

## CAPITAL MARKETS DAY

### TRANSCRIPT

#### **Andrew Lindsay, Director - London Office**

Good afternoon, good morning.

I'm Andrew Lindsay, head of Antofagasta's London office.

Here is the agenda for our Capital Markets Day. We'll start with two hours of presentations, followed by Q&A. Our CEO, Iván Arriagada, will give you an overview of the company and how we operate, and he'll be followed by presentations by our senior management team on Operations, Project Development, Exploration, Sustainability, Finance and Innovation. We'll also show you an interview about the economic and political situation in Chile today.

After the formal presentations, we will then have a Q&A session during which you'll be able to ask senior management questions. Anyone who wishes to ask a question needs to dial in to one of the telephone numbers included in the announcement of this event. The numbers will also be made available during the webcast and at the end. If you just want to listen, to stay on the webcast, the event will end at 5:00 UK time.

Please now look at our cautionary statement, which you can also read at your leisure as part of the Presentation Slide Pack, which is available on our website. A recording of the full webcast will be added to our website shortly after the end of the event.

Welcome to our Capital Markets Day, a first for many years. I hope you find it interesting.

#### **Iván Arriagada, Chief Executive Office**

Thank you, Andrew, and welcome everyone joining us today, we're delighted to have you with us.

Antofagasta is a pure play copper producer with high quality assets in Chile, supported by a team that delivers reliably and responsibly through the cycle. Over the next two hours, you will hear from our team as we discuss how we mine and what we're doing to progress the future of mining in a way that is sustainable and delivers value for all our stakeholders. You will also hear about the embedded growth options we have in our business portfolio and the levers we have to unlock that growth for many years to come.

We're very excited about copper. It is an essential commodity for our daily lives and plays an integral role in our future, given its use in decarbonisation and economic progress, especially in emerging economies, as they transition to more advanced development phases. It also helps to improve the quality of life for those parts of the world population, which have yet to catch up with developed nations.

The trend to a lower carbon economy is expected to boost copper demand via the electrification of energy supply, which already accounts for close to 30% of total copper use, as clean energy becomes the dominant source of global power generation over coming decades. Copper used by the transport sector will grow even faster as electric vehicles, which only account for approximately 10% of the total transport market today, become part of everyday life. As you know, EVs use four times as much copper as internal combustion engine vehicles.

On the back of these trends total copper consumption, which includes primary production from copper mines as well as recycled scrap, is expected to grow by an average of approximately 2.3% per year over the next decade, from 23 million tons in 2020 to 30 million tons in 2030. But notably, a significant share of growth in consumption is estimated to come from regions around the world other than China.

The supply story is one of structural constraints as mines age and grades decline, and as permitting new projects becomes more onerous in every region in the world. It currently takes, on average, about 15 years from discovery to production, which means any significant supply side response to higher prices is not going to be immediate. Supply will grow, however, with increasing scrap usage and as miners like Antofagasta deploy improved technology and innovation to unlock embedded tons. And you will hear more about this later.

Antofagasta is in a prime position to seize the growth in demand. We have the embedded tons across our business, the ability to unlock them, and we are a responsible and reliable producer.

Above all, we are a company that you can trust to deliver strong shareholder returns through the cycle while delivering value to all stakeholders, including local and national communities, while managing any environmental impact in a responsible way.

Before we dive into the details and take you on a tour of our business, I'd like to spend a moment revisiting our purpose of developing mining for a better future. This is what drives us and motivates us all at Antofagasta.

Everyone at Antofagasta believes that what we do will enable a better world for providing the raw materials for a greener, lower carbon economy and to contribute financially and socially to our host communities, where we mine to improve lives and livelihoods.

We're making real progress to reduce our impact on the environment and expect 90% of the water we use to either be from the sea or recirculated water by 2025. And we're also moving to 100% renewable power. We have the resources and technology to grow, to ensure we're a sustainable partner and we have the people and talent who are among the best in the world, to deliver reliably and responsibly.

Our purpose is underpinned by five strategic pillars of people, safety and sustainability, competitiveness, growth and innovation. And you will hear more from each of them in the presentations that follow.

Reliability to any company is a vital element of trust. We take our responsibility to be a reliable producer very seriously, and as our shareholders, our communities, our employees, our suppliers and our civil society, demand it. We operate in a way that allows us to deliver on our commitments year after year in terms of production, returns, and our commitments to the environment and our communities.

We are proud of our track record of delivering on what we say we do will do and in terms of costs, we have outperformed guidance consistently.

Not only are we a reliable producer, but we have a reliable growth profile that will allow us to produce sustainably into the future.

We have a variety of exploration and late stage projects, which are in different phases of evaluation and will generate organic growth for the company. Excitingly, we have a huge mineral resource base of over 18 billion tons, of which some 7 billion tons are in the Centinela Mining District, and 6 billion tons are at Los Pelambres, giving us the options to develop our inventory over a time when copper supply is becoming increasingly constrained.

We also have some exciting greenfield exploration projects in Chile.

We believe we have very strong organic growth potential. And alongside this, we will continue to remain alert to attractive external opportunities if they present themselves.

This map highlights the key prospective geological regions in the Americas for copper, where our exploration team is working.

On the map of Chile, you can see our huge mineral resource base that I was mentioning.

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

On this slide, we show a five-year production trend projection, which highlights the growth we have embedded in the business. This is not intended to be a precise forecast, but to show directionally where potential production could come from in the next five-year period, provided the underlying assumptions and conditions are met. You will hear some more from the team today about these projects and how we will unlock the growth to create further value.

We think this is an exciting time for Antofagasta. Next year we expect to start commissioning new processing capacity at Los Pelambres, and also to add new copper supply from ore mined from the Esperanza Sur pit at Centinela, and from the chloride leach project at Zaldívar. Regarding the potential supply from the second concentrator at Centinela, it is at the very advanced study and engineering stage, but it has not yet been approved. If it is, we will have additional copper, which could potentially take us to approximately 900,000 tons of production by the year 2026. However, this is not a target since we will only focus on value creating production.

It is no accident that our financial strength and balance sheet is in great shape to deliver this growth, and our CFO Mauricio Ortiz will outline a strategy of allocating capital to maximize return. He will also describe how we allocate capital to mitigate our risks to climate change and how we're now incorporating carbon pricing into our evaluations.

Alongside exploration and our growth projects, we also have an amazing team that constantly innovates, and is transforming the way in which we operate, allowing us to unlock value throughout the business.

We have developed a patented primary sulphide leach technology called Cuprochlor<sup>®</sup>-T, which, if is successful, could allow us to bring forward the processing of ore otherwise scheduled to be mined in many more years or will allow ore that was previously considered to be uneconomic, to be profitably processed. On top of that, we have been introducing innovative changes that are changing the way in which we operate, such as introducing autonomous trucks at Centinela, establishing a remote operating centre so our employees can work smarter and maintain a good quality of life, and setting up a Digital Academy to upskill all the talent and ideas across our business.

This is a key part of Antofagasta's strategy.

Before I turn over to the team, I would like to say how pleased we are to have Andrés Velasco with us today. Professor Velasco is a former Finance Minister of Chile and is now the dean of the School of Public Policy at the London School of Economics. He will be talking to us about the current economic and political situation in Chile, an interesting time as the political sands are shifting and mining is inevitably being caught up in this.

But Antofagasta is in great shape to stand up to change and challenge.

Our purpose is to develop mining for a better future by responsibly and sustainably producing a critical metal that plays a significant role in supporting local and global economic and social development, as well as the global transition to a low carbon economy. We will continue to create value for all our stakeholders.

I will now hand over to Hernán Menares, our Vice President of Operations, who will show you how we do that. Over to you, Hernán.

## **Hernán Menares, Vice President of Operations**

Hello, my name is Hernán Menares. I am the Vice President of Operations. I'm going to say a few words about our strategy and model for our operations and how we execute them to ensure Antofagasta remains a reliable and responsible producer. You will also see how we're able to unlock growth and therefore, value in our operations.

But first, I would like to remind those of you who are less familiar with our company of our assets in Chile: We have four mining operations, three are in the north, in the Atacama Desert, and the fourth, Los Pelambres, in central Chile in an agricultural region. Our mines primarily produce copper in the form of concentrate and cathodes, as well as molybdenum and gold as by-products.

Los Pelambres is our largest operation and Centinela, our second largest, and between them they produce over 80% of our copper.

And, as you heard from Iván, we have 18 billion tons of mineral resources across our portfolio, with 7 billion in the Centinela mining district and 6 billion at Los Pelambres. These resources make up a robust foundation to ensure our future growth in production for many years to come.

In addition to our copper operations, we also have a transport division Ferrocarril de Antofagasta a Bolivia, FCAB, which is based in the city of Antofagasta. FCAB provides rail and truck services to the mining industry in the region, including to some of our own operations, and we'll be showing you a short video, so you can learn about what it does and what it's future looks like.

The safety of our people, contractors and communities remains our number one priority. Our operations have high standards for safety, which we were able to sustain throughout the COVID-19 Pandemic, and the associated restrictions enabling us to meet our annual production and cost targets in 2020 while continuing to improve our safety record. You can see that since 2018, we have been using High Potential Incidents as a leading indicator to our progress of improving safety, and these have steadily improved over this period.

But despite these efforts, after 33 months of being fatality free, there was a fatal accident at Los Pelambres earlier this year. A full investigation was completed following which all the identified learnings were implemented at all our sites.

Our current focus in terms of safety is to reinforce the key principles of our safety policy, as detailed on this slide, concentrating on our commitment to achieve zero fatalities at our operations and continuing to reduce the number of high potential incidents which ultimately will drive lost time incidents down further.

Antofagasta's operating strategy, consistent with the company's overall Strategic Framework, seeks to position each of our mining operations to achieve excellence in safety, environmental protection and production, efficiency across our value chain, ensuring asset utilization is maximized and the operation has a competitive position on the cost curve. We execute our strategy in three key stages. Firstly, to achieve and sustain stable operating conditions at nameplate capacity; secondly, to seek further optimization through continuous improvement, which now includes using data analytics; and lastly, is to capitalize on the success of the first two stages to create a platform for profitable growth, which will further unlock value from our operations.

This would not be possible without the people behind our operations and the different skills they bring to the table. Our culture is based on our specific way of doing things and managing risk, using shared values and our code of ethics to guide us. The key to success is the quality of the people and we have the best in the industry.

We drive our culture of continuous improvement through our Operating Model, to realize the full potential of our operations, while applying the Lean Management philosophy.

We do this by seeking to reduce process variability and capture latent capacities. And this means we define each team member's role and responsibility so we can reach full potential across our assets and ensure sustainable production.

We also believe in the power of innovation to increase our ability to continually improve, and you'll be hearing more on this later from Alan Muchnik.

Let's now look at how we have successfully embedded our operating model across the Group. Our main milestones have been:

- Creating roles with clearly defined functions.
- Establishing an operational excellence standard, so that our teams have the means to lock in the value of improvements.
- Developing a portfolio of new initiatives which identify ways of reducing variability.
- And applying the Lean Management model.

Here, you can see examples that illustrate the success of our model. The first is the tons of ore stacked on the heaps at Antucoya, which you can see has improved by 7% over the past three years. The other is the effective utilization rate of trucks at Los Pelambres, which has improved by 3 percentage points since 2018. All these improvements are critical as collectively they keep our costs down and protect our margins. We see this continuous improvement as the release of embedded growth in our operations that we have the levers to unlock.

Our commitment to social value remains at the core of our business, and we seek to embed our strong ESG values across the business, including to our day-to-day operations. This approach defines the way we develop and how we manage our risk, and also impacts how we contribute to the economic and social growth of our neighbouring communities while addressing global challenges such as climate change.

A constructive and collaborative relationship with our communities is vital for our ability to create shared value. These relationships are based on the principles of dialogue, collaboration, traceability, excellence, and transparency.

We seek to grow together with the communities, as well as to contribute to their long-term social and economic development. At the same time, we take care to prevent, mitigate and compensate for any adverse impact our activities may cause.

Responsibility for social and community management lies with the General Manager of each operation.

Looking more closely at the environmental objectives at our operations, exploration activities and projects, we have a Sustainability Policy and an environmental management model that guides us and ensures we meet our objectives.

Our objectives are detailed on the slide and René Aguilar will go into more detail later, but from an operational standpoint, we are focused on:

- Ensuring compliance with environmental permits and legal requirements, and implementing all critical environmental controls.
- Ensuring zero operational events.
- Designing operational continuity and development projects from a socio-environmental perspective.

Responsibility for environmental matters lies with the General Manager of each mining operation and their environmental teams. Together, they are responsible for monitoring and reporting operational events, environmental risks and what is required to adhere to the environmental management model.

At each mine, we have clear emissions reduction plans and targets. At Pelambres, we also have water consumption targets. These emissions targets are KPIs for our teams, and are an integral part of the annual performance bonuses of management and staff.

In every aspect of what we do across all our operations, we seek to unlock the embedded growth in our business through our operating model, while remaining a reliable and responsible producer.

### **Los Pelambres – From pit to port (video)**

The Los Pelambres copper deposit was discovered in the 1920s and is one of the largest copper mines in the world. It is a sulphide deposit and is located in the Coquimbo region of central Chile, at the head of the Choapa river valley, 240 km northeast of Santiago. This is a region where mining coexists with agriculture, which is why our relationships and engagement with our communities are so important to us.

Participation, transparency, working together with local governments and developing social investment projects that are validated and important to the community are the principles that drive us. This relationship is as important as the projects that we finally complete. We have a team of highly trained and committed men and women working with us.

Taking care of their health and safety is our most important goal.

Los Pelambres was the first Antofagasta operation to use renewable energy, and by 2025, over 90% of the water needed to produce copper will be desalinated seawater or recirculated water.

The mine produces copper concentrate containing gold and silver and molybdenum concentrate by mining, milling and flotation. These concentrates are sold to our customers around the world. Mining has evolved rapidly in connecting its extractive business with its contribution to society.

The purpose of developing mining for a better future is what drives us as an organisation, and this mandate is at the heart of our actions. With the implementation of autonomous drills, we have improved the performance of these assets by 10%, improved utilisation by 15% and eliminated operator exposure to the process.

Metal contained in the ore is moved from the mine to the processing plant by haul trucks and then onto a series of conveyor belts.

The conveyor belts use the change in altitude to generate 25 MW of energy, which is used by the mine and transfer the ore to the processing plant.

Once at the plant, the ore is crushed and milled, and then it moves on to the flotation tanks with the copper floats to the top and is separated.

Concentrating from a 0.68% ore grade to a 30% copper concentrate grade. The current copper recovery rate at the concentrator plant is 90%. What we expect going forward is that we will be able to continue to increase copper recoveries benefitting from the new projects we are developing.

Today, the plant is processing 175,000 tonnes of ore a day. It will be expanding to its full permitted capacity of 190,000 tonnes a day in the second half of 2022. The first phase of the Expansion Project is already 65% completed and includes a desalinization plant to ensure Los Pelambres' future water supply.

The Los Pelambres Expansion project strengthens the ore processing capacities of the concentrator plant and includes a desalinated water supply system from the coast to the mountains.

Once the copper and the moly have been separated in the flotation tanks, the copper concentrates then travel through a 120 kilometres pipeline to the Punta Chungo port in the town of Los Vilos. As they head to the port, they travel through the Choapa Valley, where some of our neighbouring communities live and work.

The relationship model we have with the communities is called Somos Choapa. This is an initiative in which the local governments of Illapel Salamanca, Canela and Los Vilos, the communities and Los Pelambres all participate in with the objective of developing a portfolio of short, medium and long-term programmes that are focused on the sustainable development of the Choapa province.

About 20% of our suppliers are also located in the Coquimbo region.

And while the concentrates move towards the port, the tailings travel 60 kilometres through a separate system to the Mauro tailings dam, located in the valley of the Pupío stream. The water recirculated from the tailings, which collects on the surface of the dam, minimizes the operation's freshwater use, allowing us to achieve a recirculation rate of between 80% and 85%.

Once the concentrates arrive at the port, they are filtered and loaded onto ships and then set sail to our smelter customers in Asia.

### **The Centinela Mining District (video)**

Centinela's operations are located near Sierra Gorda in the Antofagasta region, at 2,300 meters above sea level in the Atacama Desert.

This mining district has a series of ore deposits that we have acquired, discovered and developed over the last twenty years, and which will be the source of much of Antofagasta's growth over the coming decades.

The Centinela Mining District has nearly 7 billion tonnes of mineral resources at 0.37%, of which 2.1 billion tonnes are reserves at 0.41%.

We are currently operating seven open pits: Esperanza, Esperanza Sur, Tesoro Central Encuentro Oxides, Tesoro Sur, Llano and Mirador. And in 2020, we produced 247,000 tonnes of copper in concentrate and cathodes.

Centinela uses sea water in its processes and was the first mining company in the world to use thickened tailings technology on a large scale. These special thickeners were commissioned in 2016 and on average recover 65% of water contained in the tailings, significantly more than can be achieved by conventional thickeners.

From the beginning of 2022, the operation will be wholly powered from renewable sources, significantly reducing its GHG emissions.

The Esperanza sulphide operation has been producing copper concentrates since 2011 and next year the concentrator will also start to receive ore from the Esperanza Sur pit. This will reduce the variability of the ore feed to the plant, which will help optimize its operation.

To the south of Esperanza Sur, at the Encuentro deposit, the oxides are being mined and processed in the SX-EW plant to produce copper cathodes.

If the second concentrator project is approved in 2022, it should be commissioning in 2025 and would be feed by ore from Esperanza Sur and Encuentro Sulphides. These two large sulphide deposits total about 4.1 billion tonnes of resources and will supply the two concentrator plants at Centinela for many years to come as well as supporting further expansions in the future.

### **Paula Aguirre, Deputy Vice President of Projects**

Hello, my name is Paula Aguirre, and I am the Deputy Leader of our project development team here at Antofagasta. Our team is made up of 200 people working across the project timeline from scoping all the way through to construction before we hand over to the operations team.

Within our team we have a core group of professionals who manage the projects and the engineering contractors appointed to build them. As the project progress we make sure to rotate members of the team to ensure the transfer of key skills so that we can build a body of knowledge across our entire projects' portfolio.

We are currently working on a number of projects, three of which are in the construction phase four in the feasibility study stage, and several others in earlier stages of development. And I'll go into this in a bit more detail shortly.

First, I'd like to explain our approach to project development at Antofagasta, which is designed to ensure we maintain a balanced portfolio with executing strategies tailored to the specifics of each project.

This approach includes a number of different review stages to ensure we'll properly evaluate the quality and return of each project throughout the process, and also identify if any changes of approach or updates are needed. And, you can see this stage set out here on this slide.

A good example of our approach is Centinela Second Concentrator project. So, let's look at that now.

Independent experts have carried out a series of reviews since the early stages of the project to ensure it is progressing successfully. These reviews have also identified updates for design optimization resulting from new innovation, which improved the business case of the project. For example, the automation currently being implemented at Centinela, which includes the introduction of autonomous trucks and the use of the new remote operating centre currently being built in Antofagasta.

The Centinela Second Concentrator project is currently in the detailed engineering stage, and the reviews at this stage help us as a team reduce the project's overall risks exposure by completing up to 65% of the detailed engineering plans. This increases the accuracy of the capital estimated by defining the construction and equipment costs, and include the process of obtaining the key permits. At the end of this stage, the business case assessment and risk profile will be updated and the project will be presented to the board to make a decision on the investment.

As you can see here, we have a pipeline of organic growth projects over the next four years and beyond, including those currently under construction, as well as those we expect to bring onstream over the coming years. Once completed, the projects currently under construction will contribute 80 to 90,000 tonnes to our Group production, and if the second concentrator project at Centinela is approved, Group production has the potential to grow to approximately 900,000 tonnes.



One of the most important aspects to managing the development of projects is being resilient and flexible enough to react to unexpected external events, like COVID-19. The pandemic put pressure on how we managed our teams, and we had to change the shift patterns and introduce social distancing measures to keep people safe and healthy while still advancing the projects. And the recovery has now put pressure on the reliability of our supply chain. But we have adapted and have been able to continue construction. And we will continue to adapt as necessary. Our current plans assume COVID restrictions will continue for the foreseeable future, but as a managed health risk due to high vaccination levels in Chile.

The Los Pelambres expansion project has two components to it: the expansion of the concentrator and the construction of a desalination plant. These are under separate contracts and we expect the desalination plant to be commissioned in the second half of 2022 and the concentrator plan by the year-end 2022.

The overall project is 65% complete with the total cost estimate of \$1.7 billion being under final review given the challenges experienced during this year of high absenteeism and worker rotation, as well as higher logistic costs.

At Esperanza Sur, the mining contractor will complete the pre-stripping in early 2022 and then, the operation teams will take over and mobilize the autonomous trucks.

At Zaldívar, the Chloride Leach project is well advanced and is expected to be completed in Q1 2022, when it will start ramping up the rate of copper recoveries as the new leaching process is applied.

Our largest project is the second concentrator at Centinela which I have already referred to. A Board decision on the project is expected during the second half of next year, and if approved, construction will start in 2023, with first production expected about two and a half to three years later. The project includes a High Pressure Grinding Roll for advanced crushing which uses significantly less energy and is lower cost than a traditional grinding mill. It will also need a separate water system to bring raw seawater from the coast, a concentrator circuit plus other associated infrastructure. The current capital estimate is approximate of \$2.7 billion.

We have a lot of exciting growth projects in development and in the pipeline, and with our rigorous approach to evaluation we can deliver successful projects to our operations team reliably and responsibly.

Moving further upstream to discuss more growth opportunities for Antofagasta, I would like to hand over to Andrónico Luksic, the Vice President of Development. Andrónico, over to you.

### **Andrónico Luksic L., Vice President of Development**

Hello, I'm Andrónico Luksic, Antofagasta's Vice President of Development, and I'm responsible for the company's exploration strategy.

As you have heard from Iván, we have a strong embedded growth profile with a huge mineral resource base of over 18 billion tonnes. And today, I'm going to talk to you about how our exploration strategy is helping unlock much of that for the company, ensuring the sustainable and long-term growth of Antofagasta.

In the 1980s and 1990s, exploration became an increasingly important part of the company's activities and expansion, with greenfield exploration extending beyond Chile and into the neighbouring countries such as Peru, Argentina and Bolivia. We also explored in Spain at this time. It was during this period that we acquired Los Pelambres, which then was just a small underground operation, and the company started to focus wholly on mining.

In the following years we broadened our exploration activities, at one stage conducting exploration in five continents. As you can see on the slide, in order to continue discovering resources to add to the Group's overall research base.

Since 2015, we have tightened our focus to a few carefully selected countries in the Americas, including Peru, the US, Canada and in particular Chile.

Our exploration strategy is centred on building a portfolio of high quality, long-term copper projects.

So, we focus on those targets that we believe can deliver at least a minimum of 50,000 tonnes of copper over a mine life of more than ten years, and preferably with by-products. We concentrate on those growth opportunities in stable and secure countries to reduce our risk exposure. As I just mentioned, the main prospective belts that satisfied this target criteria for us at the moment are in Chile, Peru, the US and Canada as you can see on the map here.

As we explore, our aim is to find those areas that can at least replace the mineral resources that are mined at our operations. We achieved this not just through focused exploration, but through acquisition as well, usually at the asset level and we are currently looking for M&A opportunities and early-stage copper projects to work on, particularly in South America.

Our strategic preference remains, however, to grow through discovery and land or resource consolidation. We have had some considerable success with this over the years in Chile, with two projects we're currently working on, and we will be ready to speak about this in the near future as we continue to consolidate the results from these targets.

Importantly, our strategic approach varies depending on the country and the requirements landscapes and infrastructure there. In Chile, our focus is on our predominantly brownfield exploration in the copper belts of the northern-central part of the country, particularly in areas with high prospectivity for porphyry copper, as well as Manto and Iron Ore Copper Gold-type deposits. During 2020, the early-stage programmes we have in Chile completed more than 40,000 meters of drilling, which was less than a year before, but this was due to the COVID-19 restrictions in place.

Searching for satellite deposits near our existing operations is also a key part of our exploration programme, and this approach was worked particularly well near our Centinela operation in the Centinela Mining District, and I'll go into that case study in more detail shortly.

In Peru, the US and Canada we concentrate on greenfield explorations.

We have exploration offices in Santiago, and also in Toronto and Lima, and each office manages the exploration programmes in the respective areas. In Chile and Peru, we lead our own exploration efforts, but elsewhere we prefer to enter into joint ventures with partners who hold interesting land positions and are able to bring local knowledge and experience.

Our exploration strategy has translated into success for us, as you can see here on this slide. Thanks to our successful resource development, most of which was the result of our exploration efforts, we have maintained the second highest rate of copper resource growth out of the major global copper producers, including in this study since 2003, with an annual rate of 9.5% per annum.

This success has also translated into tangible growth for Antofagasta as a business. Over this time, the Group's total mineral resource have grown from 23 to 87 million tonnes of copper. And this slide illustrates this gain has come primarily from organic growth.

I'd like now to focus on our Centinela Mining District, which we believe accurately captures the success of our exploration strategy over time.

We've built the district over several decades into a multi-deposit mining district containing nearly 7 billion tonnes of mineral resources.

Production started at El Tesoro in 2001, and this production grew with the opening of Esperanza in 2011, followed by the opening of the Encuentro Oxides pit a few years later. Early next year, we will complete the pre-stripping of Esperanza Sur pit, growing this district even further.

During this time, we were able to discover and then maintain high levels of copper resources to add to our portfolio. In 2020, we had 24 million tonnes of contained copper and 22 million ounces of gold.

In the last year our focus continued to be on identifying new high-quality oxide leach targets in the Centinela District. And due to COVID-19 restrictions in place on our various exploration sites, we concentrated on carrying out more desktop evaluations than in the year before so that we could generate new land acquisition opportunities to pursue as restrictions eased. These were done either by submitting exploration license applications or by entering into agreements with third parties.

In order to maintain our success and efforts in exploration, we have remained committed to reliable expenditure levels, even in low price cycles. The majority of expenditure is concentrated on our exploration work in Chile, with a smaller portion dedicated to exploration in other countries. Exploration expenditure has been similar since 2018, only decreased due to COVID restrictions in 2020 as our activities reduced.

Exploration is a long-term activity for us that has played a very important role in Antofagasta's evolution. It has enabled us to grow into the company we are today and maintain the second highest rate of copper resource growth out of the major global copper producers.

And it will be a major component of the company's future as we seek to unlock the wealth of embedded growth we have in our portfolio.

I'm incredibly lucky to be supported by very experienced geology and exploration teams, with deep knowledge of our prospecting regions and the ability to break exploration paradigms and discover new reserves.

We will continue to focus on highly prospective regions in the Americas, both through our own efforts and through joint ventures and opportunistic M&A that fit into our strategy and current targets. As I mentioned, we are working on some exciting projects which we will tell you more about in the coming future.

Until then, thank you very much for your time, and I will now hand over to René Aguilar and Alejandra Vial to talk to you about the Sustainability Strategy and how it is embedded in everything we do.

### **René Aguilar, Vice President of Corporate Affairs and Sustainability**

Hello. I am René Aguilar, and I am Antofagasta's Vice President of Corporate Affairs and Sustainability. Together with my colleague Alejandra Vial, we're going to take you through a presentation that focuses on our sustainability approach.

As you know, having listened to some of my colleagues already today, our business strategy at Antofagasta is structured around five pillars that focus our purpose around developing mining for a better future.

Sustainability is a core theme across our strategy, though in the frame of the five pillars, it is particularly important in regard to two of them. First, people and second safety and sustainability, which itself is a source of value creation and our culture at Antofagasta.

So at this point, it's a good idea to take a deeper look at how we consider Sustainability at Antofagasta.

Our approach is defined around being a reliable and responsible producer. This approach is critical to us and indeed, every business decision that we make.

And it's set within the context of our full commitment to mitigating climate change.

And indeed, for our comprehensive social agenda as well, which in our view, means that the communities in which we are part will benefit from our activities.

So to the detail for us, there are five key focus areas: people, our economic performance, our approach to environmental management, social development, and an unwavering commitment to transparency.

Let's take a look at each of these in turn.

When it comes to people, safety is a priority across our business and for all our people, for both our employees and contractors. And indeed, you have heard much about our leadership in this area earlier from Hernán.

For us, their well-being and development of our employees and contractors are crucial to our value proposition. As mining becomes an ever more sophisticated and technical industry, skill levels are increasing, too, and this presents new opportunities and, at times, challenges that we seek to mitigate to ensure the safety of our workforce.

We recognize the importance of diversity and equal opportunity, and so, we are continually focused on fostering environments that facilitate collaboration and both the professional and personal development of our workforce as individuals and also, collectively as teams.

During 2020, we made good progress on improving diversity in our workforce, with 50% of all new employees being women. So far this year, we are on track to achieve our goal, which is to double the number of women by 2022, to 17% from 2018.

Across our workforce, we provide ongoing skills training and also build competencies in new engineering and technological developments as mining evolves for the future.

We do this at all levels, though in my mind, one initiative that is stood out for me this year is the introduction of a pre apprentice level program that will encourage students to consider and prepare for apprentice level opportunities.

It's true that the pandemic has also allowed us to think in new ways, and indeed, that elements of mining in the future will be done from urban centres like our Remote Operations Centre in Antofagasta, as well as using different shift systems providing a balance of working from home and site.

We are also working to maximize the number of employees recruited locally, and that also includes a greater use of local suppliers.

Our workforce is predominantly Chilean nationals, but looking at our regions, in 2020, the mining division employed 40% of its workforce from the Antofagasta and Coquimbo regions, where our mining companies are located.

In the transport division, that percentage was higher in 2020, at close to 90%.

Our second pillar in our sustainability policy relates to economic performance, about which several other presenters are speaking about today. So, suffice it to say that whenever we are talking about sustainability, economic factors are a key consideration.

Moving to the third focus area, environmental management. It's an integral part of the way we do business.

We view this in a three-step approach.

First and foremost, prevent. Second, when this has not been possible, control. And of course, third, mitigate. We are constantly working to prevent, control, and mitigate our potential impacts, and always seek to use natural resources efficiently.

At this point, I want to hand over to Alejandra Vial, our environmental manager, so that she can tell you more about what we are doing at this level. Alejandra, please.

### **Alejandra Vial, Environment Manager**

Thanks, René. Let's get straight into the detail.

At an operating level, I like to consider our approach to environmental management as one of constant improvement. Our Environmental Management Model is based on leadership, reportability and risk management. It starts with committed leadership, individual programmes that we monitor, manage and report on, which in turn, inform us and allow us to make better decisions, manage our risks and enhance our programmes. But it starts, as always, with leadership.

Our board approved a Climate Change Strategy, the aim of which is to address the challenges of climate change with a multidisciplinary approach.

We are strengthening the Group's capacity to mitigate and adapt to climate change. And to achieve this, we have defined a strategy that includes five main areas.

The first is the development of climate change resilience.

We start with climate scenario modelling, gathering and generating the data and information for the evaluation of risk, opportunity, and reporting under national and international standards. And we use this modelling to adapt and involve our critical infrastructure and processes based on the physical, acute, and chronic risks that we have identified.

The second and the third are emission reduction, and the efficient use of resources.

We are managing our greenhouse gas emissions, converting our mining operation to use only renewable power, and I'll go into more detail on this shortly.

The fourth is management of the environment and biodiversity.

And finally, we recognize that we cannot work alone. We collaborate with other stakeholders to identify adaptation opportunities, but while also contributing to and working with others, to assess the anticipated impact of climate change and transition plans.

Water is a strategic resource. We operate as efficiently as possible, minimizing waste and optimizing productivity. Water usage is of particular importance in Chile, and it has always been a priority for us, and is becoming increasingly so with climate change.

So now we are going to show you a video about our water management strategy and our efforts to increase our water use efficiency.

### **Water (video)**

Water is essential for every aspect of our lives.

Without water, life and nature as we know it, would be impossible. It is also essential for the production of copper, and the production of copper is essential to deliver economic prosperity and the transition to a low carbon economy.

Yet climate change is bringing a greater risk to the availability of fresh water, especially in a water-stressed region, like Chile. So, our answer to this challenge must be to reduce our consumption of water and work closely with our communities and partners to do this, and ensure they benefit.

We recognized the need for a resilient water future in the 1990s, when we pioneered the use of raw seawater at our previously owned Michilla mine, which was our first operation in the Atacama Desert, the driest desert in the world.

Now in 2021, 96% of the water Antucoya uses is seawater, and Centinela uses 86%. Not only does Centinela stand out worldwide in terms of using raw seawater, but it was also the first operation in the world to use thickened tailings technology on a large scale. This technology extracts most of the water from the tailings to produce a paste that is easily stackable and allows a higher percentage of the water to be recirculated back to the processing plant. This recirculation rate is significantly higher than the industry average.

We are always looking to improve water use efficiency, to lower our ultimate water use, and across all four of our operations, we can boast an average recirculation rate of over 80%.

Los Pelambres in central Chile is our biggest mining operation, and while it is not in the desert, it is high up in the Andes, where mining and agriculture coexist. This region has been suffering very difficult drought conditions for the past twelve years as a result of climate change, with the last year being particularly tough.

Six years ago, Antofagasta took the decision to advance the research, design, and the permits needed to build a desalination plant for Los Pelambres near the Port of Los Vilos. This desalination plant is vital for the expansion of the mine and is now 66% complete, and will be commissioned in the second half of 2022. We are proud to say that Los Pelambres will be the first mine in central Chile to use desalinated seawater, and we are currently progressing with the necessary permits to double the capacity of the plant so that by 2025, more than 90% of the water it needs will be a combination of desalinated seawater and reused or recycled water. The fresh water that we don't use as a result of moving down the desalination route will be available for our neighbouring communities to help them cope with the drought.

We are working intensively with our communities and partners to help them manage the supply of drinking water in rural areas and the water that small and medium sized farmers need for the irrigation of crops and livestock.

Our partnerships extend further to leading universities, study centres and state agencies where we work on finding ways to improve our water use efficiency for research and development projects.

At Zaldívar, we only use continental water and have applied for an extension of our water permit from 2025 to 2031, which is environmentally sustainable. Zaldívar's mine life extends to 2036, and looking beyond this date, fieldwork and studies are underway on further extending the life of the mine by exploiting the primary sulphide ore body that lies below the current ore reserves. Water planning beyond the extension to 2031 is being evaluated as part of these studies.

We know that water is essential for every aspect of our lives, and we expect that by 2025, some 90% of the water used by our mining operations will be seawater and reused or recycled water. Our lives and our world depend on it.

## **Alejandra Vial, Environment Manager**

In 2018, we set a goal of reducing our GHG emissions by 300,000 tonnes of CO2 equivalent by 2022. By the end of 2020, we had achieved the goal, with emission reduced by over 580,000 tonnes. So earlier this year, we created a new target to reduce our scope 1 and 2 emissions by a further 30%, or 730,000 tonnes, by 2025. And also, in the long term we have committed to being carbon neutral by 2050 at the latest, in line with Chile's own targets.

Regarding scope 3, we will continue to measure and report it, and we are working on setting a reduction target.

We are managing the environment and biodiversity near our operations, not only to reduce our impact, but in some areas to enhance it by managing especial nature sanctuaries.

Actions speak louder than words, and so, I want to show you on this slide, four examples of biodiversity programs that we have established.

At Santa Inés, we are protecting a relict forest of olivillo, which survives due to specific climatic conditions in this semi-desert area.

At Monte Aranda, there are Chilean palms, a threatened endemic species. And Lake Conchalí is a coastal wetland with a high diversity of bird species, and is the first private RAMSAR site in the country.

And, in Quebrada Llau-Llau, there is a sclerophyllous forest, which has a rich biodiversity.

Let me now pass you back to René.

## **René Aguilar, Vice President of Corporate Affairs and Sustainability**

Thank you, Alejandra, for the detailed look at our sustainability work. Let me take the baton back now, as I want to spend the remainder of this presentation on social value and our transparency and governance framework.

The Social Value Model that we have developed seeks to generate economic, social and human capital in our direct areas of influence.

We initiate effective, participatory and transparent dialogue processes with our different stakeholders in the regions where we operate, seeking opportunities to jointly address any issues and generate a shared vision of development.

At the centre of our strategy is our belief that social investment is meaningful, and that we engage with stakeholders transparently and collaboratively, not just our employees, our local communities, but with our suppliers, government and its agencies too.

Earlier, Alejandra mentioned that initiatives that we are involved with and how we ally ourselves at the regional and national level. On this slide, there are many examples of such organizations from our social management perspective, where we are successfully engaging with our communities and other stakeholders seeking positive outcomes for all.

We also make investments in communities across a range of projects covering, for example, education, culture, infrastructure, economic development and health.

In 2020, we invested US \$46 million in social projects.

Measuring the impact of our social investment is vital, as is being cognizant of changes in the community's perception over time. We measure this impact to evaluate the contribution to people's well-being and, if necessary, we adjust our programs and projects.

And finally, before we finish our presentation, I want to touch on our commitment to transparency in what we do here at Antofagasta.

We believe in the importance of developing effective, responsible and transparent institutions, and we have the guidelines and internal regulations to ensure we conduct our business in a responsible manner and behave in an honest, transparent and respectful way, with full regard to Human Rights, and to all laws and regulations.

We are proud of the external accreditations that we have received, and they are important to us to show that our work is making a difference. These include the Copper Mark, both Centinela and Zaldívar have achieved, and Los Pelambres and Antucoya have begun the accreditation process. We are also aligned with the ICMM Principles and UN Sustainable Development Goals and are reporting against the TCFD recommendations.

So, we have covered a lot of ground today on our sustainability work and ambitions, providing a fuller appreciation of the extraordinary lengths that we go at Antofagasta on sustainability and social management issues, to ensure we remain reliable, and responsible producers at all our operations.

Now I invite you to watch a video of our transport division where Katharina is going to tell us about its history, challenges and how the railway plays an important role for the mining industry

### **Transport Division (video)**

At FCAB, we are leaders in transporting vital cargo and we are a strategic link in the mining industry, a key industry in the Chilean economy.

With more than 700 kilometres of railway our locomotives and wagons transport copper cathodes and concentrates, sulphuric acid and other mineral concentrates through our domestic and international network. that crosses the driest desert in the world, the Atacama Desert.

We have access to 6 port terminals in Antofagasta and Mejillones. Internationally, we transport mineral concentrates from Bolivia, and northern Argentina.

In 2021, we expect to transport 6.8 million tonnes of cargo using our trains and trucks.

Our business has seen a lot of change since we were established in the 1880's we continue to adapt to change as we grow the business in a safer, more effective and sustainable way. That is why we are currently developing technologies that will allow us to incorporate the use of green hydrogen. Using green hydrogen will allow us to reduce the use of diesel and thus lower our overall CO2 emissions.

We are working hard on increasing the participation of women in FCAB not only in administrative and executive roles, but also in railway operator and maintenance roles.

FCAB continues to contribute to the social development of the Antofagasta region through important projects such as our plan to restore the Valdivia railway station and our railway yard conversion plan that seeks to gradually revitalise 48 hectares of railway yards, transforming them into an urban area for community use. We hope these projects will contribute to the city's development with the company encouraging the active participation of the local community via a socially responsible plan.



We have a strong commitment to the region where we have operated for so long. Together with our communities we have seen new businesses start up and thrive, new jobs created and a better way of life for us all. We know that this relationship will bring communities not only economic growth but also improved quality of life.

This is why we will continue to foster mutual trust with our communities and to carry what is most valuable in Chile's northern region.

## **Andrés Velasco Interview**

### **Interviewer**

Hello. I'm joined here in London by Andrés Velasco, a former Minister of Finance in Chile, from 2006 to 2010. During his tenure, he was recognized as Latin America's Finance Minister of the Year by several international publications. Andrés is an economist, he was a professor at NYU, Harvard and Columbia. He's currently Dean of the School of Public Policy at the London School of Economics. So welcome, Dr. Velasco.

### **Andrés Velasco**

Thank you. Pleasure.

### **Interviewer:**

So, I'm going to start with a big picture question about the political situation in Chile. We've just had the results of the congressional elections, which were held recently. The presidential elections were held on the same day, and the outcome of that is we've now got two candidates and it's a very close race between the far-left candidate Gabriel Boric and the far-right candidate José Antonio Kast. So what's your take on the political situation?

### **Andrés Velasco**

Chile used to be the country in Latin America with boring politics. We were the outlier in the continent. No more. Chile today is having rather rocky politics. Some of the changes are for the better, some of the change may not be for the better, I think that remains to be seen. But clearly the situation is evolving very, very quickly and politics in Chile in the next five years will not be like politics in Chile in the past.

What's changed? First of all, the political parties, the political leaders and the political arrangements that governed Chile for the last 25 to 30 years, through what I think was a period of prosperity and progress, those people, those parties, today are not in fashion, to put it mildly. When we look at polls, political parties, Congress, the government, the court system, business leaders, union leaders, nobody has 10% approval in the polls. Second thing that happened is that Chile, which has been a fairly peaceful country, had an explosion of both street unrest and political violence in the last quarter of 2019. And that violence sort of ended as a result of the pandemic, but it revealed a country that was deeply fractured, where a lot of people were not happy. And a minority, but a very active minority was willing to engage in political violence to attain political change. And that's new. Of course, Chile had a very bloody and nasty dictatorship under General Pinochet in the seventies and eighties. But since the nineties, Chile has been a country where politics was done the peaceful way, not necessarily the violent way. Fortunately, that street unrest was channelled politically into a process of writing a new Constitution, and a great deal of that sort of change, and frustration of that period has been usefully, I think, channelled in that respect, and the Constitution is being written as we speak. I think it's good news in the sense that when you have political institutions which have lost a great deal of legitimacy, it is not a bad idea to rewrite the script and start again. But of course, you know, it remains to be seen what the new Constitution will bring.

### **Interviewer**

So given it remains to be seen, and your experience in the political situation, can you give a sense from your judgment about what we might expect to see in the Constitution?

### **Andrés Velasco**

I think it is easy to be misled by a lot of the noise and a lot of the symbolism around the first two or three months of the Convention. Naturally, it is a new body. A lot of the people who were elected to the Convention are not conventional, and clearly, in a country which is mostly centrist, the left is probably overrepresented at the Convention. So, the first couple of months of the Convention led a lot of people to be worried about exactly what kind of a product will come out. This is bad news. It's also a bit of good news. I think eventually, and it's happening already, a group of people are beginning to think and address the fundamental issue. The fundamental issue is that we've got to rewrite the rules of politics.

Chile has two or three big choices to make. Will it remain a presidential political regime or will it move to a parliamentary system like the UK That's sort of one big issue. Secondly, will we remain a proportional electoral system like much of continental Europe, Or are we going to move closer to something like the Westminster system or the American system of the-first-past-the-post. And last, but not least, Chile has been a very centralized country where Santiago wielded a lot of power, and the provinces did not. And I think... I could be accused of being naive here, but I want to be optimistic. I think that a consensus is gradually emerging about the sort of building blocks of that. And, in that sense, given the current degree of distrust of political institutions in Chile, having a rewriting of that is probably good news. Now what else will the Constitution bring, that, you know, what will be the regime concerning the environment, or concerning business, or concerning the central bank or fiscal rules? The honest answer is, a lot of that is at this point, very much up in the air.

### **Interviewer**

So, what is the balance between the importance of the constitutional changes versus the impact of whichever presidential candidate is elected?

### **Andrés Velasco**

In the long run, the real big game being played today is the Constitution. You know, the next president will be around for four years, maybe even less, because one of the things the Convention could do is cut short the period and say, we begin with a new system, say, within two years. And of course, when you rewrite the rules of the political game, you know, serious countries don't change the Constitution every two weeks. This Constitution will be around for 30, 40, maybe 100 years. So, I think that is the big show in town.

### **Interviewer**

And what's your sense of timing of when more details of that are going to emerge, given that there's a substantive programme of reform?

### **Andrés Velasco**

Pretty, pretty quickly, actually. The Convention, you know, the Convention was brought into being by a constitutional reform, so the timing and procedures are fairly well set out. The Convention is supposed to produce a draft within nine months, but it can ask for an extension. So, I think it'll probably be about a year. So, sometime around the middle of next year, maybe earlier, we will have a pretty good sense of what that constitution might look like.

Of course, you will have committees within the Convention writing drafts, then whatever emerges from the committees has to go to the general body. And then there's a referendum, a national referendum, which has to say thumbs up or thumbs down to the text. I think it's pretty likely that whatever comes out of the Convention will be

approved by the referendum. So, the real, the real struggle, if you want to put it that way, the real conversation will be within the Convention, probably sometime between, say, late February 2022 and the middle of 2022.

### **Interviewer**

So actually, it sounds like a very, you know, despite the sort of some of the news around, it's a very constructive and detailed process which is underway.

### **Andrés Velasco**

The way by which we got here was anything but, you know, easy. The Constitution, I mean, the reform to bring this Convention into being was arrived at 3:00 a.m. in November 2019, when Santiago and the country were being rocked by violent protests so that the process was difficult. But as I say, when you have that degree of discontent, that degree of mobilization, when you have a government that is essentially a spectator, because the government lost political initiative, the question is, will the outcome be violent, which would have been really terrible or will the outcome be institutional? The good news is that Chile chose the institutional route. The open question is when you put 155 people, many of whom don't have a lot of political experience, in a room and say, write a new Constitution, the outcome could be great, or the outcome could be not so good. If you look at countries in Latin America that wrote brand new constitutions over the last, say, quarter century. Some countries, Colombia and Brazil in particular, came up with workable arrangements. They are not perfect, they have a number of shortcomings, but they were workable. Other countries like Bolivia, like Ecuador, wrote constitutions that were basically meant to keep the guy you know, who happened to be in power then, in power forever. So those are not particularly, you know, democratic constitution writing exercises. I think the one in Chile is more like Colombia and Brazil, less like clearly Bolivia or Ecuador. But still, you know, the job of writing a Constitution is a tough one. You know, the UK doesn't have one. You know, it's- You know, Britons knows how tough it is, you know, they've stayed away from the job.

### **Interviewer**

I'm going to move on to another piece of drafting, if I may, which is concerning the mining royalty bill. And so, in May, the lower house of Congress, passed a new mining bill, which would tax mining revenues at a sliding rate linked to the copper price. And obviously at the higher rates at very high levels. And since then, the Senate's been reviewing it and is expected to make some changes to moderate that. So how do you expect this bill to progress? What's your take on sort of the latest news around it? And given that we're in a transition period, how should we be thinking about this?

### **Andrés Velasco**

I think it's pretty likely that whoever becomes president in Chile beginning in March of next year will want to revisit the issue of mining royalties.

Now, will the current bill become law? I think chances are, no, it will not. To understand the current bill, you have to understand two things. First of all, it was put forward by a bunch of members of Congress at the height of the primary election season, a few months ago, so really it is a political bill, and pretty much anybody who knows anything about the subject understands that from a technical point of view, is not a very sound bill. It is a fairly extreme bill. It is very unlikely to see the light of day. Secondly, and this is a point that is not often appreciated outside Chile, the bill is completely unconstitutional, because the Chilean constitution in force today gives the executive power the sole right to introduce bills having to do with taxation. So, the only way in which this bill could, in fact, become the law of the land is if the government actually sponsored it, and the chances that the current Conservative administration would sponsor the bill between now and the 11th of March when it leaves office, are basically zero. So, the current bill is very, very unlikely to become the law of the land. But, come what may, you know, in March, other bills are likely to be presented, and if Boric becomes the president of Chile, which is, you

know, if you believe polls more likely than Kast or even though it's a very close race, it is quite likely that the Boric team will submit a new bill, which I think will be less extreme than the current bill.

### **Interviewer**

And just to be clear on timing, how soon do you think some bill will come back in some new drafted form?

### **Andrés Velasco**

You know, the installation of a new government is never an easy or quick affair. So, you know, the presidential period in Chile begins, as I said on the 11th of March. I would expect the new administration, particularly if Boric is president, to send a tax reform to Congress, say within the first three months, not the first day, but not much after that.

### **Interviewer**

And, in terms of the impact on the industry, so yes, the expectation is that something will change.

### **Andrés Velasco**

Yes.

### **Interviewer**

And unlikely to be as severe as the currently drafted bill, just to summarize your position.

### **Andrés Velasco**

I have spoken to a number of economists and a number of tax lawyers, you know, who are the local experts on the subject. I have yet to meet anyone who thinks that the bill, as is, makes any sense. The rates are too high. It is completely out of line with international standards. Again, if you look at countries, that would be reasonable standards of comparison, whether that country may be Canada or whether a country, maybe Peru or Australia in particular, which is a country that a lot of Chileans look to because, you know, big mining power, you know, BHP, which is a big Australian company, is in Chile, there are British companies in Chile, there are American companies in Chile and of course, Antofagasta is a big player in Chile. So, compared to what you see in the international arena, that bill is completely out of line. So that bill, as is, will probably never really become the law of the land. Will there be a change? Will the issue of royalties be revisited by Congress in the future? I think, particularly if Boric is president, the answer is yes.

### **Interviewer**

Let us look more generally at sort of as an economist, you've written a lot about sort of economic policy incentives, which have an impact on people's livelihoods and on their lives. As you look at an industry like the mining sector, how would you understand the impact that the mining industry can have to improve livelihoods and indeed has, obviously has a significant economic impact, particularly in Chile?

### **Andrés Velasco**

Chile is a mining country. You know, a lot of the national symbolism is all about the countryside, but a lot of the GDP and a lot of the employment directly or indirectly is generated by mining. And as a result, you know, mining will remain a very central force in Chilean economics and in Chilean politics. And I don't think any government, regardless of political preferences, would be likely to neglect the mining industry or would be likely to do something that sort of brings it to a halt. I mean, that would be really shooting yourself, not in the foot, but in the head. Having said that, I think the conversation will be, as we mentioned earlier, you know, are environmental standards or, you know, taxation standards comparable to those that you might observe in other countries. And clearly, now the

world has shifted to the left. Chile has shifted to some extent to the left. So, you know, what is expected to say in terms of the environment, given global warming, given, you know, big, big issues with pollution of air and water in Chile, clearly standards will be more demanding. I think that's happening everywhere, it's happening in the world, but that does not mean that I anticipate some sort of a radical regime that would sort of bring the industry or the sector to a screeching halt.

### **Interviewer**

So, I just want to come back to the question of this sort of congressional makeup. We obviously know what that looks like right now. What's your take about what that means or what it looks like?

### **Andrés Velasco**

The conventional wisdom after the protest, after the big marches was that the Chilean electorate had moved radically to the left. But that was more of a conjecture than a real solid finding, and I think the election just a few weeks ago, brought some news. I think it revealed that the electorate is split, and that there's no one overwhelming political force that dominates Congress, that we're going to have a Congress that is, on the one hand, more polarized than any Congress before, meaning the centre is weaker, and parties on the far right and the far left are stronger. But it is not a makeup that tilts very heavily one way or the other way. In the lower house, which has 155 members, the Cámara de Diputados, if you add up everybody who looks vaguely leftist, they have a slight majority, but not a very large majority. And in addition, that is not one block because you have in that general area, Christian Democrats who are quite centrist, Social Democrats, Socialists, Communists and then an array of left-wing parties, some of which are somewhat centrist, some of which are more extreme. On the right, you also have a panoply of parties, two or three larger ones, and a bunch of smaller ones. But this Congress in particular is unlike the previous ones in that are a lot more independents, and a lot more new parties, and even the old parties don't have a lot of party discipline. So, you know, the sort of simple mathematics of saying block A has got so many, and block B has got so many, won't quite work. But the basic message is in the lower house, a slight majority for the left and the centre left. In the Senate, there is a 50/50 split, much like the American Senate. Again, this may not be solid blocks. People may break away for one vote or another, the parties don't have a lot of party discipline, but if you do the basic arithmetic, it looks like a 50/50 split.

### **Interviewer**

Great, and let's layer on top the presidential elections. So we'll know the results soon. So, it's difficult to ask you this ahead of elections, but I'm going to push you. How should we understand the race at the moment, which is between two fairly extreme candidates on the left and the right? And what are the implications of whoever wins, given that mix you've just described about the slightly sort of mixed political environment on the congressional side?

### **Andrés Velasco**

The first thing to understand is that this is the first time since the return of democracy to Chile in 1990 that the main centre left block and the main centre right block have not made it to the second round. So, this election is unlike any other election. Secondly, whoever wins because of the mathematics we were just describing, will not have a congressional majority. So, there's been a lot of discussion of what this platform and program says, what the other one says. Chances are that regardless of who wins, much of that set of proposals will never become law simply because no one really has a congressional majority. Thirdly, if you believe polls, this remains a completely open election. Chilean law, strangely, we may make changes in the future, does not allow for the publication of opinion polls during the last two weeks, so the last polls came out over the weekend, and they show candidate Boric from the Frente Amplio on the far left, slightly ahead, comfortably ahead in some polls, slightly ahead in some others. And, the big question, of course, the two big questions that make those polls not particularly reliable, I'm not saying

this early that Kast will win, far from it, but because this election is unlike other elections, we have no idea how many people will vote. That's the first question, Chile has voluntary voting. And of course, the fact that, you know, we have a new variant of the virus circulating may mean, we don't know, that older voters may stay home, younger voters may come out. It is summer, on the other hand, so it's not quite as scary. Maybe everybody will vote. And secondly, it is very unclear what the supporters of some of the other candidates who came in third, fourth and fifth will do. The guy who came in third does not belong to either one of the main political blocks, either. He's a strange populist who actually campaigned from the US, because he has a number of lawsuits pending in Chile. He captured 13% of the vote. And the truth is, nobody has any idea where his votes are going. The expectation is that the bulk of the vote to the centre right, will go to Kast. You know, most of the votes of the centre left will go to Boric. But even that is an open question. And as a result, the polls today are saying that the most likely president of Chile is Boric. But the election remains very, very close.

### **Interviewer**

Just a quick follow up on that. You mentioned the polls. Obviously, you're making prediction. You obviously speak to a lot of people and your former colleagues and the sort of political sphere in Chile as well. What are they saying about the vote? Just to have that inside intelligence.

### **Andrés Velasco**

I talk to people all the time, and I am afraid that all I can report is that most people are saying the election is too close to call. You know, if most polls had to put their money on anyone, they would probably put the money on Boric, but they would immediately add well, we're not quite sure. Again, because, sorry to repeat this, the big parties are not in play, so this is much more volatile, and secondly, because of voluntary voting, you could have 40% of the population voting, 50 or 60%. Nobody has any idea. And that means that the composition of the number of people who will go to vote, will they be old? Will they be young? Will they be left leaning, right leaning? That remains very much of an open question.

### **Interviewer:**

Great. I'm just going to come to a broader question about the investment landscape, as a place to invest in Chile at the moment. I just want to get your judgment about some of the risks and opportunities that you see ahead.

### **Andrés Velasco**

Chile was, again, the boring country in which investment was very safe. Chile is no longer a boring country, So, there are many more open questions and many things are changing. Everybody knows that, say, bond yields have gone up. You know, the premium associated with investing in Chile, whether buying a bond or buying a company has gone up, so Chile is a riskier country. Or at least that's the market perception. So, I think clearly the quality of politics in Chile deteriorated over the last decade. There's no question about that. And therefore, the quality of legislation that is coming through Parliament, the ability of incoming governments to turn their programs into law has also declined. Fragmentation of politics is much, much larger. Demagogues of the right and the left are everywhere in Parliament. But again, that's not unique for Chile, right? You see that in the US or the UK or Brazil or Mexico, or so many other places. The good news, I think, is that this all could have gone terribly wrong if violence had continued and if the outcome had not been institutional. There is some chance, it is not a certainty, but there is a reasonable chance that the Constitution will have - again, it's not clear what the Constitution will say on economic issues, that remains an open question. Will the Constitution have reasonable rules of the game regarding politics, political system, electoral system, etc.? We're not sure yet, but there's a consensus beginning to emerge that looks reasonable. If that is so, then maybe in five years we will look back and say that was a difficult period, that was a very unstable period, but we pulled through. Am I sure that will happen? No, but I think there is a bit of a ray of light there.

## **Interviewer**

I'm going to leave that with a hint of optimism. So, Dr. Velasco, thank you very much for our interesting conversation today.

## **Andrés Velasco**

Thank you very much. My pleasure.

## **Mauricio Ortiz, Chief Executive Officer**

Hello. I'm Mauricio Ortiz and I'm the CFO of Antofagasta. I have the pleasure of presenting our financial strategy and how we work to maintain a strong balance sheet and generate liquidity that can support our growth plans, all of which underpin our commitment to long term sustainable value creation, and shareholder returns.

Over the years, we have built a consistent track record to create sustainable value and shareholder returns over the long term. We take business decision with a long-term view, and this is based on three fundamental objectives.

The first, a rigorous focus on our operating costs. I will speak about costs in further detail later, but I would like to emphasize that this is something that we focus on regardless of the copper price.

Secondly, our cost approach targets to manage our EBITDA. Being in a cyclical business like ours, we predict our EBITDA margins in all price environments. Our Cost and Competitiveness Program, and our operating excellence are central.

Lastly, capital returns, we have a minimum commitment of 35% of underlying net earnings that we pay out as a dividend. And any excess of cash that we define in our capital allocation model, is allocated either to fund growth and development opportunities, or returned to shareholders as dividends in excess of this 35%.

At Antofagasta, our business strategy is structured around five pillars, each defined with short and medium-term goals that enable us to achieve our purpose of developing mining for a better future.

When it comes to competitiveness, our focus is to achieve productivity gains through cost control and streamlining our processes, that will enable and deliver efficiencies and savings.

It is important to us that our operating model accommodates the variability that is inherent in our production plans. We do this with a strong focus on operating excellence. Our ongoing success in this area is evident with our Cost and Competitiveness Program, our CCP, which continues to generate significant efficiencies and savings.

As you have heard from Iván, we have a large copper inventory to fuel future growth. And from my perspective, as CFO, it is my responsibility to ensure that we have the appropriate available capital, at the lowest cost achievable, that will facilitate that growth, and allow us to maintain our leadership position for the long term.

Let's now take a look in more detail at our cost base. I believe this is the starting point from which we create sustainable value at our operations and projects, and shareholder returns over the long term.

Approximately 40% of our cost base is related to input prices. We have intentionally linked our supply prices of steel materials, explosives, fossil fuel-based energy and other inputs, to the respective underlying commodity, to minimize the impact on our margins. However, as part of our CCP, we have been innovative in using competitive advantages with some of our input prices. Energy in Chile is a great example. As we have been negotiating down our energy costs, by putting in place lower cost renewable energy contracts.

Next are our Chilean peso-based costs, which represent 40 to 45% of the total. Examples of these are wages, maintenance and other services. Our technology and organizational effectiveness initiatives are fundamental for the long term. In the short run, inflation associated with this group of costs is mitigated by changes in the Chilean peso exchange rate.

The last group of costs are spares and imported materials. Here we are working to create partnerships with existing and new suppliers, so we can innovate together and improve their products' efficiency.

All our cost optimization initiatives converge in our CCP. During the first half of the year, the CCP delivered savings of US \$43 million, which is equivalent to five cents per pound, resulting in a net cash cost of US \$1.14 per pound, placing us in the second quartile of the industry.

I am pleased to say that in 2021, we will again deliver according to the plan, and we are on track to achieving our target of US \$100 million savings this year.

Our commitment to maintain production at a competitive cost through this cycle is paramount.

Our Costs and Competitiveness Programme is designed to optimize our cost base by ensuring cost discipline and structural savings across our operations. Cumulative savings are now over US\$900 million, and we continue to seek to make cost savings to fully optimize our margins.

Much of the progress we have made in recent years reflects not only our focus on costs, but also, the culture of innovation that Antofagasta is building within the company.

Let me share a few examples so, I can bring this to life.

In Organizational Effectiveness, a recent example is the simplification of our corporate functions, which produce annual savings of approximately US\$30 million. As technology and digitalization enable us, we are further optimizing functions and challenging the way we run the mine sites as well.

A second area of focus is around how we continually strive to optimize our operations and run our mines and plants to their full potential.

One good example is how since late 2020, we have been running the Centinela concentrator beyond design capacity through machine learning and the 'milling feed reconfiguration.' This improvement will benefit Centinela for the rest of its operating life.

And finally, Goods and Services Productivity. Essentially, procurement.

A good example here is our recent energy negotiation at Zaldívar, which shaved off US\$15 million from our annual energy costs. We have also renegotiated energy supply contracts at all our other operations to decarbonize our supply and take advantage of the lower price of renewable energy in Chile.

In the face of the ever increasing cost pressures due to natural grade decline, at Antofagasta we are taking a proactive lead in cost savings and operating improvements, and this is something we will never stop doing, as it is central to our strategy.

For Antofagasta, our capital allocation framework is fundamental to all our financial decisions.

Everything is underpinned by our strong operating cash flow. Here is where our Cost and Competitiveness Programme, and our capital allocation model are intimately linked, and I would like to highlight this. We don't allocate capital to anything that the Cost and Competitiveness Programme hasn't already optimized.



After this, we invest through the cycle in ourselves, through sustaining capital programmes that will replace old plants and equipment. We also invest in mine development, where we open up different phases of the mine to expose the mineral to be mined later.

Next, we fulfil our minimum commitment to our shareholders by paying 35% of our underlying net earnings as dividends.

With our excess cashflows we consider and assess our organic growth projects, which must be in line with our stringent return and risk criteria. If nothing fits our criteria, we return this excess cash to our shareholders, as part of our dividend policy.

Central to our way of mining is to deliver on the value we have committed. Therefore, managing the climate change effects on our portfolio has become an important aspect of this assessment. We have taken many steps in this regard, which I will explain shortly but I want to highlight that at Antofagasta we are putting Value Optimization and Climate Resiliency together at the centre of our financial decisions. We have introduced an internal carbon price and are evaluating the impact of climate change variables on the life of our mines.

This helps us to be better prepared and resilient for the challenges we will face in the future.

Now let's look at this model in action. On this slide, you can see we have been following this capital allocation model for some years. We have generated strong operating cash flows, which will allow us to invest while leaving plenty of capital to allocate to our growth projects, and also reward our shareholders.

You can see here that through the cycle, we have delivered consistent and compelling shareholder value.

For the last five years, our pay-out ratio has averaged above 65% while always maintaining a strong balance sheet.

For next year, capital expenditure is expected to be at similar levels as 2021, and guidance will be finalised when the review of the Los Pelambres expansion project has been completed.

Let me describe how we are working within the business to promote and develop our climate resilience, both by adapting our business for climate change, and by mitigating the effects of climate change.

At Los Pelambres we have been facing acute water shortages for some time, which has also impacted our neighbouring communities. Additionally, our climate models showed that this condition would only deteriorate over the coming years. We had to take action and adapt to the reality of climate change. In 2018, we sanctioned the investment in a 400 litre per second desalination plant, which is currently under construction, and we expect that it will come online in the second half of next year.

We have also had to be proactive in mitigating the effects of climate change and are in the process of switching all our mining operations to run wholly on renewable energy, which will not only significantly reduce our emissions but will reduce our costs as well.

We have also introduced an internal carbon price, which we will use in the assessment of projects and in the day-to-day procurement process.

Our clear capital allocation strategy has given us the discipline and agility to assess new decision factors, always targeting to achieve sustainable value and shareholder returns over the long term.

In summary, I have taken you through how at Antofagasta we seek to manage our cost base, but I also showed how much we focus on this, and how this performance and our long-term investment strategies have enabled us to maintain a strong balance sheet. Costs per pound is our key financial KPI, and it reflects the success of all our cost

control and productivity improvement activities in an industry where control of the revenue line is driven largely by external factors.

We also looked at our evolving capital allocation framework, where we have explicitly introduced climate change considerations. I believe that we are careful, measured, and disciplined in our approach to how we manage our finances and generate shareholder returns.

Looking to the future, we are still 100% focused on creating sustainable value and shareholder returns over the long term. We will do this in the same way as we have ensured our successful performance over the last few years.

We will manage our operating cashflows by continuing to focus on our costs. We will protect our margins through our Cost and Competitiveness Programme, and we will return excess capital to our shareholders, consistent with our tradition of being a value and income company.

Thank you. I will now hand over to Alan Muchnik, who will tell you about our innovation activities.

### **Alan Muchnik, Vice President of Strategy and Innovation**

Hello, my name is Alan Muchnik, and I am Antofagasta's Vice President of Strategy and Innovation. It's a pleasure to be speaking with you all today while I guide you through our innovation strategy, recent successes and future plans. I will also tell you about our new primary leach technology.

As you know, Antofagasta's central purpose is developing mining for a better future. And innovation sits at the heart of this as one of our strategic pillars. Our efforts around innovation are centred on how we create value across the business.

With innovation, we have two objectives or end goals, that we want to achieve.

- One, to improve our operations' continuity and realize their full potential.
- And two, to enable and develop growth conditions, looking for transformation and business development.

Our journey to achieving these goals has been clearly established. It is purpose driven. We are concentrating on solutions and the differences they will create.

Moving on, we can go into more detail of what these end goals look like, in terms of tangible solutions and goals, and how they make up our vision for the "Operation of the Future".

Taking the first objective, we seek to use our comprehensive innovation process to devise new ways to operate best in class digital operations, so that we can sustain our competitive position across our portfolio, while we take advantage of the opportunities from adopting new technologies, from planning, to the mine, to the plant and beyond. This includes dynamic and intelligent planning, new ways of working on digital platforms, and automated or autonomous operations at the mine and plant, using remote operations and data-driven decision making.

A few examples for you, some of which I have touched on earlier.

We are currently building integrated Remote Operation Centres for Centinela and Pelambres, which is one of our digital roadmap programmes and part of our drive to smart operations that we expect will deliver improved safety, savings and productivity gains by targeting global performance optimisation.

We expect the Centinela IROC to become the platform for future regional operations integration, and hope this will also boost local innovation and employment in the city of Antofagasta.

One of the main drivers of digitalisation is data, which through analytics can be converted into information, decisions and actions to improve mining operations. This has proven to be a source of competitive advantage in other industries and opens significant value opportunities to our business.

A few examples of this are:

- We increased our metal recovery by anticipating the mineral characteristics of the ore that feeds the flotation circuit using a decision support system based on machine learning and optimisation methods. This solution is already in operation on two flotation lines at Pelambres and we are extending it to the remaining lines, as well as to Centinela. We have also increased heap leach recoveries in our hydrometallurgical plants by applying data analytics to better understanding the process behaviour for different ores.
- Improving mine stability controls by the detection and early warning of small-scale geotechnical instabilities in open pit slopes.

Another aspect we are focusing on is the increased use of autonomous equipment at our operations for safety and improved performance from increased reliability and asset utilisation, and also disciplined execution. We have started with autonomous drills at Pelambres, and will now introduce autonomous drills and trucks at Esperanza Sur in Centinela. We expect to extend this more widely across the Group over the coming years, together with the application of robotics in performing maintenance activities, and converting our hydrometallurgical plants to use more automation.

Los Pelambres is one of the first sites in the copper industry to have cable-linked autonomous drills in production, significantly increasing their utilisation rates and metres drilled, compared with manual operation, which also creates savings from an optimised fleet size, and benefits from reduced maintenance and spare parts operating costs.

Moving on to the second objective, let me talk about how we use innovation to forge new ways to develop mining and leverage growth.

This is a longer-term objective and includes continuing our efforts towards the next generation of mining, developing game changing process technology, achieving carbon neutrality and meaningful emission reductions, as well as minimising our tailings footprint.

One instance of this process in action is our work towards creating effective tailings and water management solutions. This focuses on water recovery, control and monitoring, and facility integrity.

When we seek to solve the challenges we face, we do not set out to own the solutions. In many areas we work with the wider industry collaborating and sharing ideas. One of these areas is how we progress new technologies to reduce mine equipment carbon emissions. For instance:

- We have recently become a sponsor of Charge On, an international open innovation challenge for suppliers to develop solutions to supply electricity safely, sustainably and quickly to battery-powered mining trucks.
- We have also recently joined the Hydra Consortium, which aims to develop and test the technology needed to replace the use of diesel in heavy-duty vehicles and thus reduce GHG emissions with hydrogen.

None of these efforts would be successful without an able and digitally literate workforce, inspired to innovate and approach solutions together. To enable this mindset, we developed our Digital Academy to upskill our employees with the know-how they need in today's digital era.

Launched in 2020, the Academy is focused on upskilling and reskilling our workforce to match the new demands of our digital transformation and our innovation processes. In 2020, over 15 hundred senior leaders and supervisors

took digital literacy courses on basic terminology and tools. By the end of the year, 94% had received diplomas for completing all nine online courses. In 2021, 270 supervisors started a specialist course on data-based decision-making.

Now I'd like to take you through one of the innovations we are most proud of, our primary sulphide leach technology, Cuprochlor<sup>®</sup>-T.

### **Cuprochlor<sup>®</sup>-T (video)**

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

We have been investing for many years in research and development to produce copper from low grade primary sulphide minerals that traditionally have been uneconomic using existing technologies. This new technology is called Cuprochlor<sup>®</sup>-T, and we believe it will allow us over time to produce copper cathodes from low grade primary sulphide minerals at reduced operating and capital costs, and with a smaller water and carbon footprint.

An important percentage of our copper resources are chalcopyrite, which is a copper iron sulphide mineral that we find in an increasing proportion as we mine deeper. Given that increasing proportion and that it is not always possible to process the lower grade chalcopyrite economically, there is potential that mineral resources that were previously regarded as uneconomic, could be regarded as economic.

So, we developed a new solution that allows us to leach these primary sulphides, Specifically, chalcopyrite, and obtain economic recoveries of 70% or more, after approximately 200 days of leaching.

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

We started in the lab and moved on to pilot testing, followed by a range of semi-industrial tests. Finally, we conducted an industrial-sized leaching of 40,000 tonnes of primary sulphide ore, with more than 90% chalcopyrite. We applied sulphuric acid and a combination of chlorinated reagents and temperature.

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

So far, the only efficient process for extracting copper contained in primary sulphides is flotation. Another process is bacterial leaching. But this process has lower recoveries, and requires longer cycle times and special conditions for handling the bacteria.

The Cuprochlor<sup>®</sup>-T technology would allow Antofagasta to take advantage of the installed capacity of existing heap leach and SX-EW facilities to produce copper cathodes from lower grade copper resources. This new process has the potential to significantly reduce the capital and operating costs, and importantly, it has a smaller water and carbon footprint. Cuprochlor<sup>®</sup>-T is Antofagasta's proprietary innovation.

We are currently progressing the studies on the primary sulphide ore body at some of our SX-EW operations. This is how Antofagasta develops mining for a better future.

## **Alan Muchnik, Vice President of Strategy and Innovation**

Innovation is central to our success and our purpose. It has been an important enabler in recent years, and has helped us identify opportunities to unlock growth and remain a reliable and responsible copper producer.

It will remain integral as we continue to focus on maximizing the benefits of our embedded growth potential, and on how we can sustain and improve our competitive position, while we keep moving towards carbon neutrality and ensuring our operations remain as responsible as ever to our people, to our shareholders, to our communities and to our climate.

We have significantly progressed in our technology roadmap, and have a clear vision as we move forward, driven by our people, so that we can continue delivering our purpose, developing mining for a better future.

And with that, I'll hand you over to Iván to wrap up today's presentations.

## **Iván Arriagada, Chief Executive Officer**

Thank you, and thanks to the rest of the management team. I would like to make a couple of short closing remarks, and then we will open up for questions.

Today, we have explained how Antofagasta is a reliable and responsible copper producer, with embedded growth ready to be unlocked to create value for all our stakeholders.

In summary, a very large 18-billion tonne copper inventory in highly prospective copper regions, mainly in Chile. A new proprietary primary sulphide-leach technology that will potentially unlock value from previously uneconomic mineral resources, identified key brownfields, and incremental growth within our asset portfolio, a five-year production plan that could potentially take us to approximately 900,000 tonnes by 2026. An expanded capital allocation framework, that includes climate risk mitigation, environmental commitments to significantly reduce our freshwater consumption, and emissions by 2025 or earlier, strong social commitments to our workers and our communities, by making our mines safer and greener and supporting our local suppliers while upskilling our workforce and providing a better work-life balance.

We have the financial strength and balance sheet to deliver this growth and extraordinary people who you heard from today, who have the track record of delivering on our promises. Whatever challenges the external environment throws at us, you can trust Antofagasta to be ready to meet that challenge.

I would like to thank Professor Velasco for his time and the very interesting comments about the current situation in Chile, and I would like to thank you for listening, and for your continued support of Antofagasta.

The future for Antofagasta is bright, and I now will hand over to Andrew, who will open the floor up to your questions. Over to you, Andrew.