

05 | 13 | 2025

TOWARDS NET ZERO IN CHILEAN MINING

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The Electric Mine 2025

ALMOST EVERY ASPECT
OF MODERN LIFE
REQUIRES MINERALS

ENERGY



HEALTH



COMMUNICATIONS



AGRICULTURE



TRANSPORT



MUSIC,
ENTERTAINMENT &
MANY OTHERS



ADDED TO THE TRADITIONAL DEMAND, THE ENERGY TRANSITION AND DIGITALIZATION ARE MINERAL-INTENSIVE.

- ELECTRIC VEHICLES USE **4** TIMES MORE COPPER THAN GASOLINE CARS.
- RENEWABLE ENERGIES REQUIRE **5** TIMES MORE COPPER THAN CONVENTIONAL ONES.
- A 3 MW ELECTRIC WIND TURBINE NEEDS **4.7** TONS OF COPPER
- 1 MW OF SOLAR-PANEL GENERATED ENERGY USES **5** TONS OF COPPER ON AVERAGE.



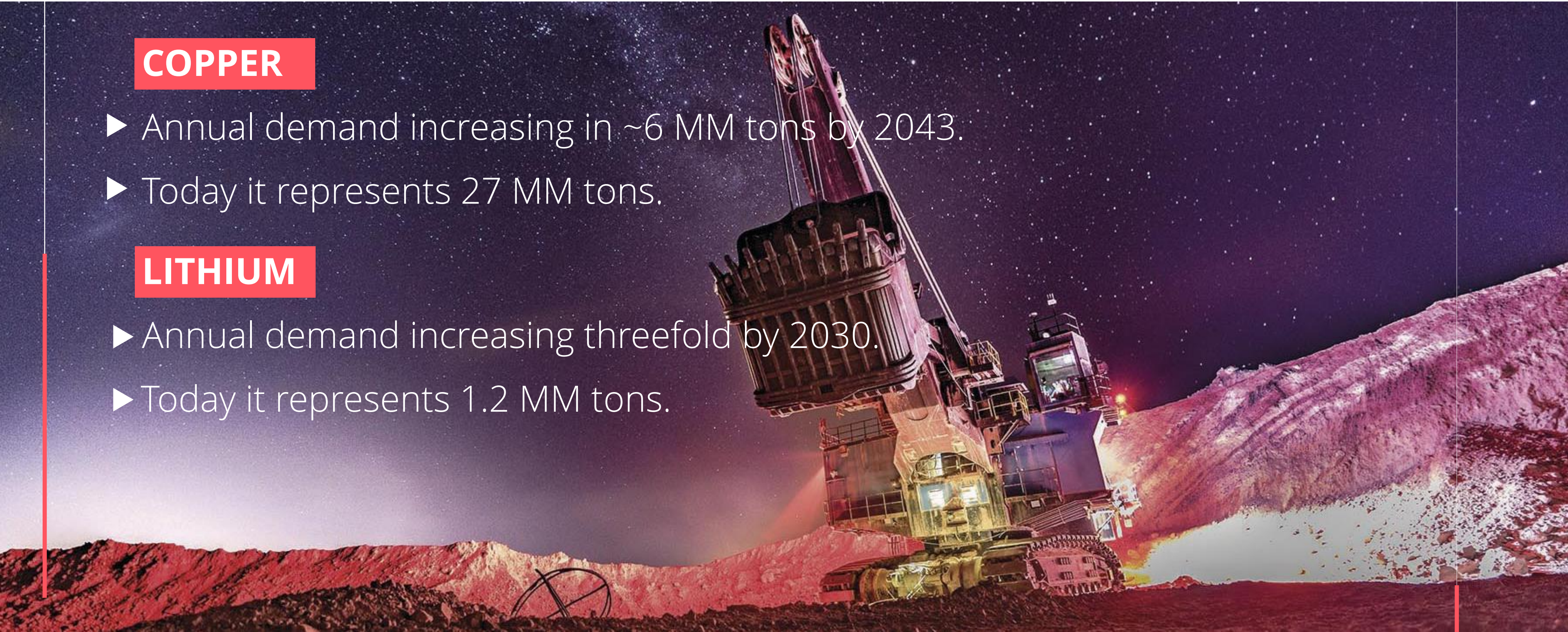
GLOBAL COPPER & LITHIUM DEMAND

COPPER

- ▶ Annual demand increasing in ~6 MM tons by 2043.
- ▶ Today it represents 27 MM tons.

LITHIUM

- ▶ Annual demand increasing threefold by 2030.
- ▶ Today it represents 1.2 MM tons.



“A LOW-CARBON
FUTURE WILL NOT BE
POSSIBLE WITHOUT
MINERALS”

WORLD BANK, 2017



THE WELL-BEING OF HUMANITY DEPENDS ON MINERALS



THE GREAT
CHALLENGE FOR
THE MINING
SECTOR IS TO
INCREASE
PRODUCTION
WHILE REDUCING
ITS CARBON
FOOTPRINT

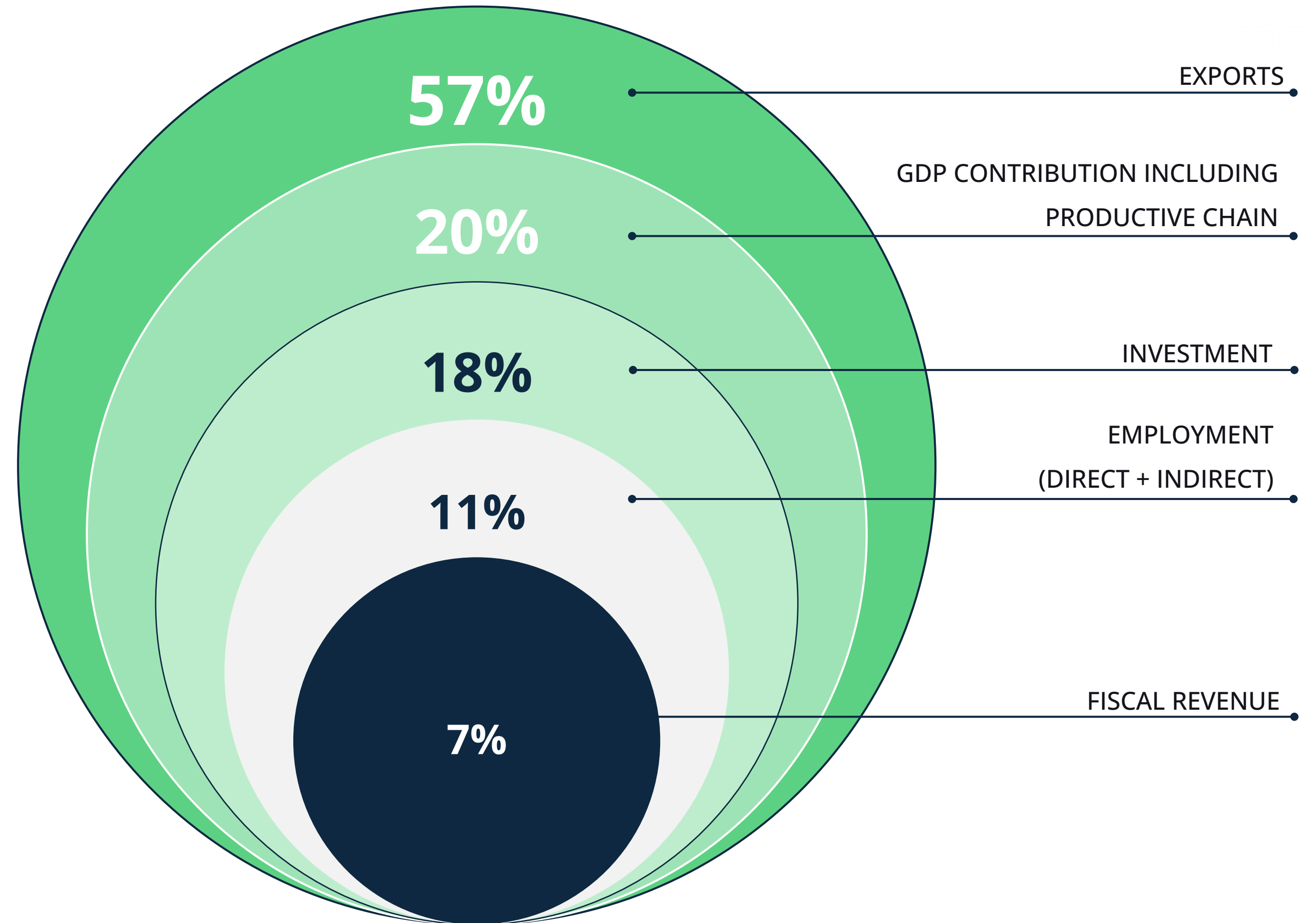


AND WHAT ARE WE DOING IN CHILE?

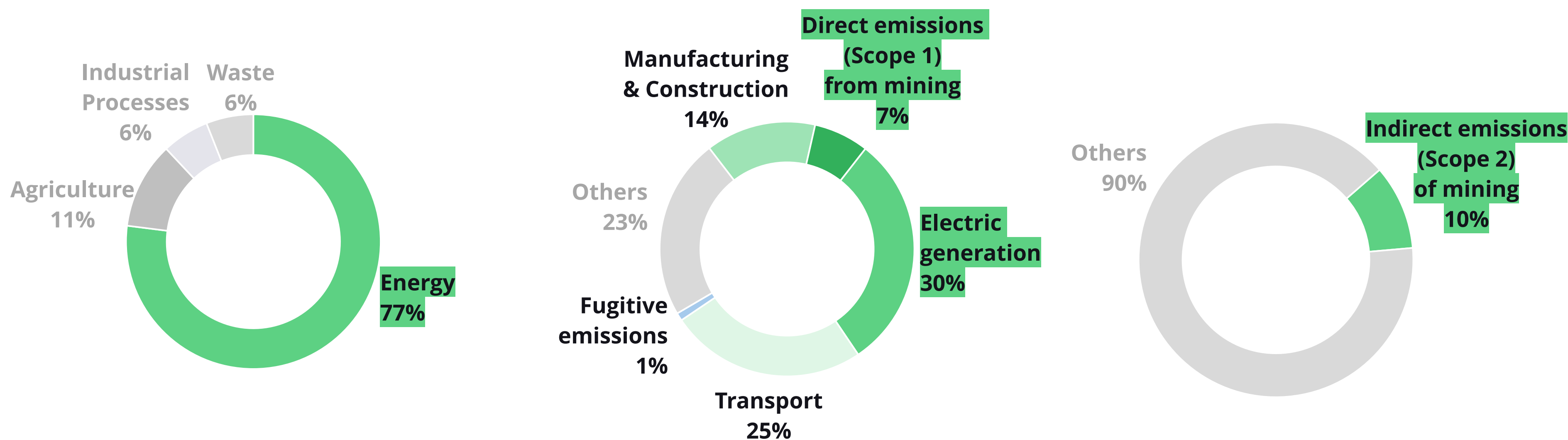


ECONOMIC IMPACT OF MINING IN CHILE

MINING IS A KEY INDUSTRY
FOR OUR COUNTRY'S
DEVELOPMENT.



SECTORIAL PARTICIPATION IN CHILE'S GREENHOUSE GAS EMISSIONS



SOURCE: Chile's long-term climate strategy, 2021.

CHILE'S MINING INDUSTRY IS COMMITTED TO REDUCE IT'S GHG EMISSIONS.

IN ORDER TO ACHIEVE THE
OBJECTIVES OF THE PARIS
AGREEMENTS.

BUT EVEN MORE SO.

IN DECEMBER 2020, THE LARGE-SCALE MINING INDUSTRY, THROUGH CONSEJO MINERO, BECAME THE FIRST PRODUCTIVE SECTOR TO VOLUNTARY COMMIT TO GHG EMISSION REDUCTION TARGETS. SINCE THEN, THESE TARGETS HAVE BEEN UPDATDED.

AT THE COP26 IN GLASGOW, THE COMPANIES OF THE INTERNATIONAL COUNCIL ON MINING AND METALS (ICMM), OF WHICH CONSEJO MINERO IS A MEMBER, ANNOUNCED THE COMMITMENT TO ACHIEVE NET ZERO SCOPE 1 AND 2 GHG EMISSIONS BY 2050.

REDUCING DIRECT EMISSIONS

80% OF SCOPE 1 EMISSIONS COME FROM HAUL TRUCKS

The industry is working with developers of large mining equipment and haul trucks towards a technological change. However, this is under process, with no certainty on a time frame for massive implementation.

INNOVATION FOR CLEANER SAFER VEHICLES - ICMM

This international initiative led by the ICMM promotes the development of fuel replacement technologies, working with mining companies and suppliers.

PILOT PROJECTS

Mining companies are conducting pilot projects implementing the use of trolley systems for haul trucks, among others.



IN ADDITION TO INITIATIVES AIMED AT
MEASURING EMISSIONS AND COMMITTING
TO REDUCTION TARGETS, THE MINING
INDUSTRY IS ADOPTING OTHER ACTIONS.

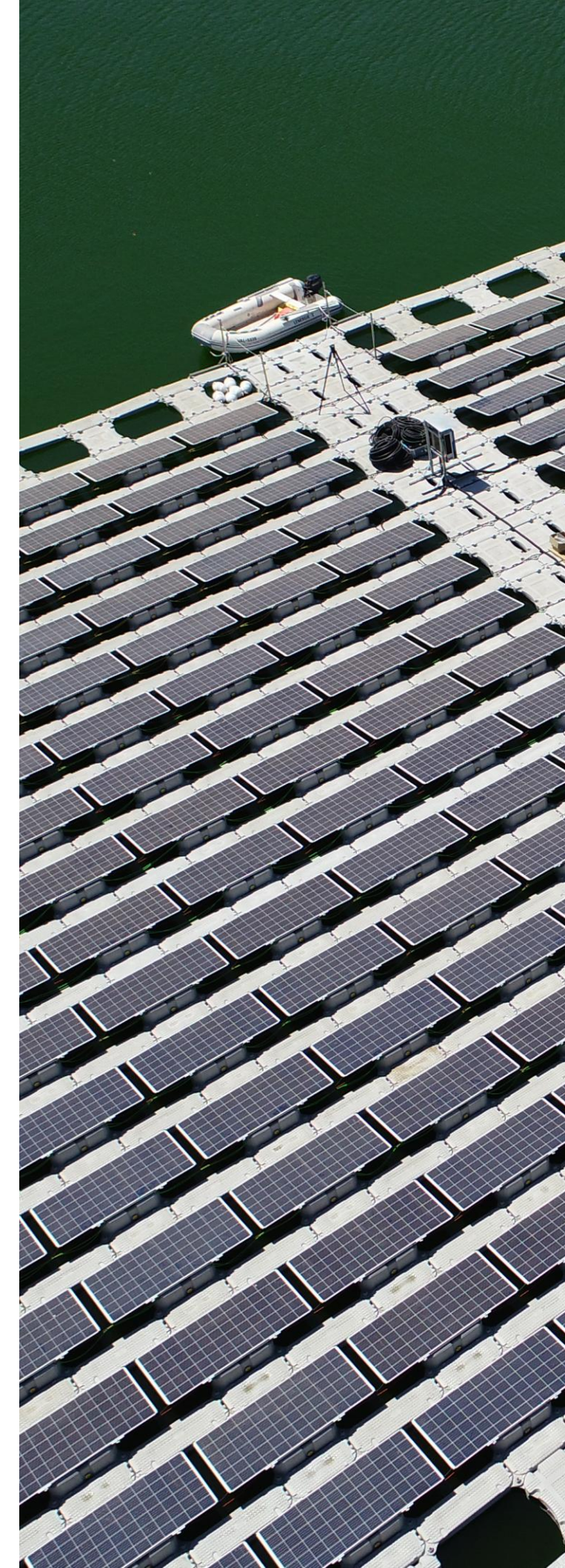
REDUCING INDIRECT EMISSIONS

RENEWABLE ENERGIES

- MINING HAS **DRIVEN THE DEVELOPMENT OF RENEWABLE ENERGY SOURCES** IN THE ELECTRICITY MATRIX, MAINLY BY SIGNING SUPPLY CONTRACTS THAT CONDITION THE USE OF CLEAN SOURCES.
- CURRENTLY, RENEWABLE ENERGIES ACCOUNT FOR **74% OF THE SUPPLY FOR LARGE-SCALE MINING IN CHILE**, ACCORDING TO COCHILCO.
- THE NATIONAL MINING POLICY HAS A TARGET OF **90% OF RENEWABLES BY 2030**.

ENERGY EFFICIENCY

- CONCRETE ACTIONS: **AGREEMENT BETWEEN THE MINISTRY OF ENERGY AND CONSEJO MINERO** (2014-2020) FOR **IMPLEMENTING INTERNATIONAL STANDARDS ENERGY MANAGING SYSTEMS**. THE CONCLUSION WAS THAT CHILE WAS ALIGNED WITH BENCHMARK MINING COUNTRIES.
- THIS EXPERIENCE LAID GROUNDWORK FOR THE **ENERGY EFFICIENCY LAW** OF FEBRUARY 2021, WITH SWIFT COMPLIANCE BY THE SECTOR.



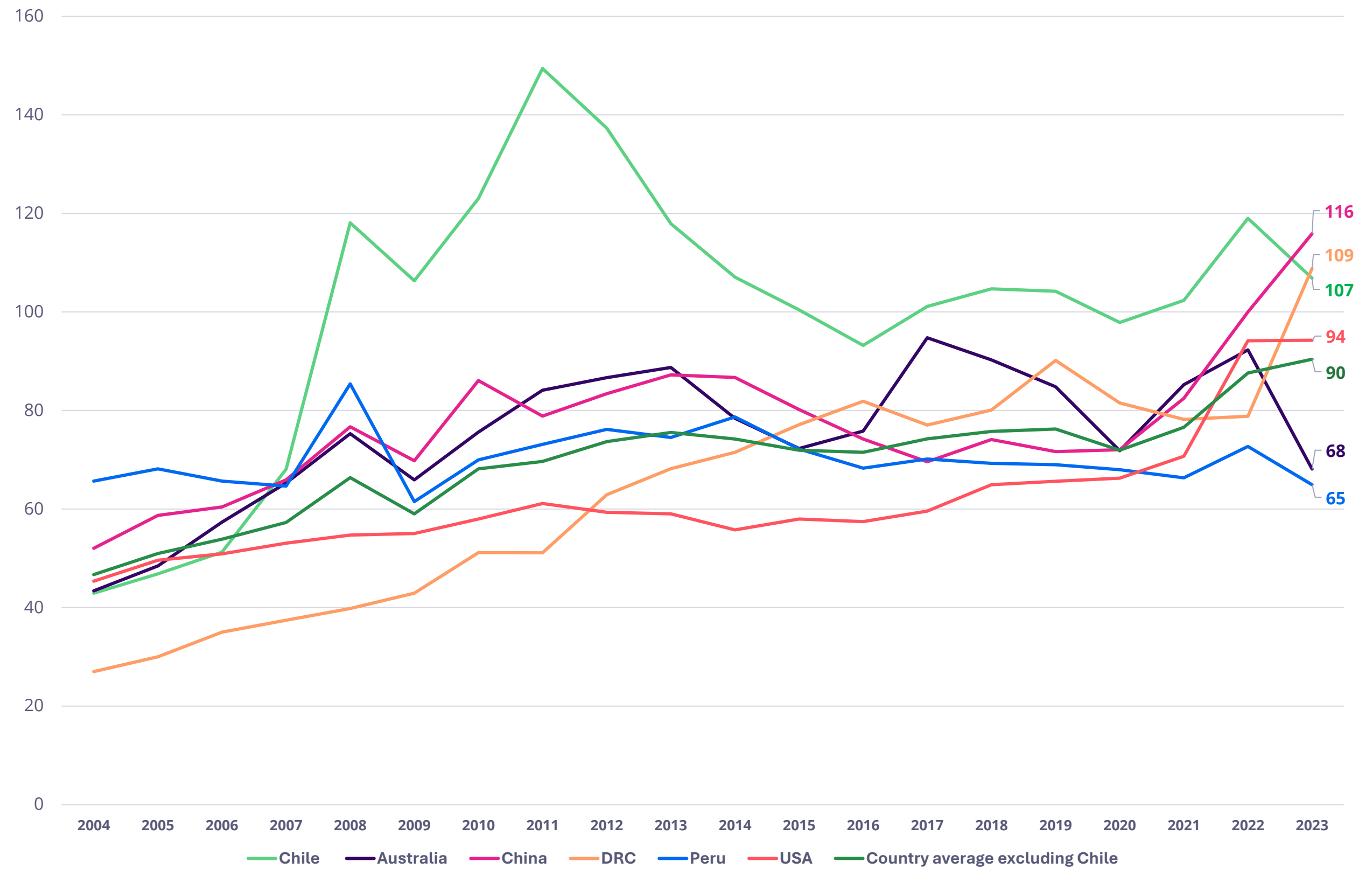
THE COST OF ELECTRICITY IN CHILE

- **ADVANCEMENTS IN ELECTRIFICATION** WILL ALLOW THE MINING SECTOR TO MAKE SIGNIFICANT LEAPS IN TERMS OF DECARBONIZATION.
- HOWEVER, THE **COST OF ELECTRICITY FOR MINING COMPANIES IN CHILE IS AMONG THE HIGHEST** WHEN COMPARED TO ITS MAIN COMPETITORS.
- ELECTRICITY ACCOUNTS FOR **11% OF OPERATIONAL COSTS** OF COPPER MINING.



THE COST OF ELECTRICITY IN CHILE

SOURCE: Consejo Minero based on information from Wood Mackenzie, 2024.



FINAL REMARKS

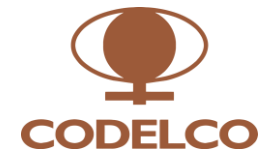
THE GREAT CHALLENGE FOR THE MINING SECTOR IS TO PRODUCE THE MINERALS THE WORLD NEEDS TO FIGHT CLIMATE CHANGE, WHILE AT THE SAME TIME REDUCING ITS OWN CARBON FOOTPRINT.

THE MINING INDUSTRY IS COMMITTED TO REDUCING GHG EMISSIONS IN ORDER TO ACHIEVE THE GOALS OF THE PARIS AGREEMENT.

BESIDES MEASURING ITS EMISSIONS AND COMMITTING TO REDUCTION TARGETS, THE MINING SECTOR IS ADOPTING CONCRETE ACTIONS IN TERMS OF MITIGATION TO CLIMATE CHANGE, MAINLY RELATED TO INCORPORATE RENEWABLE ENERGIES, ELECTRIFICATION AND ACHIEVEING ENERGY EFFICIENCY.

THE POLICYMAKERS CAN ENHANCE AND ACCELERATE THIS PROCESS BY ENSURING COMPETITIVE COST OF ELECTRICITY.

CONSEJO MINERO



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THANK YOU

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