

Chilean Mining Analysis

Constanza Araya Ibarra
April 2024

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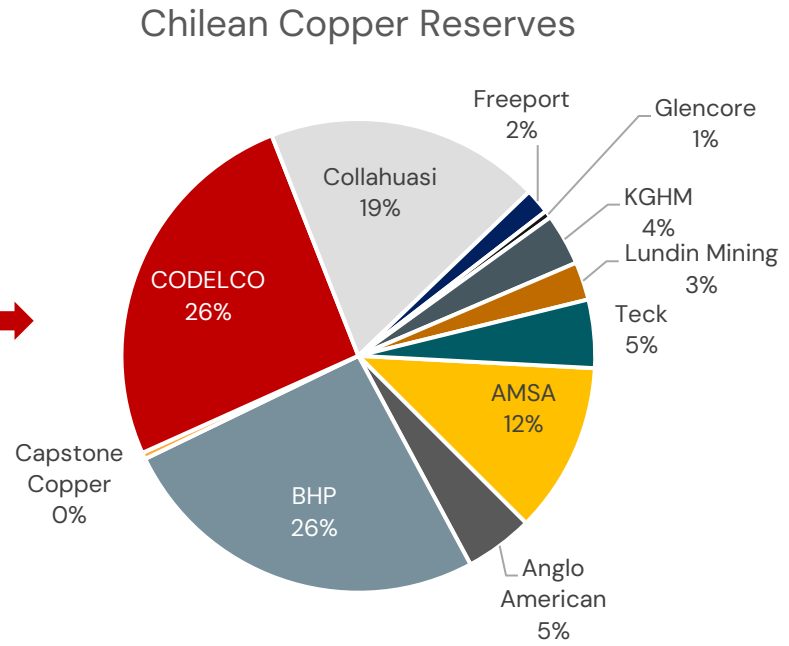
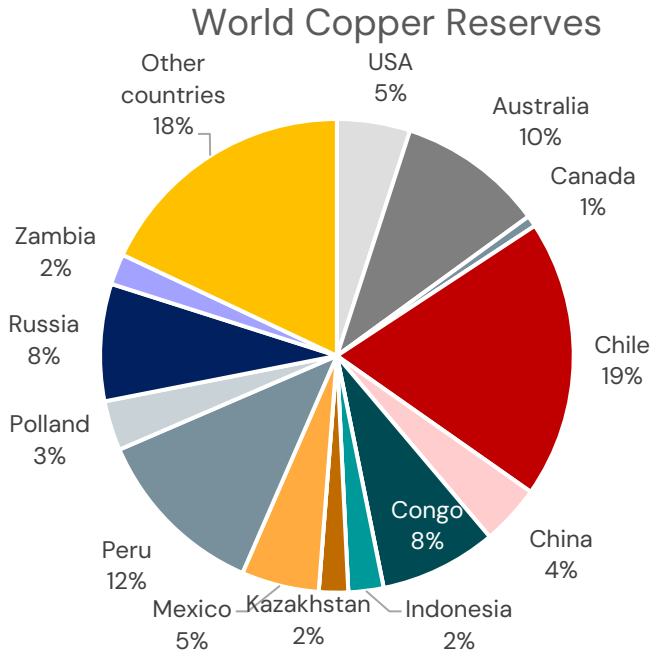
Agenda

1 Copper

2 Lithium

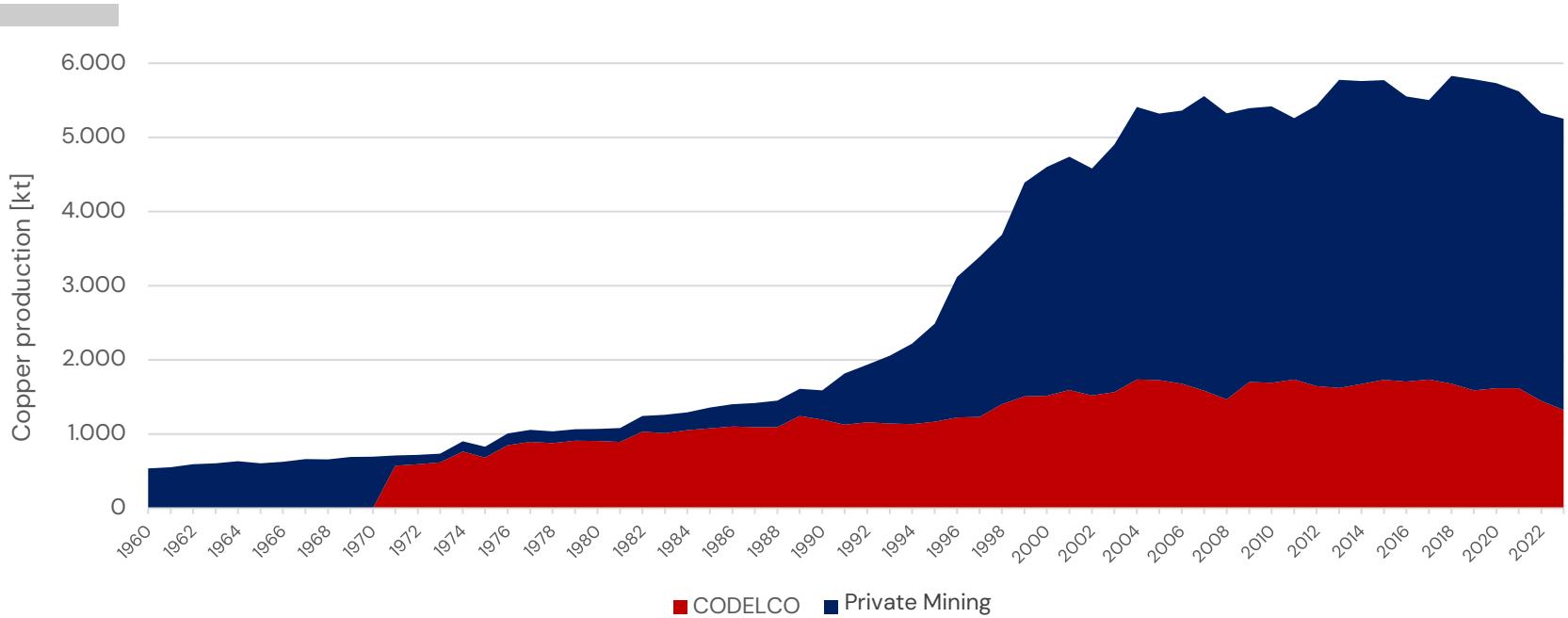
3 Opportunities
for the Chilean
mining sector

Copper reserves



Source: Self-elaboration with data from USGS and mining companies.

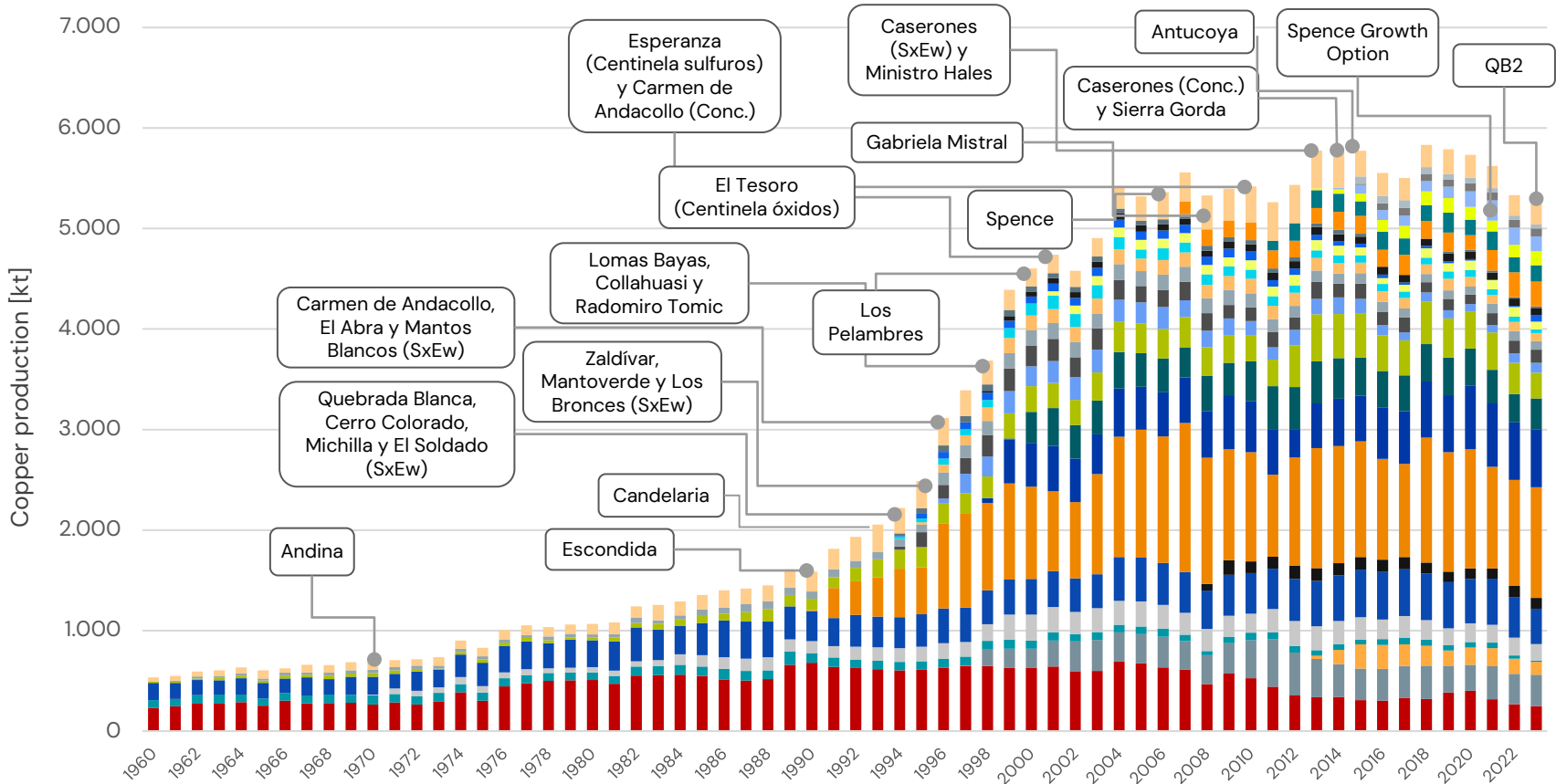
Chilean Copper Production



Note: Since 1971, private mining companies owned by US capital become the current CODELCO.

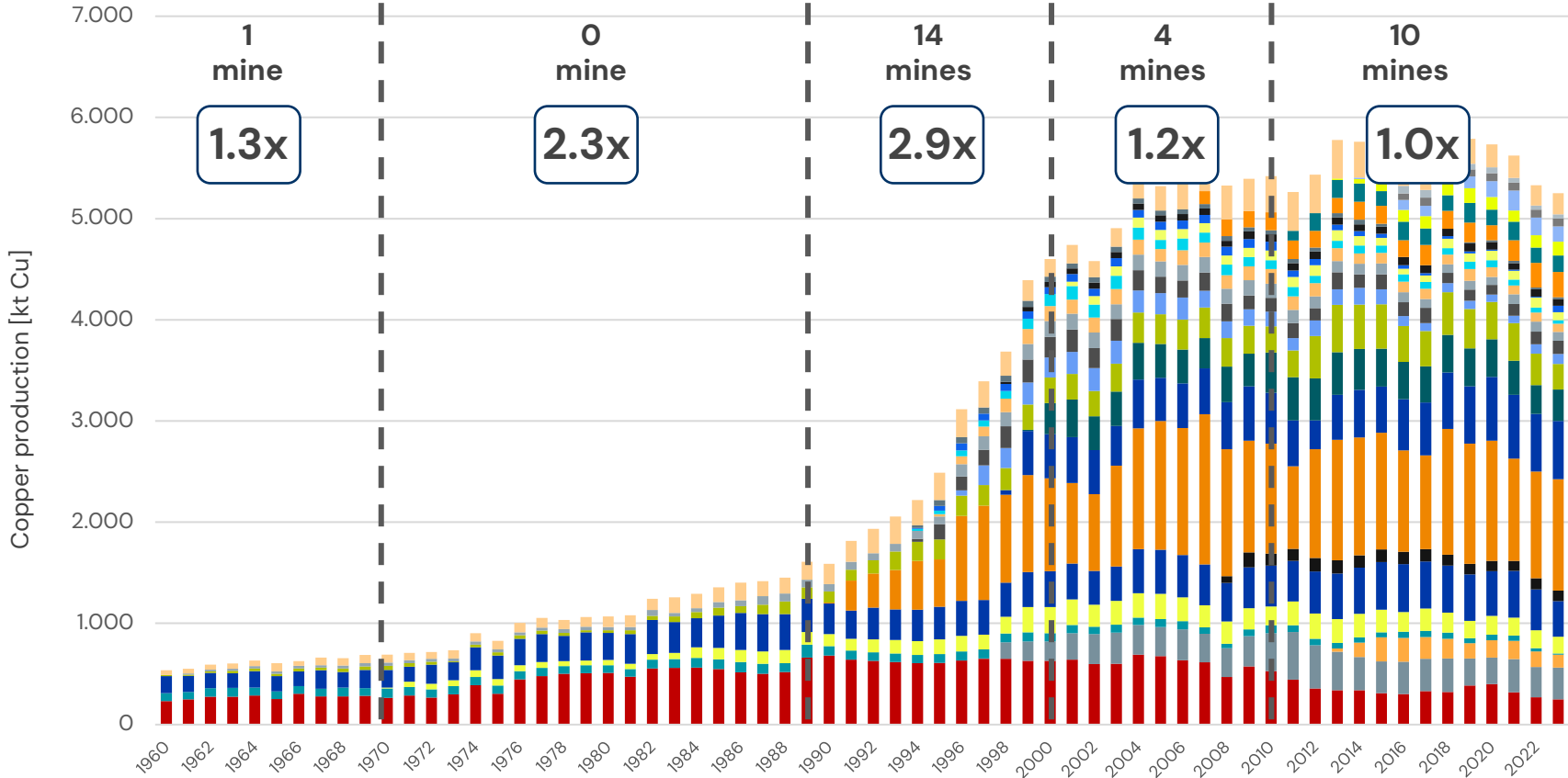
Source: Self-elaboration with data from Cochilco and other public sources.

Chilean Mining Analysis



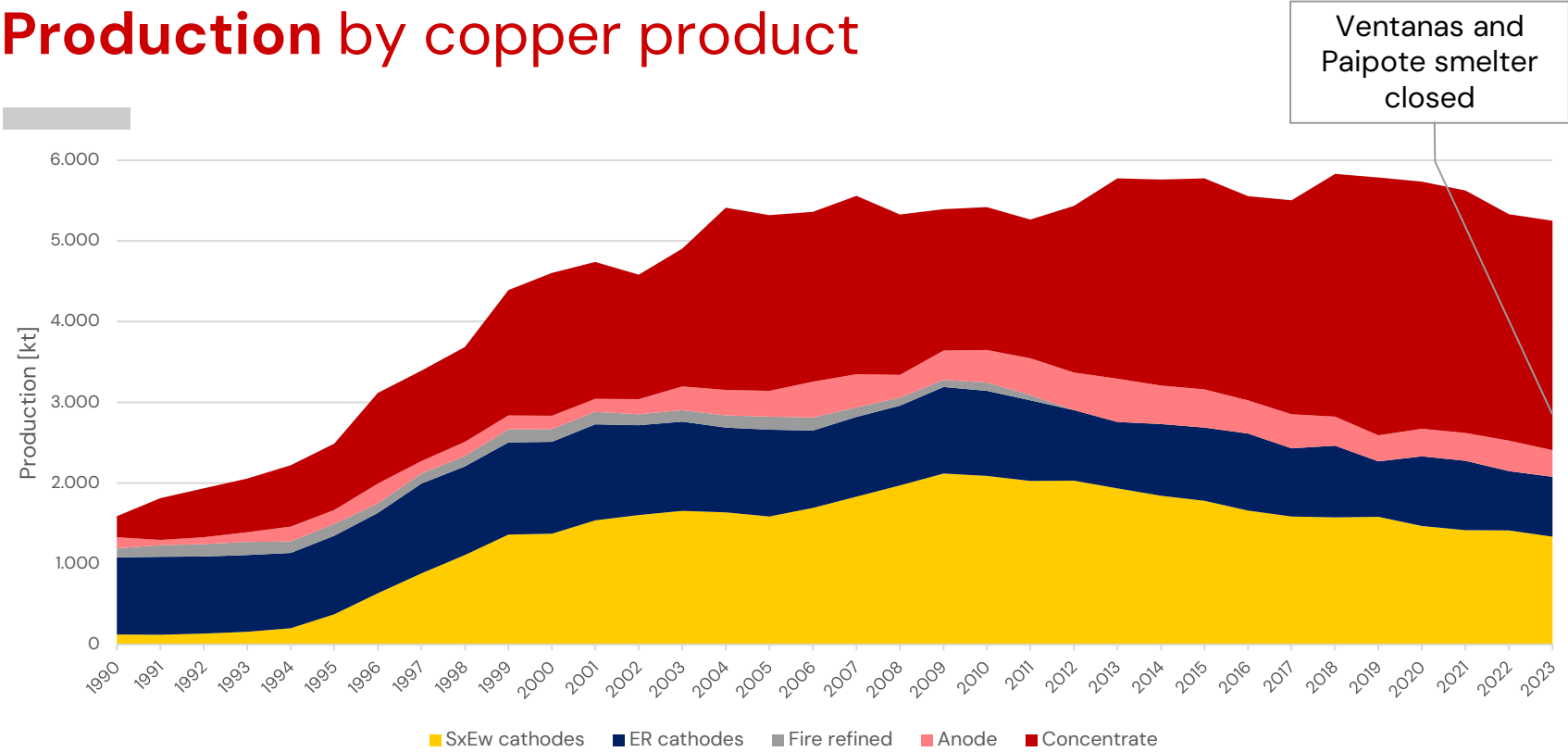
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Chilean Mining Analysis



Source: Self-elaboration with data from Cochilco and other public sources.

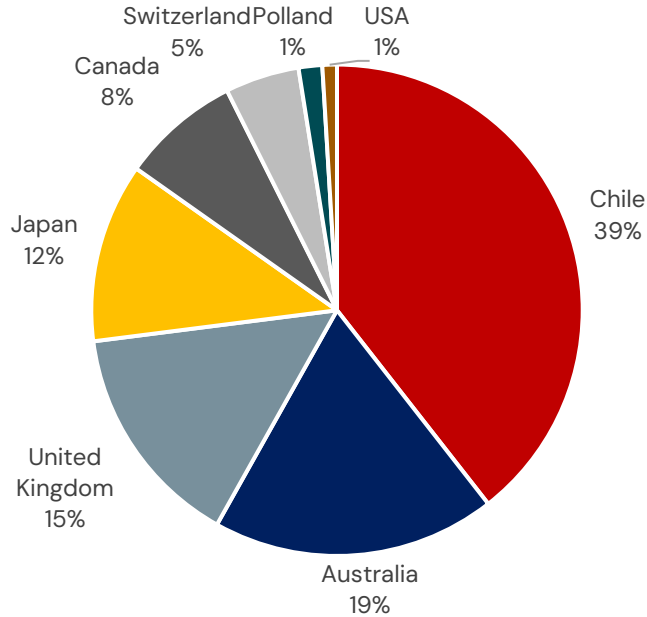
Production by copper product



Source: Self-elaboration with data from Cochilco.

Main countries operating in Chile

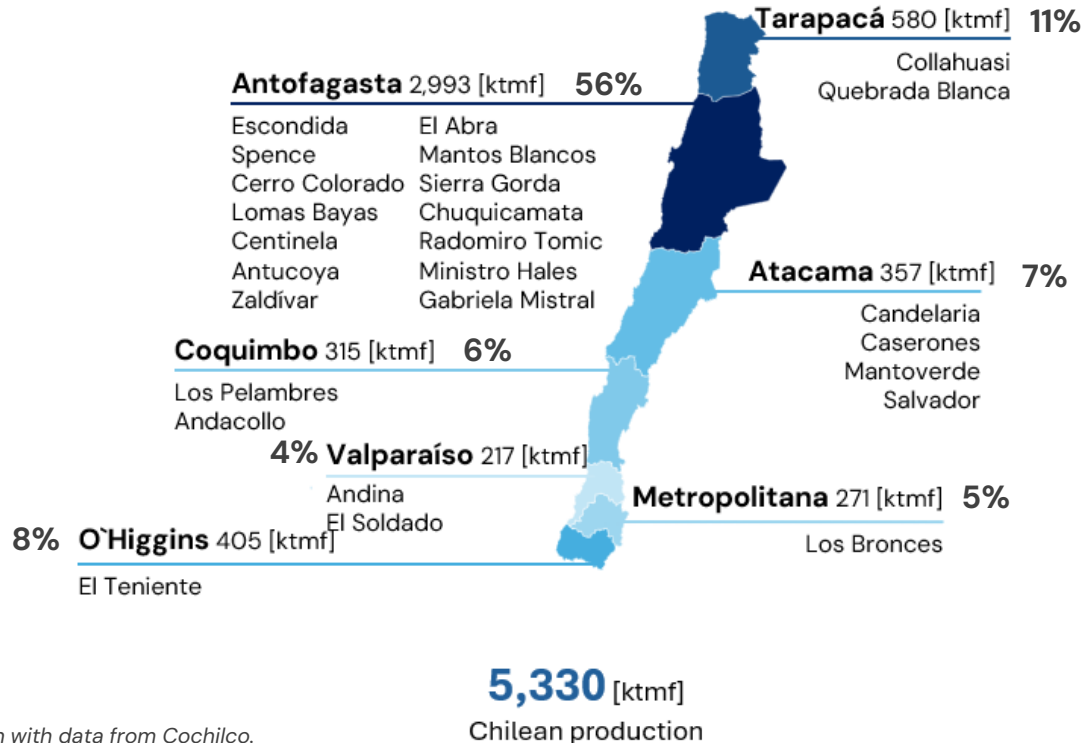
Participation in national production



Note: For Chile, AMSA is considered national capital

Source: Self-elaboration with data from mining companies.

Chilean Copper Production

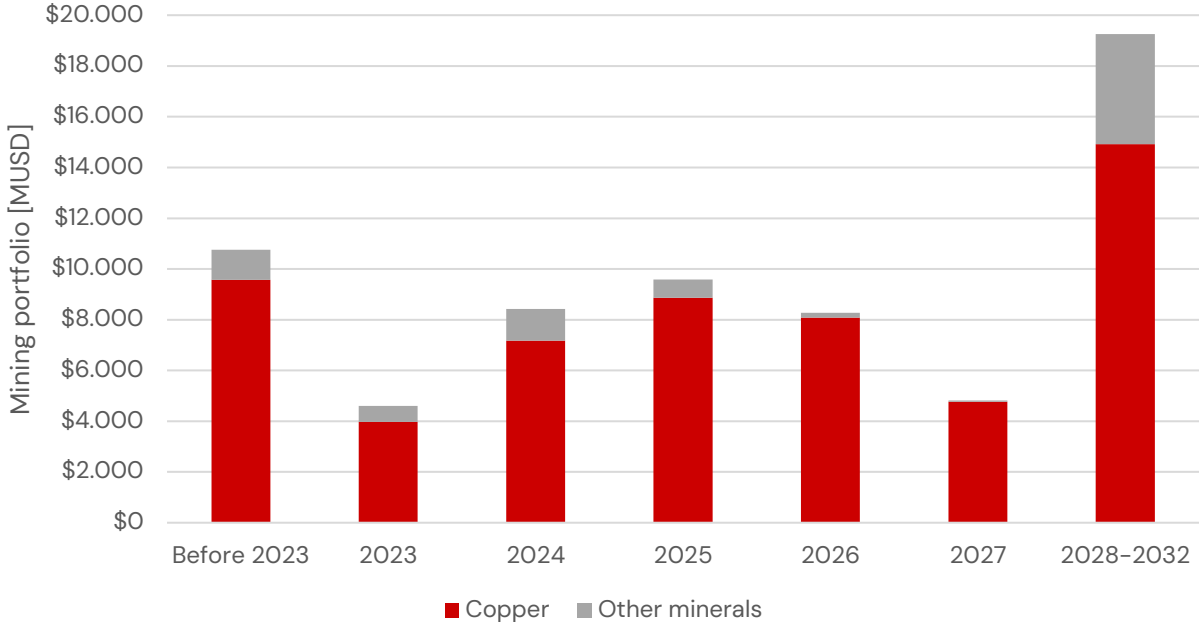


Source: Self-elaboration with data from Cochilco.

Upcoming operation projects

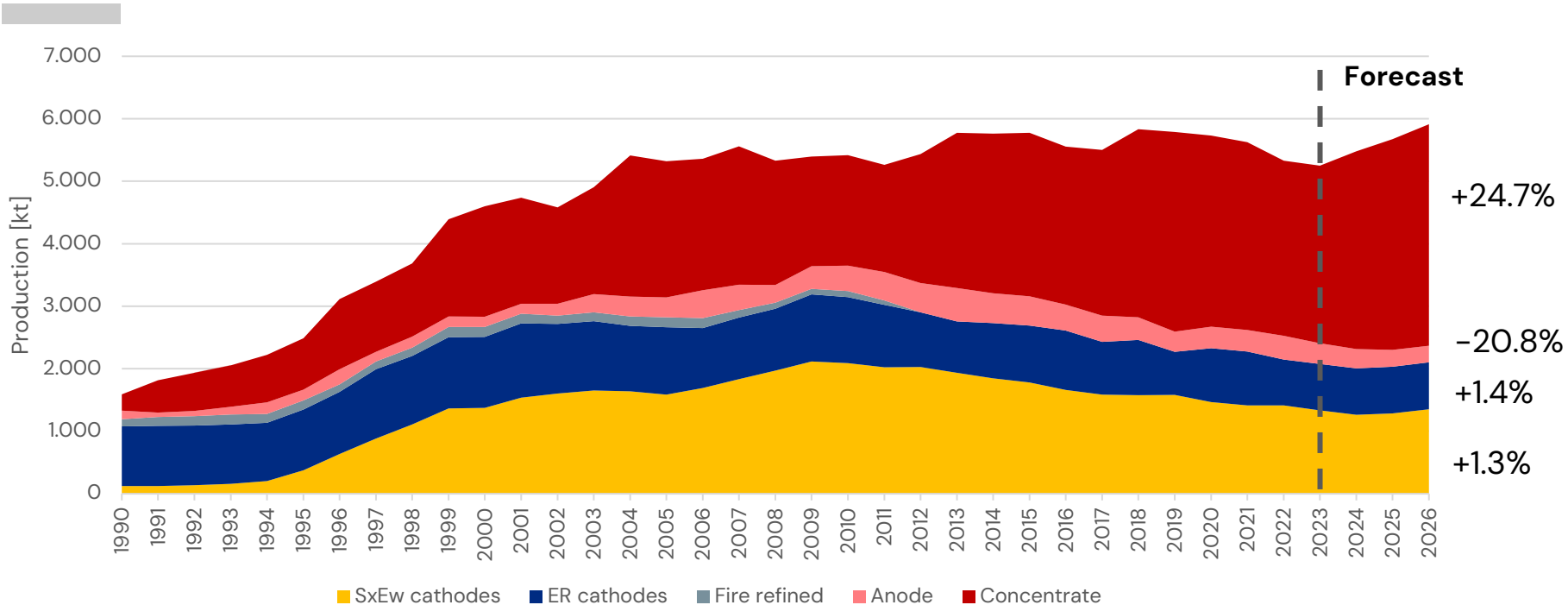
Project name	Operation	Costs [MUSD]	Status
LOMAS BAYAS OPERATIONAL CONTINUITY	Cía. Minera Lomas Bayas	\$ 254	Working on H1 2024.
COLLAHUASI 210 KTPD	Doña Inés de Collahuasi	\$ 3.200	Delayed to 2026
RAJO INCA	Codelco Div. Salvador	\$ 2.400	70% progress. Working on at the end of H1 2024
LOS BRONCES INTEGRATED	Anglo American Sur	\$ 3.500	Continue reviewing engineering. Construction start in 2025
QB2 PHASE II	Cía. Minera Teck Quebrada Blanca	\$ 3.000	Environmental impact study withdrawn, the company is reassessing the project to resubmit it at the end of 2024.
CENTINELA DISTRICT	Minera Centinela	\$ 4.400	Construction starts in 2024

Mining portfolio



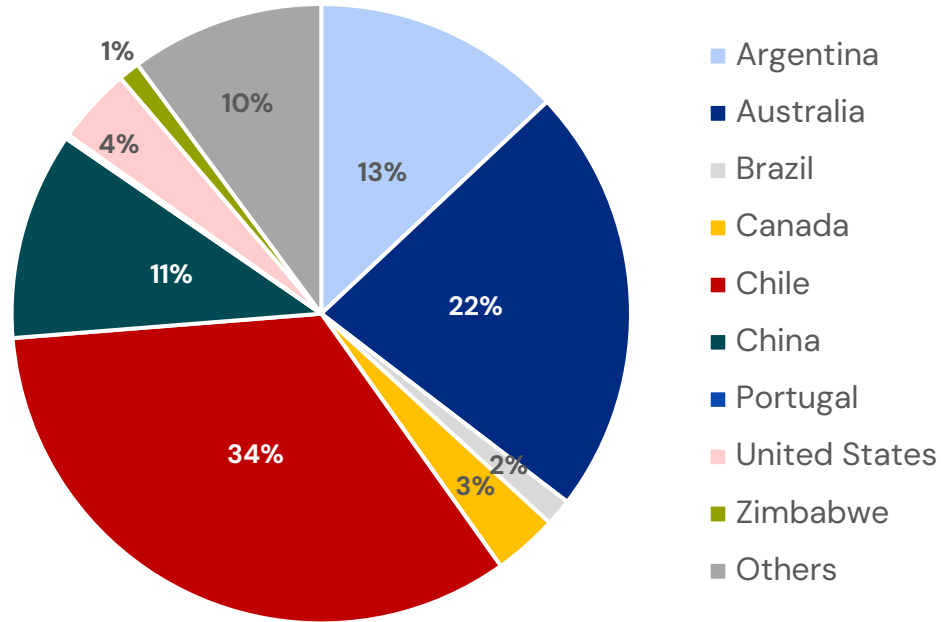
Source: Cochilco, 2023

Forecast production 2024 – 2026 (by copper product)



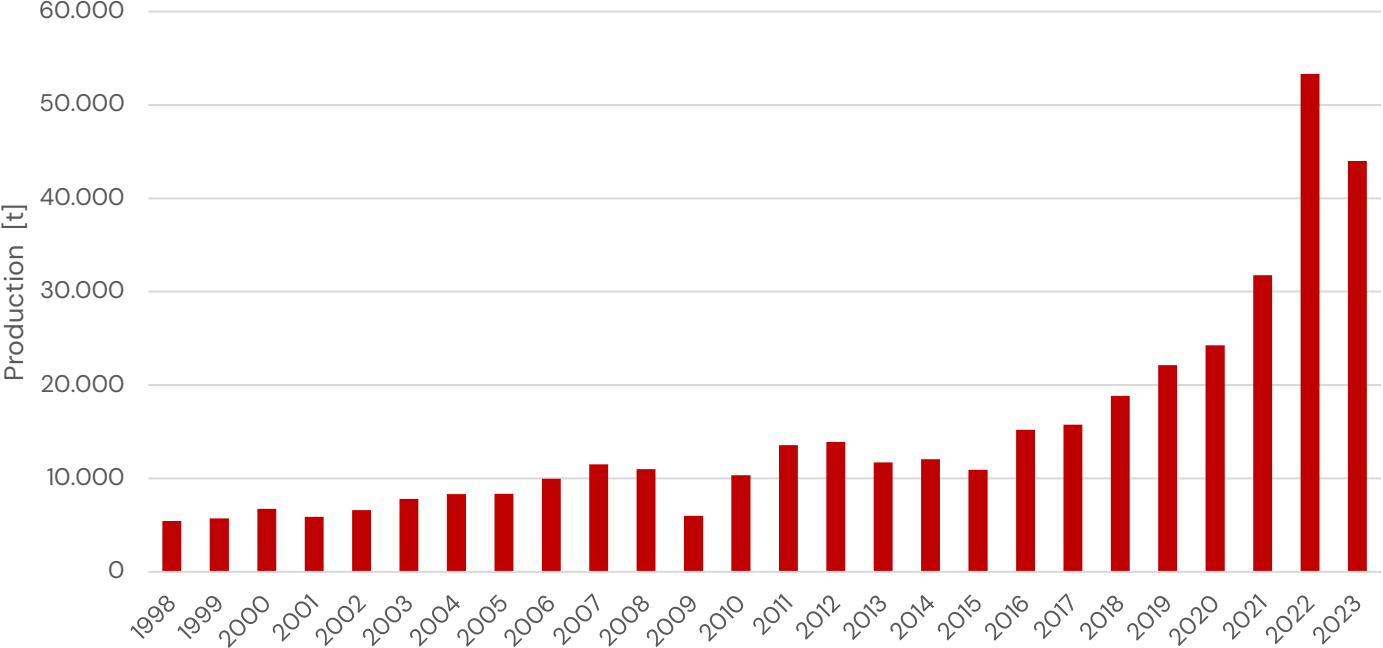
Source: Self-elaboration with data from different sources.

Lithium reserves



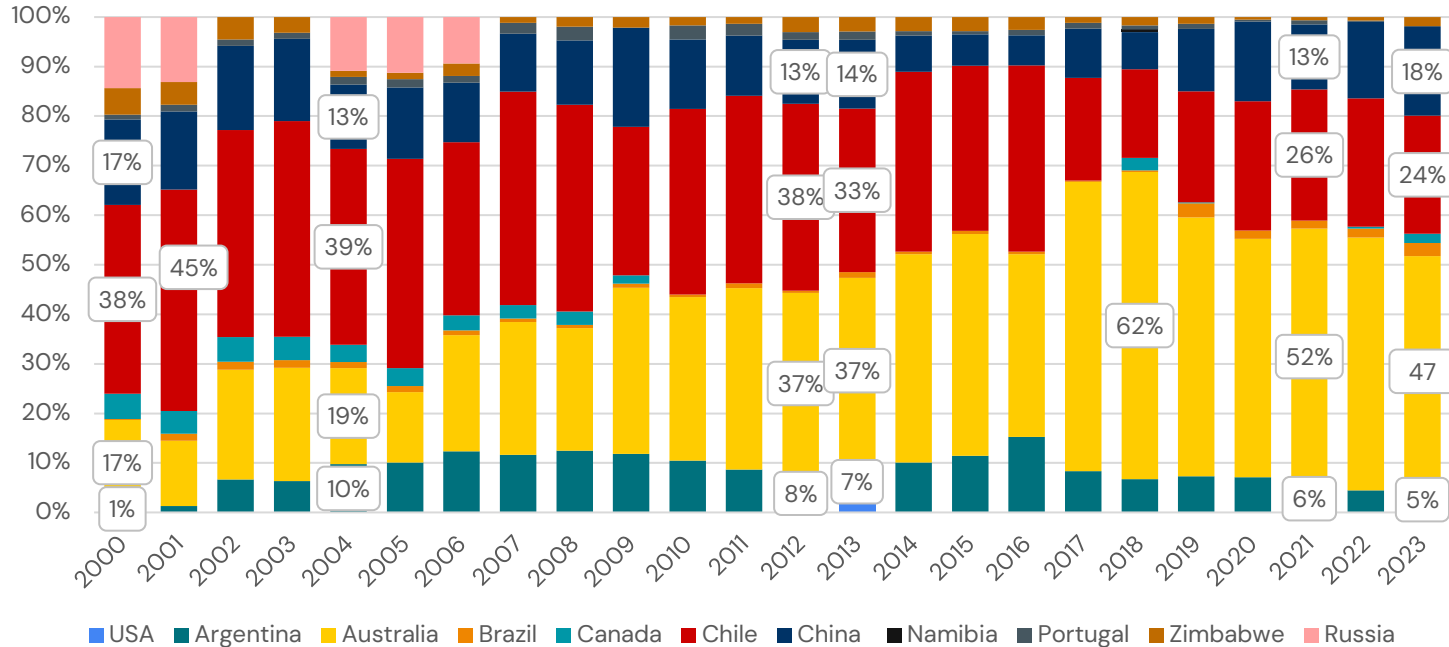
Source: Self-elaboration with data from USGS.

Lithium production in Chile



Source: Self-elaboration with data from Sernageomin and USGS.

Participation per country



Source: Self-elaboration with data from USGS.

Opportunities to improve mining in Chile



Innovation in processing



Permitting process



Water footprint reduction



Decarbonization



Smelting



Climate change



Automation

Strengths for Mining in Chile

ENVIRONMENTAL

- Mature industry and international reputation (I)
- Production with the lowest carbon footprint (I)
- Availability of renewable energy (solar) (G/G)
- Real transition over the last 30 years towards more sustainable mining (I/S)
- Proximity to the seacoast (G/G)
- Leading global mining companies operate in Chile (access to capital, local lessons, higher standards, international reputation to take care of) (I)
- Strong environmental institutional arrangements (S)

SOCIAL

- Mature industry and international reputation (I)
- Growing awareness of sustainability issues within companies (I)
- Real transition over the last 30 years towards more sustainable mining (I/S)
- Human capital in Big Mining (I)
- Leading global mining companies operate in Chile (access to capital, local lessons, higher standards, international reputation to take care of) (I)
- Political freedom in Chile (S)
- Job quality (I)

ECONOMIC

- Mature industry and international reputation (I)
- Volume and quality of resources (small complex deposits) (I)
- Local technical capacities are adequate (I)
- Leading global mining companies operate in Chile (access to capital, local lessons, higher standards, international reputation to take care of) (I)
- Installed infrastructure (I / S)
- Current legislation protects foreign investment and facilitates project development (S)

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