or loss	**20.4**	1.6
	40.2	5.0
Interest expense		
Interest expense	**(78.6)**	(63.4)
	(78.6)	(63.4)
Other finance items		
Unwinding of discount on provisions	**(16.9)**	(6.2)
Adjustment to provision discount rates	**–**	30.8
Effects of changes in foreign exchange rates	**(12.8)**	49.9
Preference dividends	**(0.1)**	(0.1)
	(29.8)	74.4
Net finance (expense)/income	**(68.2)**	16.0

During 2022, amounts capitalised and consequently not included within the above table were as follows: $47.0 million at Los Pelambres (year ended 31 December 2021 – $12.1 million) and $2.0 million at Centinela (year ended 31 December 2021 – $2.1 million).

The interest expense shown above includes $7.1 million in respect of leases (2021 – $7.9 million). The interest paid in respect of leases $6.0 million (2021 – $6.5 million).

11 Income tax expense

The tax charge for the year comprised the following:

	2022 $m	2021 $m
Current tax charge		
• Corporate tax (principally first category tax in Chile)	**(340.4)**	(560.8)
• Mining tax (royalty)	**(83.9)**	(250.0)
• Withholding tax	**(24.5)**	(224.7)
	(448.8)	(1,035.5)
Deferred tax charge		
• Corporate tax (principally first category tax in Chile)	**(96.5)**	(237.4)
• Mining tax (royalty)	**(9.8)**	0.9
• Withholding tax	**(48.5)**	29.7
	(154.8)	(206.8)
Total tax charge	**(603.6)**	(1,242.3)

The rate of first category (ie corporate) tax in Chile is 27.0% (2021 – 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). Production from Los Pelambres, Antucoya, Encuentro (oxides), the Tesoro North East pit and the Run-of-Mine processing at Centinela Cathodes is 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 at Centinela Cathodes is subject to a rate of 5% of taxable operating profit.

The following table provides a numerical reconciliation between the accounting profit before tax multiplied by the applicable statutory tax rate and the total tax expense (including both current and deferred tax).

	Year ended 31 December 2022 Excluding exceptional items		Year ended 31 December 2022 Including exceptional items		Year ended 31 December 2021 Excluding exceptional items		Year ended 31 December 2021 Including exceptional items	
	$m	%	$m	%	$m	%	$m	%
Profit before tax	**1,614.2**		**2,558.9**		3,654.7		3,477.1	
Profit before tax multiplied by Chilean corporate tax rate of 27%	**(435.9)**	**27.0**	**(691.0)**	**27.0**	(986.8)	27.0	(938.8)	27.0
Mining tax (royalty)	**(94.5)**	**5.8**	**(94.5)**	**3.7**	(243.8)	6.7	(243.8)	7.0
Deduction of mining tax (royalty) as an allowable expense in determination of first category tax	**23.1**	**(1.4)**	**23.1**	**(0.9)**	67.8	(1.9)	67.8	(1.9)
Items not deductible from first category tax	**(33.9)**	**2.1**	**(33.9)**	**1.3**	(31.6)	0.9	(31.6)	0.9
Adjustment in respect of prior years	**(2.6)**	**0.1**	**(2.6)**	**0.1**	(12.1)	0.3	(12.1)	0.3
Withholding tax	**(73.0)**	**4.6**	**(73.0)**	**2.9**	(195.0)	5.3	(195.0)	5.6
Tax effect of share of profit of associates and joint ventures	**13.0**	**(0.8)**	**13.0**	**(0.5)**	16.1	(0.4)	16.1	(0.5)
Impact of previously unrecognised tax losses on current tax	**0.2**	**–**	**0.2**	**–**	52.5	(1.4)	52.5	(1.5)
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
Gain on disposal of investment in joint venture	**–**	**–**	**255.1**	**(10.0)**	–	–	–	–
Tax expense and effective tax rate for the year	**(603.6)**	**37.4**	**(603.6)**	**23.6**	(1,332.9)	36.5	(1,242.3)	35.7

The effective tax rate excluding exceptional items of 37.4% varied from the statutory rate principally due to the mining tax (royalty) (net impact of $71.4 million/4.4% 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 $73.0 million/4.6%), items not deductible for Chilean corporate tax purposes, principally the funding of expenses outside of Chile (impact of $33.9 million/2.1%), adjustments in respect of prior years (impact of $2.6 million/0.1%) and the impact of previously unrecognised tax losses (impact of $0.2 million/0%), partly offset by 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 $13.0 million/0.8%).

The impact of the exceptional items on the effective tax rate including exceptional items was $255.1 million/10.0%. Further details of the exceptional gain on the disposal of the Group's investment in the Tethyan joint venture, including relevant tax aspects, are set out in Note 17.

The main factors which could impact the sustainability of the Group's existing effective tax rate are:

- In October 2022, the Chilean government announced its updated proposals for a comprehensive reform of the tax system, including proposed changes to the mining royalty. These proposals are subject to review and approval by the Chilean Congress, and so there is no certainty as to the exact nature of changes which may finally be enacted into law.
- The level of future distributions made by the Group's Chilean subsidiaries out of Chile, which could result in increased withholding tax charges. 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.
- The impact of expenses which are not deductible for Chilean first category tax. Some of these expenses are 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.

The implementation of the OECD BEPS Pillar 2, which would introduce a minimum effective tax rate of 15% for multinational companies, will be applicable to the Group when brought into relevant legislation. The Group's operations are based in Chile and therefore currently subject to the Chilean first category (corporate) tax rate of 27%, plus withholding taxes on any remittance of profits from Chile. The Group has been assessing the potential impact of the draft UK legislation, and will complete that assessment when the legislation has been finalised.

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 3B.

12 Earnings per share

	2022 $m	2021 $m
Profit for the period attributable to owners of the parent (excluding exceptional items)	**588.3**	1,404.4
Exceptional Items	**944.7**	(114.2)
Profit for the period attributable to owners of the parent (including exceptional items) from operations	**1,533.0**	1,290.2

	2022 Number	2021 Number
Ordinary shares in issue throughout each year	**985,856,695**	985,856,695

	2022 cents	2021 cents
Basic earnings per share (excluding exceptional items) from operations	**59.7**	142.5
Basic earnings per share (exceptional items) from operations	**95.8**	(11.6)
Basic earnings per share (including exceptional items) from operations	**155.5**	130.9

Basic earnings per share are calculated as profit after tax and non-controlling interests, based on 985,856,695 (2021: 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:

		2022	2021
Profit for the year attributable to owners of the parent	$m	**1,533.0**	1,290.2
Profit from continuing operations attributable to owners of the parent	$m	**1,533.0**	1,290.2
Ordinary shares	Number	**985,856,695**	985,856,695
Basic earnings per share from continuing operations	cents	**155.5**	130.9

13 Dividends

Amounts recognised as distributions to equity holders in the year:

	2022 $m	2021 $m	2022 cents per share	2021 cents per share
Final dividend paid in June (proposed in relation to the previous year)				
• Ordinary	**1,172.2**	478.1	**118.9**	48.5
Interim dividend paid in September				
• Ordinary	**90.7**	232.7	**9.2**	23.6
	1,262.9	710.8	**128.1**	72.1

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:

	2022 $m	2021 $m	2022 cents per share	2021 cents per share
Final dividend proposed in relation to the year				
• Ordinary	**497.6**	1,172.1	**50.5**	118.9

Total dividends proposed in relation to 2022 (including the interim dividend) are 59.7 cents per share or $588.3 million (2021 – 142.5 cents per share or $1,404.8 million).

In accordance with IAS 32, preference dividends have been included within net finance expense (see Note 10) and amounted to $0.1 million (2021 – $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 (www.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 168.

14 Intangible assets

	Cost $m	Accumulated depreciation and impairment $m	Net book value $m
At 1 January 2021	150.1	–	150.1
Provision against carrying value	–	(150.1)	(150.1)
At 31 December 2021	**150.1**	**(150.1)**	**–**
At 31 December 2022	**150.1**	**(150.1)**	**–**

The intangible asset relates to Twin Metals' mining licences assets (included within the corporate segment). As explained in note 3, a full impairment provision was recognised in respect of the $150.1 million cost of this asset as at 31 December 2021, as a result of the US federal government's cancellation of certain of Twin Metals' mining leases. Twin Metals believes it has a valid legal right to the mining leases and a strong case to defend its legal rights. Although the Group is pursuing validation of those rights, considering the time and uncertainty related to any legal action to challenge the government decisions, a full impairment provision has been recognised in respect of the carrying value of the asset.

15 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 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
At 1 January 2022	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
Additions	**–**	**–**	**582.5**	**–**	**–**	**–**	**2.0**	**1,366.2**	**51.3**	**2,002.0**
Additions – capitalised depreciation	**–**	**–**	**73.3**	**–**	**–**	**–**	**–**	**–**	**–**	**73.3**
Adjustment to capitalised decommissioning provisions	**–**	**–**	**–**	**173.8**	**–**	**–**	**–**	**–**	**–**	**173.8**
Capitalisation of interest	**–**	**–**	**–**	**–**	**–**	**–**	**–**	**49.0**	**–**	**49.0**
Reclassifications	**–**	**–**	**–**	**1.4**	**11.9**	**1.5**	**4.1**	**(15.8)**	**(3.1)**	**–**
Asset disposals	**–**	**–**	**–**	**(0.2)**	**–**	**(0.6)**	**(9.2)**	**(5.9)**	**(17.4)**	**(33.3)**
At 31 December 2022	**61.9**	**672.0**	**3,535.3**	**5,978.9**	**134.7**	**207.4**	**7,241.3**	**4,322.7**	**531.1**	**22,685.3**
Accumulated depreciation and impairment										
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)
At 1 January 2022	**(25.0)**	**(588.1)**	**(1,372.4)**	**(2,889.9)**	**(44.4)**	**(111.5)**	**(4,540.7)**	**–**	**(310.0)**	**(9,882.0)**
Charge for the year	**–**	**(60.1)**	**(352.8)**	**(319.3)**	**(7.8)**	**(14.0)**	**(293.2)**	**–**	**(93.9)**	**(1,141.1)**
Depreciation capitalised in inventories	**–**	**–**	**–**	**–**	**–**	**–**	**(71.1)**	**–**	**–**	**(71.1)**
Depreciation capitalised in property, plant and equipment	**–**	**–**	**–**	**–**	**–**	**–**	**(73.3)**	**–**	**–**	**(73.3)**
Asset disposals	**–**	**–**	**–**	**0.1**	**–**	**0.6**	**7.6**	**–**	**17.4**	**25.7**
At 31 December 2022	**(25.0)**	**(648.2)**	**(1,725.2)**	**(3,209.1)**	**(52.2)**	**(124.9)**	**(4,970.7)**	**–**	**(386.5)**	**(11,141.8)**
Net book value										
At 31 December 2022	**36.9**	**23.8**	**1,810.1**	**2,769.8**	**82.5**	**82.5**	**2,270.6**	**4,322.7**	**144.6**	**11,543.5**
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

The Group has no (2021 – nil) assets pledged as security against bank loans provided to the Group.

At 31 December 2022, the Group had entered into contractual commitments for the acquisition of property, plant and equipment amounting to $845.1 million (2021 – $599.3 million) of which $445.4 million was related to Los Pelambres and $326.1 million to Centinela.

The average interest rate for the amounts capitalised was 2.8% (2021 – 1.9%).

At 31 December 2022, the net book value of assets capitalised relating to the decommissioning provision was $212.1 million (2021 – $49.7 million).

Depreciation capitalised in property, plant and equipment of $73.3 million related to the depreciation of assets used in mine development (operating stripping) at Centinela, Los Pelambres and Antucoya (2021 – $72.0 million).

The Right-of-use assets includes office lease, vehicles, machinery and equipment. Expenses related to leases of low-value assets not shown as leases (included in operating costs) are $25.1 million for 2022 (2021 – $17.8 million).

As explained in note 4, an impairment provision was recognised in 2021 for $27.5 million of property, plant and equipment relating to the Twin Metals project.

16 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 at 2022	Economic interest at 2021
Direct subsidiaries of the Parent Company						
Antofagasta Railway Company plc	UK	Chile	1	Railway	100%	100%
The Andes Trust Limited	UK	UK	1	Investment	100%	100%
Andean LFMA Investment Limited[i]	UK	Chile	1	Investment	100%	100%
Andes Re Limited	Bermuda	Bermuda	4	Insurance	100%	100%
Alfa Estates Limited	Jersey	Jersey	3	Investment	100%	100%
Indirect subsidiaries of the Parent Company						
Minera Los Pelambres SCM	Chile	Chile	2	Mining	60%	60%
Minera Centinela SCM	Chile	Chile	2	Mining	70%	70%
Minera Antucoya SCM	Chile	Chile	2	Mining	70%	70%
Antofagasta Minerals SA	Chile	Chile	2	Mining	100%	100%
Energía Andina Geothermal SpA	Chile	Chile	2	Energy	100%	100%
MLP Transmisión SA	Chile	Chile	2	Energy	100%	100%
Sociedad Contractual Minera El Encierro[ii]	Chile	Chile	2	Mining	56.54%	–
Northern Minerals Investment (Jersey) Limited	Jersey	Jersey	3	Investment	100%	100%
Northern Metals (UK) Limited	UK	UK	1	Investment	100%	100%
Northern Minerals Holding Co	USA	USA	5	Investment	100%	100%
Duluth Metals Limited	Canada	Canada	7	Investment	100%	100%
Twin Metals (UK) Limited	UK	UK	1	Investment	100%	100%
Twin Metals (USA) Inc	USA	USA	6	Investment	100%	100%
Twin Metals Minnesota LLC	USA	USA	6	Mining	100%	100%
Franconia Minerals (US) LLC	USA	USA	6	Mining	100%	100%
Duluth Metals Holdings (USA) Inc	USA	USA	12	Investment	100%	100%
Duluth Exploration (USA) Inc	USA	USA	13	Investment	100%	100%
DMC LLC (Minnesota)	USA	USA	12	Investment	100%	100%
DMC (USA) LLC (Delaware)	USA	USA	12	Investment	100%	100%
DMC (USA) Corporation	USA	USA	12	Investment	100%	100%
Antofagasta Investment Company Limited	UK	UK	1	Investment	100%	100%
Minprop Limited	Jersey	Jersey	3	Mining	100%	100%
Antomin 2 Limited	BVI	BVI	8	Mining	51%	51%
Antomin Investors Limited	BVI	BVI	8	Mining	51%	51%
Antofagasta Minerals Australia Pty Limited	Australia	Australia	9	Mining	100%	100%
Minera Anaconda Peru SA	Peru	Peru	10	Mining	100%	100%
Los Pelambres Holding Company Limited	UK	UK	1	Investment	100%	100%
Los Pelambres Investment Company Limited	UK	UK	1	Investment	100%	100%
Lamborn Land Co	USA	USA	5	Investment	100%	100%
Anaconda South America Inc	USA	USA	14	Investment	100%	100%
El Tesoro (SPV Bermuda) Limited	Bermuda	Bermuda	4	Investment	100%	100%
Antofagasta Minerals Canada	Canada	Canada	9	Agency	100%	100%
Antofagasta Minerals (Shanghai) Co. Limited	China	China	15	Agency	100%	100%
Andes Investments Company (Jersey) Limited	Jersey	Jersey	3	Investment	100%	100%
Bolivian Rail Investors Co Inc	USA	USA	5	Investment	100%	100%
Inversiones Los Pelambres Chile Limitada	Chile	Chile	2	Investment	100%	100%
Equatorial Resources SpA	Chile	Chile	2	Investment	100%	100%
Minera Santa Margarita de Astillas SCM	Chile	Chile	2	Mining	82.0%	82.0%

/ Notes to the Financial statements *continued*

	Country of incorporation	Country of operations	Registered office	Nature of business	Economic interest at 2022	Economic interest at 2021
Minera Penacho Blanco SA	Chile	Chile	2	Mining	66.6%	66.6%
Michilla Costa SpA	Chile	Chile	2	Logistics	99.9%	99.9%
Minera Pampa Fenix SCM	Chile	Chile	2	Investment	90.0%	90.0%
Minera Mulpun Limitada	Chile	Chile	2	Mining	100%	100%
Fundación Minera Los Pelambres	Chile	Chile	2	Community development	100%	100%
Inversiones Punta de Rieles Limitada	Chile	Chile	11	Investment	100%	100%
Ferrocarril Antofagasta a Bolivia	Chile	Chile	11	Railway	100%	100%
Inversiones Chilean Northern Mines Limitada	Chile	Chile	11	Investment	100%	100%
The Andes Trust Chile SA	Chile	Chile	11	Investment	100%	100%
Forestal SA	Chile	Chile	11	Forestry	100%	100%
Servicios de Transportes Integrados Limitada	Chile	Chile	11	Road transport	100%	100%
Inversiones Train Limitada	Chile	Chile	11	Investment	100%	100%
Servicios Logisticos Capricornio Limitada	Chile	Chile	11	Transport	100%	100%
Embarcadores Limitada	Chile	Chile	11	Transport	100%	100%
FCAB Ingenieria y Servicios DosLimitada	Chile	Chile	11	Transport	100%	100%
Inmobiliaria Parque Estación S.A.	Chile	Chile	11	Real Estates	100%	100%
Emisa Antofagasta SA	Chile	Chile	11	Transport	100%	100%

(i) Name change from Chilean Northern Mines Limited to Andean LFMA Investment Limited

(ii) Sociedad Contractual Minera El Encierro is a newly incorporated Group entity

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 Simon Bolivar 255, Antofagasta, Chile
12 6041 Earle Brown Drive, 480 Brooklyn Center, MN 55430, USA
13 1010 Dale Street N, St Paul, MN 55117-5603, USA
14 2711 Centerville Road, Suite 400, Wilmington, DE 19808, USA
15 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.

17 Disposal of investment in Tethyan joint venture

On 15 December 2022, Antofagasta entered into definitive agreements to exit its interest in the Tethyan joint venture. As a result of those agreements:

- the Reko Diq project in Pakistan (the "Project") was reconstituted in Reko Diq Mining Company (Private Limited) ("RDMC"). RDMC is the Pakistani registered subsidiary of Tethyan Copper Company Pty Limited ("TCC"), which is itself the Australian registered subsidiary of Atacama Copper Pty Limited ("Atacama"), the joint venture company registered in Australia and owned equally by the Company and Barrick Gold Corporation ("Barrick");
- a consortium of various Pakistani state-owned enterprises acquired shares in RDMC which holds the Project (the "Sale"); and
- as the International Centre for Settlement of Investment Disputes ("ICSID") award (to TCC) was resolved by reconstituting the Project, TCC no longer has any rights or claims against the Governments of Pakistan and Balochistan arising from the suspension of the Project in 2011.

The proceeds of the Sale which, together with accrued interest up to 15 December 2022 totalled US$946.0 million, are currently held by Atacama in a segregated interest-bearing account. Antofagasta and Barrick have agreed that the proceeds of this account, including all further interest received, less any Australian tax arising, will be distributed to the Antofagasta Group during 2023, on a date to be determined by Antofagasta. Atacama is seeking a binding private ruling to confirm that the Sale proceeds and their distribution to the Antofagasta Group will not be subject to Australian tax. The Australian corporate tax rate is 30%. Although Antofagasta will retain its shareholding in Atacama until the proceeds have been distributed, it no longer has any appointees on the board of the joint venture, is not entitled to exercise voting rights in Atacama, and is not required to provide any funding to, or permitted to receive any distributions from, Atacama other than the Sale proceeds. Antofagasta has therefore ceased to have an economic interest in Atacama and its subsidiaries as of 15 December 2022 other than being entitled from that date to receive an amount equal to the Sale proceeds and related interest less any Australian tax arising (whether before or after the distribution). Accordingly, Antofagasta has recognised a gain on disposal of its investment in the joint venture as at 15 December 2022 of $944.7 million, reflecting the Sale proceeds and related interest, working capital and other adjustments and the carrying value of the investment at that date. A receivable balance of $943.3 million in respect of the estimated proceeds due to Antofagasta has been recognised within Trade and other receivables in the balance sheet.

18 Investment in associates and joint ventures

	ATI (i) 2022 $m	**Minera Zaldívar (ii) 2022 $m**	**Tethyan Copper (iii) 2022 $m**	**Total 2022 $m**
Balance at the beginning of the year	**5.8**	**900.0**	**–**	**905.8**
Obligations on behalf of JV and associates at the beginning of the year	**–**	**–**	**(0.6)**	**(0.6)**
Share of profit/(loss) before tax	**2.0**	**69.3**	**(0.7)**	**70.6**
Share of tax	**(0.5)**	**(22.0)**	**–**	**(22.5)**
Share of profit/(loss) from JV and associates	**1.5**	**47.3**	**(0.7)**	**48.1**
Dividends receivable	**–**	**(50.0)**	**–**	**(50.0)**
Disposal of investment in JV	**–**	**–**	**1.3**	**1.3**
Balance at the end of the year	**7.3**	**897.3**	**–**	**904.6**
Obligations on behalf of JV and associates at the end of the year	**–**	**–**	**–**	**–**

	ATI (i) 2021 $m	Minera Zaldívar (ii) 2021 $m	Tethyan Copper (iii) 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 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)

The investments, which are included in the $904.6 million balances at 31 December 2022, are set out below:

Investment in associates

(i) 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

(ii) The Group's 50% interest in Minera Zaldívar SpA ("Zaldívar").

(iii) The Group had a 50% interest in Tethyan Copper Company Limited ("Tethyan"), which was a joint venture with Barrick Gold Corporation in respect of the Reko Diq project in the Islamic Republic of Pakistan ("Pakistan"). As explained in Note 17, on 15 December 2022 Antofagasta entered into definitive agreements to exit its interest in the Tethyan joint venture and is therefore no longer recognised as a joint venture by the Group.

18 Investment in associates and joint ventures *continued*

As the net carrying value of the interest in Tethyan was negative, it was included within non-current liabilities, as the Group was liable for its share of the joint venture's obligations.

Summarised financial information for the associates is as follows:

	ATI 2022 $m	ATI 2021 $m
Cash and cash equivalents	**0.4**	1.2
Current assets	**18.2**	13.7
Non-current assets	**91.8**	99.3
Current liabilities	**(19.3)**	(22.5)
Non-current liabilities	**(69.5)**	(75.0)
Revenue	**55.2**	47.2
Profit from continuing operations	**5.1**	1.3
Total comprehensive income	**5.1**	1.3

Summarised financial information for the joint ventures is as follows:

	Minera Zaldívar 2022 $m	Total 2022 $m
Cash and cash equivalents	**70.1**	**70.1**
Current assets[1]	**661.8**	**661.8**
Non-current assets	**1,658.6**	**1,658.6**
Current financial liabilities (excluding trade, other payables and provisions)	**(53.2)**	**(53.2)**
Current liabilities	**(159.3)**	**(159.3)**
Non-current financial liabilities (excluding trade, other payables and provisions)	**(68.3)**	**(68.3)**
Non-current liabilities	**(203.3)**	**(203.3)**
Revenue	**783.4**	**783.4**
Depreciation and amortisation	**(149.2)**	**(149.2)**
Interest income	**1.5**	**1.5**
Interest expense	**(0.8)**	**(0.8)**
Income tax expense	**(43.9)**	**(43.9)**
Profit/(loss) after tax from continuing operations	**94.6**	**94.6**
Total comprehensive income/(expense)	**94.6**	**94.6**

1. The current assets include cash and cash equivalents

	Tethyan Copper 2021 $m	Minera Zaldívar 2021 $m	Total 2021 $m
Cash and cash equivalents	3.6	46.4	50.0
Current assets[1]	3.6	664.0	667.6
Non-current assets	–	1,675.1	1,675.1
Current financial liabilities (excluding trade, other payables and provisions)	–	(54.3)	(54.3)
Current liabilities	(5.1)	(170.2)	(175.3)
Non-current financial liabilities (excluding trade, other payables and provisions)	–	(124.4)	(124.4)
Non-current liabilities	(0.1)	(155.1)	(155.2)
Revenue	–	849.2	849.2
Depreciation and amortisation	(3.0)	(160.4)	(163.4)
Interest income	2.0	0.3	2.3
Interest expense	–	(0.5)	(0.5)
Income tax expense	–	(62.1)	(62.1)
Loss/(profit) after tax from continuing operations	(18.0)	137.1	119.1
Total comprehensive (expense)/income	(18.0)	137.1	119.1

1. The current assets include cash and cash equivalents

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

	2022 $m	2021 $m
Balance at the beginning of the year	**8.7**	11.1
Acquisition	**66.5**	–
Movement in fair value	**15.8**	(2.1)
Foreign currency exchange differences	**(0.5)**	(0.3)
Balance at the end of the year	**90.5**	8.7

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 are based on quoted market prices.

20 Inventories

	2022 $m	2021 $m
Current		
Raw materials and consumables	**221.4**	155.6
Work-in-progress	**404.9**	316.5
Finished goods	**81.8**	60.7
	708.1	532.8
Non-current		
Work-in-progress	**347.0**	270.4
Total	**1,055.1**	803.2

During 2022, no net realisable value ("NRV") adjustment has been recognised (2021 – nil). Non-current work-in-progress represents inventory expected to be processed more than 12 months after the balance sheet date.

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	
	2022 $m	2021 $m	**2022 $m**	2021 $m	**2022 $m**	2021 $m
Trade receivables	**997.1**	1,040.0	**–**	–	**997.1**	1,040.0
Other receivables[1]	**1,090.1**	106.1	**51.0**	51.2	**1,141.1**	157.3
	2,087.2	1,146.1	**51.0**	51.2	**2,138.2**	1,197.3

1. At 31 December 2022, the Other receivables balance includes the proceeds receivable in respect of the Group's disposal of its investment in the Tethyan joint venture. As detailed in Note 17, the proceeds are currently held by Atacama in a segregated interest-bearing account with an A+ rated bank.

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, other than the Tethyan receivable noted above. 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 include employee loans of $49.3 million (31 December 2021 – $42.9 million).

Movements in the expected credit loss provision were as follows:

	2022 $m	2021 $m
Balance at the beginning of the year	**(1.2)**	(1.5)
Utilised in year	**0.2**	0.1
Foreign currency exchange difference	**–**	0.2
Balance at the end of the year	**(1.0)**	(1.2)

The ageing analysis of the trade and other receivables balance is as follows:

	Up to date $m	Up to 3 months past due $m	3-6 months past due $m	More than 6 months past due $m	Total excluding expected credit loss provision $m	Expected credit loss provision $m	Total $m
2022	**2,098.8**	**36.8**	**1.2**	**2.4**	**2,139.2**	**(1.0)**	**2,138.2**
2021	1,187.1	8.4	0.3	2.7	1,198.5	(1.2)	1,197.3

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.

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:

	2022 $m	2021 $m
Cash and cash equivalents	**810.4**	743.4
Liquid investments	**1,580.8**	2,969.7
	2,391.2	3,713.1

At 31 December 2022 and 2021 there is no cash which is subject to restriction.

The denomination of cash, cash equivalents and liquid investments was as follows:

	2022 $m	2021 $m
US dollars	**2,371.1**	3,673.8
Chilean pesos	**18.8**	37.8
Sterling	**1.0**	1.2
Other	**0.3**	0.3
	2,391.2	3,713.1

The credit quality of cash, cash equivalents and liquid investments are as follow:

	2022 $m	2021 $m
AAA	**1,476.7**	1,772.4
AA+	**–**	2.2
AA	**–**	54.4
AA-	**36.5**	121.1
A+	**303.0**	799.5
A	**484.1**	904.0
Subtotal	**2,300.3**	3,653.6
Cash at bank[1]	**90.9**	59.5
Total cash, cash equivalents and liquid investments	**2,391.2**	3,713.1

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 2022 (31 December 2021 – nil).

23 Borrowings and other financial liabilities

A) Analysis by type of borrowing and other financial liabilities

Borrowings and other financial liabilities may be analysed by business segment and type as follows:

	Note	2022 $m	2021 $m
Los Pelambres			
• Senior loan	(i)	**(1,470.5)**	(1,188.3)
• Leases		**(55.3)**	(54.8)
Centinela			
• Senior loan	(ii)	**(276.7)**	(386.8)
• Leases		**(35.2)**	(59.8)
Antucoya			
• Senior loan	(iii)	**(223.5)**	(196.3)
• Subordinated debt	(iv)	**(171.5)**	(184.5)
• Short-term loan		**–**	(35.0)
• Leases	(v)	**(16.5)**	(23.4)
Corporate and other items			
• Senior loan	(vi)	**–**	(497.3)
• Bond	(vii)	**(985.3)**	(496.1)
• Leases	(viii)	**(23.1)**	(20.4)
Transport division			
• Senior loan	(ix)	**(15.3)**	(25.8)
• Leases		**(1.6)**	(1.4)
Preference shares	(ix)	**(2.5)**	(2.7)
Total		**(3,277.0)**	(3,172.6)

(i) The senior loan at Los Pelambres represents a $1,491 million US dollar denominated syndicated loan divided in three tranches. The first tranche has a remaining duration of 3 years and an interest rate of US LIBOR six-month rate plus 1.05%. The second tranche has a remaining duration of 6 years and an interest rate of US LIBOR six-month rate plus 0.85%. The third tranche has a remaining duration of 5.5 years and an interest rate of US LIBOR six-month rate plus 1.10%. The loans are subject to financial covenants which require that specified net debt to EBITDA and EBITDA to finance expense ratios are maintained.

(ii) The senior loan at Centinela represents a US dollar denominated syndicated loan with an amount outstanding of $278 million with a duration of 3 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.

(iii) The senior loan at Antucoya represents a US dollar denominated syndicated loan with an amount outstanding of $225 million. This loan has a remaining duration of 4 years and has an interest rate of Term SOFR six-month rate plus 1.40%. 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 subordinated debt at Antucoya is US dollar denominated, provided to Antucoya by Marubeni Corporate with a remaining duration of 4 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.

(v) The finance 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 1.5 years.

(vi) During the year ended 31 December 2022, Antofagasta plc made a $500 million repayment of the senior loan.

(vii) The bonds at Corporate reflect two corporate bonds – a $500 million 2.375% corporate bond due in 2030 and a $500 million 5.625% corporate bond due in 2032.

(viii) Finance leases at Corporate and other items are denominated in Unidades de Fomento (ie inflation-linked Chilean pesos) and have a remaining duration of 4 years and are at fixed rates with an average interest rate of 5.2%.

(ix) The long-term loans at the Transport division are US dollar denominated, with an outstanding amount of $15 million and a remaining duration of 1 year and an interest rate of US LIBOR six-month rate plus 1.06%.

(x) The preference shares are Sterling-denominated and issued by Antofagasta plc. There are 2 million shares of £1 each authorised, issued and fully paid. 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 15 – 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
- Note 10 – cash paid relating to interest on lease

C) Analysis of borrowings and other financial liabilities by currency

The exposure of the Group's borrowings to currency risk is as follows:

At 31 December 2022	Chilean pesos $m	Sterling $m	US dollars $m	2022 Total $m
Corporate loans	**(0.3)**	**–**	**(1,985.7)**	**(1,986.0)**
Bond	**–**	**–**	**(985.3)**	**(985.3)**
Other loans (including short-term loans)	**–**	**–**	**(171.5)**	**(171.5)**
Leases	**(115.1)**	**(3.9)**	**(12.7)**	**(131.7)**
Preference shares	**–**	**(2.5)**	**–**	**(2.5)**
	(115.4)	**(6.4)**	**(3,155.2)**	**(3,277.0)**

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)

D) Analysis of borrowings and other financial liabilities by type of interest rate

The exposure of the Group's borrowings to interest rate risk is as follows:

At 31 December 2022	Fixed $m	Floating $m	2022 Total $m
Corporate loans	**(15.5)**	**(1,970.5)**	**(1,986.0)**
Bond	**(985.3)**	**–**	**(985.3)**
Other loans (including short-term loans)	**–**	**(171.5)**	**(171.5)**
Leases	**(125.7)**	**(6.0)**	**(131.7)**
Preference shares	**(2.5)**	**–**	**(2.5)**
	(1,129.0)	**(2,148.0)**	**(3,277.0)**

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)

23 Borrowings and other financial liabilities *continued*

E) Maturity profile

The maturity profile of the Group's borrowings is as follows:

At 31 December 2022	Within 1 year $m	Between 1-2 years $m	Between 2-5 years $m	After 5 years $m	2022 Total $m
Corporate loans	**(377.4)**	**(531.7)**	**(927.7)**	**(149.2)**	**(1986.0)**
Bond	**–**	**–**	**–**	**(985.3)**	**(985.3)**
Other loans	**–**	**–**	**(171.5)**	**–**	**(171.5)**
Leases	**(55.1)**	**(39.5)**	**(35.9)**	**(1.2)**	**(131.7)**
Preference shares	**–**	**–**	**–**	**(2.5)**	**(2.5)**
	(432.5)	**(571.2)**	**(1,135.1)**	**(1,138.2)**	**(3.277.0)**

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)

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:

	2022 $m	2021 $m
Within 1 year	**(62.1)**	(74.7)
Between 1 – 2 years	**(40.1)**	(40.5)
Between 2 – 5 years	**(37.6)**	(54.8)
After 5 years	**(1.3)**	-
Total minimum lease payments	**(141.1)**	(170.0)
Less amounts representing finance charges	**9.4**	10.2
Present value of minimum lease payments	**(131.7)**	(159.8)

All leases are on a fixed payment basis and no arrangements have been entered into for contingent rental payments.

F) Financing Facilities

On 30 December, 2022, Antofagasta plc agreed a revolving credit facility "RCF" of $500 million. This revolving credit facility has a term of three years, which expires on 30 December, 2025.

The facility remained undrawn throughout 2022.

	Facility available		Drawn		Undrawn	
	2022 $m	2021 $m	2022 $m	2021 $m	2022 $m	2021 $m
Revolving credit facility	**(500.0)**	–	**–**	–	**(500.0)**	–
	(500.0)	–	**–**	–	**(500.0)**	–

24 Trade and other payables

	Due in one year		Due after one year		Total	
	2022 $m	2021 $m	2022 $m	2021 $m	2022 $m	2021 $m
Trade creditors	**(751.5)**	(579.5)	**–**	–	**(751.5)**	(579.5)
Other creditors and accruals	**(328.2)**	(249.6)	**(8.0)**	(16.8)	**(336.2)**	(266.4)
	(1,079.7)	(829.1)	**(8.0)**	(16.8)	**(1,087.7)**	(845.9)

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 18 days (2021 – 20 days).

25 Financial instruments and financial risk management

A) Categories of financial instruments

The carrying value of financial assets and financial liabilities is shown below:

				2022 $m
	At fair value through profit and loss	At fair value through other comprehensive income	Held at amortised cost	Total
Financial assets				
Equity investments	–	90.5	–	90.5
Trade and other receivables	897.2	–	1,047.5	1,944.7
Cash and cash equivalents	8.5	–	801.9	810.4
Liquid investments	1,580.8	–	–	1,580.8
	2,486.5	90.5	1,849.4	4,426.4
Financial liabilities				
Borrowings and leases	–	–	(3,277.0)	(3,277.0)
Trade and other payables	–	–	(1,067.3)	(1,067.3)
	–	–	(4,344.3)	(4,344.3)

				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
Trade and other 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)

The fair value of the fixed rate bonds included within the "Borrowings and leases" category was $899.4 million at 31 December 2022 compared with its carrying value of $985.3 million. The fair value of all other financial assets and financial liabilities carried at amortised cost approximates the carrying value presented above.

The Group has the following financial instruments:

	2022 $m	2021 $m
Financial assets		
Trade and other receivables (non-current) per balance sheet	51.0	51.2
Trade and other receivables (current) per balance sheet	2,087.2	1,146.1
Total trade and other receivables per balance sheet	2,138.2	1,197.3
Less: non-financial assets (including prepayments and VAT receivables)	(193.5)	(102.3)
Total trade and other receivables (financial assets)	1,944.7	1,095.0
Financial liabilities		
Trade and other payables (current) per balance sheet	(1,079.7)	(829.1)
Trade and other payables (non-current) per balance sheet	(8.0)	(16.8)
Total trade and other payables per balance sheet	(1,087.7)	(845.9)
Less: non-financial liabilities (including VAT payables)	20.4	10.3
Total trade and other payables (financial liabilities)	(1,067.3)	(835.6)

25 Financial instruments and financial risk management *continued*

B) Fair value of financial instruments

An analysis of financial assets and financial liabilities measured at fair value is presented below:

	Level 1 $m	Level 2 $m	Level 3 $m	Total 2022 $m
Financial assets				
Equity investments (a)	**90.5**	**–**	**–**	**90.5**
Trade and other receivables (b)	**–**	**897.2**	**–**	**897.2**
Cash and cash equivalents (c)	**8.5**			**8.5**
Liquid investment (d)	**–**	**1,580.8**	**–**	**1,580.8**
	99.0	**2,478.0**	**–**	**2,577.0**

	Level 1 $m	Level 2 $m	Level 3 $m	Total 2021 $m
Financial assets				
Equity investments (a)	8.7	–	–	8.7
Trade and other receivables (b)	–	1,011.7	–	1,011.7
Liquid investment (d)	–	2,969.7	–	2,969.7
	8.7	3,981.4	–	3,990.1

Recurring fair value measurements are those that are required in the balance sheet at the end of each reporting year.

a) 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.

b) 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.

c) The element of cash and cash equivalents measured at fair value relates to money market funds, which are valued reflecting market prices at the period end. These are level 1 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 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 2022, 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 2022, sales of copper and molybdenum concentrate and copper cathodes represented 90.4% 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.

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 $19.8 million (2021 – increase by $18.4 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 $19.8 million (2021 – decrease by $18.4 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 $58.7 million (2021 – $64.8 million) and earnings per share by 6.0 cents (2021 – 6.6 cents), based on production volumes in 2022, without taking into account the effects of provisional pricing. A $1 /lb change in the average molybdenum price for the year would have affected profit attributable to the owners of the parent by $9.5 million (2021 – $9.2 million), and earnings per share by 1.0 cents (2021 – 0.9 cents), based on production volumes in 2022, 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 $11.6 million (2021 – $11.5 million), and earnings per share by 1.2 cents (2021 – 1.2 cents), based on production volumes in 2022, 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 182.

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 $19.1 million (2021 – increase of $6.1 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 $23.3 million (2021 – decrease of $7.4 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 23(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 $3.3 million (2021 – decrease of $6.4 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 $9.1 million (2021 – increase of $0.9 million). There would have been no impact on the income statement.

25 Financial instruments and financial risk management *continued*

(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 76 to 93.

(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 2022, the Group was in a net debt position (2021 – net cash 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 2022	Less than 1 year $m	Between 1-2 years $m	Between 2-5 years $m	After 5 years $m	2022 Total $m
Corporate loans	**(475.7)**	**(609.4)**	**(1,017.8)**	**(163.3)**	**(2,266.2)**
Other loans (including short-term loans and bond)	**(60.5)**	**(40.0)**	**(290.8)**	**(1,176.3)**	**(1,567.6)**
Leases	**(62.1)**	**(40.4)**	**(37.9)**	**(1.3)**	**(141.7)**
Preference shares*	**(0.1)**	**(0.1)**	**(0.3)**	**(2.5)**	**(3.0)**
Trade and other payables	**(1,079.8)**	**(4.0)**	**(3.9)**	**–**	**(1,087.7)**
	(1,678.2)	**(693.9)**	**(1,350.7)**	**(1,343.4)**	**(5,066.2)**

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*	(0.1)	(0.1)	(0.3)	(2.7)	(3.2)
Trade and other payables	(829.1)	(16.8)	–	–	(845.9)
	(1,218.0)	(467.8)	(1,872.3)	(728.8)	(4,286.9)

* 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 debt of $885.8 million at 31 December 2022 (2021 – net cash $540.5 million), as well as gross cash (defined as cash, cash equivalents and liquid investments) which was $2,391.2 million at 31 December 2022 (2021 – $3,713.1 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 (being the net asset value less any intangible asset value)

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. All derivatives were closed in 2021 and there are none entered into in 2022.

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.

26 Long-term incentive plan *continued*

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:

	2022	2021
Weighted average forecast share price at vesting date	**$18.5**	$18.0
Expected volatility	**50.90%**	39.23%
Expected life of awards	**3 years**	3 years
Expected dividend yields	**6.77%**	3.94%
Discount rate	**4.33%**	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 2022	**544,143**	**1,385,475**
Granted during the year	**214,812**	**336,206**
Cancelled during the year	**(38,330)**	**(128,513)**
Payments during the year	**(282,106)**	**(416,221)**
Outstanding at 31 December 2022	**438,519**	**1,176,947**
Number of awards that have vested	**213,594**	**–**

The Group has recorded a liability of $17.2 million at 31 December 2022, of which $4.7 million is due after more than one year (31 December 2022 – $18.9 million of which $9.2 million was due after more than one year) and total expenses of $13.1 million for the year (2021 – expense of $9.0 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 2022 was $0.1 million (2021 – $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 2022 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:

	2022 %	2021 %
Average nominal discount rate	**5.3%**	6.3%
Average rate of increase in salaries	**2.2%**	2.3%
Average staff turnover	**3.5%**	4.9%

Amounts included in the income statement in respect of severance provisions are as follows:

	2022 $m	2021 $m
Current service cost (charge to operating profit)	**(19.1)**	(19.8)
Interest cost (charge to other finance items)	**(6.8)**	(3.6)
Foreign exchange credit/(charge) to other finance items	**1.5**	19.6
Total charge to income statement	**(24.4)**	(3.8)

Movements in the present value of severance provisions were as follows:

	2022 $m	2021 $m
Balance at the beginning of the year	**(107.5)**	(123.2)
Current service cost	**(19.1)**	(19.8)
Actuarial (losses)/gains	**(18.1)**	3.1
Unwinding of discount on provisions	**(6.8)**	(3.6)
Paid in the year	**12.7**	16.4
Foreign currency exchange difference	**1.5**	19.6
Balance at the end of the year	**(137.3)**	(107.5)

Assumptions description

Discount rate

	31 December 2022	31 December 2021
Nominal discount rate	**5.34%**	6.50%
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	**28 November 2022**	31 October 2021
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 2018 to 2022.

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 2018 to 2022.

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 $10.2 million. If the discount rate is 100 basis points lower, the defined benefit obligation would increase by $11.7 million.
- If the expected salary growth increases by 1%, the defined benefit obligation would increase by $10.5 million. If the expected salary growth decreases by 1%, the defined benefit obligation would decrease by $9.6 million.
- If the staff turnover increases by 1%, the defined benefit obligation would decrease by $2.5 million. If the staff turnover decreases by 1%, the defined benefit obligation would increase by $2.5 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 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 and 1 January 2022	(1,371.0)	115.0	(23.1)	(61.3)	(102.9)	127.6	–	(1,315.7)
(Charge)/credit to income	**(79.2)**	**1.4**	**(48.5)**	**(15.6)**	**(9.8)**	**(3.1)**	**–**	**(154.8)**
Reclassification	**(16.9)**	**7.8**	**–**	**9.1**	**–**	**–**	**–**	**–**
Charge deferred in equity	**–**	**4.9**	**–**	**–**	**0.8**	**–**	**–**	**5.7**
At 31 December 2022	**(1,467.1)**	**129.1**	**(71.6)**	**(67.8)**	**(111.9)**	**124.5**	**–**	**(1,464.8)**

The charge to the income statement of $154.8 million (2021 – $206.8 million) included an impact from foreign exchange differences of nil (2021 – nil).

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):

	2022 $m	2021 $m
Net deferred tax assets	**78.5**	96.8
Net deferred tax liabilities	**(1,543.3)**	(1,412.5)
Net deferred tax balances	**(1,464.8)**	(1,315.7)

At 31 December 2022, the Group had unused tax losses associated with Chilean entities (predominantly Antucoya) of $460.3 million (2021 – $472.5 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 $124.5 million has been recognised in respect of 100% of these losses as at 31 December 2022 (31 December 2021 – $127.6 million). In addition, at 31 December 2022, the Group had unused tax losses associated with entities outside of Chile (predominantly in respect of the Twin Metals project) of $427.0 million (2021 – $428.0 million). A portion of the Twin Metals tax losses expire in the period from 2030 – 2037, and the remainder can be carried forward indefinitely. Deferred tax assets have not been recognised in respect of these tax losses, reflecting the fact that the relevant entities have generated taxable losses in recent years.

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, reflecting the improved actual and forecast profitability of the relevant Group entity (Antucoya). That entity has continued to generate taxable profits during 2022, utilising $10.9 million of the deferred tax asset during the year.

At 31 December 2022, deferred withholding tax liabilities of $71.6 million have been recognised (31 December 2021 – $23.1 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 $6,430.4 million (31 December 2021 – $6,483.3 million). 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 $1,076.5 million (31 December 2021 – $1,232.1 million), depending on the application of tax credits which may be available in particular circumstances.

Temporary differences arising in connection with interests in associates are insignificant.

The deferred tax balance of $1,464.8 million (2021 – $1,315.7 million) includes $1,404.7 million (2021 – $1,272.6 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

	2022 $m	2021 $m
Balance at the beginning of the year	**(336.1)**	(520.2)
Charge to operating profit in the year	**(15.4)**	(11.3)
Unwind of discount to net interest in the year	**(10.1)**	(2.6)
Adjustment to provision discount rates	**(1.6)**	30.8
Capitalised adjustment to provision	**(173.8)**	119.9
Utilised in year	**49.7**	33.8
Foreign currency exchange difference	**(0.9)**	13.5
Balance at the end of the year	**(488.2)**	(336.1)
Short-term provisions	**(33.2)**	(33.8)
Long-term provisions	**(455.0)**	(302.3)
Total	**(488.2)**	(336.1)

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. During 2022, the Centinela and Antucoya provisions were updated to reflect new plans approved by Sernageomin during the 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 2022, the real discount rates ranged from 1.67% to 1.73% (31 December 2021: 2.3% to 2.5%).

It is estimated that the provision will be utilised from 2023 until 2066 based on current mine plans, with approximately 15% of the total provision balance expected to be utilised between 2023 and 2031, approximately 49% between 2032 and 2041, approximately 10% between 2042 and 2051 and approximately 26% between 2052 and 2066.

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. The Group discloses in line with the recommendations of the Task Force on Climate-related Financial Disclosures ("TCFD"). This process included scenario analyses assessing the impact of 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 possible that additional consideration of potential climate risk impacts 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:

	2022 Number	2021 Number	2022 $m	2021 $m
Authorised				
Ordinary shares of 5p each	**1,300,000,000**	1,300,000,000	118.9	118.9

	2022 Number	2021 Number	2022 $m	2021 $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 2022 or 2021. 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(x).

30 Share capital and other reserves *continued*

(II) Other reserves and retained earnings

Details of the share premium account, hedging, fair value and translation reserves and retained earnings for both 2022 and 2021 are included within the consolidated statement of changes in equity on page 182.

	2022 $m	2021 $m
Share premium		
At 1 January and 31 December	**199.2**	199.2
Hedging reserves[1]		
At 1 January	**–**	(23.9)
Parent and subsidiaries net cash flow hedge fair value losses	**–**	(100.4)
Parent and subsidiaries net cash flow hedge losses transferred to the income statement	**–**	126.8
Tax on the above	**–**	(2.5)
At 31 December	**–**	–
Equity investment revaluation reserve[2]		
At 1 January	**(7.4)**	(5.3)
Gains/(losses) on equity investment	**15.8**	(2.1)
At 31 December	**8.4**	(7.4)
Foreign currency translation reserves[3]		
At 1 January	**(3.0)**	(1.4)
Currency translation adjustment	**(0.4)**	(1.6)
At 31 December	**(3.4)**	(3.0)
Total other reserves per balance sheet	**5.0**	(10.4)
Retained earnings		
At 1 January	**8,071.6**	7,492.2
Parent and subsidiaries' profit for the period	**1,484.9**	1,230.5
Equity accounted units' profit after tax for the period	**48.1**	59.7
Actuarial (losses)/gains [4]	**(8.2)**	–
Total comprehensive income for the year	**1,524.8**	1,290.2
Dividends paid	**(1,262.9)**	(710.8)
At 31 December	**8,333.5**	8,071.6

1. The hedging reserve records 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 reserve. 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 26.

31 Non-controlling interests

The non-controlling interests of the Group during 2022 and 2021 are as follows:

	Non-controlling Interest %	Country	At 1 January 2022 $m	Share of profit for the financial year $m	Capital Increase $m	Share of dividends $m	Hedging and actuarial gains $m	At 31 December 2022 $m
Los Pelambres	**40.0**	**Chile**	**1,204.5**	**320.4**	**–**	**(80.0)**	**(1.9)**	**1,443.0**
Centinela	**30.0**	**Chile**	**1,275.9**	**82.9**	**–**	**–**	**(2.0)**	**1,356.8**
Antucoya	**30.0**	**Chile**	**198.4**	**21.2**	**–**	**–**	**(0.3)**	**219.3**
Encierro	**43.5**	**Chile**	**–**	**(2.2)**	**–**	**–**	**–**	**(2.2)**
Total			**2,678.8**	**422.3**	**–**	**(80.0)**	**(4.2)**	**3,016.9**

	Non-controlling Interest %	Country	At 1 January 2021 $m	Share of profit/(losses) for the financial year $m	Capital Increase $m	Share of dividends $m	Hedging and actuarial gains/(losses) $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

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 2022 and 2021 is set out below:

	Los Pelambres 2022 $m	Centinela 2022 $m	Antucoya 2022 $m
Non-controlling interest (%)	**40.0%**	**30.0%**	**30.0%**
Cash and cash equivalents	**249.3**	**134.9**	**46.1**
Current assets	**1,373.2**	**1,170.7**	**340.6**
Non-current assets	**5,413.3**	**4,752.3**	**1,367.2**
Current liabilities	**(725.8)**	**(553.3)**	**(153.1)**
Non-current liabilities	**(2,408.8)**	**(1,011.8)**	**(405.0)**
Net cash from operating activities	**1,060.9**	**762.2**	**162.1**
Net cash used in investing activities	**(881.0)**	**(879.8)**	**(65.1)**
Net cash from/(used in) financing activities	**44.8**	**(163.2)**	**(174.3)**

	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)

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 including Encierro 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 operations

	2022 $m	2021 $m
Profit before tax	**2,558.9**	3,477.1
Depreciation	**1,141.1**	1,078.7
Net loss on disposals	**2.1**	9.2
Net finance expense/(income)	**68.2**	(16.0)
Net share of results of associates and joint ventures	**(48.1)**	(59.7)
Gain on disposal of investment in joint venture	**(944.7)**	–
Provision against carrying value of assets	**–**	177.6
(Increase)/decrease in inventories	**(180.7)**	10.9
Decrease/(increase) in debtors	**27.0**	(206.8)
Increase in creditors	**141.0**	55.7
Decrease in provisions	**(26.5)**	(19.0)
Cash flow generated from operations	**2,738.3**	4,507.7

B) Analysis of changes in net debt

	At 1 January 2022 $m	Cash flow $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 2022 $m
Cash and cash equivalents	**743.4**	**65.6**	**–**	**–**	**–**	**–**	**–**	**1.4**	**810.4**
Liquid investments	**2,969.7**	**(1,388.9)**	**–**	**–**	**–**	**–**	**–**	**–**	**1,580.8**
Total cash and cash equivalents and liquid investments	**3,713.1**	**(1,323.3)**	**–**	**–**	**–**	**–**	**–**	**1.4**	**2,391.2**
Borrowings due within one year	**(268.0)**	**373.9**	**–**	**–**	**–**	**(483.3)**	**–**	**–**	**(377.4)**
Borrowings due after one year	**(2,742.1)**	**(488.5)**	**–**	**(11.7)**	**(6.3)**	**483.3**	**(0.1)**	**–**	**(2,765.4)**
Leases due within one year	**(69.1)**	**105.4**	**–**	**–**	**–**	**(80.7)**	**–**	**(10.7)**	**(55.1)**
Leases due after one year	**(90.7)**	**–**	**(51.3)**	**–**	**–**	**80.7**	**(1.0)**	**(14.3)**	**(76.6)**
Preference shares	**(2.7)**	**–**	**–**	**–**	**–**	**–**	**–**	**0.2**	**(2.5)**
Total borrowings	**(3,172.6)**	**(9.2)**	**(51.3)**	**(11.7)**	**(6.3)**	**–**	**(1.1)**	**(24.8)**	**(3,277.0)**
Net cash/(debt)	**540.5**	**(1,332.5)**	**(51.3)**	**(11.7)**	**(6.3)**	**–**	**(1.1)**	**(23.4)**	**(885.8)**

	At 1 January 2021 $m	Cash flow $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 debt	(82.0)	695.1	(61.8)	(5.7)	(16.6)	–	10.4	1.1	540.5

C) Net (debt)/cash

	2022 $m	2021 $m
Cash, cash equivalents and liquid investments	**2,391.2**	3,713.1
Total borrowings and other financial liabilities	**(3,277.0)**	(3,172.6)
Net (debt)/cash	**(885.8)**	540.5

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.

	2022	2021
Year-end rates	**$1.2080=£1; $1 = Ch$855.86**	$1.3490=£1; $1 = Ch$844.69
Average rates	**$1.2340=£1; $1 = Ch$872.38**	$1.3750=£1; $1 = Ch$759.81

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 $309.9 million (2021 – $263.9 million). The balance due to ENEX SA at the end of the year was $28.6 million (2021 – $20.4 million),
- the Group earned interest income of $0.8 million (2021 – $0.1 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 nil (2021 – $2.2 million),
- the Group purchased shipping services from Hapag Lloyd, an associate of Quiñenco, of $12.7 million (2021 – $8.9 million). The balance due to Hapag Lloyd at the end of the year was $0.3 million (2021 – $0.4 million),
- the Group made purchases of technology services from ARTIKOS CHILE SA, a subsidiary of Quiñenco, of $0.2 million (2021 – $0.2 million). The balance due to ARTIKOS CHILE SA at the end of the year was nil (2021 – nil).

B) Compañía de Inversiones Adriático SA

In 2022, 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 $0.4 million (2021 –$0.8 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 2022, the Group incurred $0.1 million (year ended 31 December 2021 – $0.1 million) of exploration expense at these properties.

D) Tethyan Copper Company Limited

On 15 December 2022 Antofagasta entered into definitive agreements to exit its interest in the Tethyan joint venture, which is therefore no longer recognised as a joint venture by the Group. The group contributed nil (2021 - $9.5 million) to Tethyan during 2022.

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 $6.7 million (2021 – $2.5 million). During 2022, Zaldívar declared dividends of $50.0 million to the Group (2021 – $77.5 million).

F) Directors and other key management personnel

Information relating to Directors' remuneration and interests is given in the Remuneration Report on page 159. Information relating to the remuneration of key management personnel including the Directors is given in Note 9.

35 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 judgements may at times occur. The Group may incur, in the future, judgements 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. Provisions are recognised when it is probable that the Group will be required to settle an obligation arising as a result of a legal claim against the Group.

36 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.

Financial statements of the Parent Company (Antofagasta plc)

Parent Company balance sheet

	Note	2022 $m	2021 $m
Non-current assets			
Investment in subsidiaries	5	**589.1**	529.1
Other receivables[1]	5	**54.0**	54.0
Property, plant and equipment		**4.4**	5.1
		647.5	588.2
Current assets			
Other receivables[1]	5	**744.6**	3.8
Liquid investments		**457.6**	1,649.4
Cash and cash equivalents		**238.5**	422.8
		1,440.7	2,076.0
Total assets		**2,088.2**	2,664.2
Current liabilities			
Amounts payable to subsidiaries	6	**(615.7)**	(302.2)
Other payables		**(9.2)**	(15.4)
		(624.9)	(317.6)
Non-current liabilities			
Medium and long-term borrowings	7	**(992.2)**	(993.4)
		(992.2)	(993.4)
Total liabilities		**(1,617.1)**	(1,311.0)
Net assets		**471.1**	1,353.2
Equity			
Share capital		**89.8**	89.8
Share premium		**199.2**	199.2
Retained earnings			
At 1 January		**1,064.2**	626.0
Profit for the year attributable to the owners		**380.8**	1,149.0
Dividends		**(1,262.9)**	(710.8)
At 31 December		**182.1**	1,064.2
Total equity		**471.1**	1,353.2

1. The prior period comparatives have been restated to reflect a reclassification from current other receivables to non-current other receivables of $54.0 million (see note 5).

The financial statements on pages 234 to 237 were approved by the Board of Directors on 23 March 2023 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 2021	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
Comprehensive income for the year	**–**	**–**	**380.8**	**380.8**
Dividends	**–**	**–**	**(1,262.9)**	**(1,262.9)**
At 31 December 2022	**89.8**	**199.2**	**182.1**	**471.1**

The ordinary shares rank after the preference shares in entitlement to dividends 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.

1 Basis of preparation of the Parent Company financial statements

The Antofagasta plc Parent Company financial statements 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 $380.8 million (2021 – $1,149.0 million).

2 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.

I) Financing facilities

On 30 December, 2022, Antofagasta plc agreed a revolving credit facility "RCF" of $500.0 million. This revolving credit facility has a term of three years, which expires on 30 December, 2025 (see Note 23F).

3 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, which have a total carrying value as at 31 December 2022 of $589.1 million. 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 inter-company 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 $18.4 billion at 31 December 2022, the cash and other assets held by the relevant Group companies and the level of earnings generated by the Group's operations.

4 Employee Benefit Expense

i) Average number of employees

The average monthly number of employees was 4 (2021 – 4), engaged in management and administrative activities.

ii) Aggregate remuneration

The aggregate remuneration of the employees mentioned above was as follows:

	2022 $m	2021 $m
Wages and salaries	**2.3**	2.3
Social security costs	**0.3**	0.3
Other pension costs	**0.1**	0.1
	2.7	2.7

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.

5 Subsidiaries

i) Investment in subsidiaries

	2022 $m	2021 $m
Shares in subsidiaries at cost[1]	**120.6**	60.6
Amounts owed by subsidiaries due after more than one year	**468.5**	468.5
	589.1	529.1

	Shares $m	Loans $m	Total $m
1 January 2022	60.6	468.5	529.1
31 December 2022	**120.6**	**468.5**	**589.1**

1. The $60.0m increase in the shares in subsidiaries balance reflects the acquisition by the Company of additional shares issued by the Company's direct subsidiary Andean LFMA Limited during the year.

The Company has reviewed whether there are any indicators of impairment in respect of the investment balance and concluded that there are no such indicators.

The above amount of $468.5 million (31 December 2021 – $468.5 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.

ii) Trade and other receivables – amounts owed by subsidiaries due after one year

At 31 December 2022, an amount of $54.0 million (31 December 2021 – $54.0 million) was owed to the Company by indirect subsidiaries. This amount is not expected to be realised within twelve months after the reporting period. The prior period comparatives have been restated to reflect a reclassification of this amount from current other receivables to non-current other receivables, again reflecting that this amount was not expected to be realised within twelve months after the reporting period. There have been no impairments recognised in respect of subsidiary receivables as at 31 December 2022.

iii) Trade and other receivables – amounts owed by subsidiaries due within one year

At 31 December 2022, amounts owed by subsidiaries due within one year were $744.6 million (31 December 2021 – $3.8 million). These balances principally relate to $410.0 million inter-company dividends declared but not yet paid to the Company by its immediate subsidiary companies. In addition, there is a $328.0 million receivable balance relating to short-term intragroup funding arrangements. There have been no impairments recognised in respect of subsidiary receivables as at 31 December 2022.

6 Amounts payable to subsidiaries

At 31 December 2022, amounts payables to subsidiaries due within one year were $615.7 million (31 December 2021 – $302.2 million). This increase in the balance during the year reflects a $328.0 million payable balance relating to short–term intragroup funding arrangements.

7 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 2022 and 31 December 2021. 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 (x)) 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 amounts in accordance with UK-adopted International Accounting Standards. 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 2022

	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)	**1,196.2**	**446.0**	**155.6**	**–**	**(113.0)**	**(94.3)**	**1,590.5**	**43.8**	**1,634.3**
Depreciation	**276.1**	**710.2**	**105.6**	**–**	**–**	**18.7**	**1,110.6**	**30.5**	**1,141.1**
Loss on disposal	**0.5**	**1.0**	**–**	**–**	**–**	**0.6**	**2.1**	**–**	**2.1**
EBITDA from subsidiaries	**1,472.8**	**1,157.2**	**261.2**	**–**	**(113.0)**	**(75.0)**	**2,703.2**	**74.3**	**2,777.5**
Proportional share of the EBITDA from associates and JV	**–**	**–**	**–**	**147.2**	**–**	**(0.7)**	**146.5**	**5.7**	**152.2**
EBITDA	**1,472.8**	**1,157.2**	**261.2**	**147.2**	**(113.0)**	**(75.7)**	**2,849.7**	**80.0**	**2,929.7**

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	4,669.9
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.

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.

	2022 $m	2021 $m
Reconciliation of cash costs excluding treatment and refining charges and by-product revenue:		
Total Group operating cost (Note 6)	**4,227.7**	4,068.7
Zaldívar operating costs (attributable basis – 50%)	**234.4**	231.7
Less:		
Depreciation (Note 6)	**(1,141.1)**	(1,078.7)
Loss on disposal (Note 6)	**(2.1)**	(9.2)
Provision against the carrying value of assets	**–**	(177.6)
Elimination of non-mining operations:		
Corporate and other items – Total operating cost (excluding depreciation) (Note 6)	**(75.0)**	(76.0)
Exploration and evaluation – Total operating cost (excluding depreciation) (Note 6)	**(113.0)**	(103.2)
Transport division – Total operating cost (excluding depreciation) (Note 6)	**(119.1)**	(106.3)
Closure provision and other expenses not included within cash costs	**(97.6)**	(90.7)
Inventory variation	**(12.0)**	2.1
Total cost relevant to the mining operations' cash costs	**2,902.2**	2,660.8
Copper production volumes (tonnes)[1]	**646,200**	721,450
Cash costs excluding treatment and refining charges and by-product revenue ($/tonne)	**4,491**	3,688
Cash costs excluding treatment and refining charges and by-product revenue ($/lb)	**2.05**	1.68
Reconciliation of cash costs before deducting by-product revenue:		
Treatment and refining charges – copper and by-product – Los Pelambres	**108.5**	115.4
Treatment and refining charges – copper and by-product – Centinela	**78.8**	70.4
Treatment and refining charges – copper – total	**187.3**	185.8
Copper production volumes (tonnes)	**646,200**	721,450
Treatment and refining charges ($/tonne)	**289.9**	257.5
Treatment and refining charges ($/lb)	**0.14**	0.11
Cash costs excluding treatment and refining charges and by-product revenue ($/lb)	**2.05**	1.68
Treatment and refining charges ($/lb)	**0.14**	0.11
Cash costs before deducting by-product revenue ($/lb)	**2.19**	1.79

1. The 646,200 tonnes includes 44,500 tonnes of production at Zaldívar on a 50% attributable basis.

C) Cash costs *continued*

	2022 $m	2021 $m
Reconciliation of cash costs (net of by-product revenue):		
Gold revenue – Los Pelambres (Note 6)	**75.5**	91.2
Gold revenue – Centinela (Note 6)	**239.0**	346.2
Molybdenum revenue – Los Pelambres (Note 6)	**311.9**	353.6
Molybdenum revenue - Centinela (Note 6)	**110.2**	44.4
Silver revenue – Los Pelambres (Note 6)	**33.1**	46.6
Silver revenue – Centinela (Note 6)	**25.1**	38.7
Total by-product revenue	**794.8**	920.7
Copper production volumes (tonnes)[1]	**646,200**	721,450
By-product revenues ($/tonne)	**1,230.0**	1,276.0
By-product revenues ($/lb)	**0.58**	0.59
Cash costs before deducting by-product revenue ($/lb)	**2.19**	1.79
By-product revenue ($/lb)	**(0.58)**	(0.59)
Cash costs (net of by-product revenue) ($/lb)	**1.61**	1.20

1. The 646,200 tonnes includes 44,500 tonnes of production at Zaldívar on a 50% attributable basis.

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 owners of the parent, 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 owners of the parent, 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 owners of the parent.

	2022			2021		
	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	**655.4**	**60%**	**393.2**	427.9	60%	256.7
Centinela	**348.5**	**70%**	**244.0**	625.3	70%	437.7
Antucoya	**111.8**	**70%**	**78.3**	181.5	70%	127.1
Corporate	**1,247.0**	**100%**	**1,247.0**	2,436.5	100%	2,436.5
Transport division	**28.5**	**100%**	**28.5**	41.9	100%	41.9
Total (Note 22)	**2,391.2**		**1,991.0**	3,713.1		3,299.9
Borrowings:						
Los Pelambres (Note 23)	**(1,525.8)**	**60%**	**(915.5)**	(1,243.1)	60%	(745.9)
Centinela (Note 23)	**(311.9)**	**70%**	**(218.3)**	(446.6)	70%	(312.6)
Antucoya (Note 23)	**(411.5)**	**70%**	**(288.1)**	(439.2)	70%	(307.5)
Corporate (Note 23)	**(1,010.9)**	**100%**	**(1,010.9)**	(1,016.5)	100%	(1,016.4)
Transport division (Note 23)	**(16.9)**	**100%**	**(16.9)**	(27.2)	100%	(27.2)
Total (Notes 23 and 32)	**(3,277.0)**		**(2,449.7)**	(3,172.6)		(2,409.6)
Net (debt)/cash	**(885.8)**		**(458.7)**	540.5		890.3

Five Year Summary

	2022 $m	2021 $m	2020 $m	2019 $m	2018 $m
Consolidated balance sheet					
Intangible asset	**–**	–	150.1	150.1	150.1
Property plant and equipment	**11,543.5**	10,538.5	9,851.9	9,556.7	9,184.1
Other non-current assets	**1.1**	1.3	2.6	2.1	2.6
Inventories	**347.0**	270.4	278.1	208.0	172.7
Investment in associates and joint ventures	**904.6**	905.8	914.6	1,024.8	1,056.1
Trade and other receivables	**51.0**	51.2	55.9	48.2	56.1
Derivative financial instruments	**–**	–	0.3	1.7	–
Equity investments	**90.5**	8.7	11.1	5.1	4.7
Deferred tax assets	**78.5**	96.8	6.4	8.2	37.2
Non-current assets	**13,016.2**	11,872.7	11,271.0	11,004.9	10,663.6
Current assets	**5,222.1**	5,405.7	5,333.3	3,605.5	3,438.9
Current liabilities	**(1,605.8)**	(1,574.2)	(1,625.7)	(1,548.9)	(1,307.1)
Non-current liabilities	**(4,988.1)**	(4,675.2)	(4,897.5)	(3,660.5)	(3,357.3)
	11,644.4	11,029.0	10,081.1	9,401.0	9,438.1
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)	**8,338.5**	8,061.2	7,461.6	7,094.7	7,070.4
Equity attributable to owners of the parent	**8,627.5**	8,350.2	7,750.6	7,383.7	7,359.4
Non-controlling interests	**3,016.9**	2,678.8	2,330.5	2,017.3	2,078.7
	11,644.4	11,029.0	10,081.1	9,401.0	9,438.1

	2022 $m	2021 $m	2020 $m	2019 $m	2018 $m
Consolidated income statement					
Group revenue	**5,862.0**	7,470.1	5,129.3	4,964.5	4,733.1
Total profit from operations and associates	**2,627.1**	3,461.1	1,516.5	1,400.2	1,367.2
Profit before tax	**2,558.9**	3,477.1	1,413.1	1,349.2	1,252.7
Income tax expense	**(603.6)**	(1,242.3)	(526.5)	(506.1)	(423.7)
Profit from continuing operations	**1,955.3**	2,234.8	886.6	843.1	829.0
Profit from discontinued operations	**–**	–	7.3	–	51.3
Profit for the year	**1,955.3**	2,234.8	893.9	843.1	880.3
Non-controlling interests	**(422.3)**	(944.6)	(387.5)	(341.7)	(336.6)
Net earnings (profit attributable to owners of the parent)	**1,533.0**	1,290.2	506.4	501.4	543.7
EBITDA	**2,929.7**	4,836.2	2,739.2	2,438.9	2,228.3

	2022 cents	2021 cents	2020 cents	2019 cents	2018 cents
Earnings per share					
Basic and diluted earnings per share	**155.5**	130.9	51.3	50.9	55.1

	2022 cents	2021 cents	2020 cents	2019 cents	2018 cents
Dividends per share proposed in relation to the year					
Ordinary dividends (interim and final)	**59.7**	142.5	54.7	34.1	43.8
	59.7	142.5	54.7	34.1	43.8
Dividends per share paid in the year and deducted from equity	**128.1**	72.1	13.3	47.7	47.4

	2022 $m	2021 $m	2020 $m	2019 $m	2018 $m
Consolidated cash flow statement					
Cash flow from continuing operations	**2,738.3**	4,507.7	2,431.1	2,570.7	1,877.0
Interest paid	**(74.3)**	(60.7)	(52.7)	(76.3)	(68.2)
Income tax paid	**(787.1)**	(776.9)	(319.7)	(403.6)	(498.0)
Net cash from operating activities	**1,876.9**	3,670.1	2,058.7	2,090.8	1,310.8
Investing activities					
Acquisition and disposal of subsidiaries, joint venture and associates	**–**	–	–	–	145.2
Dividends from associates	**50.0**	142.5	–	58.0	16.6
Equity investments, investing activities and recovery of VAT	**1,322.4**	(577.2)	(893.5)	(678.3)	284.2
Purchases and disposals of intangible assets, property, plant and equipment	**(1,879.0)**	(1,776.0)	(1,306.6)	(1,076.9)	(872.2)
Interest received	**29.1**	7.4	12.6	41.0	26.4
Net cash used in investing activities	**(477.5)**	(2,203.3)	(2,187.5)	(1,656.2)	(399.8)
Financing activities					
Dividends paid to owners of the parent	**(1,262.9)**	(710.8)	(131.1)	(470.3)	(466.9)
Dividends paid to preference holders and non-controlling interests	**(80.1)**	(604.6)	(280.1)	(400.1)	(120.1)
Capital increase from non-controlling interest	**–**	–	210.0	–	–
New borrowings less repayment of borrowings and leases	**9.2**	(634.5)	918.3	60.8	(347.1)
Net cash (used in)/generated from financing activities	**(1,333.8)**	(1,949.9)	717.1	(809.6)	(934.1)
Net increase/(decrease) in cash and cash equivalents	**65.6**	(483.1)	588.3	(375.0)	(23.1)

	2022 $m	2021 $m	2020 $m	2019 $m	2018 $m
Consolidated net cash					
Cash, cash equivalents and liquid investments	**2,391.2**	3,713.1	3,672.8	2,193.4	1,897.6
Short-term borrowings	**(432.5)**	(337.1)	(603.4)	(723.9)	(646.0)
Medium and long-term borrowings	**(2,844.5)**	(2,835.5)	(3,151.4)	(2,032.9)	(1,847.9)
	(3,277.0)	(3,172.6)	(3,754.8)	(2,756.8)	(2,493.9)
Net (debt)/cash at the year-end	**(885.8)**	540.5	(82.0)	(563.4)	(596.3)

Production statistics

Production and sales volumes, realised prices and cash costs by mine	Production 2022 '000 tonnes	Production 2021 '000 tonnes	Sales 2022 '000 tonnes	Sales 2021 '000 tonnes	Net cash costs 2022 $/lb	Net cash costs 2021 $/lb	Realised prices 2022 $/lb	Realised prices 2021 $/lb
Copper								
Los Pelambres	**275.0**	324.7	**271.2**	324.5	**1.10**	0.89	**3.76**	4.54
Centinela	**247.5**	274.2	**246.1**	276.1	**1.75**	1.13	**3.89**	4.31
Antucoya	**79.2**	78.6	**80.8**	80.4	**2.50**	2.04	**3.95**	3.94
Zaldívar (attributable basis – 50%)	**44.5**	44.0	**44.4**	44.6	**2.39**	2.39	**–**	–
Group total	**646.2**	721.5	**642.5**	725.6	**1.61**	1.20	**3.84**	4.37
Group weighted average (net cash costs)								
Group weighted average (excluding treatment and refining charges and before by-products)					**2.05**	1.68		
Group weighted average (before by-product credits)					**2.19**	1.79		
Cash costs at Los Pelambres comprises								
Cash costs before by-product credits					**1.84**	1.59		
By-product credits (principally molybdenum and gold)					**(0.74)**	(0.70)		
Net cash costs					**1.10**	0.89		
Cash cost at Centinela comprises								
Cash costs before by-product credits					**2.44**	1.87		
By-product credits (principally gold)					**(0.69)**	(0.74)		
Net cash costs					**1.75**	1.13		
LME average							**4.00**	4.23

	Production 2022 '000 ounces	Production 2021 '000 ounces	Sales 2022 '000 ounces	Sales 2021 '000 ounces	Realised prices 2022 $/oz	Realised prices 2021 $/oz
Gold						
Los Pelambres	**43.1**	53.2	**42.3**	51.1	**1,785**	1,783
Centinela	**133.7**	199.0	**132.3**	193.5	**1,806**	1,789
Group total	**176.8**	252.2	**174.6**	244.6	**1,801**	1,788
Market average price					**1,800**	1,799

	'000 tonnes	'000 tonnes	'000 tonnes	'000 tonnes	$/lb	$/lb
Molybdenum						
Los Pelambres	**7.2**	9.2	**6.8**	9.2	**20.9**	17.5
Centinela	**2.4**	1.3	**2.4**	1.2	**20.5**	17.2
Group total/average realised price	**9.6**	10.5	**9.2**	10.4	**20.8**	17.4
Market average price					**18.7**	15.9

Ore reserves and mineral resources estimates

At 31 December 2022

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 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 Sofia Orellana (CP, Chile), Deputy Manager of Long-Term Mining Planning 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 254-255. 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 drill holes 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 drill holes. 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 drill holes. 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 realistic consideration on modifying factors such as mining method, metallurgical process and 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 realistic consideration on modifying factors such as mining method, metallurgical process and 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 realistic consideration on modifying factors such as mining method, metallurgical process and 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

	Tonnage (millions of tonnes)		Copper (%)		Molybdenum (%)		Gold (g/tonne)		Attributable Tonnage (millions of tonnes)	
Group Subsidiaries	**2022**	2021	**2022**	2021	**2022**	2021	**2022**	2021	**2022**	2021
Ore reserves										
Los Pelambres (see note (a))										
Proved	**574.8**	612.3	**0.60**	0.60	**0.020**	0.020	**0.05**	0.05	**344.9**	367.4
Probable	**330.6**	343.8	**0.57**	0.57	**0.020**	0.019	**0.05**	0.05	**198.4**	206.3
Total	**905.5**	956.1	**0.59**	0.59	**0.020**	0.020	**0.05**	0.05	**543.3**	573.7
Centinela (see note (b))										
Centinela Cathodes (oxides)										
Proved	**59.1**	76.4	**0.50**	0.54					**41.4**	53.5
Probable	**215.4**	222.9	**0.33**	0.34					**150.8**	156.1
Subtotal	**274.5**	299.3	**0.37**	0.39					**192.1**	209.5
Centinela Concentrates (sulphides)										
Proved	**509.2**	545.6	**0.44**	0.45	**0.012**	0.012	**0.17**	0.17	**356.5**	381.9
Probable	**1,203.6**	1,138.7	**0.38**	0.39	**0.012**	0.013	**0.12**	0.12	**842.5**	797.1
Subtotal	**1,712.8**	1,684.3	**0.40**	0.41	**0.012**	0.012	**0.13**	0.14	**1,198.9**	1,179.0
Proved	**568.3**	622.0	**0.45**	0.46					**397.8**	435.4
Probable	**1,418.9**	1,361.6	**0.38**	0.38					**993.2**	953.1
Total	**1,987.2**	1,983.6	**0.40**	0.40					**1,391.1**	1,388.5
Antucoya (see note (c))										
Proved	**436.2**	435.9	**0.33**	0.33					**305.3**	305.1
Probable	**281.4**	309.6	**0.29**	0.30					**197.0**	216.7
Total	**717.6**	745.5	**0.31**	0.32					**502.3**	521.9
Total Group Subsidiaries	**3,610.3**	3,685.3	**0.43**	0.43					**2,436.7**	2,484.1

	Tonnage (millions of tonnes)		Copper (%)		Molybdenum (%)		Gold (g/tonne)		Attributable Tonnage (millions of tonnes)	
Group Joint Ventures	**2022**	2021	**2022**	2021	**2022**	2021	**2022**	2021	**2022**	2021
Ore reserves										
Zaldívar (see note (n))										
Proved	**337.9**	366.6	**0.44**	0.45					**169.0**	183.3
Probable	**75.2**	84.3	**0.31**	0.34					**37.6**	42.1
Total	**413.2**	450.8	**0.42**	0.43					**206.6**	225.4
Total Group	**4,023.5**	4,136.2	**0.43**	0.43					**2,643.3**	2,709.5

Mineral resources estimates (including ore reserves)

	Tonnage (millions of tonnes)		Copper (%)		Molybdenum (%)		Gold (g/tonne)		Attributable Tonnage (millions of tonnes)	
Group Subsidiaries	**2022**	2021	**2022**	2021	**2022**	2021	**2022**	2021	**2022**	2021
Los Pelambres (see note (a))										
Sulphides										
Measured	**1,054**	1,093	**0.57**	0.58	**0.020**	0.020	**0.05**	0.05	**632.6**	656.1
Indicated	**2,121**	2,135	**0.52**	0.52	**0.016**	0.016	**0.05**	0.05	**1,272.9**	1,281.0
Measured + Indicated	**3,176**	3,228	**0.54**	0.54	**0.018**	0.018	**0.05**	0.05	**1,905.5**	1,937.1
Inferred	**2,780**	2,729	**0.46**	0.46	**0.016**	0.016	**0.06**	0.06	**1,667.7**	1,637.4
Total	**5,955**	5,957	**0.50**	0.50	**0.017**	0.017	**0.05**	0.06	**3,573.2**	3,574.5
Los Pelambres total										
Measured	**1,054**	1,093	**0.57**	0.58	**0.020**	0.020	**0.05**	0.05	**632.6**	656.1
Indicated	**2,121**	2,135	**0.52**	0.52	**0.016**	0.016	**0.05**	0.05	**1,272.9**	1,281.0
Measured + Indicated	**3,176**	3,228	**0.54**	0.54	**0.018**	0.018	**0.05**	0.05	**1,905.5**	1,937.1
Inferred	**2,780**	2,729	**0.46**	0.46	**0.016**	0.016	**0.06**	0.06	**1,667.7**	1,637.4
Total	**5,955**	5,957	**0.50**	0.50	**0.017**	0.017	**0.05**	0.06	**3,573.2**	3,574.5
Centinela (see note (b))										
Centinela Cathodes (oxides)										
Measured	**101**	110	**0.47**	0.52					**70.7**	76.7
Indicated	**297**	316	**0.32**	0.32					**207.6**	221.3
Measured + Indicated	**398**	426	**0.36**	0.37					**278.3**	298.0
Inferred	**15**	16	**0.33**	0.33					**10.6**	11.3
Subtotal	**413**	442	**0.36**	0.37					**288.9**	309.3
Centinela Concentrates (sulphides)										
Measured	**913**	956	**0.48**	0.48	**0.014**	0.013	**0.19**	0.19	**639.4**	669.4
Indicated	**1,935**	1,903	**0.37**	0.37	**0.013**	0.013	**0.12**	0.12	**1,354.6**	1,332.3
Measured + Indicated	**2,848**	2,860	**0.40**	0.41	**0.013**	0.013	**0.14**	0.14	**1,993.9**	2,001.8
Inferred	**1,789**	1,233	**0.29**	0.30	**0.011**	0.011	**0.08**	0.08	**1,252.2**	862.7
Subtotal	**4,637**	4,092	**0.36**	0.38	**0.012**	0.013	**0.12**	0.12	**3,246.2**	2,864.5
Centinela total										
Measured	**1,014**	1,066	**0.48**	0.49					**710.1**	746.2
Indicated	**2,232**	2,220	**0.36**	0.36					**1,562.2**	1,553.6
Measured + Indicated	**3,246**	3,285	**0.40**	0.40					**2,272.2**	2,299.8
Inferred	**1,804**	1,249	**0.29**	0.30					**1,262.9**	874.0
Total	**5,050**	4,534	**0.36**	0.38					**3,535.1**	3,173.8

/ 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	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021
Antucoya (see note (c))										
Oxides										
Measured	**463.7**	465.4	**0.32**	0.33					**324.6**	325.7
Indicated	**348.5**	388.9	**0.29**	0.30					**244.0**	272.2
Measured + Indicated	**812.3**	854.3	**0.31**	0.31					**568.6**	598.0
Inferred	**302.3**	337.4	**0.26**	0.26					**211.6**	236.2
Total	**1,114.6**	1,191.6	**0.30**	0.30					**780.2**	834.1
Antucoya total										
Measured	**463.7**	465.4	**0.32**	0.33					**324.6**	325.7
Indicated	**348.5**	388.9	**0.29**	0.30					**244.0**	272.2
Measured + Indicated	**812.3**	854.3	**0.31**	0.31					**568.6**	598.0
Inferred	**302.3**	337.4	**0.26**	0.26					**211.6**	236.2
Total	**1,114.6**	1,191.6	**0.30**	0.30					**780.2**	834.1
Polo Sur (see note (d))										
Oxides										
Measured	**46.6**	32.4	**0.45**	0.49					**46.6**	32.4
Indicated	**59.7**	69.5	**0.38**	0.40					**59.7**	69.5
Measured + Indicated	**106.4**	101.9	**0.41**	0.43					**106.4**	101.9
Inferred	**6.2**	6.6	**0.30**	0.41					**6.2**	6.6
Subtotal	**112.6**	108.5	**0.41**	0.43					**112.6**	108.5
Sulphides										
Measured	**257.0**	281.4	**0.39**	0.39	**0.007**	0.007	**0.07**	0.07	**257.0**	281.4
Indicated	**678.2**	654.9	**0.33**	0.34	**0.007**	0.006	**0.05**	0.05	**678.2**	654.9
Measured + Indicated	**935.2**	936.4	**0.35**	0.35	**0.007**	0.006	**0.06**	0.06	**935.2**	936.4
Inferred	**598.0**	612.1	**0.27**	0.27	**0.006**	0.005	**0.04**	0.04	**598.0**	612.1
Subtotal	**1,533.2**	1,548.5	**0.32**	0.32	**0.006**	0.006	**0.05**	0.05	**1,533.2**	1,548.5
Polo Sur total										
Measured	**303.7**	313.8	**0.40**	0.40					**303.7**	313.8
Indicated	**737.9**	724.5	**0.34**	0.34					**737.9**	724.5
Measured + Indicated	**1,041.6**	1,038.3	**0.36**	0.36					**1,041.6**	1,038.3
Inferred	**604.2**	618.7	**0.27**	0.27					**604.2**	618.7
Total	**1,645.8**	1,657.0	**0.32**	0.33					**1,645.8**	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	**337.4**	321.9	**0.38**	0.38			**0.05**	0.05	**172.1**	164.2
Subtotal	**337.4**	321.9	**0.38**	0.38			**0.05**	0.05	**172.1**	164.2
Penacho Blanco total										
Measured										
Indicated										
Measured + Indicated										
Inferred	**355.7**	340.2	**0.37**	0.37					**181.4**	173.5
Total	**355.7**	340.2	**0.37**	0.37					**181.4**	173.5

Mineral resources estimates (including ore reserves) continued

	Tonnage (millions of tonnes)		Copper (%)		Molybdenum (%)		Gold (g/tonne)		Attributable Tonnage (millions of tonnes)	
Group Subsidiaries	**2022**	2021	**2022**	2021	**2022**	2021	**2022**	2021	**2022**	2021
Mirador (see note (f))										
Oxides										
Measured	**2.5**	2.0	**0.28**	0.29					**1.8**	1.6
Indicated	**26.8**	22.6	**0.27**	0.27					**20.2**	17.6
Measured + Indicated	**29.2**	24.6	**0.27**	0.28					**22.0**	19.2
Inferred	**11.1**	9.7	**0.26**	0.27					**8.9**	7.6
Subtotal	**40.3**	34.3	**0.27**	0.27					**30.8**	26.8
Sulphides										
Measured	**36.0**	35.4	**0.33**	0.34	**0.006**	0.006	**0.12**	0.12	**36.0**	35.4
Indicated	**20.7**	19.9	**0.28**	0.28	**0.008**	0.008	**0.07**	0.07	**20.7**	19.9
Measured + Indicated	**56.7**	55.3	**0.31**	0.31	**0.007**	0.007	**0.10**	0.11	**56.7**	55.3
Inferred	**5.0**	4.0	**0.25**	0.25	**0.008**	0.008	**0.05**	0.06	**5.0**	4.0
Subtotal	**61.8**	59.2	**0.31**	0.31	**0.007**	0.007	**0.10**	0.10	**61.8**	59.2
Mirador total										
Measured	**38.5**	37.4	**0.33**	0.33					**37.8**	36.9
Indicated	**47.5**	42.5	**0.27**	0.28					**40.9**	37.5
Measured + Indicated	**86.0**	79.8	**0.30**	0.30					**78.7**	74.4
Inferred	**16.1**	13.7	**0.26**	0.26					**13.9**	11.6
Total	**102.1**	93.5	**0.29**	0.30					**92.6**	86.0

/ 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	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021
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	**1,880.0**	1,873.4	**0.50**	0.50	**0.011**	0.011			**958.8**	955.4
Subtotal	**1,880.0**	1,873.4	**0.50**	0.50	**0.011**	0.011			**958.8**	955.4
Los Volcanes total										
Measured										
Indicated										
Measured + Indicated										
Inferred	**1,910.8**	1,904.2	**0.50**	0.50					**974.5**	971.1
Total	**1,910.8**	1,904.2	**0.50**	0.50					**974.5**	971.1
Brujulina (see note (h))										
Oxides										
Measured										
Indicated										
Measured + Indicated										
Inferred	**88.0**	87.2	**0.49**	0.49					**44.9**	44.5
Total	**88.0**	87.2	**0.49**	0.49					**44.9**	44.5
Brujulina total										
Measured										
Indicated										
Measured + Indicated										
Inferred	**88.0**	87.2	**0.49**	0.49					**44.9**	44.5
Total	**88.0**	87.2	**0.49**	0.49					**44.9**	44.5
Sierra (see note (i))										
Oxides										
Measured										
Indicated										
Measured + Indicated										
Inferred	**52.3**	52.0	**0.68**	0.69					**52.3**	52.0
Total	**52.3**	52.0	**0.68**	0.69					**52.3**	52.0
Sierra total										
Measured										
Indicated										
Measured + Indicated										
Inferred	**52.3**	52.0	**0.68**	0.69					**52.3**	52.0
Total	**52.3**	52.0	**0.68**	0.69					**52.3**	52.0
Encierro (see note (j))										
Sulphides										
Measured										
Indicated										
Measured + Indicated										
Inferred	**522.3**		**0.65**		**0.007**		**0.22**		**295.3**	
Subtotal	**522.3**		**0.65**		**0.007**		**0.22**		**295.3**	
Encierro total										
Measured										
Indicated										
Measured + Indicated										
Inferred	**522.3**		**0.65**		**0.007**		**0.22**		**295.3**	
Total	**522.3**		**0.65**		**0.007**		**0.22**		**295.3**	

Mineral resources estimates (including ore reserves) continued

	Tonnage (millions of tonnes)		Copper (%)		Molybdenum (%)		Silver (g/tonne)		Attributable Tonnage (millions of tonnes)	
Group Subsidiaries	**2022**	2021	**2022**	2021	**2022**	2021	**2022**	2021	**2022**	2021
Cachorro (see note (k))										
Oxides										
Measured										
Indicated	**12.7**		**1.15**						**12.7**	
Measured + Indicated	**12.7**		**1.15**						**12.7**	
Inferred	**24.8**	12.4	**0.92**	1.23					**24.8**	12.4
Subtotal	**37.6**	12.4	**1.00**	1.23					**37.6**	12.4
Sulphides										
Measured										
Indicated	**36.7**		**1.54**				**6.21**		**36.7**	
Measured + Indicated	**36.7**		**1.54**				**6.21**		**36.7**	
Inferred	**168.2**	129.2	**1.19**	1.21			**3.49**		**168.2**	129.2
Subtotal	**204.9**	129.2	**1.25**	1.21			**3.98**		**204.9**	129.2
Cachorro total										
Measured										
Indicated	**49.4**		**1.44**						**49.4**	
Measured + Indicated	**49.4**		**1.44**						**49.4**	
Inferred	**193.0**	141.6	**1.15**	1.21					**193.0**	141.6
Total	**242.5**	141.6	**1.21**	1.21					**242.5**	141.6

/ Ore reserves and mineral resources estimates *continued*

Mineral resources estimates (including ore reserves) continued

	Tonnage (millions of tonnes)		Copper (%)		Nickel (%)		TPM (g/tonne Au+Pt+Pd)		Attributable Tonnage (millions of tonnes)	
Group Subsidiaries	2022	2021	2022	2021	2022	2021	2022	2021	2022	2021
Twin Metals (see note (m))										
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	**9,704.3**	9,779.4	**0.46**	0.46					**7,072.2**	7,124.9
Inferred	**9,844.2**	8,688.5	**0.44**	0.44					**5,720.9**	5,656.3
Group Subsidiaries total	**19,548.6**	18,467.8	**0.45**	0.45					**12,793.2**	12,781.2

Mineral resources estimates (including ore reserves) continued

Group Join Ventures	Tonnage (millions of tonnes) 2022	Tonnage (millions of tonnes) 2021	Copper (%) 2022	Copper (%) 2021	Molybdenum (%) 2022	Molybdenum (%) 2021	Gold (g/tonne) 2022	Gold (g/tonne) 2021	Attributable Tonnage (millions of tonnes) 2022	Attributable Tonnage (millions of tonnes) 2021
Zaldivar (see note (n))										
Oxides & Secondary Sulphides										
Measured	**606.8**	660.5	**0.40**	0.40					**303.4**	330.2
Indicated	**124.8**	168.7	**0.29**	0.30					**62.4**	84.4
Measured + Indicated	**731.6**	829.2	**0.38**	0.38					**365.8**	414.6
Inferred	**14.0**	23.0	**0.35**	0.30					**7.0**	11.5
Total	**745.6**	852.2	**0.38**	0.38					**372.8**	426.1
Primary Sulphides										
Measured	**113.8**	119.5	**0.41**	0.41					**56.9**	59.8
Indicated	**265.6**	309.8	**0.40**	0.40					**132.8**	154.9
Measured + Indicated	**379.4**	429.3	**0.41**	0.40					**189.7**	214.7
Inferred	**25.2**	28.3	**0.37**	0.37					**12.6**	14.1
Subtotal	**404.6**	457.6	**0.40**	0.40					**202.3**	228.8
Zaldívar total										
Measured	**720.6**	780.0	**0.40**	0.40					**360.3**	390.0
Indicated	**390.4**	478.5	**0.37**	0.36					**195.2**	239.3
Measured + Indicated	**1,111.0**	1,258.5	**0.39**	0.39					**555.5**	629.3
Inferred	**39.2**	51.3	**0.37**	0.34					**19.6**	25.7
Group Joint Ventures total	**1,150.2**	1,309.9	**0.39**	0.38					**575.1**	654.9

Total Group	Tonnage (millions of tonnes) 2022	Tonnage (millions of tonnes) 2021	Copper (%) 2022	Copper (%) 2021	Molybdenum (%) 2022	Molybdenum (%) 2021	Gold (g/tonne) 2022	Gold (g/tonne) 2021	Attributable Tonnage (millions of tonnes) 2022	Attributable Tonnage (millions of tonnes) 2021
Measured + Indicated	**10,815.3**	11,037.9	**0.45**	0.45					**7,596.2**	7,701.5
Inferred	**9,883.4**	8,739.8	**0.44**	0.44					**6,481.7**	5,746.7
Total	**20,698.8**	19,777.7	**0.45**	0.44					**14,077.9**	13,448.0

/ Ore reserves and mineral resources estimates *continued*

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 $3.30/lb ($3.10/lb in 2021), $13.00/lb molybdenum ($9.50/lb in 2021) and $1,600/oz gold ($1,500/oz in 2021), 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 $3.75/lb ($3.60/lb in 2021). 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 resource and reserve estimates have been audited as per Group policy, with audits carried out during 2022 on the Cachorro and Polo Sur resource models. 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 ore reserves is variable over 0.35% copper. Ore Reserves decreased in 51 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 2 million tonnes, including depletion, higher mineral prices and stockpiles.

b) Centinela (Concentrates and Cathodes)

Centinela is 70% owned by the Group and consists of Centinela Concentrates (Esperanza + Esperanza Sur and Encuentro Sulphide) 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 Concentrates ore reserves have increased by a net 28 million tonnes, due mainly to the increase in metal prices. Centinela Concentrates mineral resources increased by a net 495 million tonnes, incorporating ore material that connects former Esperanza and Esperanza Sur resources, due mainly to higher product and by-product prices. The Centinela Cathodes ore reserves have decreased by a net 25 million tonnes, due mainly to depletion in the period. Centinela Cathodes ore reserves are made up of 160 million tonnes at 0.45% copper of heap leach ore and 114 million tonnes at 0.26% copper of ROM ore. Centinela Cathodes mineral resources decreased by a net 29 million tonnes, due mainly to depletion and higher mining and processing costs.

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. Ore reserves have decreased by a net 28 million tonnes, due mainly to depletion in the period, partially compensated by an increase in ore stockpiles. For 2022 the mineral resource model has been updated with 51 drill holes for a total of 10,000 metres. Mineral resources have decreased by a net 77 million tonnes, due mostly to depletion, new drilling data and higher mining costs.

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 2022 resource model has been updated with 105 drill holes for a total of 17,000 metres. Mineral resources have decreased by a net 11 million tonnes, due to the resource model update and the use of higher mining and processing costs in pit optimisation.

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 2022 the resource model has not been updated. The mineral resources have increased by a net 15 million tonnes, due mainly to the increase in metal prices.

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 the mineral resources for oxides is 0.15% copper and for sulphides is 0.20% copper. The mineral resources have increased by a net 9 million tonnes, due mainly to the increase in metal prices.

g) Los Volcanes

Los Volcanes is 51% owned by the Group. The cut-off grade applied to the determination of mineral resources is 0.20% copper. For 2022 the mineral resource model has not been updated. The mineral resources have increased by a net 7 million tonnes, due mainly to the increase in metal prices.

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 2022 the mineral resource model has not been updated. The mineral resources have increased by a net 1 million tonnes, due mainly to the increase in metal prices.

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 2022 the mineral resource model has not been updated. The mineral resources have increased by a net 0.3 million tonnes, due mainly to the increase in metal prices.

j) Encierro

Encierro is 56.55% owned by the Group. This is Encierro´s maiden mineral resource report, supported by 60,800 metres of drilling from 60 drill holes. In order to ensure that the stated mineral resources represent mineralisation that have "reasonable prospects for eventual economic extraction" (JORC code), Encierro's mineral resources are stated above cut-offs of 0.50% copper for sulphides. All reported mineral resources have been defined as inferred. Mineralisation estimated below a 0.5% cut-off is not included in the mineral resource figures.

k) Cachorro

Cachorro is 100% owned by the Group. The cut-off grade applied to the determination of mineral resources for both oxides and sulphides is 0.50% copper. The 2022 resource model has been updated included new drilling data and two newly discovered areas, adding 170 drill holes for a total of 108,000 metres. Mineral resources have increased by a net 100 million tonnes, due to the resource model update. Resources have been defined as indicated and inferred material and considering a copper price of $3.75.

m) Twin Metals Minnesota LLC

Twin Metals Minnesota LLC ("Twin Metals") is 100% owned 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 mineral resource. For 2022 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 mineral 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 mineral 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 mineral 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 mineral 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 mineral resource estimate does not include TPM values as they were not assayed for TPMs.

In August 2022, Twin Metals filed a claim in federal court challenging the administrative actions resulting in the rejection of the preference right lease applications ("PRLAs"), the cancellation of its federal leases 1352 and 1353, the rejection of its Mine Plan of Operations ("MPO") and the dismissal of the administrative appeal of the MPO rejection. That action is currently pending. 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 having the decisions on the federal leases 1352 and 1353 and the PRLAs reversed through litigation, it will not have entitlement to the mineral resources associated with those mineral licences.

n) Zaldívar

Zaldívar is 50% owned by the Group. Heap leaching (HL) and dump leaching (DL) materials are defined based on total copper cut-off grades. 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. Ore reserves have decreased by a net 38 million tonnes, due mainly to depletion in the period. For mineral resources the cut-off grade is 0.18% copper for HL and 0.10% copper for DL, throughout the life of mine period. The cut-off grade applied to the primary sulphide mineral resources is 0.3% copper. The mineral resources decreased in 160 million tonnes because of the combined effects of depletion and increased 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 Phase 13 is subject to agreements or easements to access these areas and relocate the infrastructure. Phase 13 represents 22% of the Zaldívar ore reserve.

Zaldívar submitted an Environmental Impact Assessment (EIA) in 2018 which included an application to extend its water extraction and mining permits to 2029 (with decreasing activity levels in 2030-2031). Currently, Zaldívar is permitted to extract water and mine into 2025 and 2024, respectively. To ensure the continuity of the operation, in March 2023 Zaldívar submitted a DIA (Declaration of Environmental Impact), a more limited scope and simplified procedure than an EIA, requesting that the mining permit be extended from 2024 to 2025 so as to expire at the same date as the current water permit. At the same time Zaldívar withdrew the 2018 EIA application. It is expected that an alternative and updated EIA application to extend the water and mining permits beyond 2025 will be submitted which will also include a plan for a transition from the current continental water source on completion of the extended water permit, to either procuring water from a third party or using raw sea water. The ore reserves estimate assumes that the requested permits will be extended to allow for the extraction of all of Zaldívar's ore reserves. The details of the future permits or alternative water supply arrangements could lead to a review of and, eventually, an update to, Zaldívar's mine plan.

o) Antomin 2 and Antomin Investors

The Group has a 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 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

ADS	Asset Delivery System.
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.
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.
Chilean peso	Chilean currency.
CO_2e	Carbon dioxide equivalent.
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.
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.
EBITDA	Earnings Before Interest, Tax, Depreciation and Amortisation.
EIA	Environmental Impact Assessment.
Encuentro	Copper oxide and sulphide deposit in the Centinela Mining District.
EPS	Earnings per share.
Esperanza Sur	Copper deposit in the Centinela Mining District.
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.

FTSE100 and FTSE350 Index	A share index of the 100 or 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.
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 a (gravity fed) chemical solution through the heaps to collection ponds. The metal is then recovered from the solution through the SX-EW process.
HPI	High Potential Incident. An event that, under different circumstances, might easily have resulted in a serious injury or fatality.
ICMM	International Council on Mining and Metals.
IFRIC	International Financial Reporting Standards Interpretations Committee.
IFRS	International Financial Reporting Standards.
JORC	The Australasian Joint Ore Reserves Committee.
KPI	Key performance indicator.
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 ore reserves).
LME	London Metal Exchange.
Los Pelambres	Minera Los Pelambres, a 60%-owned subsidiary incorporated in Chile.
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.

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.
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 copper cathodes.
Payable copper	The proportion or quantity of contained copper for which payment is received after metallurgical deduction.
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.

/ Glossary and definitions *continued*

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.
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.
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.
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.
Tonne	Metric tonne.
TSR	Total Shareholder Return, being the movement in the Company's share price plus any dividends paid by the Company.
Twin Metals Minnesota Project	A copper, nickel and platinum group metals underground-mining project located in Minnesota, US.
UK	United Kingdom.
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 m3	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 168, and in Note 13 to the Financial Statements.

If approved at the Annual General Meeting, the final dividend of 50.5 cents per share will be paid on 12 May 2023 to ordinary shareholders that are on the register at the close of business on 21 April 2023. Shareholders can elect (on or before 24 April 2023) 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 27 April 2023.

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 Westminster, Dean's Yard, London SW1P 3NZ and electronically by live broadcast using the Summit platform (meetnow.global/AFGAGM2023) at 2:00 pm on Wednesday 10 May 2023. 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 2023

18 January 2023	Q4 2022 Production Report
21 February 2023	Full Year 2022 Results Announcement
19 April 2023	Q1 2023 Production Report
20 April 2023	2022 Final Dividend – Ex Dividend date
21 April 2023	2022 Final Dividend – Record date
24 April 2023	2022 Final Dividend – Final date for receipt of Currency Elections
27 April 2023	2022 Final Dividend – Pound sterling/ Euro Rate set
10 May 2023	Annual General Meeting
12 May 2023	2022 Final Dividend – Payment date
19 July 2023	Q2 2023 Production Report
10 August 2023	Half Year 2023 Results Announcement
31 August 2023	2023 Interim Dividend – Ex Dividend date
01 September 2023	2023 Interim Dividend – Record date
04 September 2023	2023 Interim Dividend – Final date for receipt of Currency Elections
07 September 2023	2023 Interim Dividend – Pound sterling/ Euro Rate set
29 September 2023	2023 Interim Dividend – Payment date
18 October 2023	Q3 2023 Production Report
17 January 2024	Q4 2023 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

Designed and produced by Black Sun Plc
www.blacksunplc.com

The photography in this report was primarily supplied by Roberto Candia.

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

antofagasta.co.uk