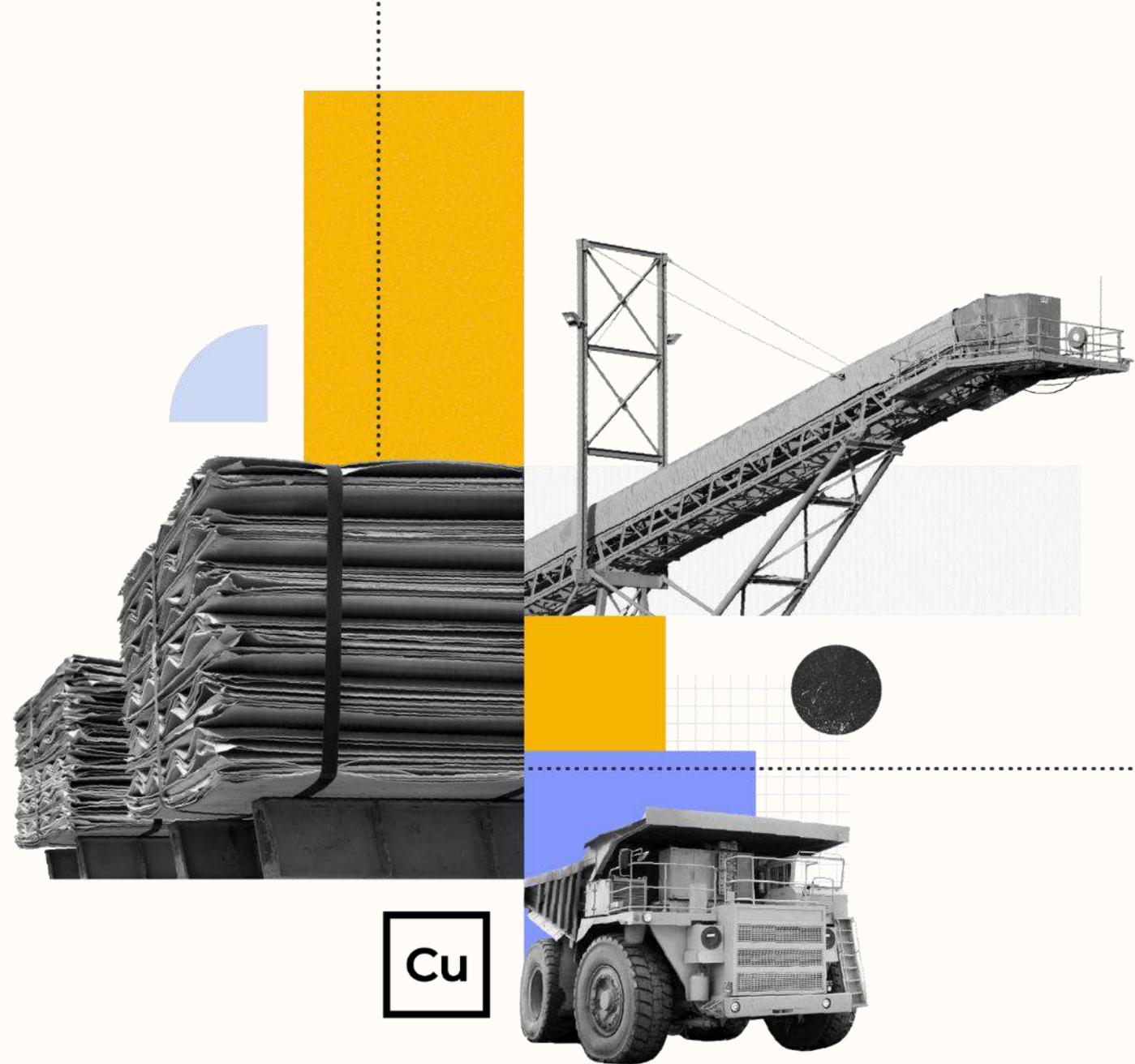


Challenges and opportunities for South American Copper

August 2025, San Juan,
Argentina

benchmarkminerals.com



Cu

Disclaimer

All information, pricing and production data within this publication has been obtained directly by **Benchmark Mineral Intelligence Ltd** in accordance with our internal methodologies which can be viewed on our website.

Secondary data has been obtained from various sources which are believed to be reliable and have been referenced accordingly. Estimations and forecasts have been highlighted where appropriate.

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All data reported in metric tonnes, all prices reported in US Dollars (USD) unless otherwise stated.



Meet the team

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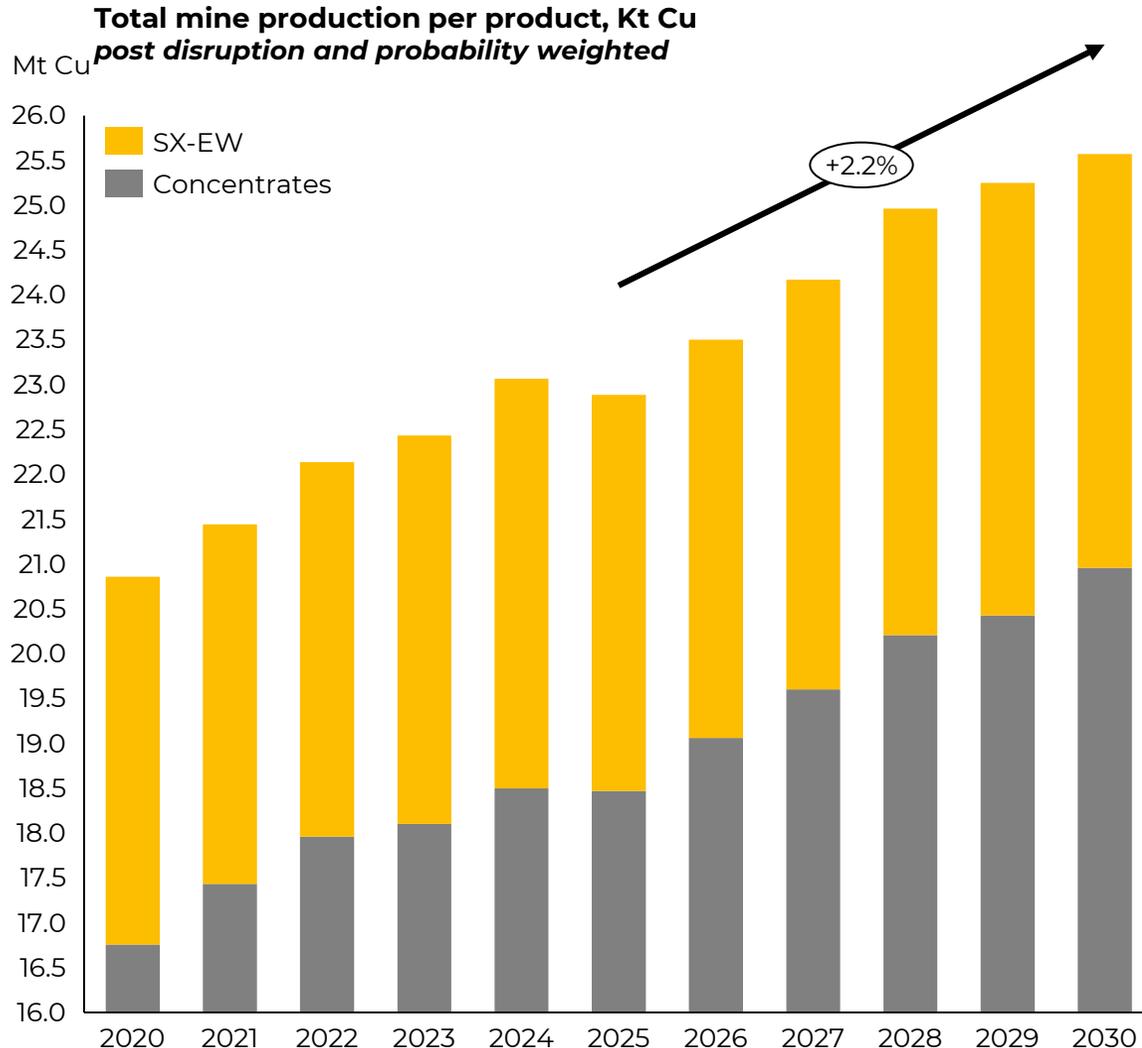
Albert has a history reporting and writing news and is using that experience to help develop BMI's short term view and coverage of the copper market.

Introduction to the report

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Supply trends: Mine production growth to slow down in 2025



In 2024, mined copper market broke 23 Mt, a substantial 2.2 Mt (+11%) above 2020 level

While growth during this period occurred across multiple regions, Africa—particularly the DRC—accounted for 68% of the total increase, contributing 1.5 Mt

Until only a few years ago, it was believed that SX-EW cathode contribution to the product mix is only going to shrink – but the DRC story changed the narrative

Despite a healthy growth of the copper market in recent years, and projected 2.1% CAGR growth over this decade, the growth forecast varies considerably throughout the period

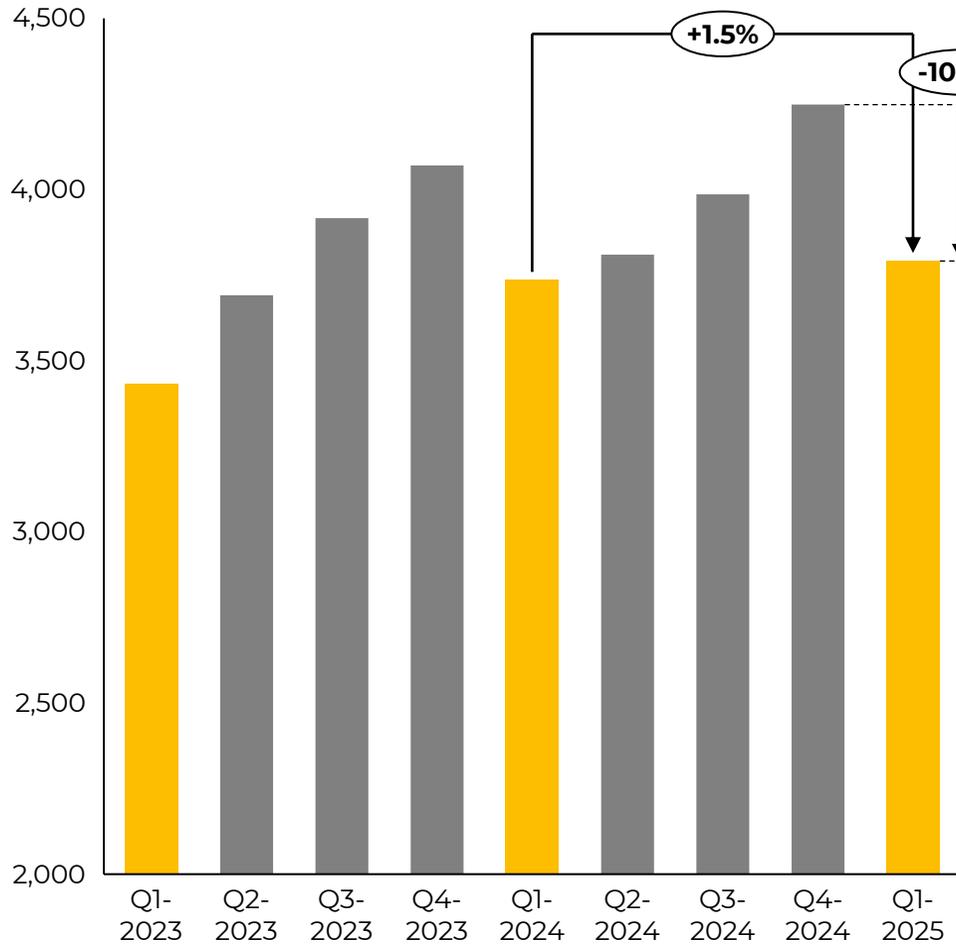
2025 is a year without any major greenfield project startups and is marked by several large assets issuing YoY guidance downgrades

The slowdown in mining growth, combined with the rapid expansion of the smelting industry, has created market imbalances not seen in recent memory

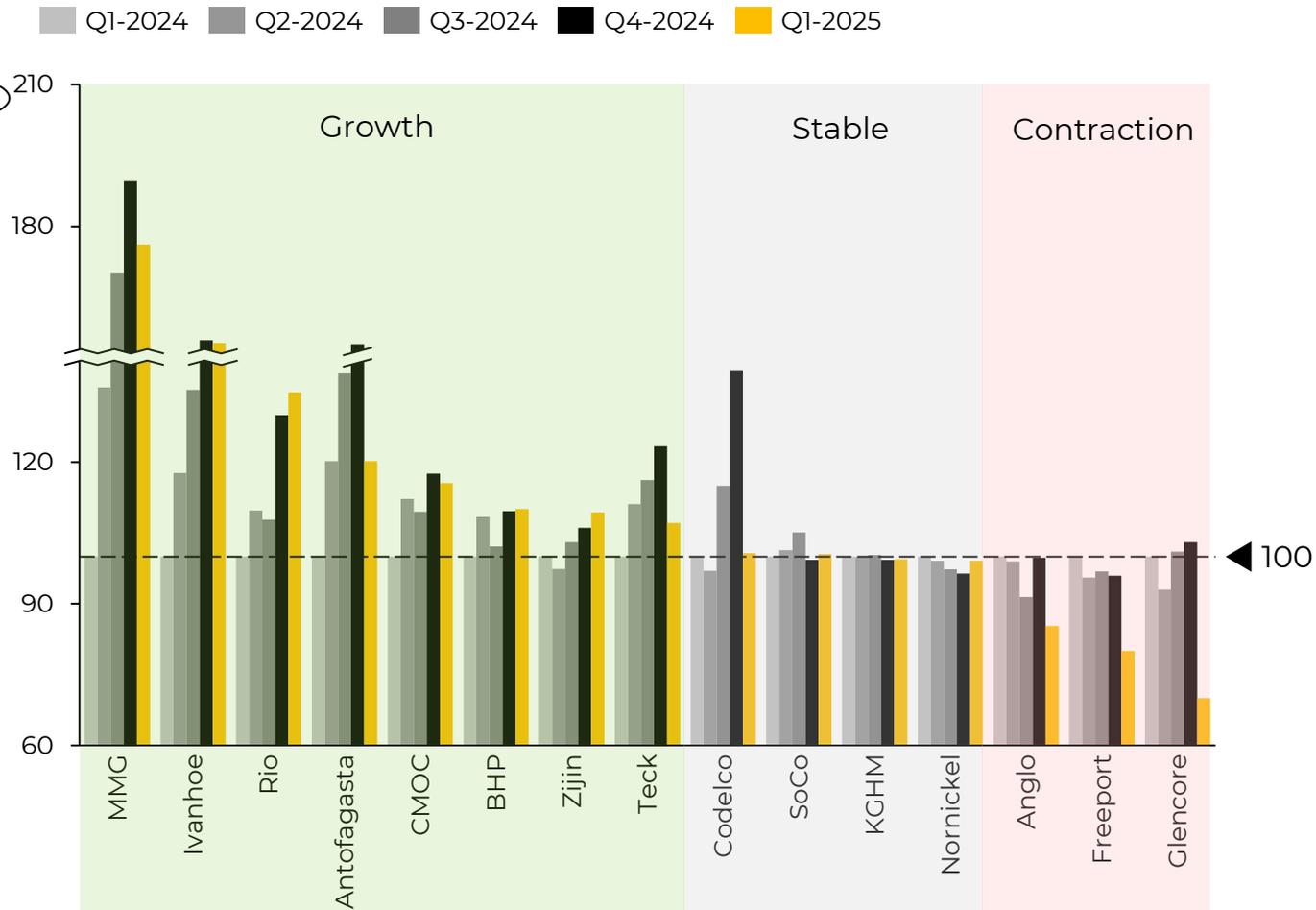
2025 could still see supply growth if disruptions remain minimal, but it is unlikely to match the levels of growth observed in recent years.

Supply trends: Q1 2025 reporting confirms weak YoY mined production growth

Total reported Cu production by a subset of large producers
kt Cu



Indexed production by 15 largest producers in Q1 2025, Q1 2024 = 100



Supply trends: 2025–26 growth hinges on restarts and ramp-ups

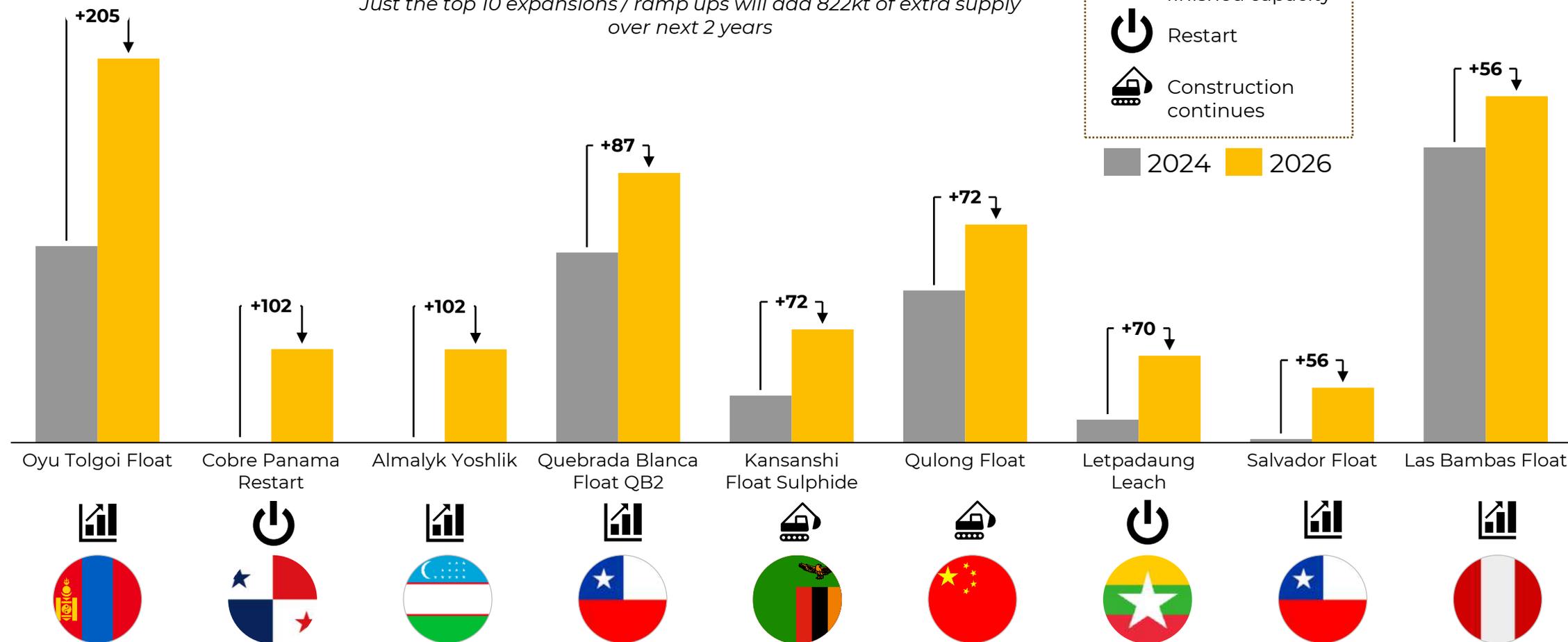
Top 10 increases in production per operation, pre-disruption - 2024 vs 2026

kt Cu

Just the top 10 expansions / ramp ups will add 822kt of extra supply over next 2 years

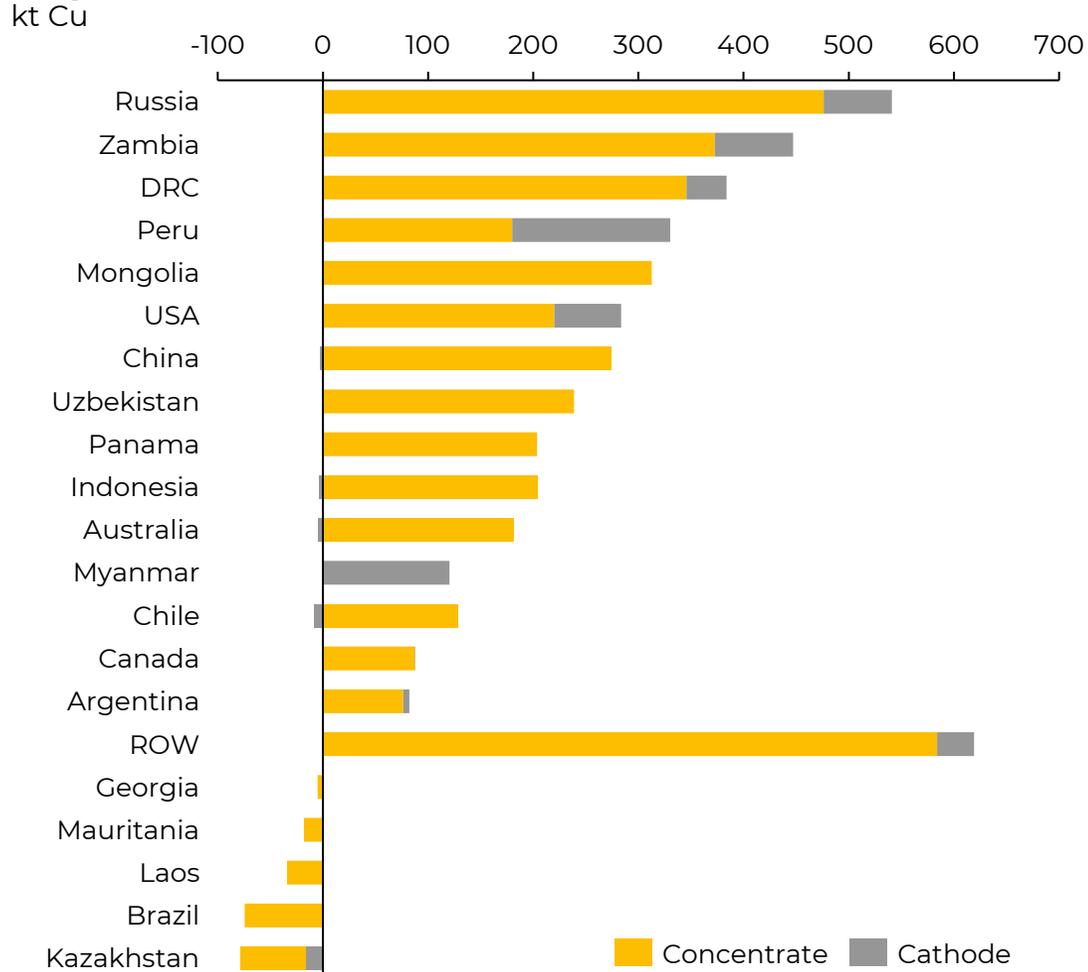
-  Ramp up of finished capacity
-  Restart
-  Construction continues

2024
 2026

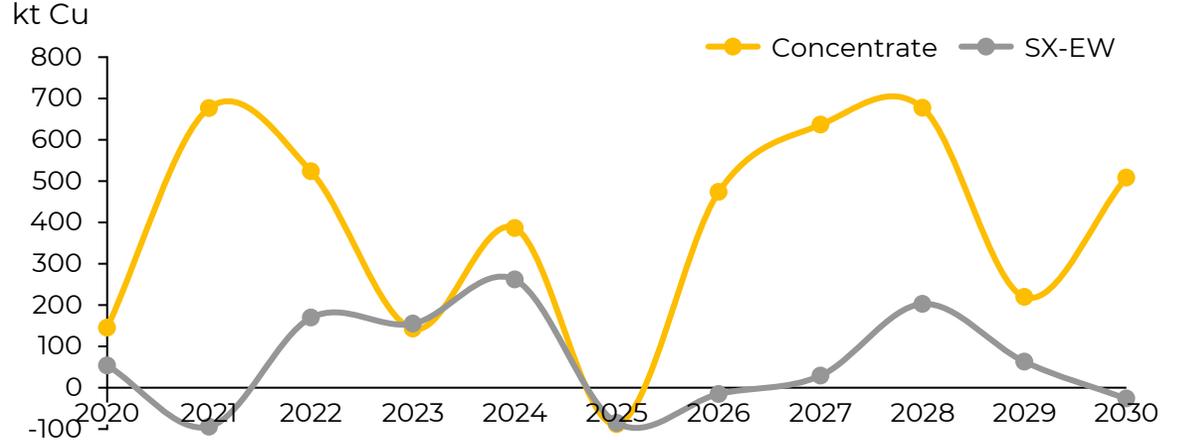


Supply trends: Copper supply growth will be mostly driven by new mine concentrate production

Mine supply change by country and product, 2025-2030, probability weighted



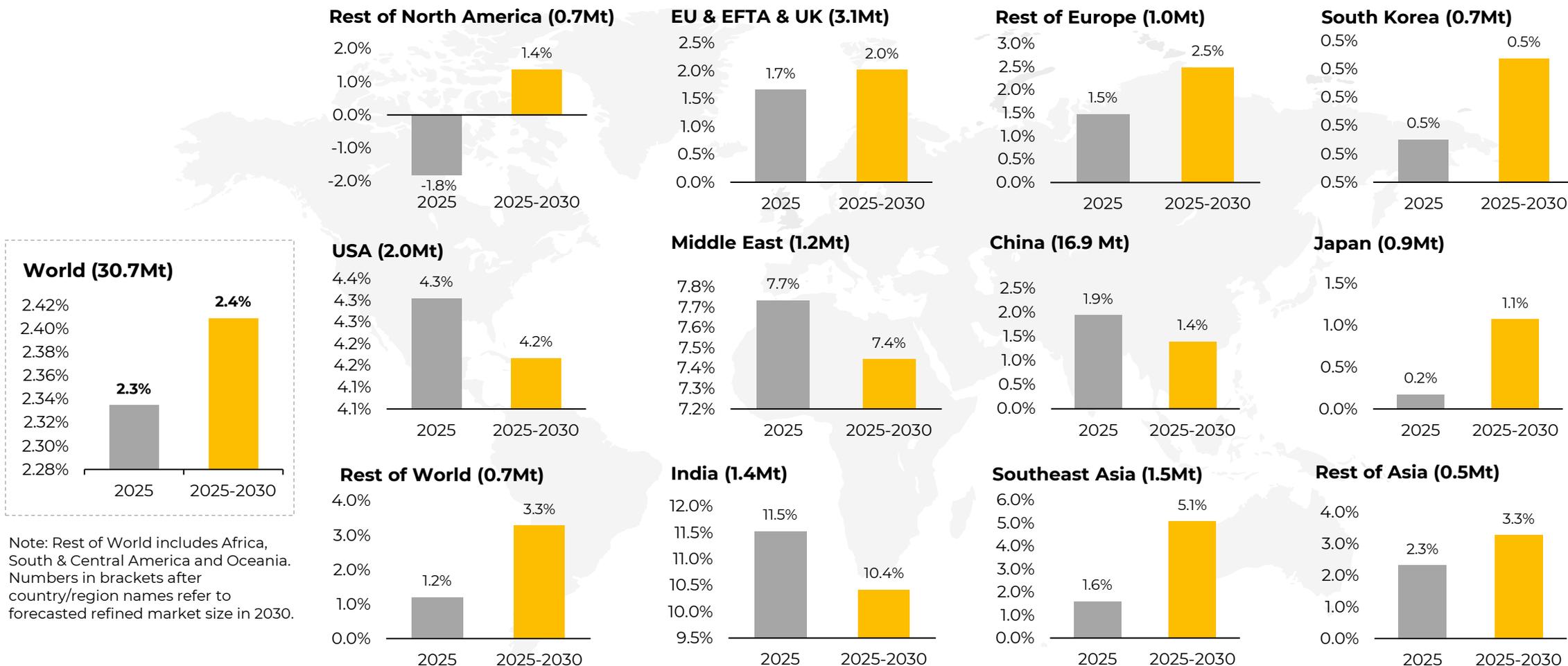
Concentrate and SX-EW mine production YoY growth, probability weighted and considering disruptions



- Concentrate growth between 2025 and 2026 will be driven mostly by the restart and ramp-up of Cobre Panama, as well as the start of the Malmyz copper project in Russia and Zhunuo in China.
- Other notable concentrate additions are expected output increases in Collahuasi going from an estimated 493kt in 2025 to 575kt in 2026, and Oyu Tolgoi which is expected to continue developing their mine, going from 306kt in 2025 to 420kt in 2026. (Consult next slide to see main drivers of growth in mined output).
- SX-EW production growth pipeline picks up in 2027 and 2028. It is expected for Letpadaung to restart and ramp up to their nameplate capacity over next years. Tenke Fungurume expansion is expected around 2028.
- Additionally, Tia Maria in Peru and Mutanda Oxides restart should begin their operations and ramp up to full capacity. In total these projects could produce 331kt of copper cathode by 2028.

Demand trends: Refined copper consumption 2025-2030 outlook

Global refined copper consumption is forecast to grow at a CAGR of 2.4% between 2025-2030 with India, Southeast Asia, and the Middle East predominantly supporting higher growth rates during this timeframe. Growth to be underpinned by industrial policies, structural factors and semis investments.

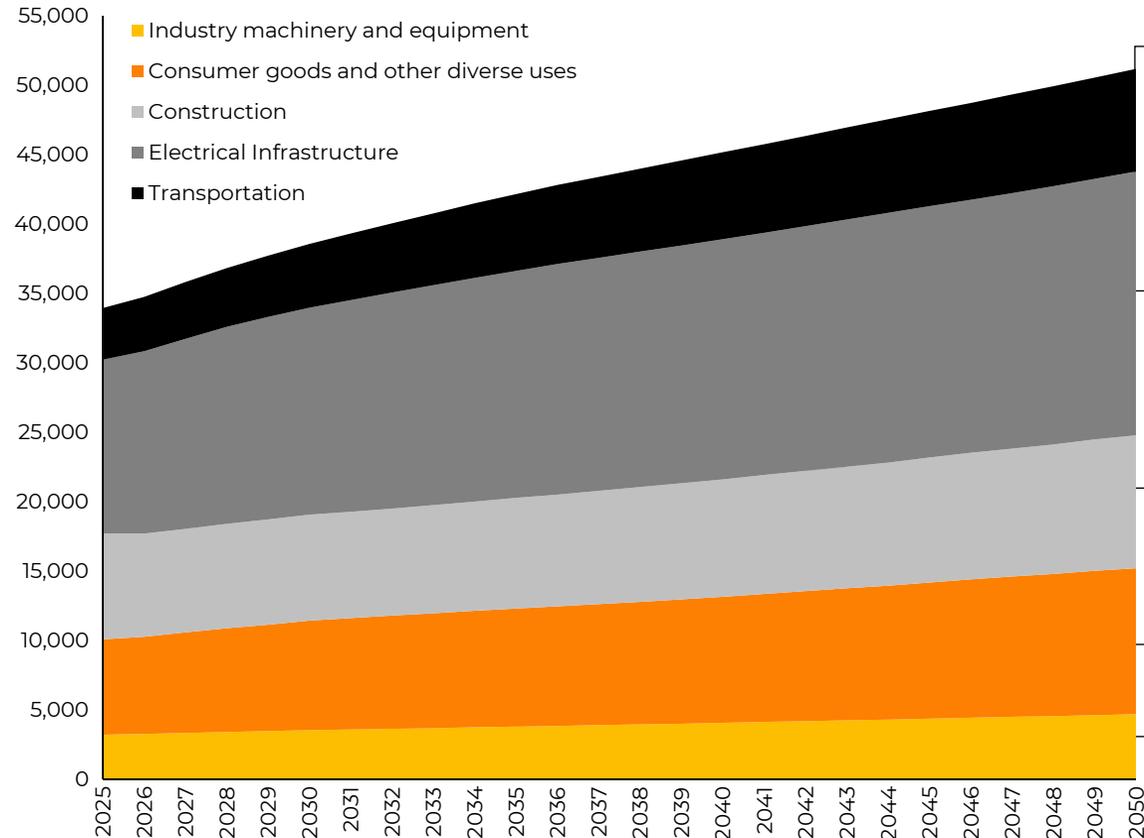


Note: Rest of World includes Africa, South & Central America and Oceania. Numbers in brackets after country/region names refer to forecasted refined market size in 2030.

Demand trends: Electrical infrastructure, consumer goods, and transportation to drive copper consumption

Global total copper consumption outlook by end-use sectors

kt Cu

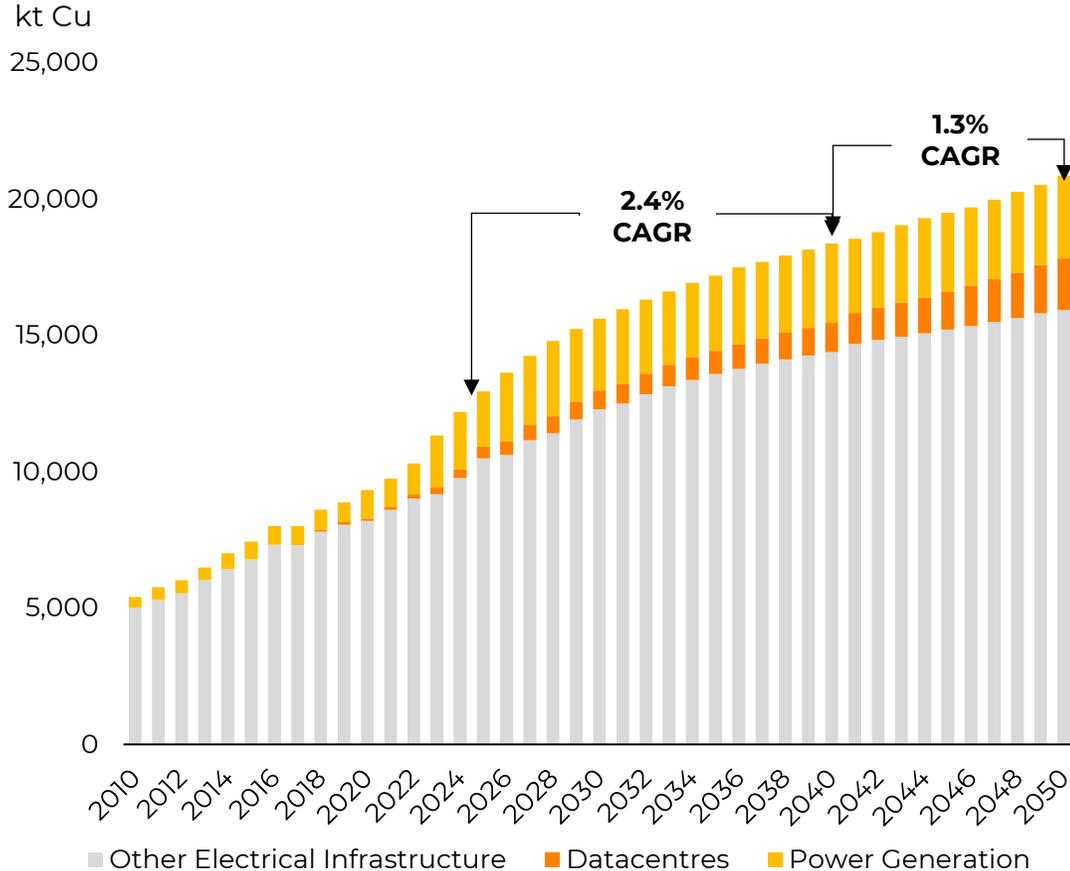


CAGR (2025-2050)

- 2.8%** Despite declining copper intensities in EVs, demand from this end-use sector is set to grow robustly over the long-term due to rising penetration rate alongside increased adoption in the 'other e-mobility category'.
- 1.7%** Driven by the shift to cleaner power sources, which are more copper-intensive than conventional ones. Furthermore, copper demand is set to benefit from growing demand for charging stations as EV penetration rates continue to rise. In addition, grid expansion and upgrades to support growing electricity needs also act as a buoy. AI-driven data centres are also emerging as a key demand driver.
- 0.9%** Driven by urbanisation and population growth, with increasingly stringent (and copper-intensive) building safety regulations providing further support. Growth is slower in mature economies and primarily led by developing markets.
- 1.7%** Supported by population growth, urbanisation and industrialisation macrotrends, alongside the advent of new copper consuming applications and transition to the use of copper-intensive, energy efficient appliances long term.
- 1.5%** This sector is set to grow steadily, underpinned by increased use of copper-intensive automation systems and power electronics, though gains are offset by design efficiencies and slower growth in heavy machinery applications.

Demand trends: Grid modernization and expansion demand high copper intensity

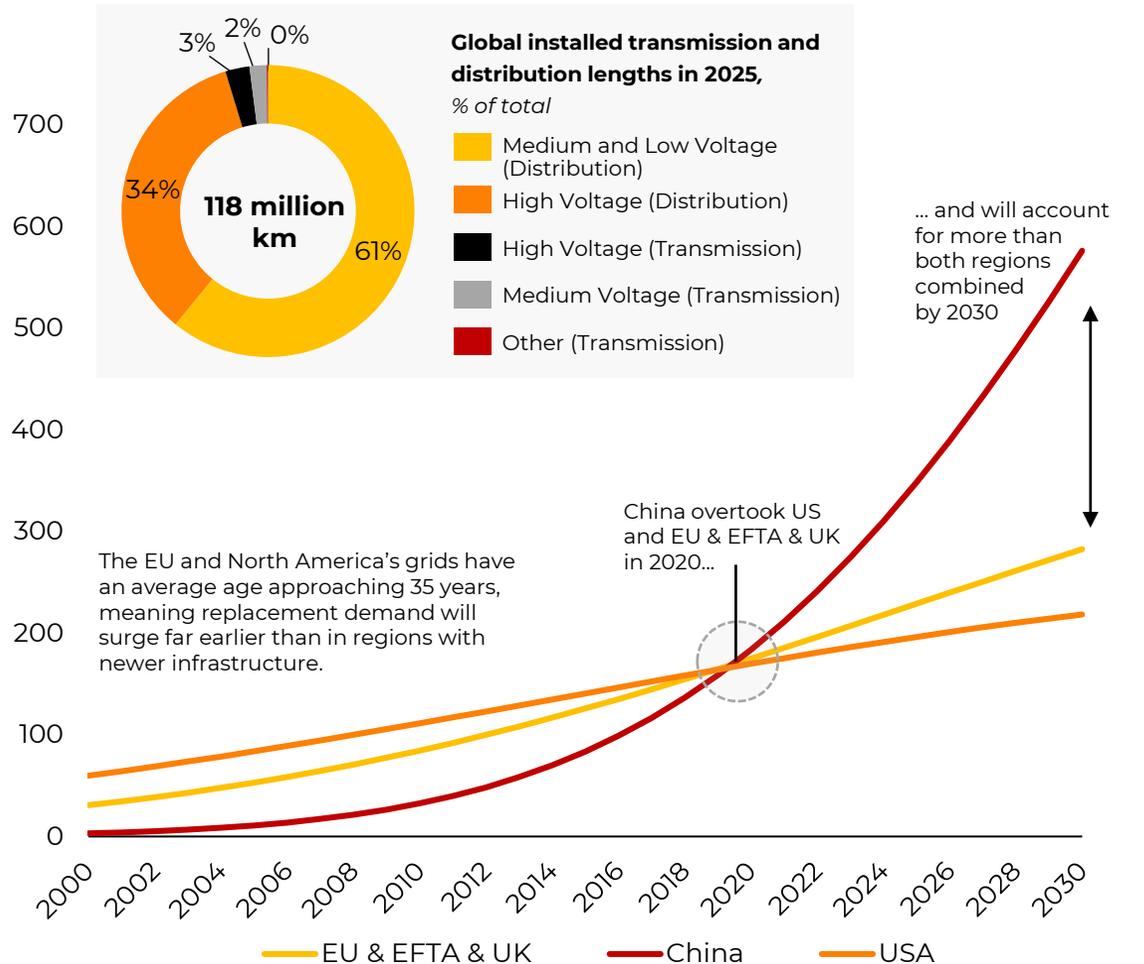
Global power grid copper demand



Notes: Electrical Infrastructure demand includes power generation, power infrastructure (new and replacement) and others such as telecom, data centers, EV chargers, etc. Wire and cable exports from China are also assumed to be copper consumed within the Electrical Infrastructure sector at this stage.

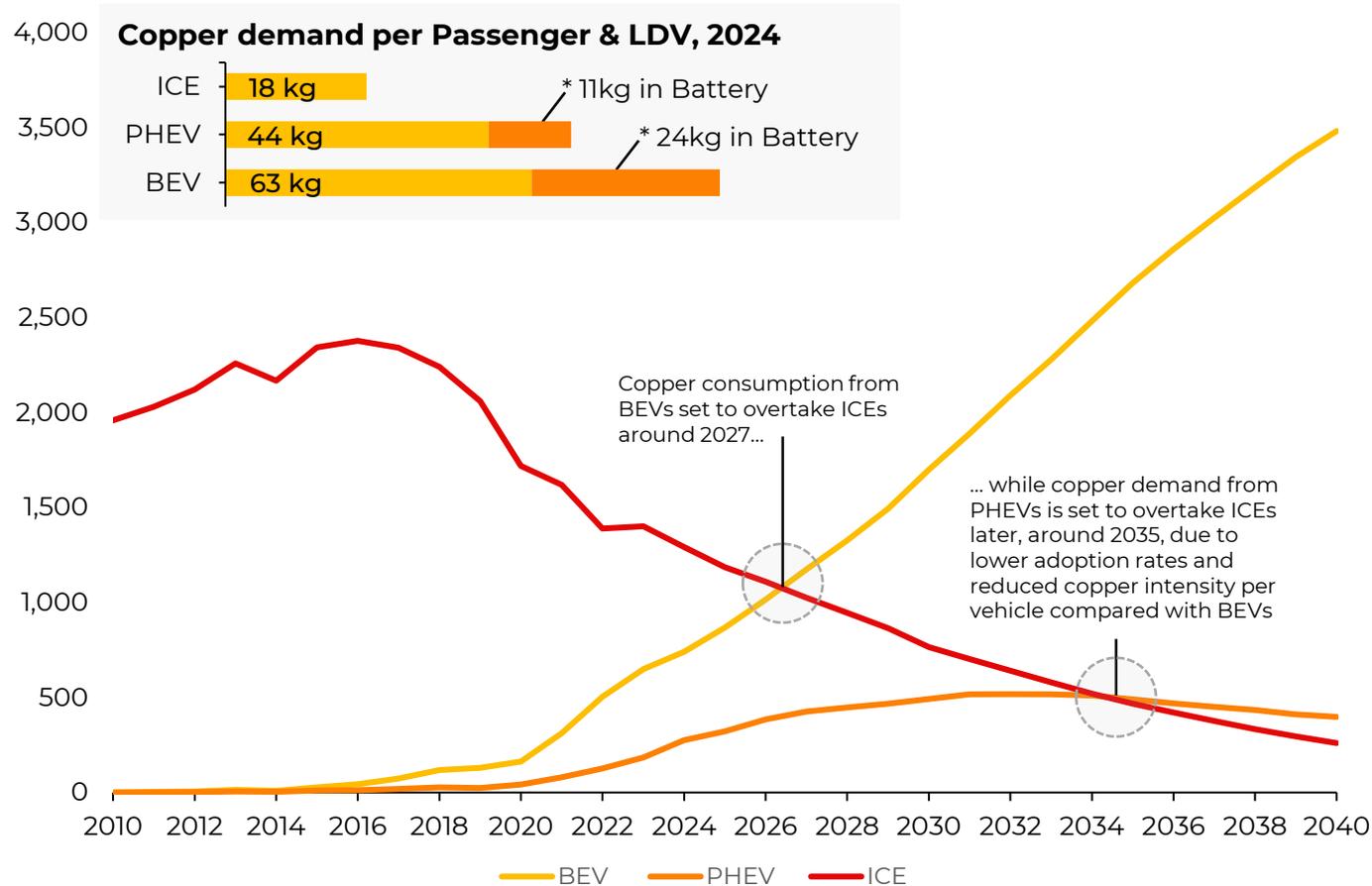
Copper demand from grid network replacements

kt Cu

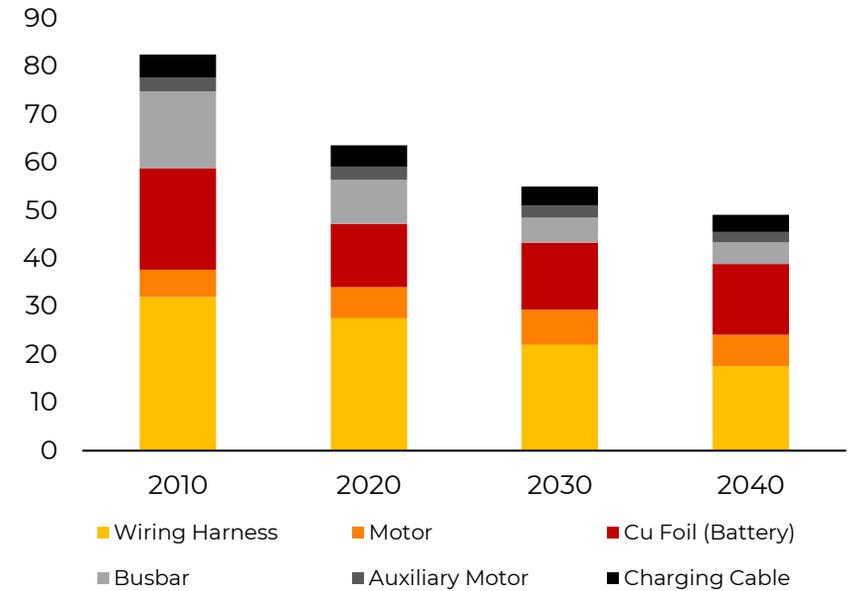


Demand trends: Automotive electrification fuels copper demand growth despite intensity reductions per EV unit

Global Copper consumption per all vehicle types, per BEV, PHEV and ICE drivetrain (*excluding micromobility)
kt Cu demand from total vehicle sales



Copper intensity of global average passenger BEV
kg Cu/unit sold



- Whilst EV penetration is expected to bolster automotive copper demand in the long term, our analysis projects copper demand on a per-vehicle basis to decline across BEVs, PHEVs and ICEs.
- Changes in technology across vehicle subcomponents, including motors, batteries, and their impact on wire gauge play a significant role in shaping vehicle intensity.

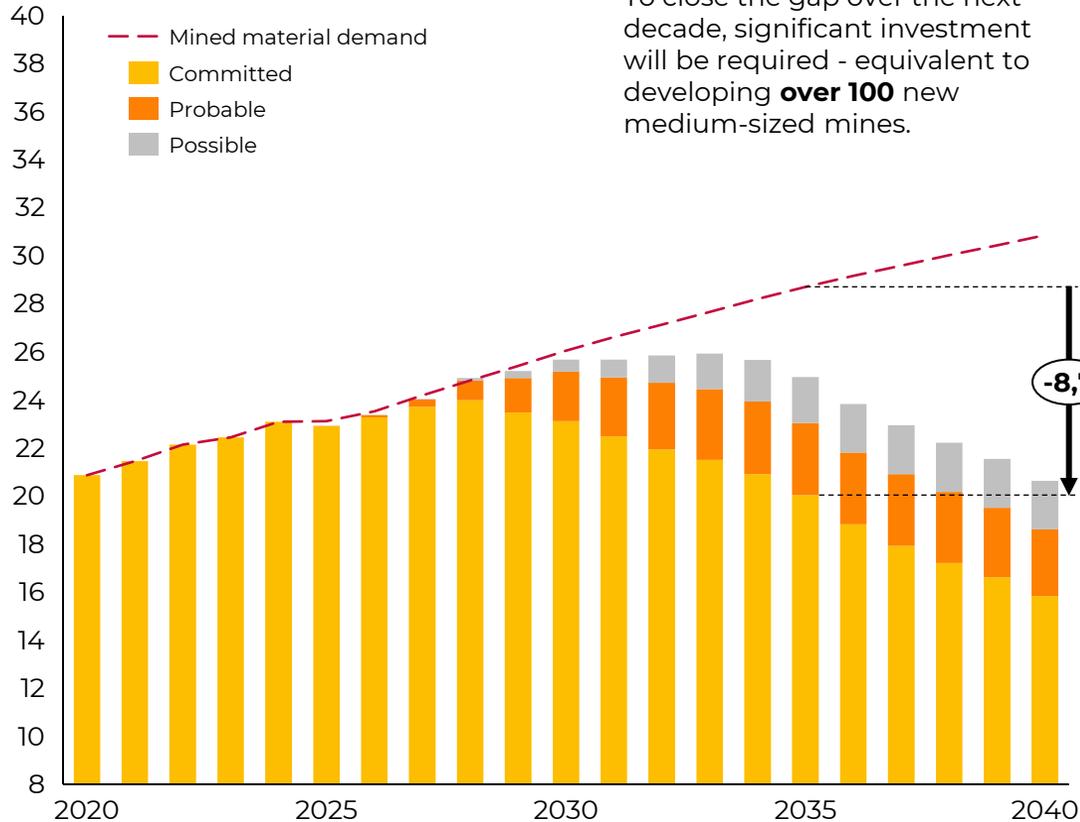
Copper market balance : dependent on “Probable” and “Possible” supply to fill the gap in the short term

Mine supply shortage will likely take place from 2025 onwards...

...and will translate into a refined copper supply in the long-term.

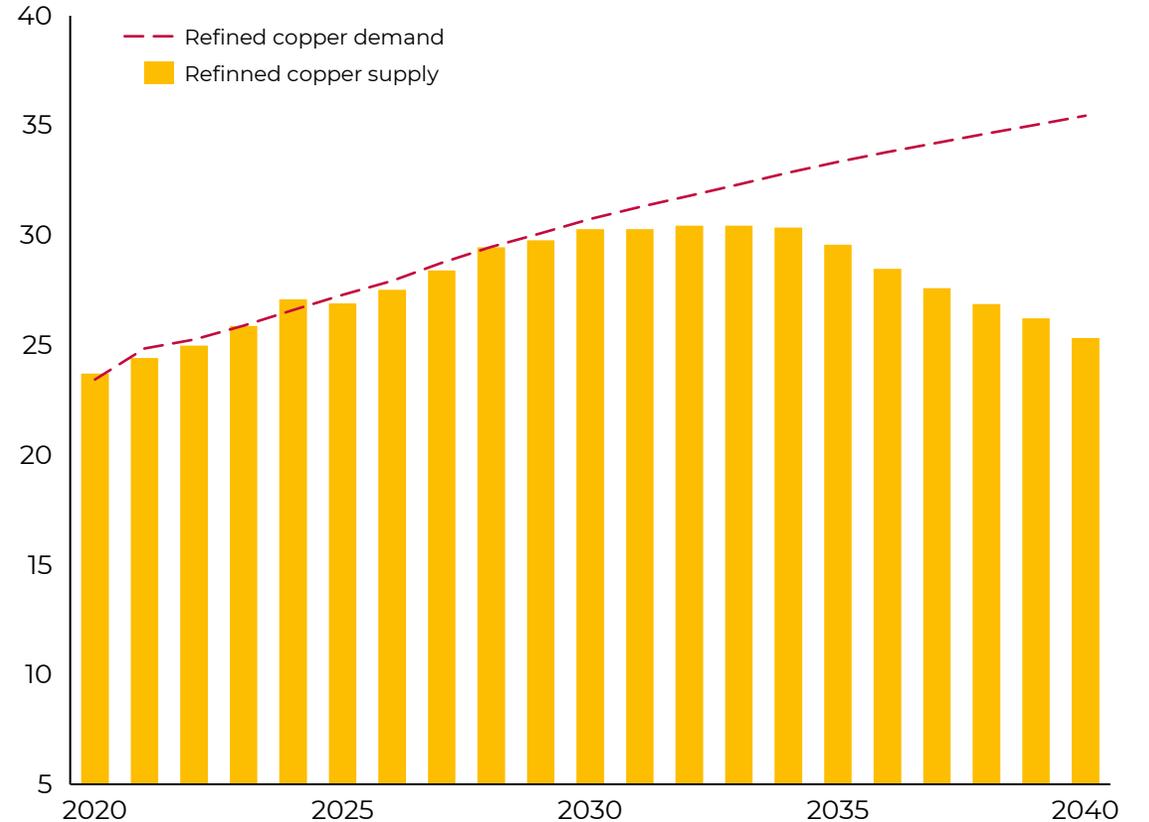
Mine material supply/demand balance, probability weighted

Mt Cu



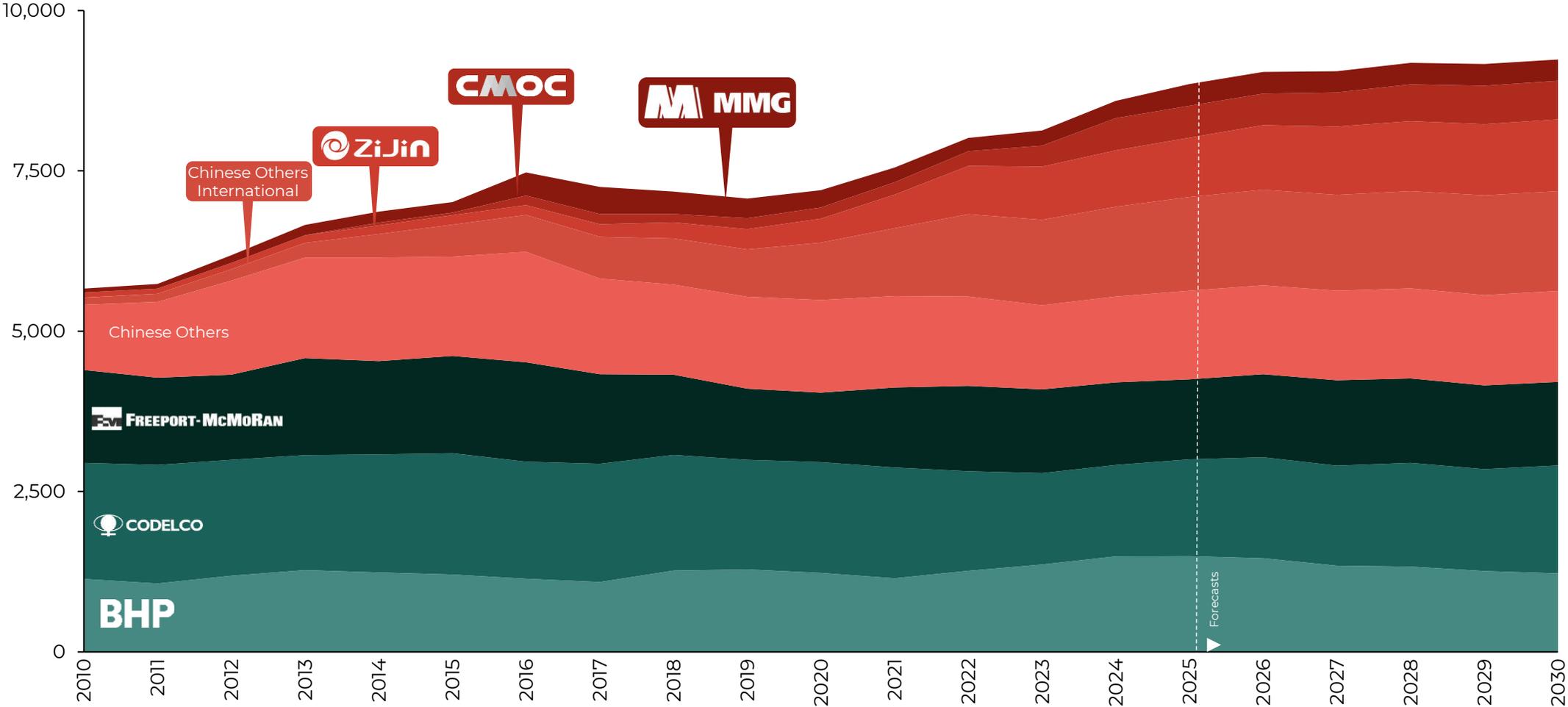
Refined copper supply/demand balance, including Probable and Possible supply

Mt Cu



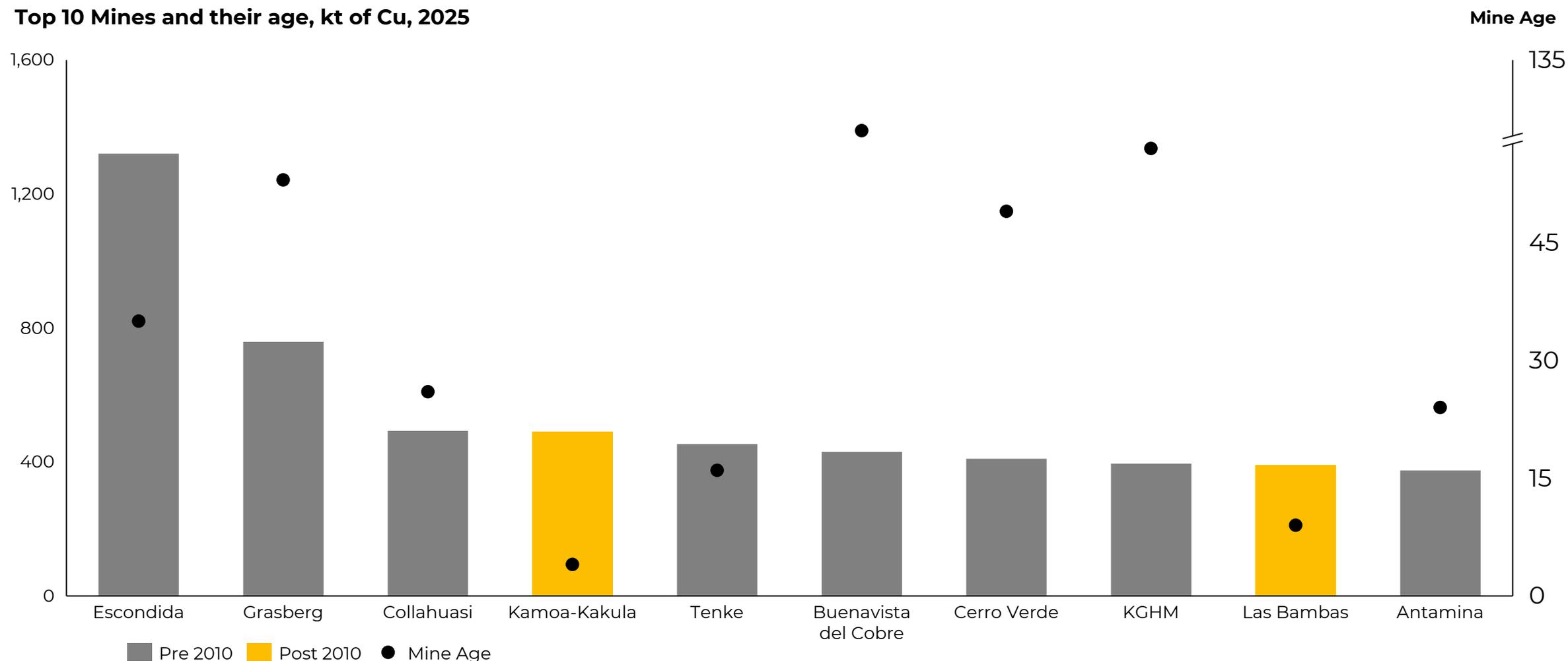
Challenges and Opportunities: The rise of Chinese miners embodies the changes in the competitive landscape

Attributable copper production by company
kt Cu



Challenges and Opportunities: Are mines getting older?

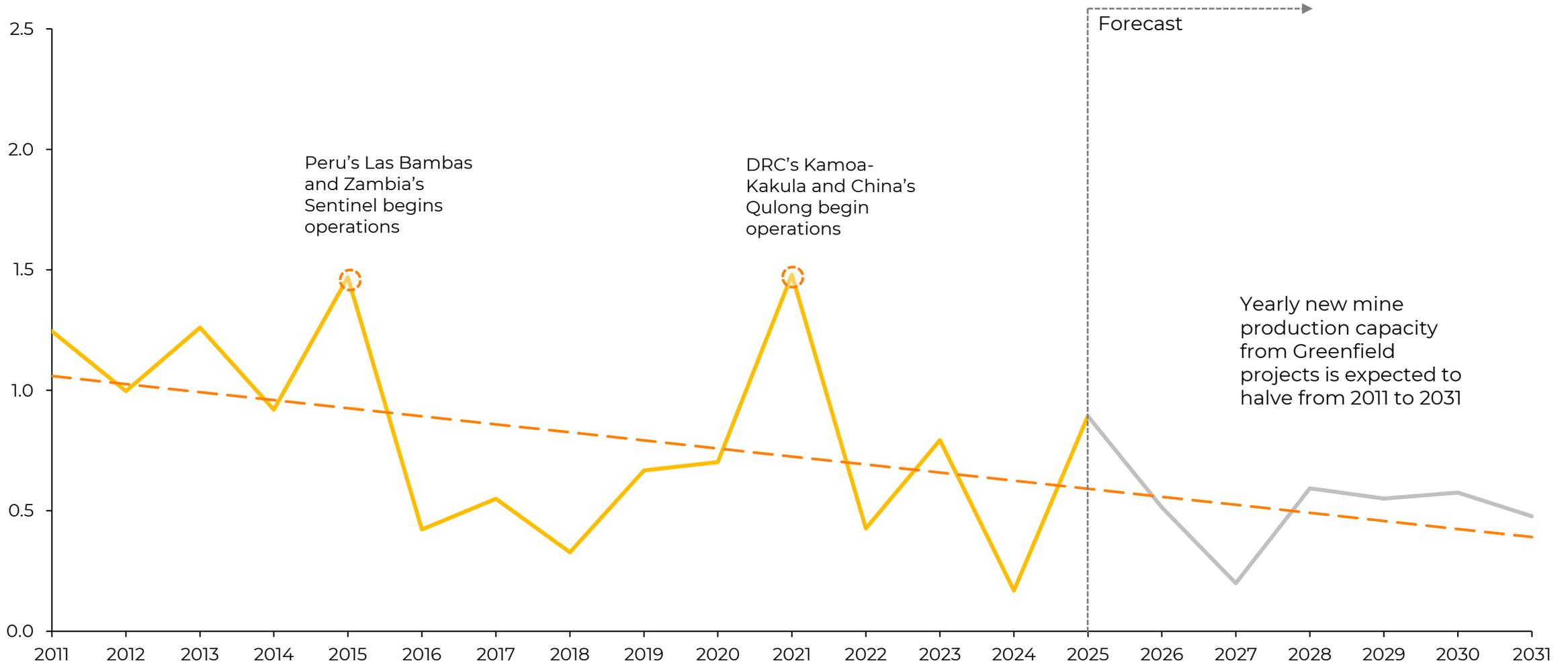
Top 10 Mines and their age, kt of Cu, 2025



Note: Assets grouped on a parent level.

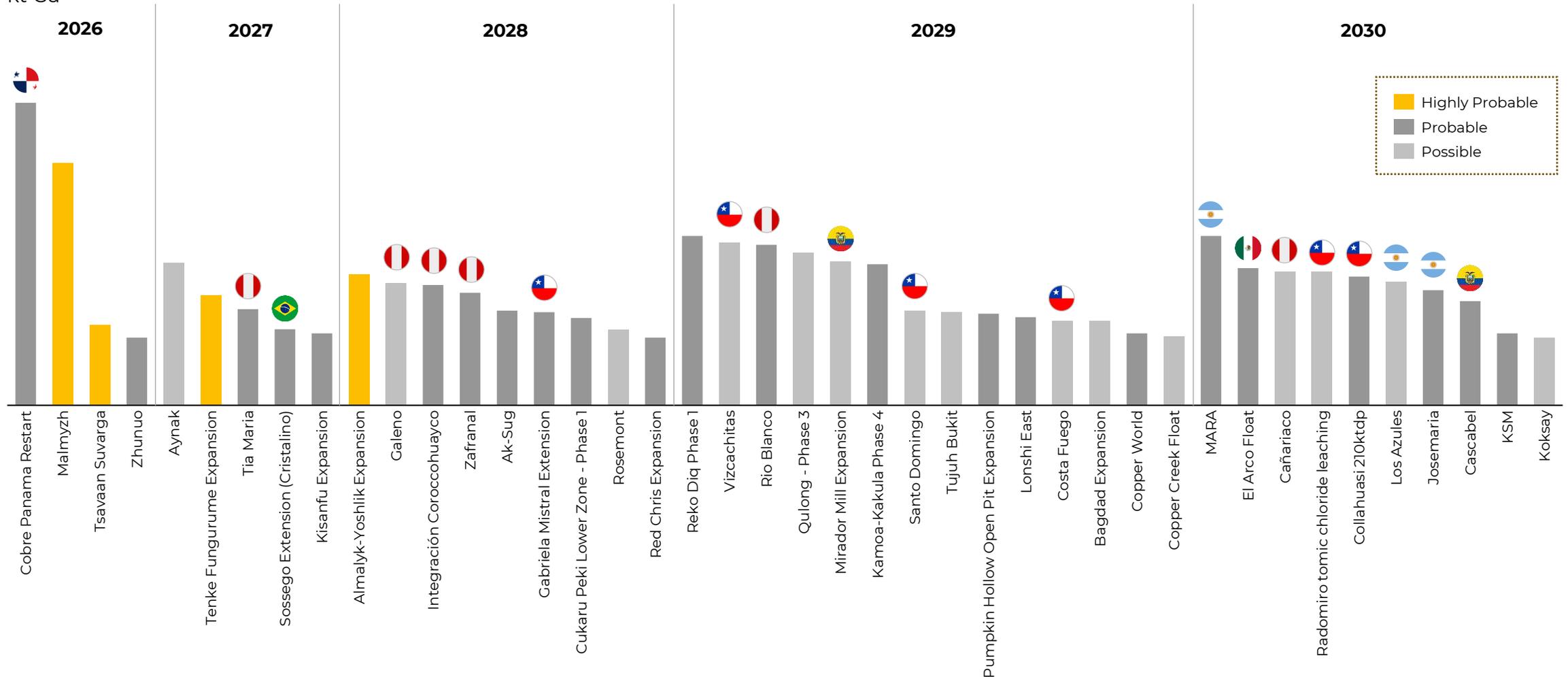
Challenges and Opportunities: Greenfield supply is getting increasingly rarer, but the Americas could reverse this trend

Greenfield project capacity coming online, probability weighted, Mt of Cu



Challenges and Opportunities: Uncertain projects dominate the near-term pipeline

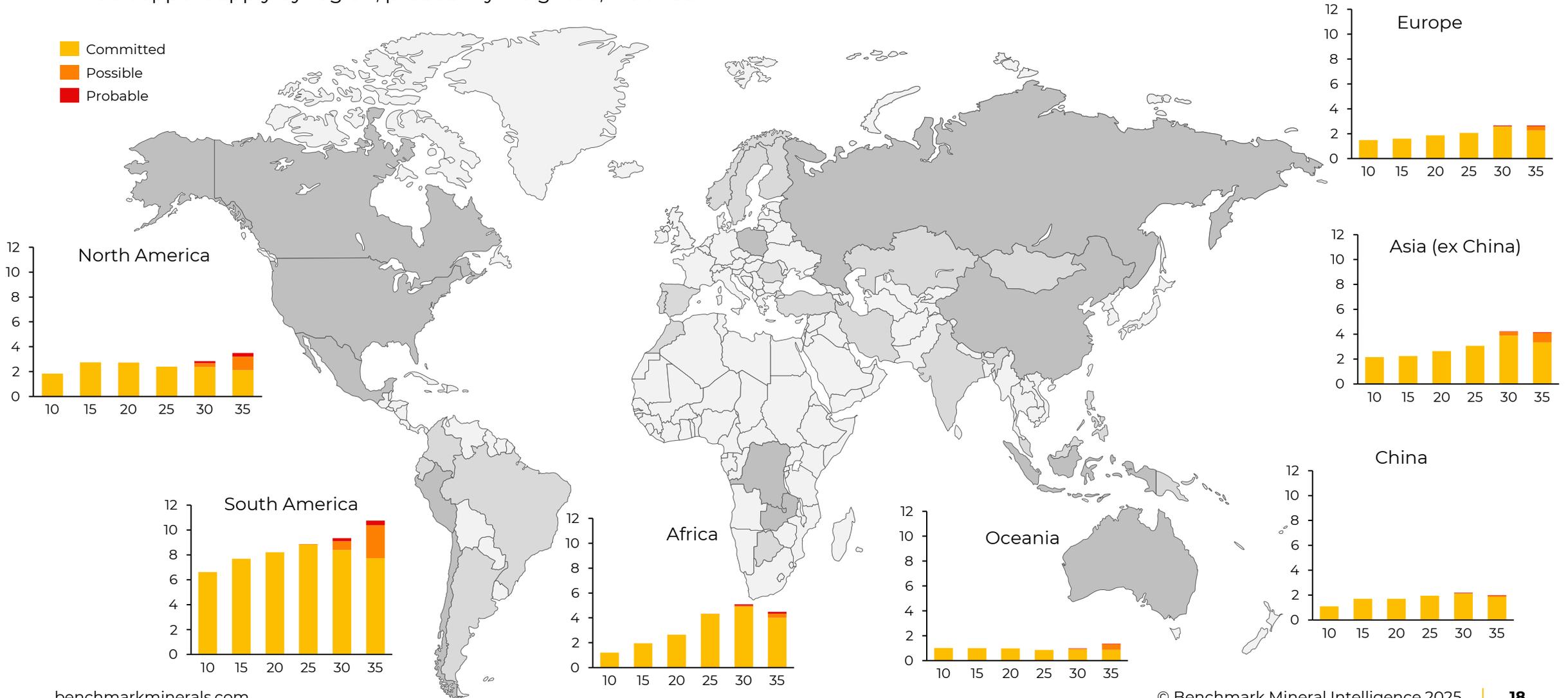
Near-term copper project pipeline by status and capacity, capacity >75ktpa, indicated value is the averaged maximum capacity over the mine-life
kt Cu



Challenges and Opportunities: South America will remain the key producer

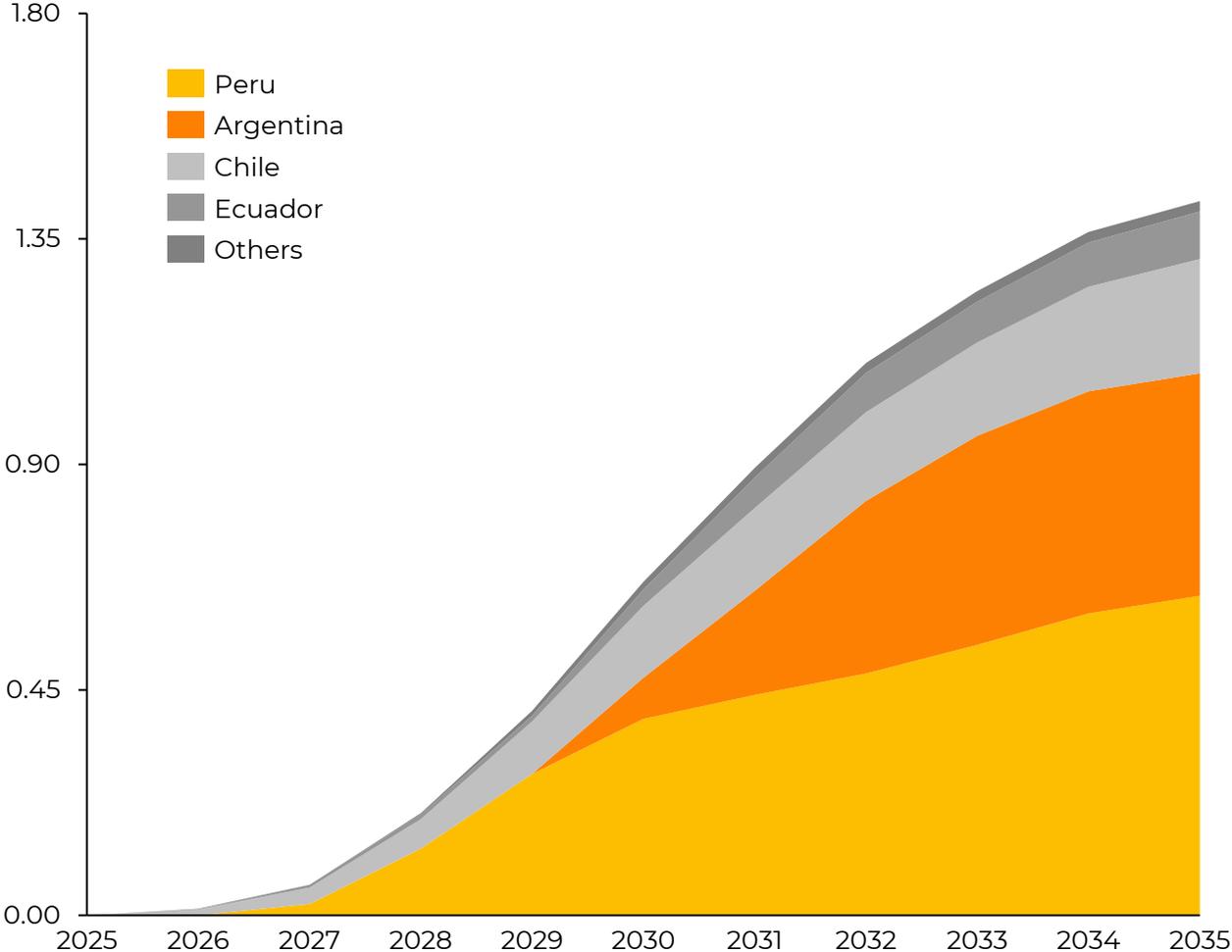
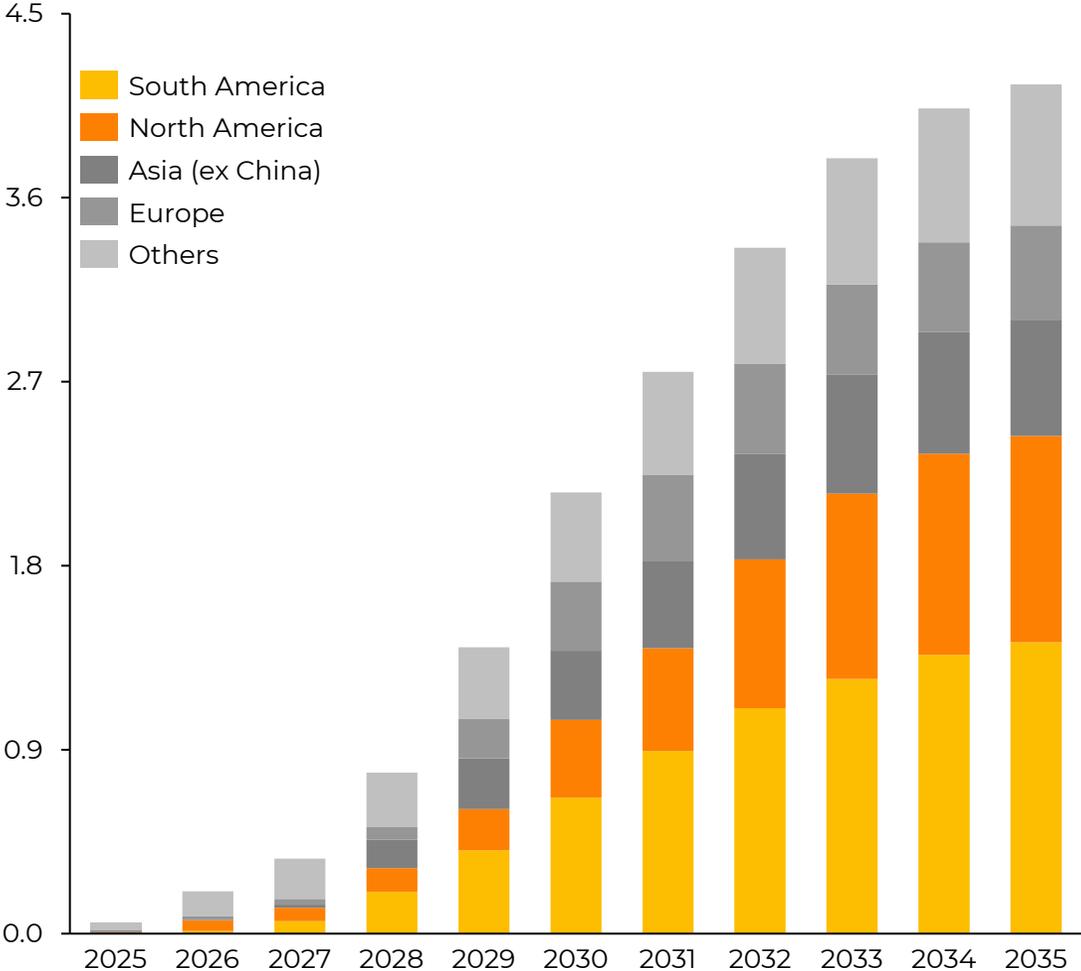
Mined copper supply by region, probability weighted, Mt of Cu

- Committed
- Possible
- Probable



Challenges and Opportunities: Peru and Argentina dominate the South American Greenfield project pipeline

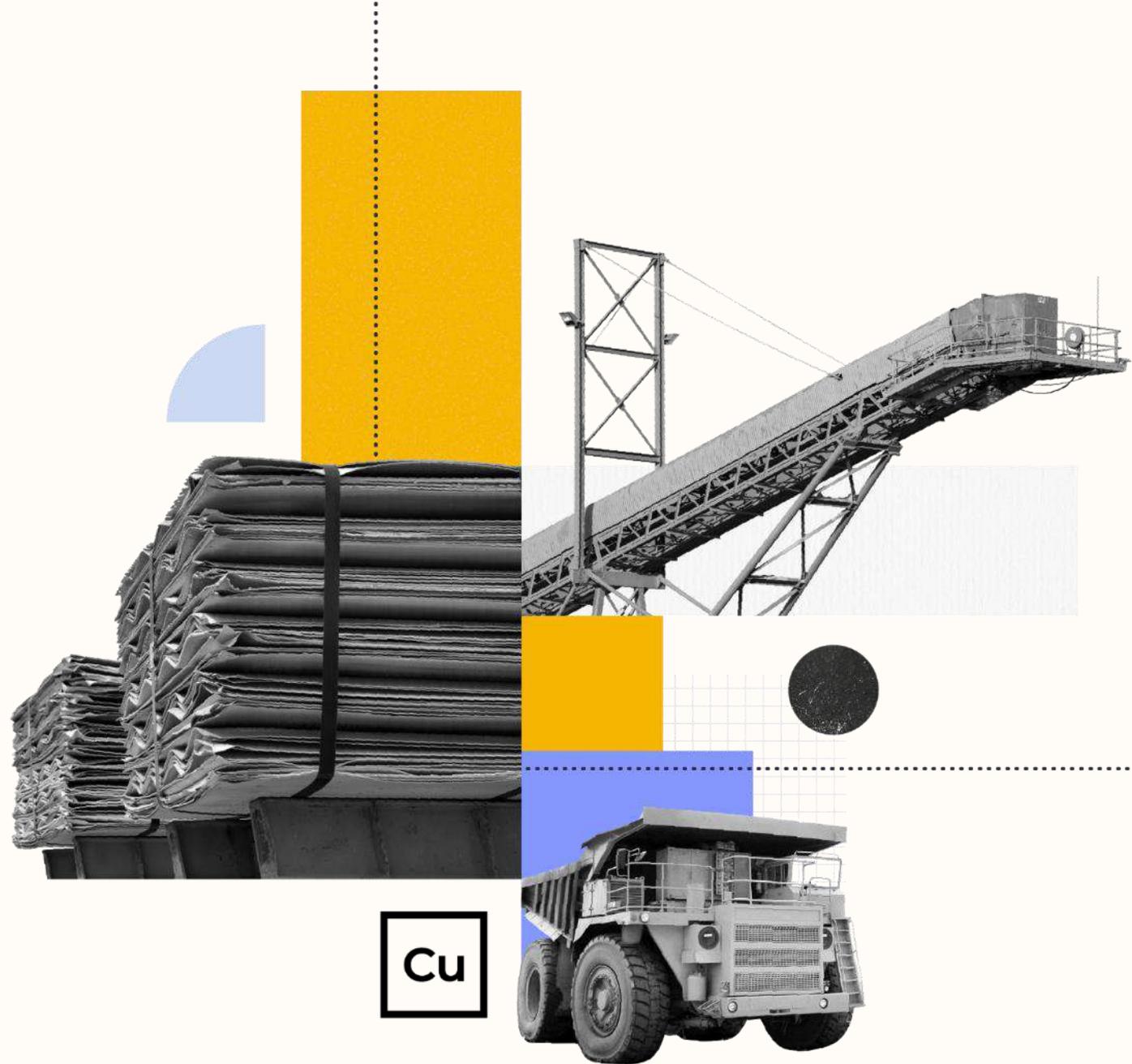
Production coming from Greenfield projects, probability weighted, Mt of Cu



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