



Chapter 1

Introduction and summary



#### Message from the Chief Executive Officer

## Our path towards carbon neutrality



Iván Arriagada CEO Antofagasta plc

We are pleased to present Antofagasta's Climate Action Plan: Our path to decarbonisation, through which we aim to contribute to the global challenge of transitioning towards a reduction of CO<sub>2</sub> emissions to achieve carbon neutrality by 2050 and mitigate the effects of climate change.

Achieving carbon neutrality by the year 2050, or sooner if technology allows, is one of the commitments we have set as a Company, as part of our own climate change strategy. This goal is also aligned with the target set by Chile through its climate change framework Law and with the global objectives of emissions reduction.

Copper is and will continue to be a key input to tackle climate change, due to its intensive use in low-carbon technologies such as the manufacturing of electric vehicles and the energy transition towards renewable energies. As one of the leading copper producers in the world, at Antofagasta we are committed to supplying this critical mineral in a responsible and sustainable way and thus, generate value for all our stakeholders.

We seek to facilitate the early management of risks and opportunities to mitigate the effects of climate change and be able to adapt to changing scenarios that allow us to transition towards carbon neutrality.

In this context, one of the goals we have set is to reduce our greenhouse gas (GHG) emissions. We were one of the first mining companies in Chile to make a complete transition to renewable energy supply contracts in all our operations, which allowed us to achieve, by 2022, the target of reducing Scope 1 and 2 emissions by 30% that we had set for 2025.

This Climate Action Plan reflects our ambition to go further in the progress we have made and to meet the new and ambitious medium-term targets that we have set ourselves: to reduce our Scope 1 and 2 emissions by 50% by 2035, with 2020 as baseline, and to reduce Scope 3 emissions by 10% by the year 2030 using 2022

as a baseline for projecting emissions. We hope to achieve this last objective in collaboration with the main actors in our value chain.

We began this Plan with a detailed analysis carried

out in 2023 to determine the best technological alternatives to begin the journey towards the decarbonisation of our operations, with a specific focus on replacing diesel fuel in mining haulage trucks and in our support vehicles. We studied different green technologies among which are: dynamic charging solutions, electric batteries, green hydrogen and e-fuels. After this analysis in which we integrated collaborative projects, such as Charge On and the Hydra Consortium, we concluded that, whilst we will continue to look at all alternative fuel sources and how these develop keeping an open mind, of the available green technologies, electrification currently appears to be the best option which may add the most value to our production processes and allow us to advance the decarbonisation of our Company. The Climate Action Plan has been designed to be updated periodically. It is a flexible Plan that can be adapted to technological advances and market conditions. Although it currently prioritises electrification, our Company is open to integrating adjustments or other compatible technologies available in the future.

The Plan detailed here requires certain enablers for us to achieve the goals we have set. On one hand, there must be availability of innovative technological solutions from the manufacturers; and on the other, there is a need for the development of renewable energy projects in Chile, both in terms of generation, transmission and storage.

Today, mining is projected to consume between 23% and 33% of the electric energy produced yearly in Chile until the year 2033<sup>2</sup>. As we already did,

Upon detailing our structured path to decarbonisation, we encounter a multifaceted challenge – maintaining and increasing our production while progressively moving towards carbon neutrality.

mining companies are on the path to transforming their supply contracts to renewable energy. At the same time, the electrification of operations, equipment and trucks will require a greater amount of electric energy, which is expected to come from renewable sources. Therefore, the continued development of the renewable electric energy generation industry is key, as well as ensuring the viability of the transmission projects for this energy. Therefore, public-private collaboration is essential to achieve carbon neutrality by 2050 as a country and as a Company.

Upon detailing our structured path to decarbonisation, we encounter a multifaceted challenge – maintaining and increasing our production while progressively moving towards carbon neutrality. While acknowledging that this endeavour is a challenging one, we also recognise it is an opportunity to redefine what growth means within the realm of sustainable development. As we push the boundaries of innovation and efficiency, it becomes evident that our growth and sustainability agendas are not

mutually exclusive, but rather, symbiotic in nature. The journey towards decarbonisation may not follow a linear timeline due to the intricate balance of numerous factors and influences. However, it is essential to responsibly manage our corporate growth. We lean into delivering our copper production potential to society, and to progress towards an environmentally responsible future.

Our ambition for a carbon-neutral future forms the cornerstone of our operations. We recognise the value in embracing innovative practices, relentless pursuit of our goals, and the power of adaptation in a rapidly evolving climate landscape. Together, we aim to forge a resilient, sustainable and prosperous future, defined by the core principles of environmental stewardship and corporate responsibility.

<sup>2</sup> Comisión Chilena de Cobre, 2023; "Proyección del consumo de energía eléctrica en la minería del cobre 2022-2033". Gobierno de Chile (Chilean Copper Commission, 2023; 'Projection of Electric Energy Consumption in Copper Mining 2022-2033'. Government of Chile).

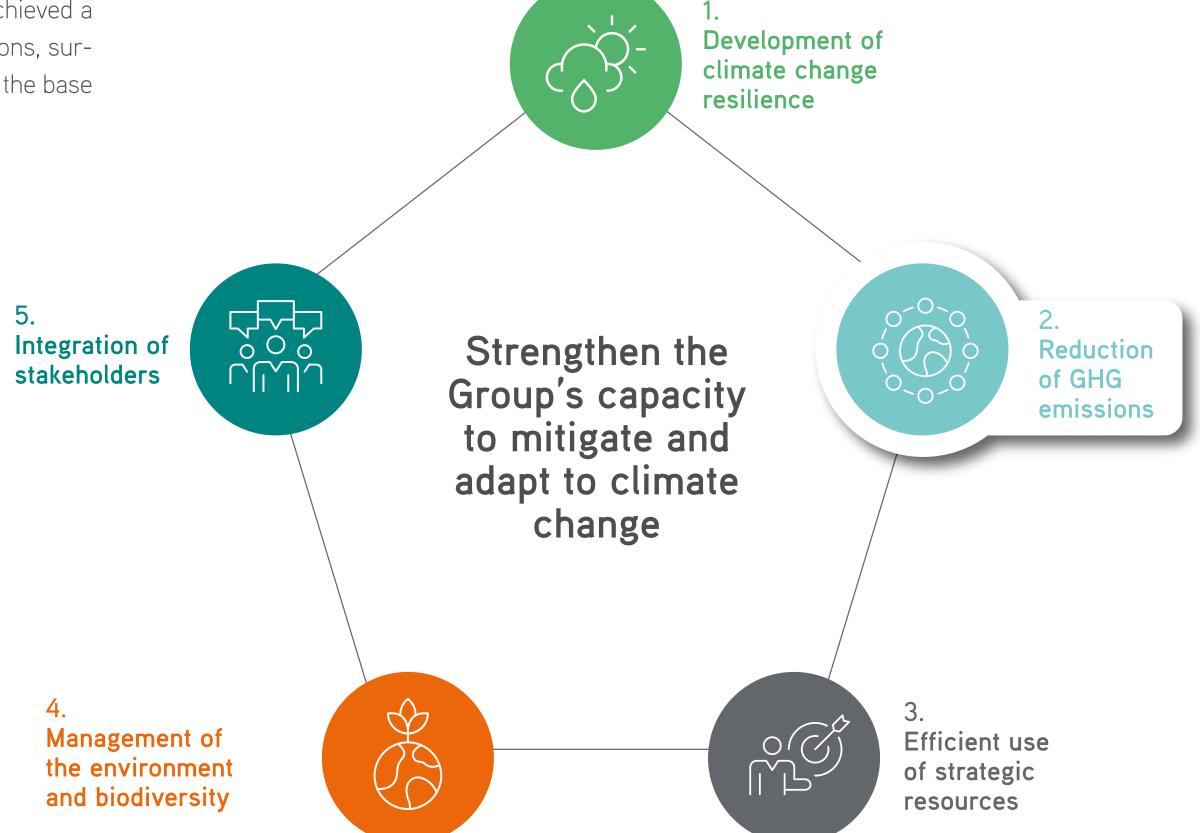


## Climate Change Strategy

At Antofagasta, we aim to address the significant challenge of climate change with utmost urgency. Motivated by robust targets to reduce greenhouse gas emissions, our ambition is to achieve carbon neutrality by 2050, or sooner if technological developments allow for it, contributing to responsible action for future generations. In 2022, we achieved a significant milestone: a 30% reduction in Scope 1 and 2 emissions, surpassing our target originally set for 2025. This early success is the base for us to set more ambitious target for the future.

Our Climate Change Strategy propels coherent and systematic action. Structured around five key pillars - building climate resilience, reducing GHG emissions, efficient use of strategic resources, environmental and biodiversity management, and stakeholder integration - each pillar is supported by concrete actions and specific measures in the short, medium, and long term, enabling proactive responses to an evolving landscape. This document elaborates on pillar 2 of the strategy. For more details on the other pillars, please refer to the <u>Second Climate Change Report</u>.

To meet this commitment, we have integrated climate change as a factor into our risk management and decision-making. Through our Climate Change Strategy, we continually work to strengthen the Group's mitigation and adaptation capacity, setting robust targets to reduce our emissions, as well as adapting and strengthening the climate resilience of our operations and value chain, supporting multisector collaboration to accelerate the development and use of low emission technologies. Our Climate Change Strategy allows us to take early action to manage the risks and opportunities presented by this phenomenon to mitigate its effects and have the capacity to adapt to new scenarios. For more details on scenario analysis, please refer to the Second Climate Change Report.



Leveraging the work we have done
to improve our understanding of
climate change has enabled us to
better integrate climate change
factors into our decision-making
processes, enriching planning and
decision-making across various
domains, from strategic planning
and investment decisions to
contracting processes.





Aligned with the Chilean Climate Change Legislation N° 21,455 goal, carbon neutrality³ by 2050 at the latest, and focused on sustainable copper mining, we developed our ambitious Climate Action Plan in 2023, which was approved by the Board of Directors at the end of the year. We believe that this roadmap, deeply rooted in our Climate Change Strategy, supports our ambition to reduce emissions and positions us at the forefront of adopting clean technologies and sustainable operational practices.

Our plan employs cutting-edge technologies and innovative solutions, including transitioning our haul truck fleet to low-emission alternatives. Every innovation proposed to be adopted meets our operational needs forming the foundation for future technological enhancements.

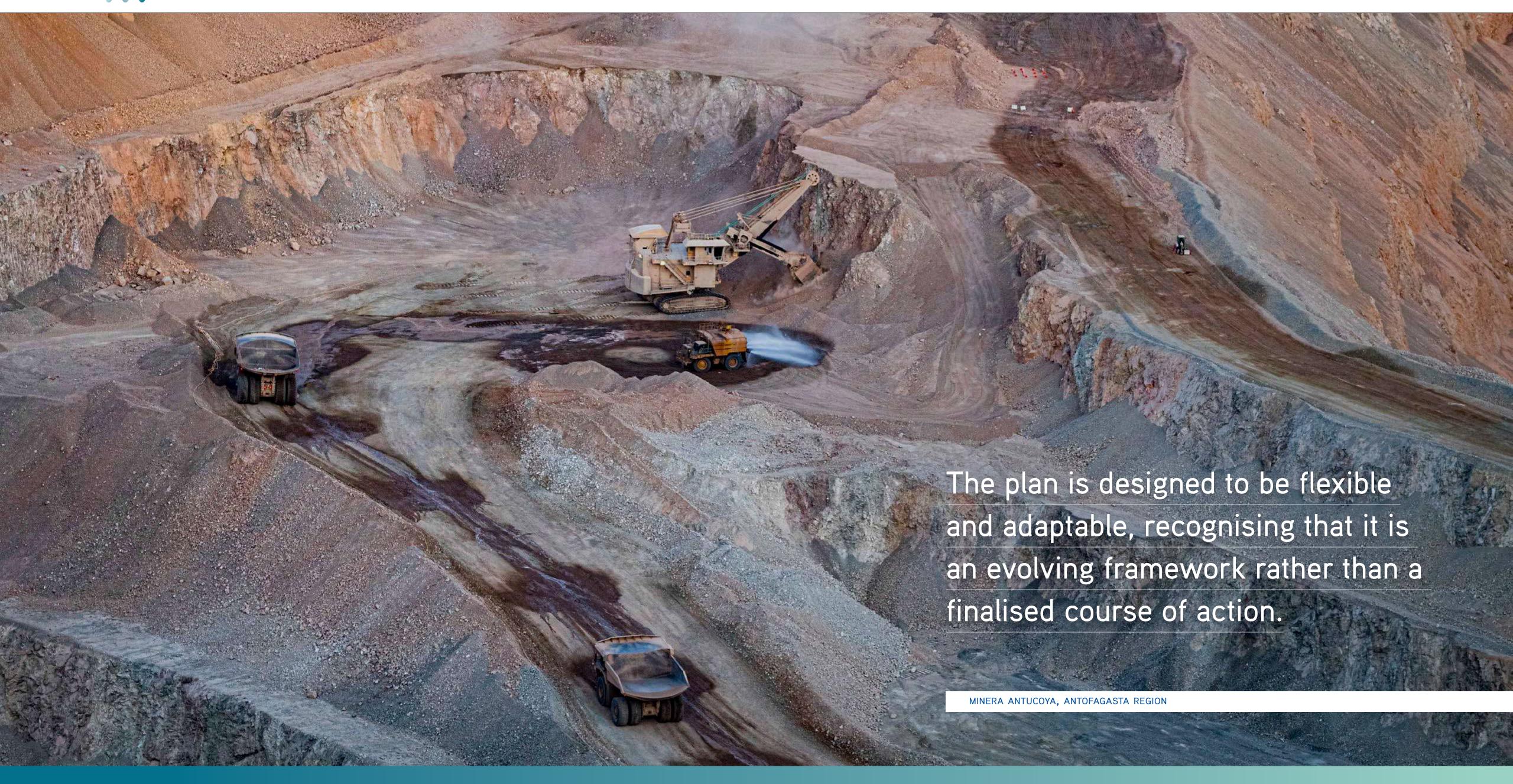
The plan considers the implementation of technologies that have not yet been deployed in our copper mining industry, so all projections made are subject to the success of the implementation and development of operational trials. The applicability of technologies such as trolleys in copper mining must still be verified, considering their possible operational impacts and assuming technological designs that facilitate their adaptability to the design of the mining plan.

The plan is designed to be flexible and adaptable, recognising that it is an evolving framework rather than a finalised course of action. While the plan currently prioritises electrification as the most probable path, we maintain a technology-neutral stance considering that one solution might not fit all processes and operations, we remain open to integrating various economically efficient technologies and regularly updating the plan to reflect market advancements.

In response to evolving climatic scenarios, scientific evidence, the associated physical and transitional risks impacting our operations, changing commercial and economic factors, we remain prepared to adjust our roadmap accordingly. Our new medium-term targets will guide our efforts and actions up to 2050, enabling us to transit our progress and supporting our ambition of achieving carbon neutrality. This approach brings agility and responsiveness, aligning our strategies with emerging technological developments and economic feasibility that we believe will enhance operational efficiency.

<sup>3</sup> That is defined as when anthropogenic CO2 emissions are balanced globally by anthropogenic CO2 removals over a specified period.







## Path to Carbon Neutrality

To help us achieve our ambition of carbon neutrality by 2050, Antofagasta has crafted a decarbonisation plan founded on a structured, action-driven methodological approach. We conducted an analysis with the current information of different technologies that allowed us to project the total cost of ownership (TCO), analysis that allowed us to identify a potential path to continue reducing our carbon footprint while also possibly adding value to the Company.



Concurrently, we are aligning our technological needs with the operational requirements of our mine plan. This includes strategic procurement and replacement of extraction trucks in synchrony with our plan's requirements, with a 2035 horizon. The integration of the fleet renewal and the decarbonisation plan presents an opportunity where renewing equipment enables a gradual and cost-efficient transition into electrification.

With a lens focused on long-term viability, we assessed emerging technologies' availability that allows us to solve the challenge of charging the equipment with a substitute for diesel or a battery without generating stoppages or impacts on the availability of that equipment. Among those solutions, we particularly focused on dynamic charging, which would allow us to electrically charge the truck while moving. Another key factor to consider when choosing technologies is their potential to deliver economic benefits today as well as considering their potential to enable other technologies such fully electric vehicles in the future. This process allows us to select technological solutions that meet immediate needs and are scalable for future enhancements. We have defined clear design principles for the transition, such as introducing dynamic charging onwards and potential upgrades to batteries in vehicles requiring engine rebuild from that date forward.

We have set a baseline for our decarbonisation plan based on a detailed analysis of our Scope 1, 2 and 3 emissions, in line with the Greenhouse Gas Protocol standard and the ICMM's Scope 3 Emissions Accounting and Reporting Guidance. For setting our Scope 3 target, our approach is aligned with the ICMM's Scope 3 Emissions Target Setting Guidance, which emphasises collaboration and integrated commitment with suppliers and customers in the supply chains. Furthermore, our target setting approach for Scope 3 aligns with the Business-as-Usual approach, congruently used by the International Copper Association (ICA) when identifying emissions abatement potential towards net zero by 2050<sup>4</sup>.

We have defined clear design principles
for the transition, building a flexible
and agile updating process, helping
prioritise technological selection and
key trials to undertake.

The focus for Scope 1 and 2 emissions reductions is on developing the supporting infrastructure, energy efficiency and transitioning to renewable energy sources. For Scope 3 emissions reductions, we will focus on fostering sustainable practices throughout the value chain by collaborating closely with our suppliers and partners.

Antofagasta's commitment to transparency and accountability is echoed in the independent verification of our emissions that we have conducted<sup>5</sup>, ensuring our stakeholders have accurate information to assess our sustainability performance.

<sup>4</sup> Copper – The Pathway to Net Zero, International Copper Association, March 2023. 5 See our Second Climate Change Report on our website for further details.



### Antofagasta emission targets



#### TARGET MET

early with a reduction of 581,355 tCO<sub>2</sub>e. The target defined in 2018 was to reduce emissions by 300,000 tCO<sub>2</sub>e in 2022





#### TARGET MET

The goal of reducing GHG emissions by 30% compared to 2020 was met, before 2025, the date for which the goal was set



#### **CARBON PRICE**

is incorporated selectively into supply chain decision making\*



#### **NEW MID-TERM TARGET**

reducing scope 3 emissions by 10%\*\*













**DEFINE NEW MEDIUM-TERM TARGETS** 





#### **NEW MID-TERM TARGET**

reducing scope 1 & 2 emissions by 50%\*\*\*



#### **CALCULATION**

TARGET DEFINED

to reduce emissions by 30% by

2025, in other words, a reduction

of 730,000 tCO<sub>2</sub>e

Scope 3 emissions categories according to the GHG Protocol







<sup>\*</sup> See our Second Climate Change Report on our website for further details.

<sup>\*\*</sup> Against 2022 "no action scenario" projection.

<sup>\*\*\*</sup> Against 2020 baseline.



Given our ambition of carbon neutrality
by 2050, we have set an ambitious new target
for Scope 1 and 2: to reduce emissions by 50%
by 2035, using 2020 as baseline.

Following on from our previous target set for 2025 and achieved in 2022, we have set a new target to reduce Scope 1 and 2 emissions by 50% by 2035, using 2020 as baseline. For Scope 3, we have set a target, involving a collaborative effort across the value chain, to reduce Scope 3 emissions by 10% against 2022 "no action scenario" projection.

Looking to the future, the Company takes on the challenge of sustainable growth. Our decarbonisation plan includes future expansion projects. A prime example is the Centinela Second Concentrator project. This project not only demonstrates our commitment to responsible growth that embraces decarbonisation, but also underscores our dedication to implementing energy efficient technologies. Our ambition is that mining equipment and processes will be integrated to our decarbonisation plan ensuring that each new initiative harmonises costs and operability with our environmental commitment.









## Scope 1 & 2 Emissions Trajectory Curve

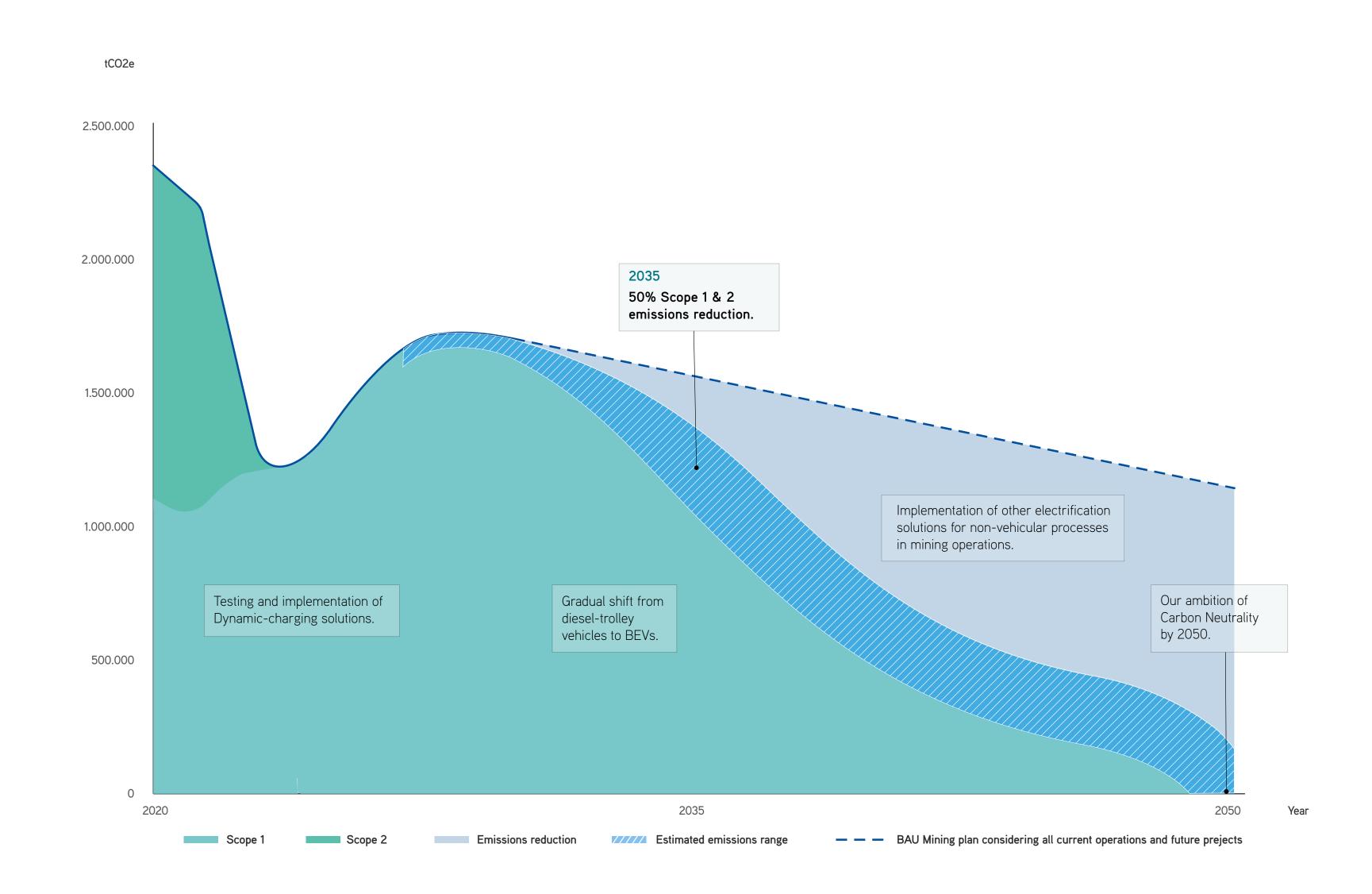
In our Climate Action Plan, the emissions trajectory curve is intended to be a helpful visual representation of our decarbonisation strategy (excluding Scope 3 emissions). It illustrates our medium-term target for reducing Scope 1 and 2 emissions and highlights key points of intervention and their estimated impact over time. It also shows the enabling technologies upon which achieving our carbon neutrality ambition for Scope 1 & 2 emissions depends. We know that we have more to do to achieve our overall carbon neutrality ambition by 2050, and our progress towards our Scope 3 target will help us to develop our climate strategy and to make more progress in the future.

The curve focuses on the mining operations of Antofagasta. The dotted line on the curve illustrates a Business-as-Usual or no action scenario whereby no additional decarbonisation actions have been taken, emphasising the importance of our future efforts. Additionally, the curve includes future projects integrated into our overall mining plan.

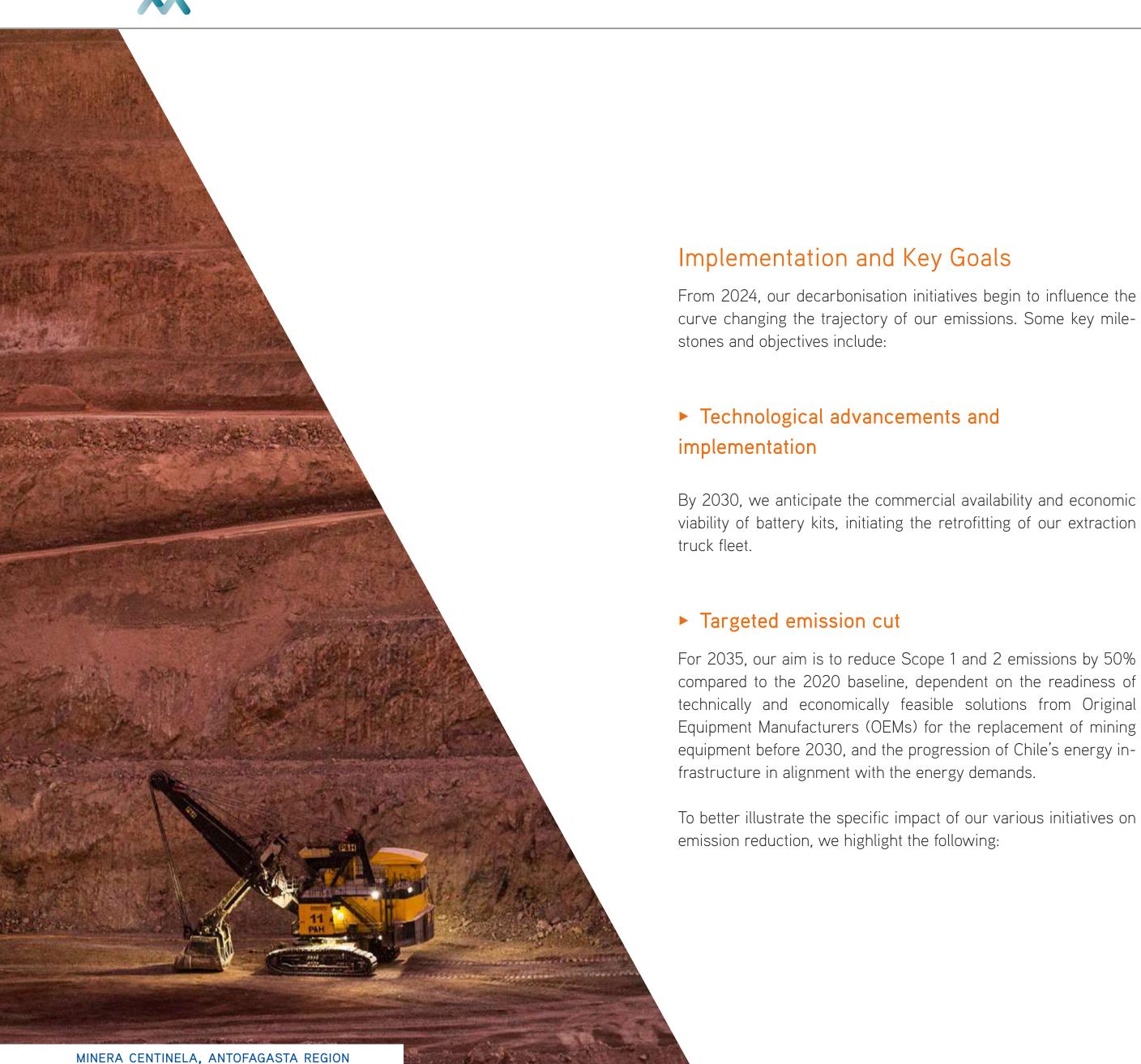
The second line of the curve shows how we anticipate our Scope 1 & 2 emissions could reduce if we were to implement our current decarbonization plan. Delivery of our plan depends on many factors outside of our control, including technological readiness for fast charging solutions, flexible trolley infrastructures, cheaper batteries and feasible retrofitting for equipment.

Our current plan includes targets up to 2035. We intend to set further targets in the future, which will help us to make progress towards our overall carbon neutrality ambition for Scope 1 & 2 emissions. As these targets have not yet been set, the trajectory of the curve is even more uncertain after 2035, but is based on estimates made by Antofagasta subject to the development of technologies and other enablers. The curve therefore shows an estimate of the best possible outcome from a decarbonisation perspective, assuming that we are able to achieve our overall Scope 1 & 2 decarbonisation ambition.

The emissions abatement curve address Scope 1 and 2 emissions of Antofagasta Minerals Group operations and does not consider the FCAB operation yet due to its emissions materiality, 1% of our total emissions. We will incorporate initiatives in the Transportation Division in the future.









#### Transition to Trolley Equipment

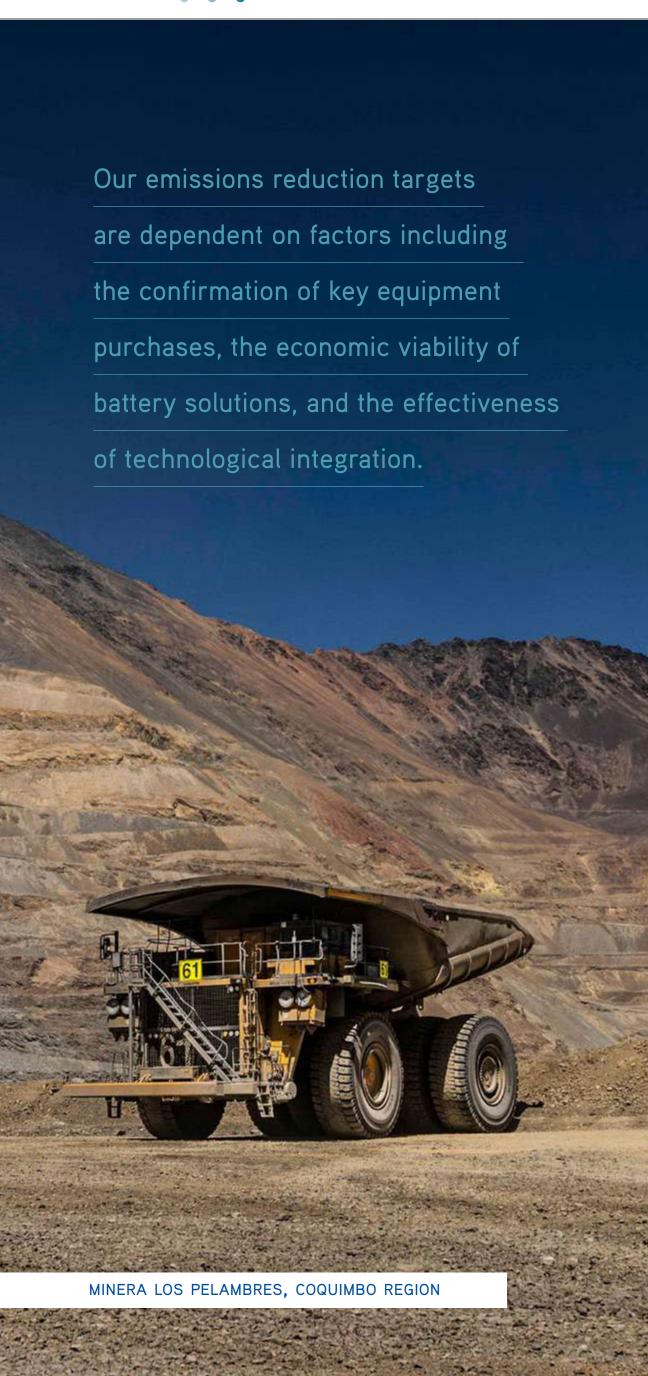
Our strategy is to start with feasibility analysis for dynamic charging solutions and define a proper recommendation for each one of our mine plans. This pre-feasibility analysis is strongly linked to the success of the tests carried out by the Group on trolley and other technologies, maintaining our flexibility to take different paths as the technology advances.

Subject to feasibilities being approved we expect to start implementing trolley systems as an initial step into the electrification of our operations. We aim to develop our knowledge of operating trolley systems through trials in our operational conditions, validating our assumptions as well as helping us estimate possible impacts in mine designs. During this same period, we expect stationary charging to increase charging speed, bringing us another tool that will be integrated into the final electrification model that is expected to support fully electric trucks.



#### Truck Retrofit to Battery

We aim to upgrade our truck fleet to battery-powered vehicles. We believe that trucks purchased by the end of decade will be preequipped for future modifications into low carbon emissions technologies. This transition timeline is heavily dependent on the dynamic and stationary charging solutions previously described as well as technology being available at a competitive cost.



#### Enabling conditions for the 2035 targets Scope 1 & 2

Our plan to meet our 2035 target depends on Original Equipment Manufacturers presenting viable proposals to replace mining equipment before 2030 and on the country's energy infrastructure evolving to meet the demands of the energy transition. It is expected that the technology will continue its evolution, providing electric charging proposals that allow us to charge a truck in less than 30 minutes and batteries with greater autonomy than those available in the industry today.

Both our plan and the industry's decarbonisation plans depend on the cost of electrical energy and its transmission that must decrease or at least remain within the ranges we see in today's market.

If these enabling conditions do not develop in line with our current expectations, then this would affect our ability to meet our 2035 target, considering the specific details of our situation and the broader context of the energy landscape.

#### Considerations, Risks and Opportunities

So far, the Company has made progress in meeting all its climate change targets. When making our decarbonisation plan, we have selected 2020 as the base year for calculating our emissions and setting our Scope 1 & 2 targets. As we have progressed in the implementation of our decarbonisation strategy, we have identified a series of inherent challenges in terms of energy transition. This area is constantly evolving and is characterised by technical and logistical complexities.

In using 2020 as the base year for our Scope 1 and 2 for setting our emissions reduction target, we are aware of potential risks to our ability to meet this target. In addition to those described above, another key aspect is that setting a target based solely on emission quantities might yield variable results due to our

growth pathway and production parameters. We may update the calculation of our baseline emissions and Scope 1 & 2 targets in future, to reflect acquisitions, divestments or significant changes in production, as appropriate.

Our ability to meet our target will depend on the maturity of the existing infrastructure, which needs adaptation to support advanced technologies such as trolley trucks and the electrical substations necessary for their operation.

From an economic perspective, long-term operating costs and investment return analysis are critical aspects, and if the costs of the new technologies we need to implement our decarbonisation plan do not reduce in line with our current expectations then this will also impact our ability to meet our 2035 target and our overall carbon neutrality ambition. While the adoption of low carbon technologies may entail high initial costs, it is anticipated that these will be offset by increased energy efficiency and future reduction in fuel and maintenance expenses. The success of our decarbonisation plan, and our ability to meet our 2035 target and achieve our overall carbon neutrality ambition depends on meticulously balancing the costs associated with the adoption of emerging technologies against long-term benefits.

Our emissions reduction targets also depend on factors such as the confirmation of key equipment purchases, the economic viability of battery solutions, and the effectiveness of technological integration. That is why we are committed to flexibility and adaptation in the face of evolving technological, economic, and regulatory circumstances.

### Approach to carbon offsets and other emission neutralisation measures

We are committed to meeting our long-term carbon neutrality emissions target. Depending on our progress towards meeting these targets and our assessment of how viable it is to achieve further emissions reductions within our value chain, we acknowledge that this journey may require us to offset some residual emissions in order to reach carbon neutrality, through the purchase and retirement of carbon credits. Hence, we have accounted for various scenarios in our emissions reductions projections, with some degree of carbon offsetting as part of the strategy, and without it. To the extent that carbon offsetting may form part of our strategy, we are committed to purchasing high-quality carbon credits and, in making any offset or climate mitigation claims, taking into account the guidance and recommendations of the internationally-recognised carbon standards and industry stakeholder bodies. We recognise that, while offsets provide a valuable tool to manage hard-to-abate emissions in the long term, they do not replace our core strategy of substantial emission reductions within our value chain. Instead, they would represent a complementary measure towards achieving our ambition to reach carbon neutrality.



#### Transition<sup>6</sup> International Energy Agency's Sustainable Development Scenario<sup>7</sup>



Carbon



in mitigation

\$50 - 100m Change in energy costs

due to mitigation

Carbon tax avoided by mitigation

6 The positive impact of climate change on copper demand or the copper price, has not been quantified.

\$500 - 100m

Transition risks and opportunities have been identified over the short, medium and long term

Net Present Value Positive Exposure
 Net Present Value Negative Exposure

7 TCFD 2022 analysis, subject to update.

#### Results of climate scenario analysis, excluding copper market benefit

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

To improve our understanding of how climate risks may develop and impact our operations, we carry out climate scenario analysis exercises on a yearly basis. This also helps us develop our investment plans and enhance our prevention and recovery control measures.

Our climate change analysis is helping us to define additional metrics to the ones we already use (mainly to calculate and manage progress against our emission targets), including the amount of capital that will be required to mitigate and adapt to climate change. We will continue to improve our maturity through the studies necessary to refine capital deployments in mitigation and adaptation. Our risk management system considers that for each risk evaluated as "High" or "Extreme" we produce specific action plans and strategies allowing us to take early and agile actions as these risks evolve.

A summary of the results of our TCFD 2022 analysis using the Transition International Energy Agency's Sustainable Development Scenario is illustrated above, with further details set out in our Second Climate Change Report available on our website. The figures shown are estimates based on various assumptions and the outcomes will depend on many factors outside of our control, including those set out in the rest of this document. Based on this analysis, currently longterm investment in mitigations is estimated in the ranges of \$1,000 - 1,500m, including the decarbonisation plan, and the investment required to support the energy transition. However we anticipate that as technologies develop and our understanding of their implementation grows with trials, this estimate could evolve positively.

Investment in decarbonisation will be part of our sustaining capex as we move forward with the plan, with the incremental costs of enabling technologies to be evaluated as part of the normal renewal cycle of our dump trucks fleets, and potential improvements to the in-pit electrical systems, among others.

Implementing our current decarbonisation plan involves balancing the costs associated with the adoption of emerging technologies against long-term benefits. We expect these benefits to include a reduction in operational costs, such as diesel consumption and maintenance costs, that could potentially offset all of the investments, as well as, generating a potential overall savings of the mine's operational cost.



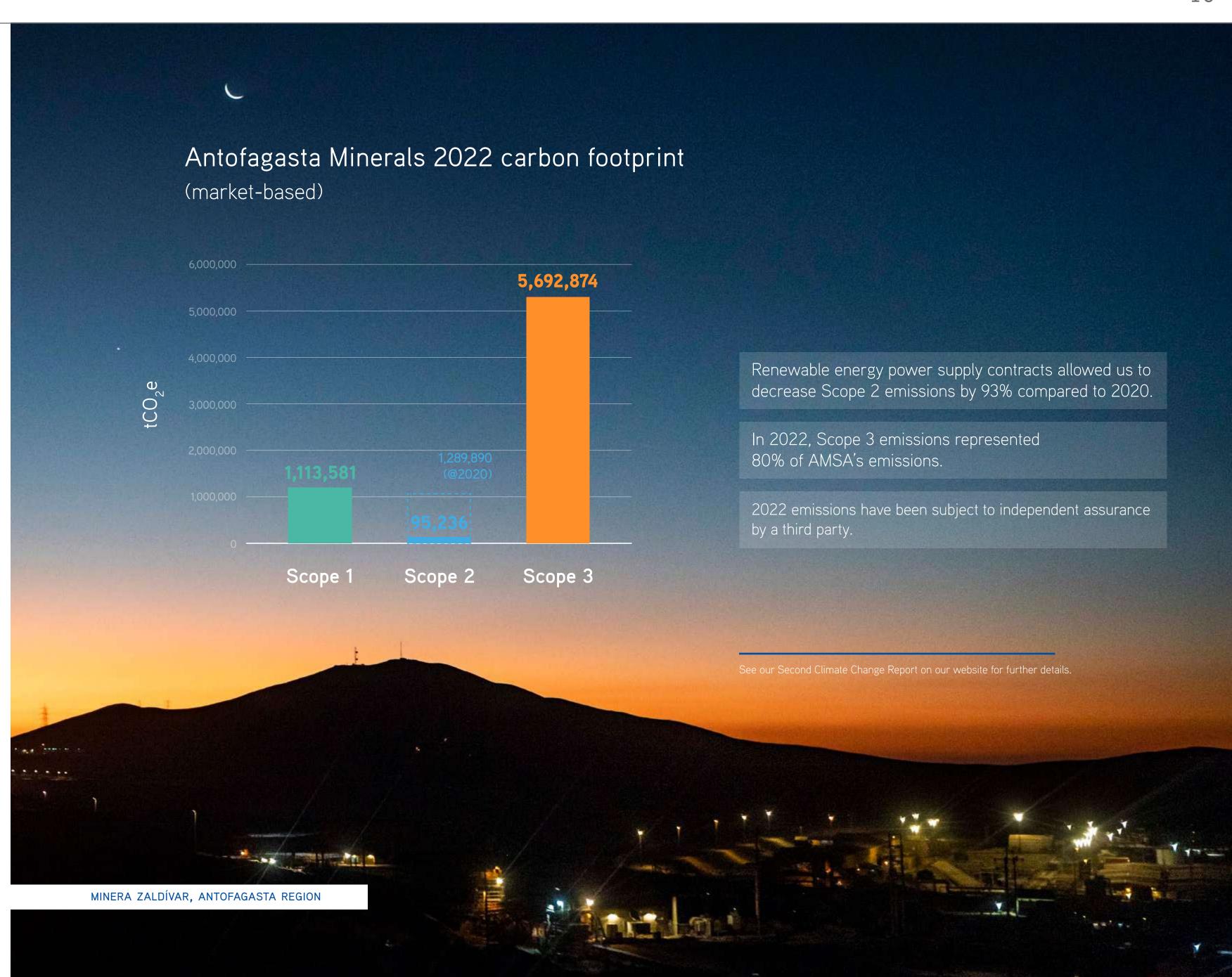


# Our Position and Performance: Scope 1, 2 & 3

## Current emissions values and reductions compared to the 2020 baseline

In 2022, we conducted a comprehensive analysis of our carbon footprint, which yielded total values reflecting our ongoing effort for decarbonisation. The total carbon emissions for that year were 6,901,691 tons of  $\rm CO_2e$ . We identified and quantified these emissions in Scope 1 and 2, with 1,113,581 tonnes of  $\rm CO_2e$  for Scope 1, 95,236 tonnes for Scope 2 and 5,692,874 tonnes for Scope 3..

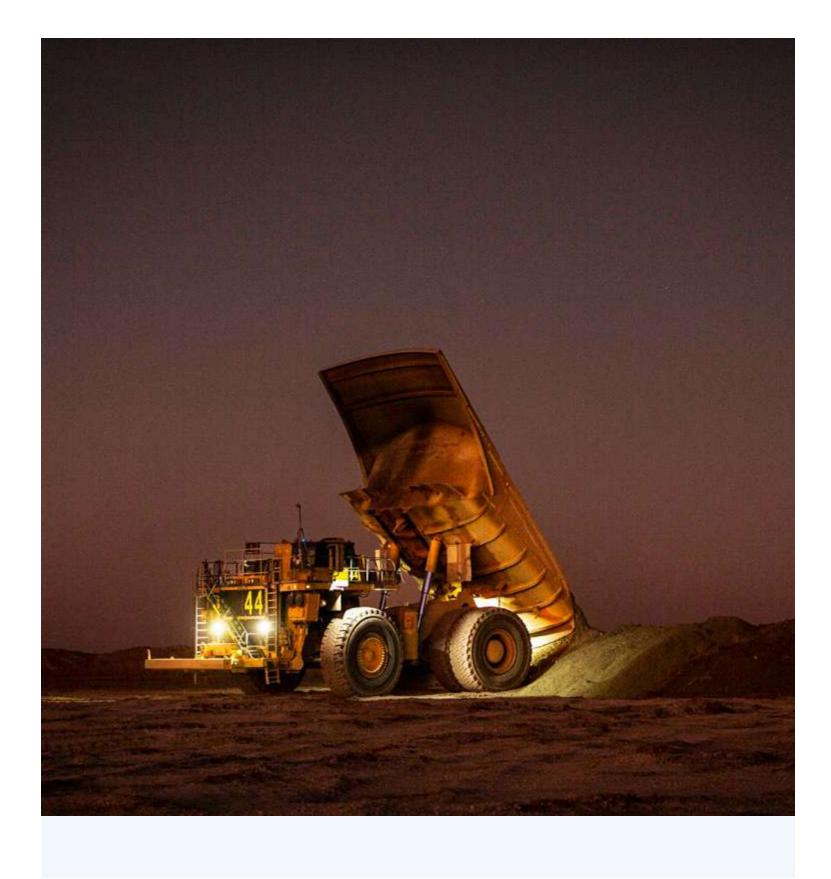
Thanks to the implementation of renewable energy power supply contracts and other energy efficiency measures, we achieved a significant reduction of 93% in Scope 2 emissions compared to the baseline year 2020, where Scope 2 reached 1,289,890 tonnes of CO<sub>2</sub>e.





### Major interventions to achieve reductions

Our decarbonisation initiatives centre around a strategic transition to cleaner and more efficient technologies, such as electric trucks and modernising our fleet. Key proposed interventions include:



#### ► Evaluate the adoption of electric trucks

The speed at which we can transition to electric trucks will depend on the current technological maturity. If operational testing is successful, we plan on phasing out diesel trucks gradually, as the infrastructure required to support the change is built. The transition to electric trucks would generate a significant reduction in our scope 1 emissions and would be the cornerstone for achieving our Scope 1 & 2 target and our ambition of carbon neutrality by 2050.

#### ► Fleet expansion and modernisation

When increasing and renewing our fleet of trucks and auxiliary equipment, we are working towards assessing technologies that reduce greenhouse gas emissions. However, for auxiliary equipment, we are facing greater challenges in their transition, as the focus of our principal manufacturers is predominantly on trucks. This situation could potentially delay the availability of equipment conducive to reducing our Scope 1 emissions, and affect our ability to meet our Scope 1 & 2 2035 target and our Scope 1 & 2 ambition of carbon neutrality. For auxiliary equipment in loading and drilling, we are exploring various technologies that could facilitate the path towards emissions reductions, without necessitating significant modifications to these machines.

#### ► Initial steps towards fleet electrification

Implementing trucks with dynamic and stationary charging systems, is the next step in our plan to take at the beginning of our transition to battery-operated vehicles. Mitigating environmental impact while preparing the necessary infrastructure for a smooth transition to battery technology once the equipment reaches the end of its useful life. This strategy enables us to gradually adapt to the energy demands of electric trucks, as well as to develop our understanding of the operation and integration of trolley systems into our mining plans.

#### ► Integration with emerging technologies

Electrification is likely to be complemented by other emerging technologies that will enhance the operational efficiency and autonomy of the equipment. We intend to continue to evaluate and adopt innovations that support our decarbonisation objectives. We believe that the integration of operational autonomy in our equipment could become a strategic enabler.

#### Energy requirements and procurement

We are carefully defining the energy and power requirements for each pit, ensuring the procurement of electricity supply contracts that are both competitive and sustainable. We are actively evaluating in-situ power generation alternatives and we are also examining energy storage solutions to optimise cost and effectively manage demand peaks.

#### ► Infrastructure development

The implementation of critical electric substations, essential for initiating the electrification process, is progressing quickly from a technological and engineering perspective, potentially allowing the development of equipment trials in the next few years, which are critical inputs for the development of potential adjustments in traditional mine planning. We have established strategic alliances with industry leaders, enabling the evaluation of various trolley infrastructure technologies. These partnerships allow well-informed decisions and contribute significantly to advancing our understanding of the battery market.

#### Equipment/retrofit and collaboration

Collaborating with CAEX suppliers, we have reached agreements which will support our greenhouse gas emissions reductions and are investigating potential further partnerships. Our objective is to rigorously test and validate both diesel-trolley and battery-trolley technologies through pilot programmes. This approach will facilitate a phased implementation plan, which is in harmony with our fleet renewal schedule, and incorporate emerging technologies to enhance the autonomy of our equipment.

#### ► Exploration of alternative technologies

Looking to the future, we continue to explore alternatives such as hydrogen and ammonia for specific applications, as well as synthetic diesel, always focusing on the most sustainable and efficient options for our operations.



## Roadmap to sustainability and progressive decarbonisation targets for Scope 1 and 2

We have set an ambitious target for 2035, constantly adapting to market conditions and technological developments.

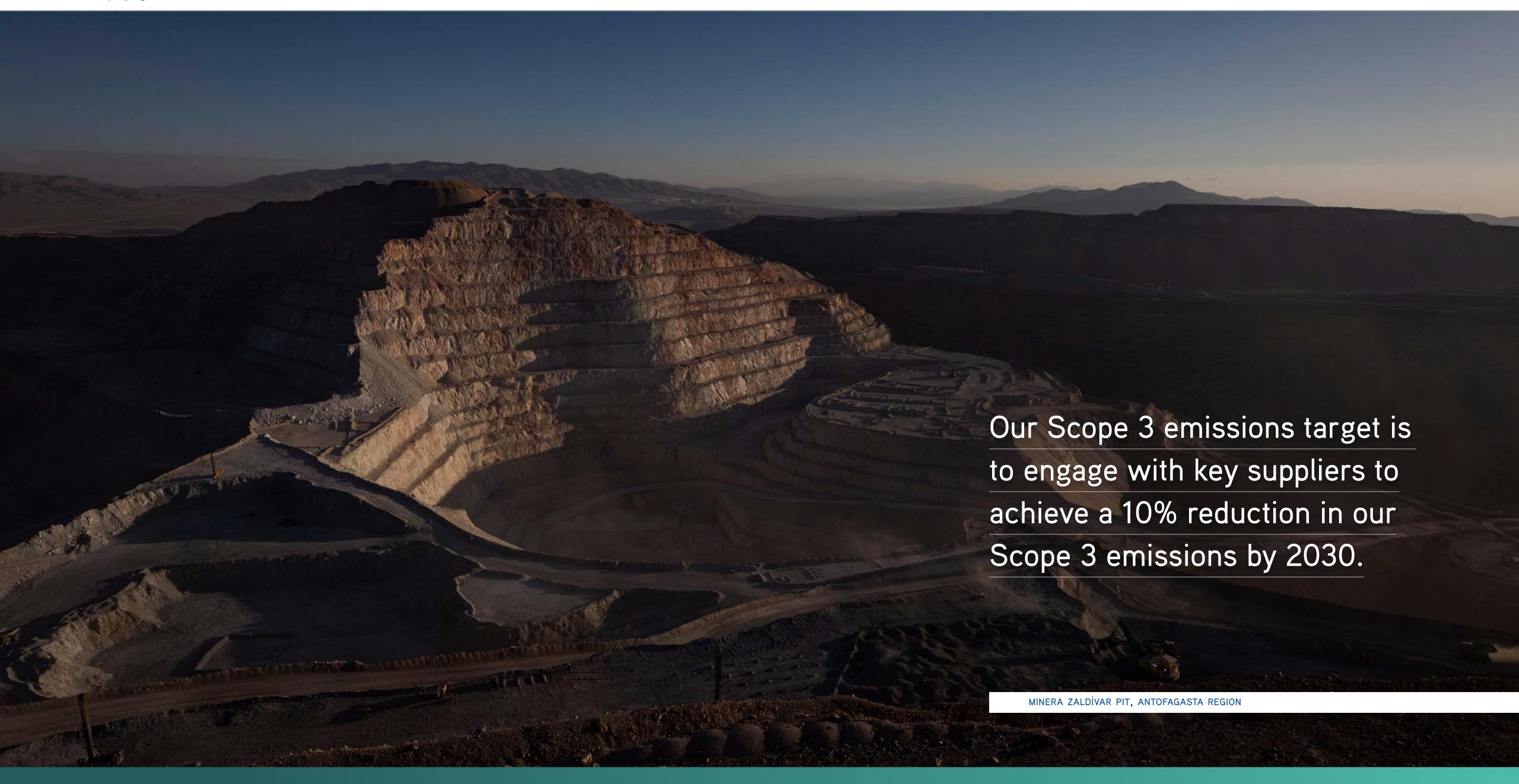


2023 2024 2025 2030 2035 and 2040

- ► We completed a detailed assessment of existing technological maturity, allowing us to produce an energy transition plan for the main operation pits.
- ► We set an ambitious target for 2035 of reducing Scope 1 & 2 emissions by 50% against a 2020 baseline. We will explore opportunities to bring forward and improve this target, adjusting to technological advances and operational improvements.
- ► This year's focus is to advance a feasibility analysis of the integration of electrification technologies into our mining plans, also seeking new designs that optimise both the use of technology and the value of the operation.
- ► We will continue to evaluate and adjust our strategies, considering technological progress and future equipment acquisitions.
- ► We will continue working on our emissions calculation methodologies.

- ► We will review and evaluate updating our Scope 1 & 2 target for 2035, including based on the extent of progress made in purchasing key equipment. Additionally we will begine to define the target for 2040.
- ► Consider trials of dynamic charging technologies in mining environments.
- ► We aim to evaluate battery kits that are commercially available and economically viable for our equipment, and review of Scope 1 & 2 emissions reduction target in light of these developments.
- ► Refine our 2035 Scope 1 & 2 target and formulate clear objectives for our 2040 Scope 1 & 2 target. These targets will be reviewed regularly to ensure they reflect both technological advances and improvements in productivity and cost efficiency.
- ► Setting medium-term Scope 1 & 2 targets, for 2035 and later in 2040, will help us to achieve our overall Scope 1 & 2 carbon neutrality ambition by 2050, continuously adapting to market conditions and technological developments.







## Our Scope 3 position and performance

#### Scope 3 emissions evaluation

Scope 3 emissions, accounting for up to 80% of Antofagasta's total emissions in 2022, include all other indirect emissions along the value chain. This highlights the importance of addressing the supply chain and product lifecycle in our decarbonisation strategy. With a total reaching 5,692,874 tonnes of CO<sub>2</sub> equivalent (tCO<sub>2</sub>e) for the year 2022, these emissions underscore the significant impact of indirect activities throughout our value chain, which includes both upstream and downstream operations.

For constructing our Scope 3 emissions reduction framework, we have established a baseline for Scope 3 emissions by utilising the most up-to-date data available. Much of this data is based on estimates which may affect the accuracy of our calculation, and so we intend to review and revise our calculations periodically as more accurate data becomes available.

We aim to engage with the industry and participants in our value chain to achieve a 10% reduction in our Scope 3 emissions by 2030. To establish this target, we developed a "no action scenario" for a baseline, which means projecting our emissions using future production and spend estimates excluding any additional emissions reductions. Because the year 2022 represents our last and most mature measurement of Scope 3 emissions, the projections were made based on their ratios and assignment criteria.

We believe that this target aligns with the methodologies and recommendations from the ICMM, considering both quantitative and qualitative initiatives and that our strategy is also aligned with the ICA approach.

The table below provides a detailed breakdown of our Scope 3 emissions:

Scope 3 Emissions Mining Group (tCO2e) (2020, 2021 and 2022) 8

Scope 3 category	2020	2021	2022
1. Purchases of goods and services	2,976,328	2,712,403	3,232,187
2. Capital goods	Included in Cat. 1	29,343	17,597
3. Fuel and electricity not included in Scopes 1 and 2	483,517	775,335	781,613
4. Transport and distribution (purchases)	144,992	160,417	174,127
5. Disposal and treatment of waste	1,095	1,230	1,804
6. Business trips	768	901	5,841
7. Daily transport to workplace	5,321	5,513	5,362
8. Leased assets	Included in Cat. 1.	14,408	14,345
9. Transport and distribution (sales)	325,578	290,275	244,111
10. Processing of sold products	1,280,753	1,252,952	1,215,886
11. Use of sold products <sup>9</sup>	N/A	N/A	N/A
12. Final disposal of sold products <sup>9</sup>	N/A	N/A	N/A
13. Leased assets to third parties9	N/A	N/A	N/A
14. Franchises <sup>9</sup>	N/A	N/A	N/A
15. Investments	310,155	0	0
Total Scope 3 Emissions	5,528.507	5,242,777	5,692,874

For category 1, emissions are concentrated mainly in the GHG protocol categories Mining and Extraction, Chemicals and Chemical Products, Construction, Machinery, Manufacturing, Land Transportation and Other social, Community and Personal Services, which represent more than 80% of category 1 emissions. Of the more than 3,000 suppliers that generate category 1 emissions, 50% of the emissions are concentrated in around 130 suppliers. Among these suppliers are our key suppliers of mine and plant supplies and equipment.

<sup>8</sup> The figures in the table have been subject to independent assurance. See our Second Climate Change Report on our website for further details.

<sup>9</sup> Categories that do not apply according to the GHG Protocol



## 2023 initiatives and achievements (Scope 3)

In 2023 we embarked on a significant phase of our detailed plan for managing our Scope 3 emissions. During this period, we developed our Suppliers for a Better Future Programme, which launched in December 2022. This initiative aims to align supplier best practices with our core values and standards, focussing on the development of people, communities, sustainability, competitiveness and innovation, with clear performance indicators. It has been instrumental in equipping regional suppliers, especially local SMEs in the Antofagasta and Coquimbo regions, with tools to enhance their competitiveness and growth potential. Our approach to Scope 3 emissions involves engaging with suppliers to raise awareness, assess their GHG emissions management maturity, and assist them to measure, disclose and set emission reduction targets. Furthermore, in collaboration with the Universidad Católica del Norte we have been working to assess and enhance our suppliers' sustainability practices.

We have conducted a scenario analysis of a

"Business As Usual" (BAU) projection for our

Scope 3 emissions. This analysis reveals potential
for participants in our value chain to reduce
their emissions. These projections consider the
expected increase in production, ensuring our
targets remain ambitious yet achievable.

This projection has been made based on the best information available at this time. We expect future adjustments arising from improvements in the calculation of emissions from value chain companies and because of updates in calculation methodologies. We will review this projection on a regular basis and update it where appropriate.

#### Scope 3 reduction strategies and levers

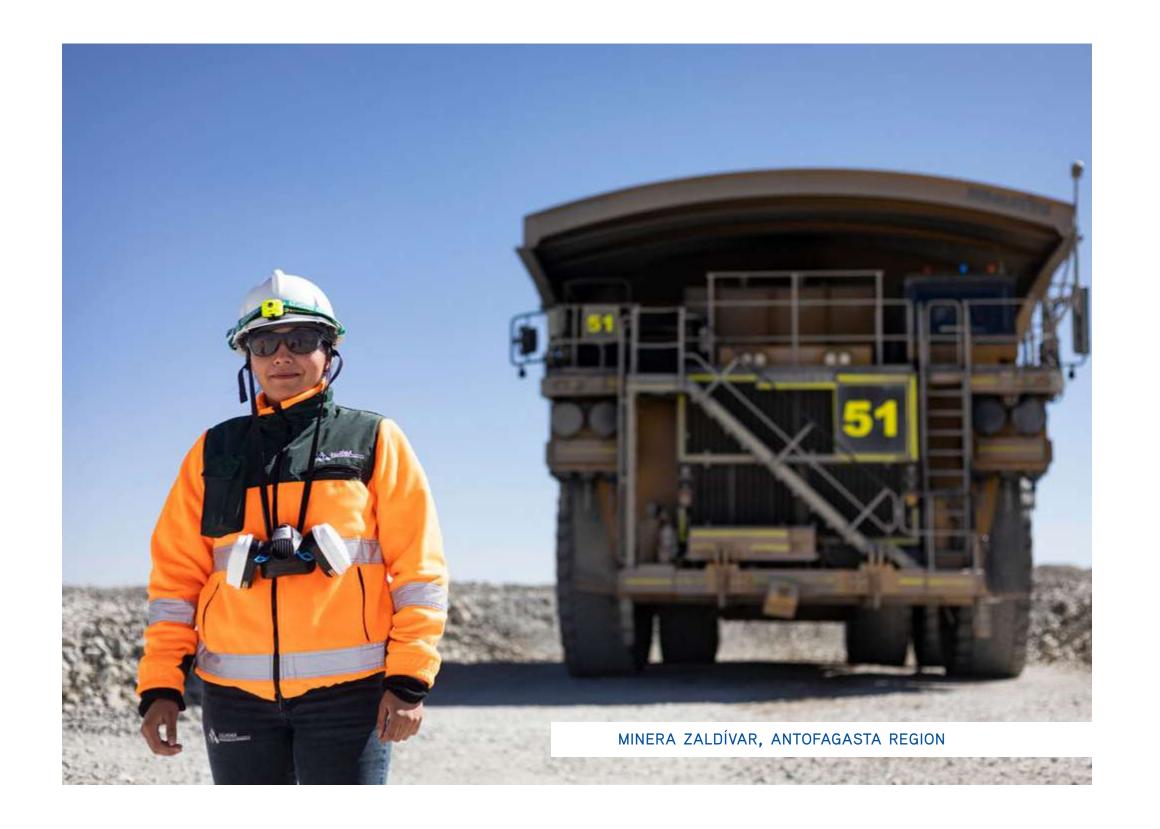
Upon analysing the distribution of our emissions, it is evident that Scope 3 emissions vastly exceed Scopes 1 and 2. This underlines the need to concentrate our mitigation efforts on indirect emissions that span from the purchase of goods and services to our production operations and investments.

In collaboration with our key suppliers, we have identified emission reduction levers across various categories of our Scope 3 emissions (mainly from categories 1, 3, and 4), including mine equipment, explosives, fuel and lubricant production and transportation, liner and grinding media, chemicals, amongst others. By focusing on these areas, we have identified a potential for reducing  $\mathrm{CO}_2$  emissions, contributing significantly to our overall environmental impact reduction. Our ability to reduce our Scope 3 emissions is dependent on the actions of third parties and so – although we can use our influence to seek to reduce our Scope 3 emissions – this is outside of our direct control.

Accordingly, our Scope 3 target is to engage with key suppliers to achieve a 10% reduction in our Scope 3 emissions by 2030 against 2022 "no action scenario" projection. Our ability to meet our Scope 3 target is supported by our strategic supplier engagement programme, which encompasses approximately 30 suppliers. We have identified a range of supplier categories and associated levers that will contribute to achieving our Scope 3 target.

The table sets out the quantified suppliers across two broad categories and emphasises opportunities for achieving emission reductions in the upcoming years. This strategic approach has the potential to reduce our Scope 3 emissions by an estimated potential 500,000 - 600,000 tonnes, subject to the ratification of operational development projects. As mentioned above, our ability to achieve our Scope 3 emissions reduction target depends on the actions of third parties, who we can seek to influence but cannot directly control. This would help us to achieve our Scope 3 emissions reduction target. While also undertaking on the challenge of growth and new projects.

Catgory	# Engaged Suppliers	Main Levers	Potential Reduction AMSA Tons CO <sub>2</sub>
Mine	+10	Acquisition	400,000
Processing & others	+20	of renewable energy source	200,000
Total			-600,000





To achieve these objectives, we will work closely with our primary emission suppliers so they commit to:

#### Supplier emission measurement and management

One of our key challenges is enhancing the accuracy of our emissions calculations. Moving away from generic estimates, we are focussed on obtaining more specific data which will improve our accuracy and our target setting process.

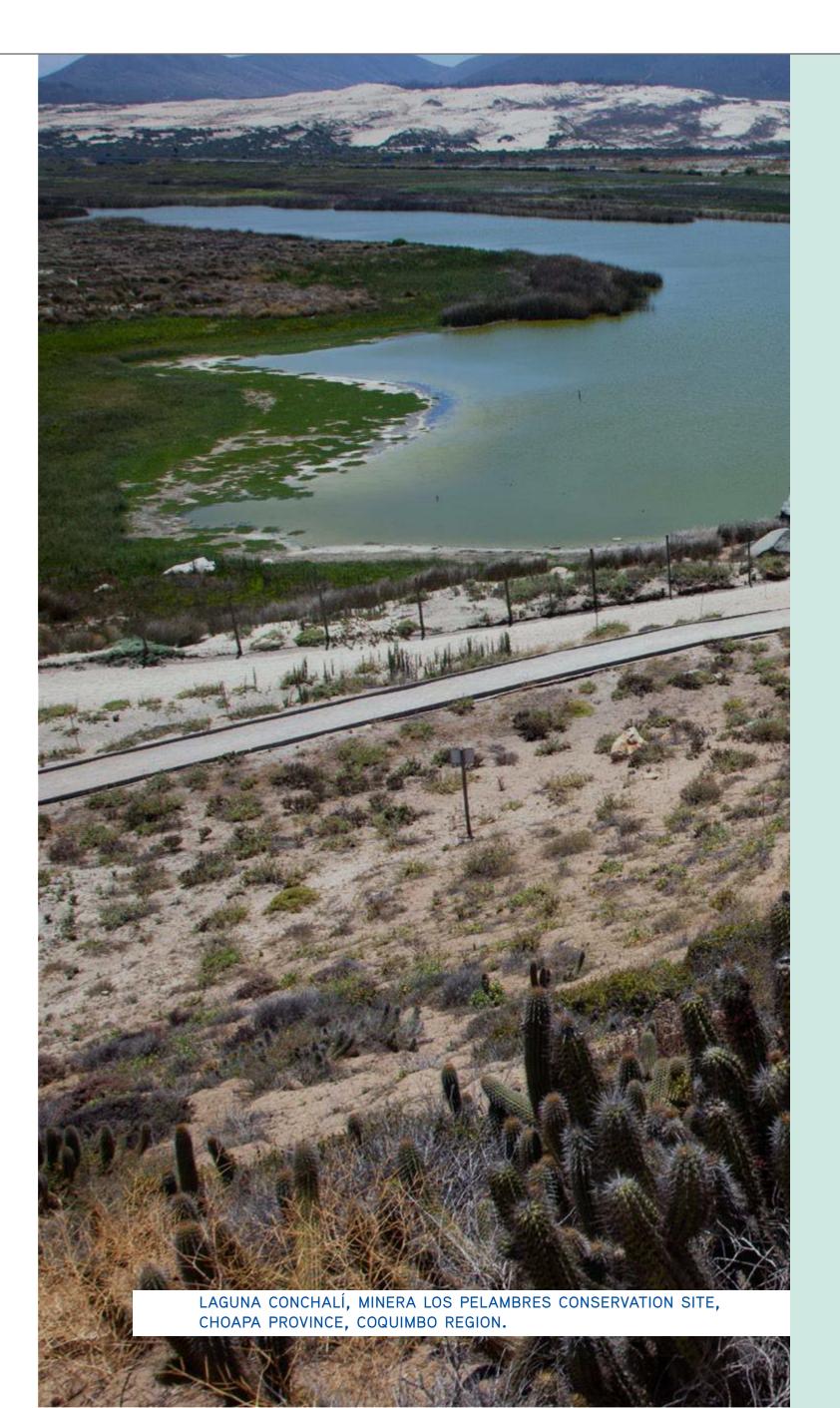
#### ► Transparency

Transparently disclose emissions through regular and accessible reports.

#### Definition and commitment

Define and commit to their own emission reduction objectives.

Our strategy involves two complementary objectives. Firstly, we aim to broaden our supplier base for collaboration on the emissions calculator. Secondly, we are focussed on gradually enhancing the capabilities of our suppliers. This involves supporting them to increasingly adopt product-specific emission factors, progressing beyond average industry emissions factors. The efforts are part of our commitment to achieving a more accurate and detailed Scope 3 emissions inventory. We will continue this path, transitioning from an inventory primarily calculated based on expenditure to one that is more precise, using either average industry emissions factors or those specific to the sector.



#### Scope 3 Emission Reduction Initiatives

In our quest to minimise environmental impact, we recognise and support a range of key initiatives that our suppliers are implementing to foster emission reductions:



Eco-design and circular economy:
We back our suppliers' efforts
in integrating eco-design and
circular economy principles.



Energy transition: We are conscious of and support our suppliers' shift to power purchase agreements (PPAs) for the augmented use of renewable energy.



Electromobility in contractual agreements: We favour our suppliers' initiatives to adopt electromobility.





### Scope 3 strategic planning towards decarbonisation

We acknowledge that the road to decarbonisation is a continuous process requiring constant review and adaptation. Therefore, we plan to revisit our goals in 2025 and outline new objectives in line with emerging progress and challenges.

Our strategic timeline is as follows:

Our Climate Action Plan reflects a pragmatic approach, grounded in solid principles such as sustainability, cost efficiency, and technological adaptability. We aim to progress towards carbon neutrality responsibly and realistically, guided by a vision of balanced development and environmental respect. Through concrete actions and adapting to technological advancements, we aspire to make a significant contribution to a more sustainable future, always with a measured and conscious approach to our role in the sector.

2023 2025 2030

- ► Identified key suppliers to improve accuracy in calculating Scope 3 emissions.
- ► Participated in worktables focussed on traceability and harmonised reporting to enhance continuous improvement in emissions management.
- ► Actively collaborated with suppliers to obtain more detailed emission factors, thus contributing to the precision of the 2023 emissions inventory.
- ► Plan to continue working closely with suppliers throughout the year to further enhance the precision of our emission calculations, progressing towards more accurate and specific emissions factors.
- ► Planned introduction of emissions calculator in partnership with our suppliers, as a key aspect of our commitment to capacity building, thereby improving accuracy and effectiveness in emissions management.
- ► Will review Scope 3 emissions reduction progress for the years 2023 and 2024 and set long-term reduction goals towards 2030 2050.
- ► Target to reduce our Scope 3 emissions by 10% against a no action scenario projection using 2022 as a baseline.

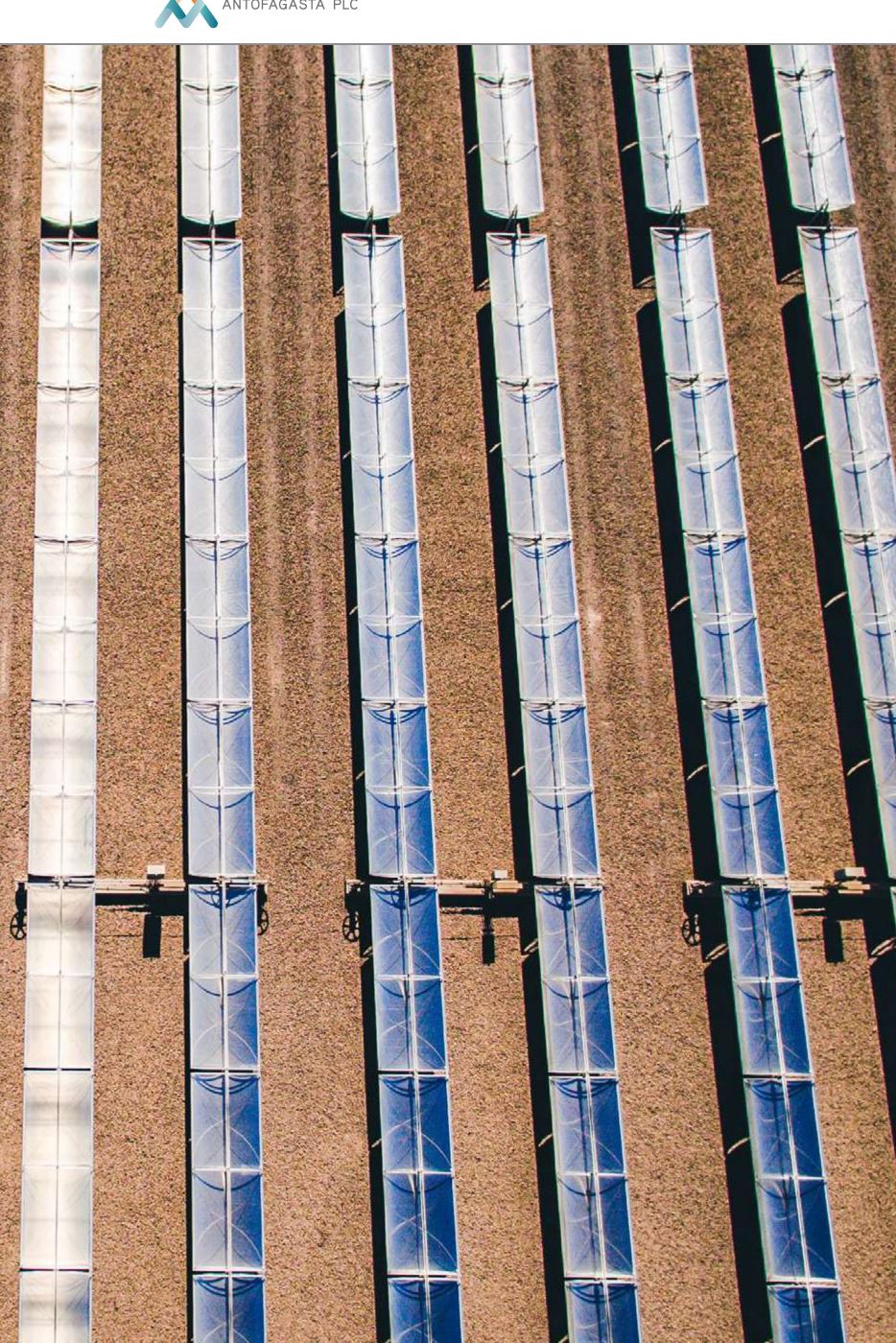


Chapter 3

Policies and Governance







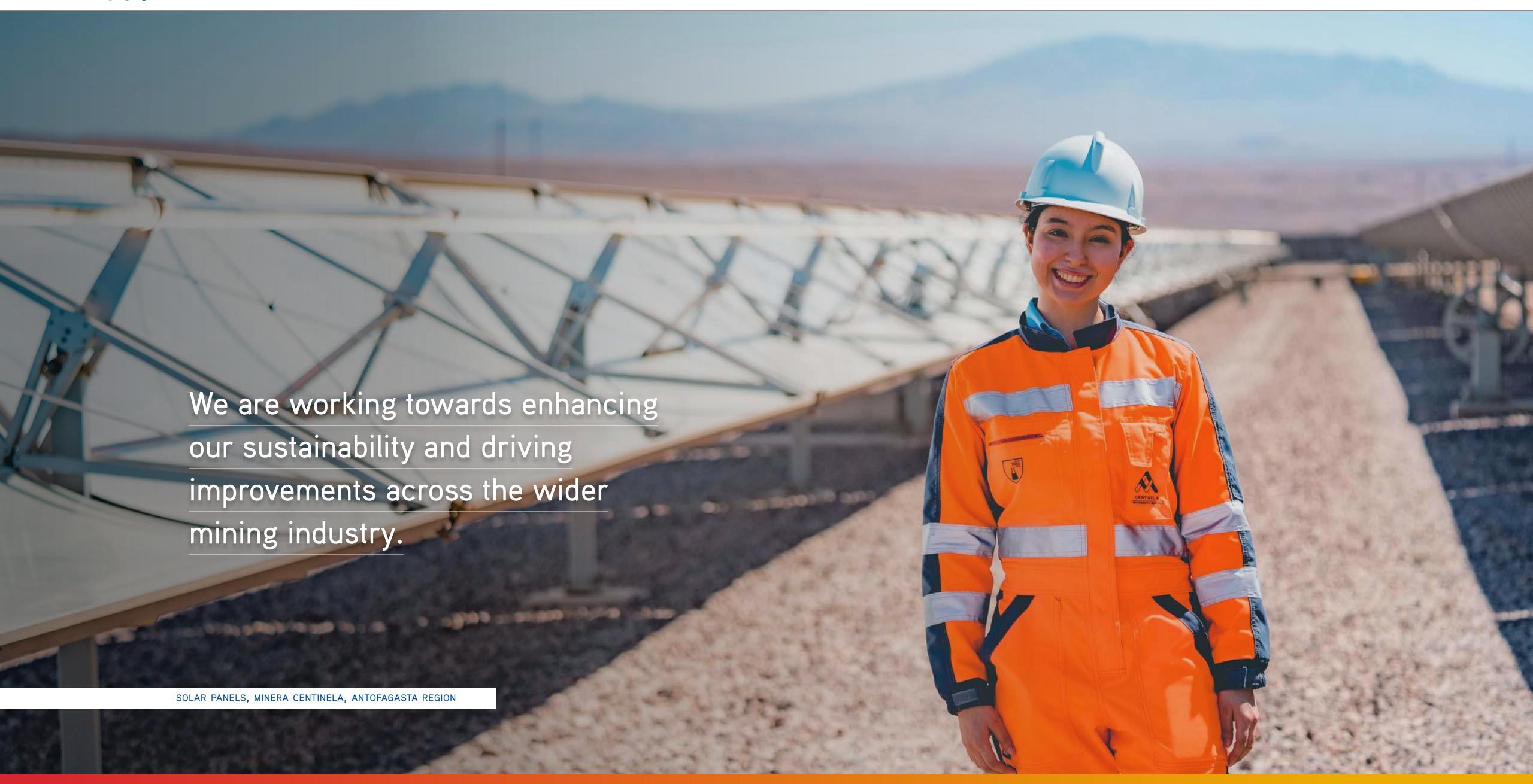
## Climate Policy Engagement

Our Sustainability policy is based in five pillars: People, Economic performance, Environmental management, Social development, Transparency and Corporate Governance. We are working towards enhancing our sustainability and driving improvements across the wider mining industry. Proactive engagement with governments, regulators, and stakeholders is paramount in shaping our decarbonisation trajectory. Our participation in industry councils and collaborative ecosystems, such as the ICMM, ICA and the Chilean Mining Council, demonstrates our commitment to development and innovation. We aim to actively contribute to policy change and to align our strategies with national and international climate goals and targets.

Our approach to addressing climate change also guides our strategic management of essential resources like water and energy. We are committed to our comprehensive Water and Energy Policies. These policies, underpinned by rigorous management systems, including ISO 50001:2018 certification, reflect our ongoing efforts in energy stewardship and our dedication to environmental excellence. In 2022, we appointed dedicated energy managers on site, who are focused on and provide specialised stewardship of these critical resources.

In recognising climate change as a collective challenge, Antofagasta extends its efforts beyond our immediate operations to encompass our suppliers. Our 'Suppliers for a Better Future Programme,' launched at the end of 2022, assists suppliers in developing their own climate policies, fostering sustainability within our procurement processes, to help us meet our collective GHG reduction targets. As part of this approach, we are actively developing training and informational programmes to equip our suppliers with the skills necessary to adapt to the evolving challenges of transition towards sustainable energy models in our operations.





SUSTAINABILITY

**MANAGEMENT** 

VICE PRESIDENT OF

**CORPORATE AFFAIRS** 

AND SUSTAINABILITY

Ethics

**VICE PRESIDENT** 

**INNOVATION** 

Climate

Change

Disclosure

**OF STRATEGY AND** 

Energy,

water &

decarbonisation

Management

AND STAKEHOLDER

Projects



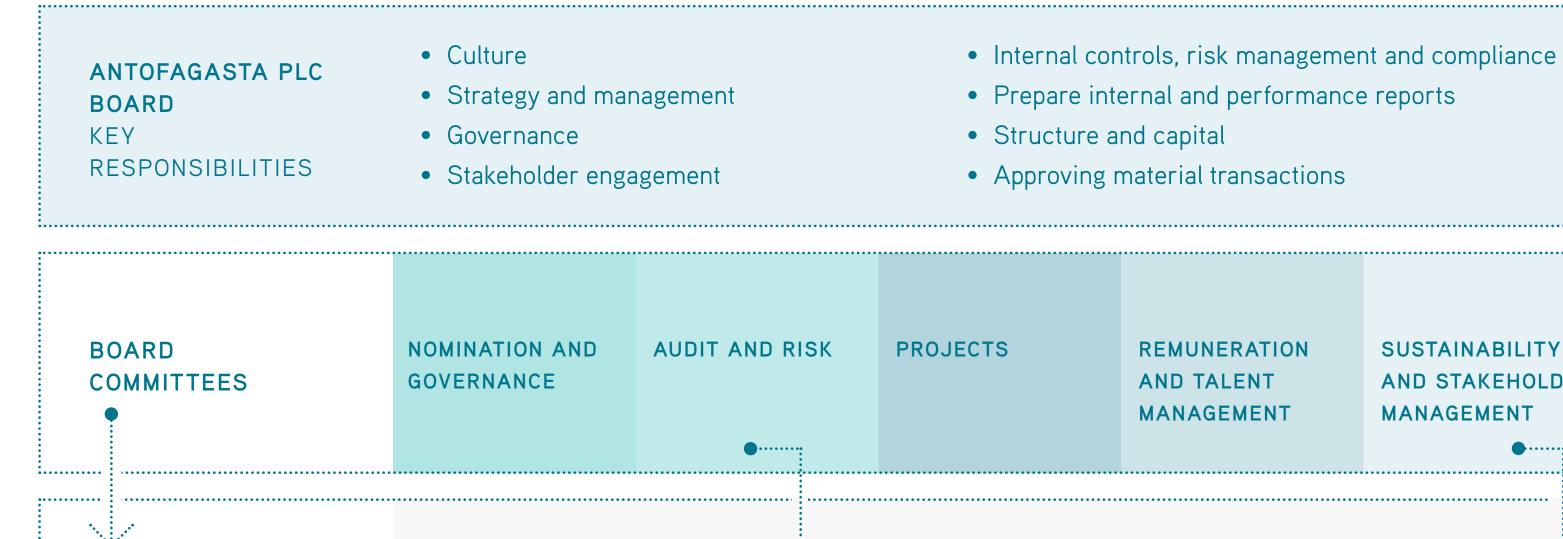
## Decarbonisation governance

Our Company's governance structure is designed to support our strategic Climate Action Plan. Spanning across all levels of the organisation, this governance framework is crafted to support the essential requirements of our Climate Change Strategy.

To enhance our focus on our decarbonisation plan, we established the Decarbonisation Management Department in 2023, which reports directly to the Vice President of Strategy and Innovation. Its main objective is to create the enabling conditions for the implementation of our decarbonisation plan. This plan considers, among others, to replace fossil fuels in our operations with low carbon technologies, maintaining competitive costs while adhering to the mining plan requirements.

At the executive level, the Climate Change Strategy duties and responsibilities are clearly defined, extending up to our Chief Executive Officer's office. Regular reports on environmental issues are made as well as several board and executive committee meetings, ensuring a continuous and open flow of strategic information to the Board's Stakeholder Engagement Committee and the Board itself.

The Climate Change Committee, within the governance structure, plays a key role in overseeing the development and implementation of the Climate Change Strategy. Simultaneously, our board, with 70% of its members having expertise in sustainability and climate change, relies on the counsel of specialised committees to fulfil the various supervisory responsibilities related to climate change.



CHIEF EXECUTIVE OFFICER

CHIEF FINANCIAL OFFICER

Business

Development

Operating

Review

Performance

CEO AND

OF THE

**EXECUTIVE** 

COMMITTEE

EXECUTIVE

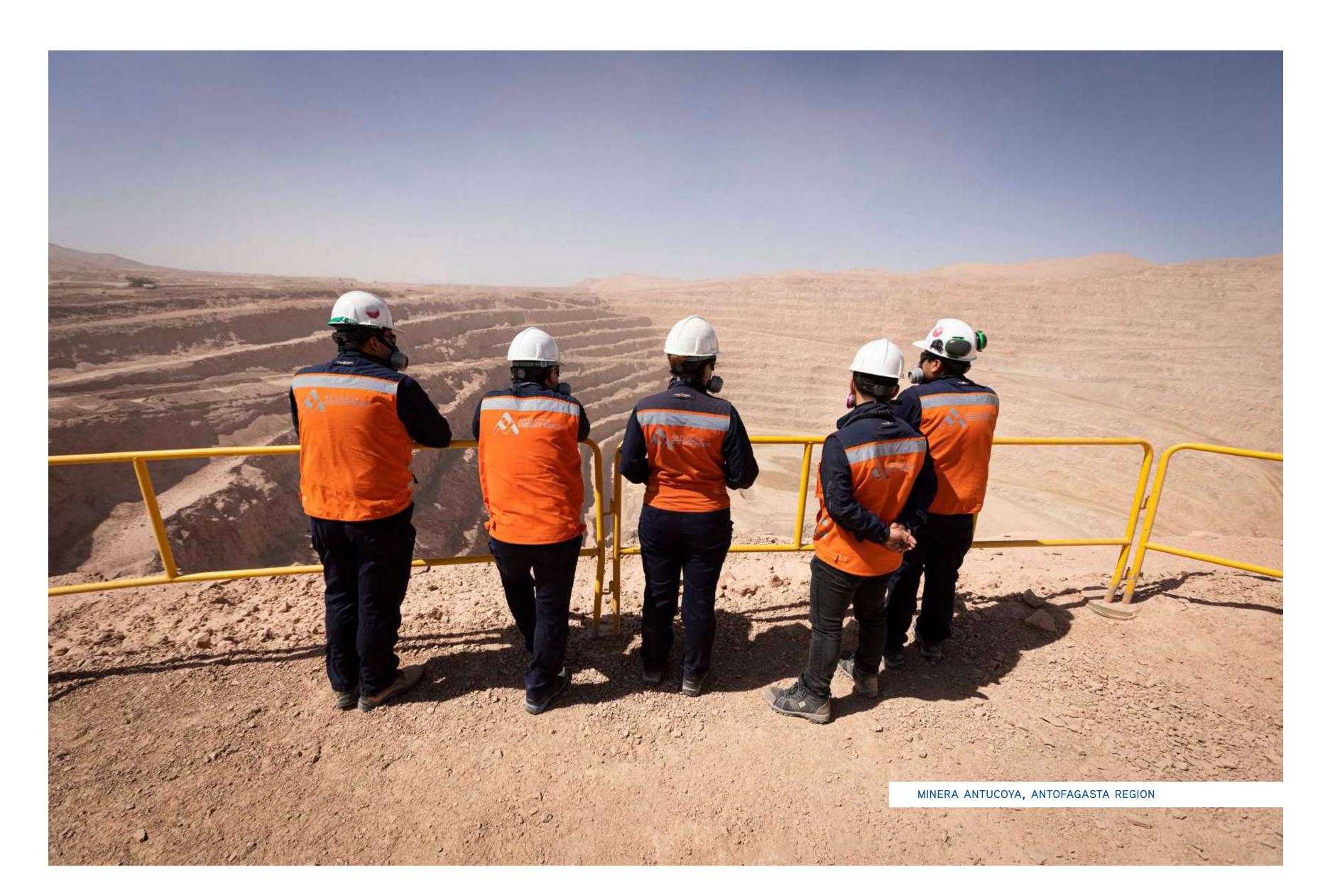
COMMITTEE

**SUBCOMMITTEES** 



In line with our strategic plan and progress towards achieving our overall ambition of carbon neutrality by 2050. We have updated our Climate Change Governance as introduced in our <u>Second Climate Change Report</u>. The Vice Presidency of Strategy and Innovation has been added to this governance structure, alongside the Vice Presidencies of Finance and Corporate Affairs and Sustainability. This structure aims to further enhance our internal goals set forth by the Executive Committee and overseen by the CEO.

Lastly, the Board's Compensation and Talent Management Committee ensures that the group's remuneration approach remain aligned with the effective implementation of strategic priorities, thus reflecting the connection between executive compensation and performance against emission targets and their programs. Sustainability goals and individual organisational capacities constitute 25% of key individual performance, with a 10% allocation specifically dedicated to environmental performance. This approach demonstrates our commitment to achieving our sustainability KPIs.





## Measuring and reporting standards

It is important to acknowledge our commitment to high standards of accountability, transparency and consistency when developing our targets and plan. We adhere to internationally accepted reporting and accounting frameworks that represent global benchmarks for best practices. These standards help to safeguard our targets are both scientifically accurate and aimed at delivering the transformative change required.

We follow the Greenhouse Gas Protocol (GHG Protocol), the most widely used international accounting tool for understanding, quantifying and managing greenhouse gas emissions. Furthermore, disclose our environmental impact by reporting against the protocols set by Disclosure Insight Action (CDP), a globally recognised disclosure system that supports companies in managing their environmental impacts and disclosing their carbon footprint systematically.

In recognition of our association as an International Council on Mining and Metals (ICMM) member, we strive to ensure our practices conform to the ICMM - Scope 3 Emissions Accounting and Reporting Guidance and Scope 3 Target Setting Guidance. This demonstrates our commitment to robust reporting and transparency in our Scope 3 emissions.

Furthermore, disclose our environmental impact by reporting against the protocols set by Disclosure Insight Action (CDP), a globally recognised disclosure system that supports companies in managing their environmental impacts and disclosing their carbon footprint systematically.





#### **Disclaimers**

This document contains a number of graphics, infographics and text boxes which aim to give a high-level overview of certain elements of this plan and improve the accessibility of this plan for readers. These graphics, infographics and text boxes are designed to be read within the context of the plan as a whole.

This document, and the information and data contained herein, has been developed based on current information, estimates and beliefs, using models, methodologies and standards which are subject to certain assumptions and limitations, including (but not limited to) the availability and accuracy of data, lack of standardisation of data and lack of historical data, as well as other future contingencies, dependencies, risks and uncertainties (due to, among other things, global and regional legislative, judicial, fiscal, technological and regulatory developments including regulatory measures addressing climate change). As a result, such models, methodologies, and standards may be subject to adjustment beyond the control of Antofagasta and may change and be changed over time. Antofagasta does not undertake to update any such statements, information or data contained herein, nor to inform you if any statements, data, or information contained herein change in future.

This document also contains data on Antofagasta's Scope 1, 2 and 3 emissions. Some of this data is based on estimates, assumptions and uncertainties. Scope 1 and 2 emissions data relates to emissions from Antofagasta's own activities (including supplied power) and is generally easier for Antofagasta to gather than Scope 3 emissions data. Scope 3 emissions relate to other organisations' emissions and is therefore subject to a range of additional uncertainties, including that: data used to model carbon emissions is typically industry-standard data or estimates rather than relating to individual suppliers; and may not cover all products and markets. In addition, international standards and protocols relating to continue to evolve, as do accepted norms regarding terminology such as carbon neutrality and net zero which may affect the emissions data Antofagasta reports. As Scope 3 emissions data improves, shifting over time from generic modelled data to more specific data, the data reported in this document is likely to evolve.

The models, methodologies, data, and standards used to develop this document and the information and data contained herein are not of the same standard as those available in the context of other financial information, nor subject to the same or equivalent disclosure standards, historical reference points, benchmarks or globally accepted accounting principles and are subject to rapid change and development for the reasons stated above. Any opinions and estimates given in this document should therefore be regarded as indicative, preliminary and/or illustrative. Actual outcomes may differ from those set out herein.

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Scope 1, 2, and 3 emissions calculations and categorisations also continue to evolve, as do accepted norms regarding terminology such as carbon neutrality and net zero which may affect the emissions data Antofagasta reports. As Scope 3 emissions data exercise your own independent judgement (with the advice of your professional advisers as necessary) with respect to the risks and specific data, the data reported in this document is likely to evolve.

#### Forward-Looking Statements

This document contains forward-looking statements. Words such as 'will', 'aim', 'expect', 'progress', 'estimate', 'anticipate', 'intend', 'look', 'believe', 'vision', 'ambition', 'target', 'seek', 'goal', 'plan', 'potential', 'try', 'work towards', 'future', 'become', 'introduce', 'transform', 'outcome', 'project', 'projections', 'deliver', 'evolve', 'develop', 'forward', 'medium-term', 'long-term', 'objective', 'achievement', or the negative of these terms and other similar expressions of future actions or results, and their negatives, are intended to identify such forward-looking statements. Forward-looking statements include, but are not limited to, statements and information regarding the targets of the Antofagasta Group (the "Group") and its strategy to reduce, in absolute terms, its operational (Scope 1 & 2) emissions by 50% by 2035 against a 2020 baseline, to reduce in-scope absolute Scope 3 emissions by 10% from a projected baseline established from our 2022 Scope 3 emissions and estimated projections of future spend; and its overall ambition to achieve carbon neutrality covering Scope 1 and 2 emmisions by 2050 as set out in more detail in this document (the "Climate Action Plan" or the "plan").

Forward-looking statements also include, but are not limited to, actions to reduce emissions in the Group's own operations and across its value chain, including reducing emissions at the Group's mines as well as within its supply chain (e.g. purchased goods and services); and future advocacy and partnerships in wider society.

These forward-looking statements are based upon current expectations and assumptions regarding anticipated developments and other factors affecting the Group.

Forward-looking statements are based on the current expectations and assumptions of management. They are not historical facts, nor are they guarantees of future performance or outcomes. Because these forward-looking statements involve known and unknown risks and uncertainties, there are important factors that could cause actual results to differ materially from those expressed or implied by these forward-looking statements. Among other risks and uncertainties, the material or principal factors which could cause actual results to differ materially include, but are not limited to, those set out as enabling conditions or matters on which the

plan depends in this document. No assurance can be given that the forward-looking statements in this document will be realised.

These forward-looking statements speak only as of the date at which this document was prepared. Except as required by any applicable law or regulation, the Group expressly disclaims any obligation or undertaking to release publicly any updates or revisions to any forward-looking statements contained herein to reflect any change in the Group's expectations with regard thereto or any change in events, conditions, or circumstances on which any such statement is based.

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