



New challenges in the copper industry:

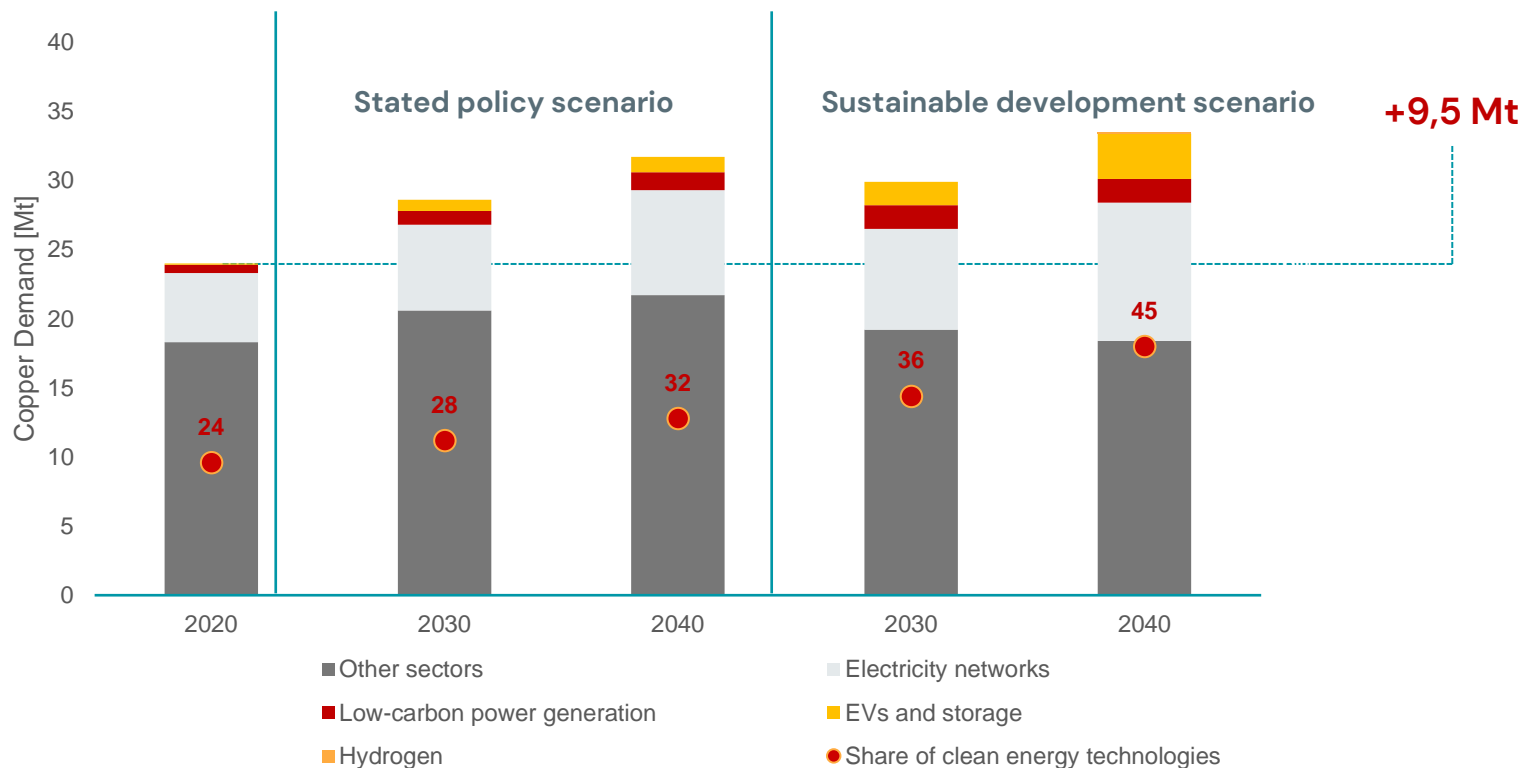
Just a bump or a trend change?

Jorge Cantallopts, Executive director CESCO
CEO Summit – Asia Copper Week 2022
November 24th.

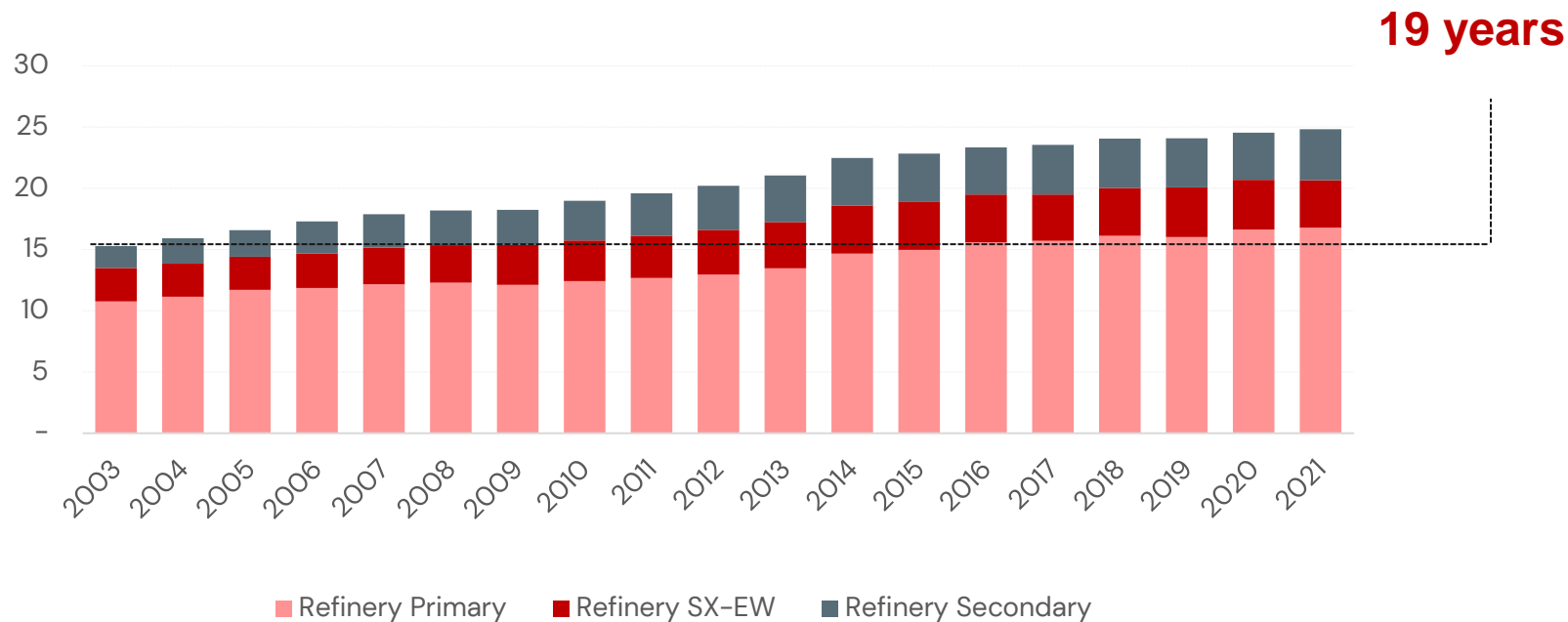
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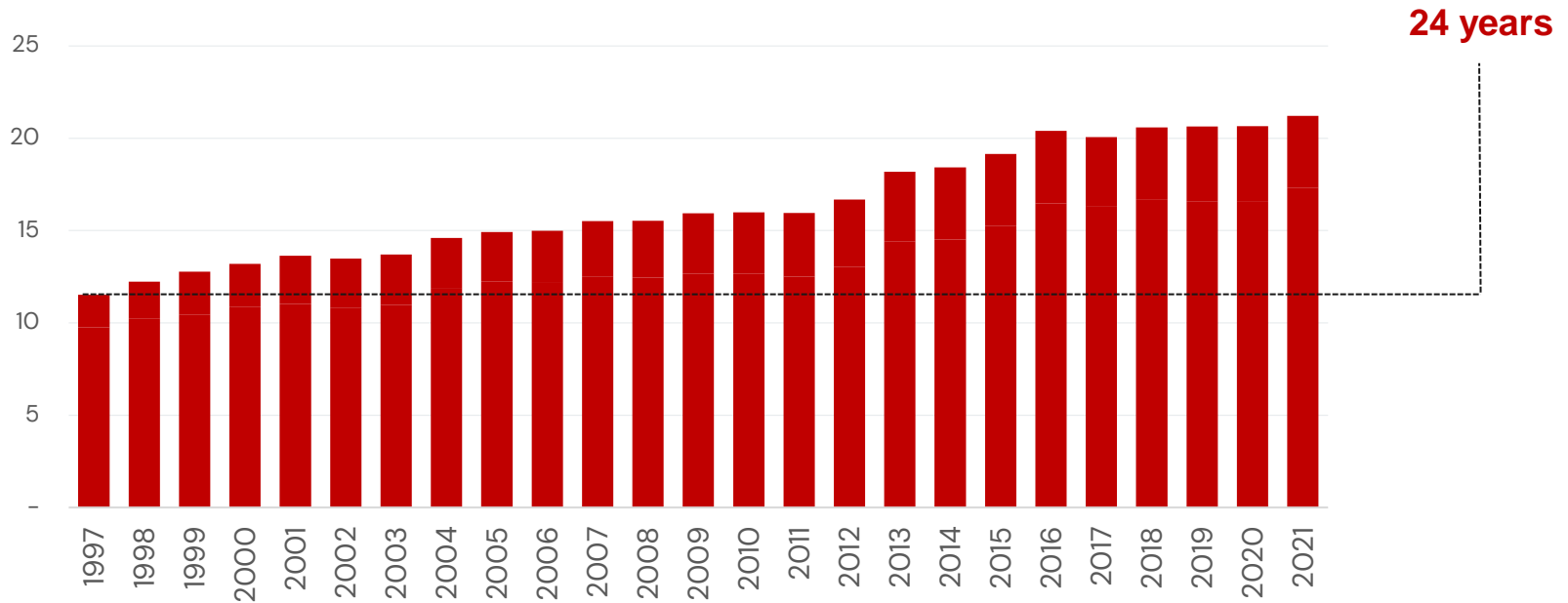
Total copper demand by sector and scenario, 2020–2040



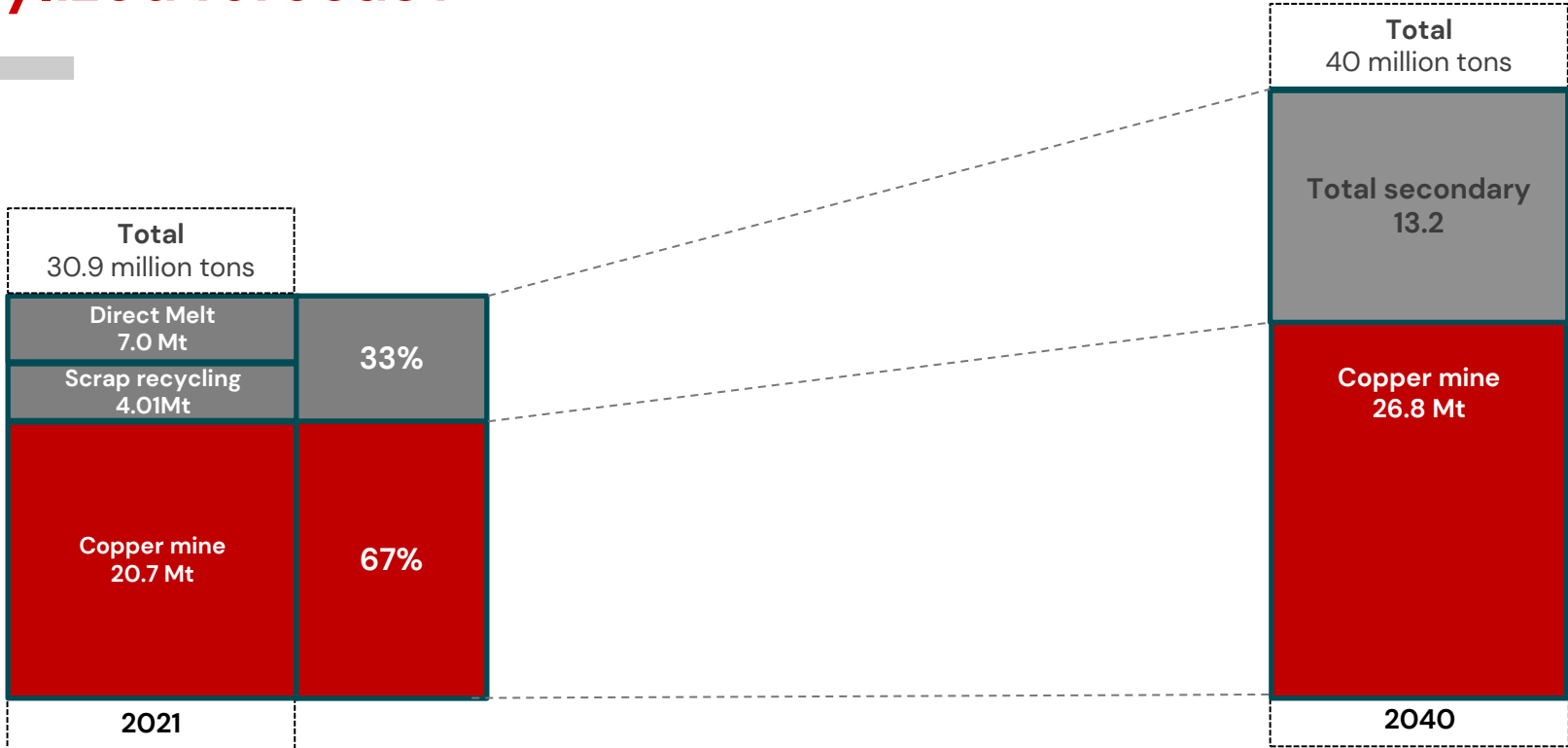
Total refined copper supply 2003–2021



Mine copper production 1997-2021

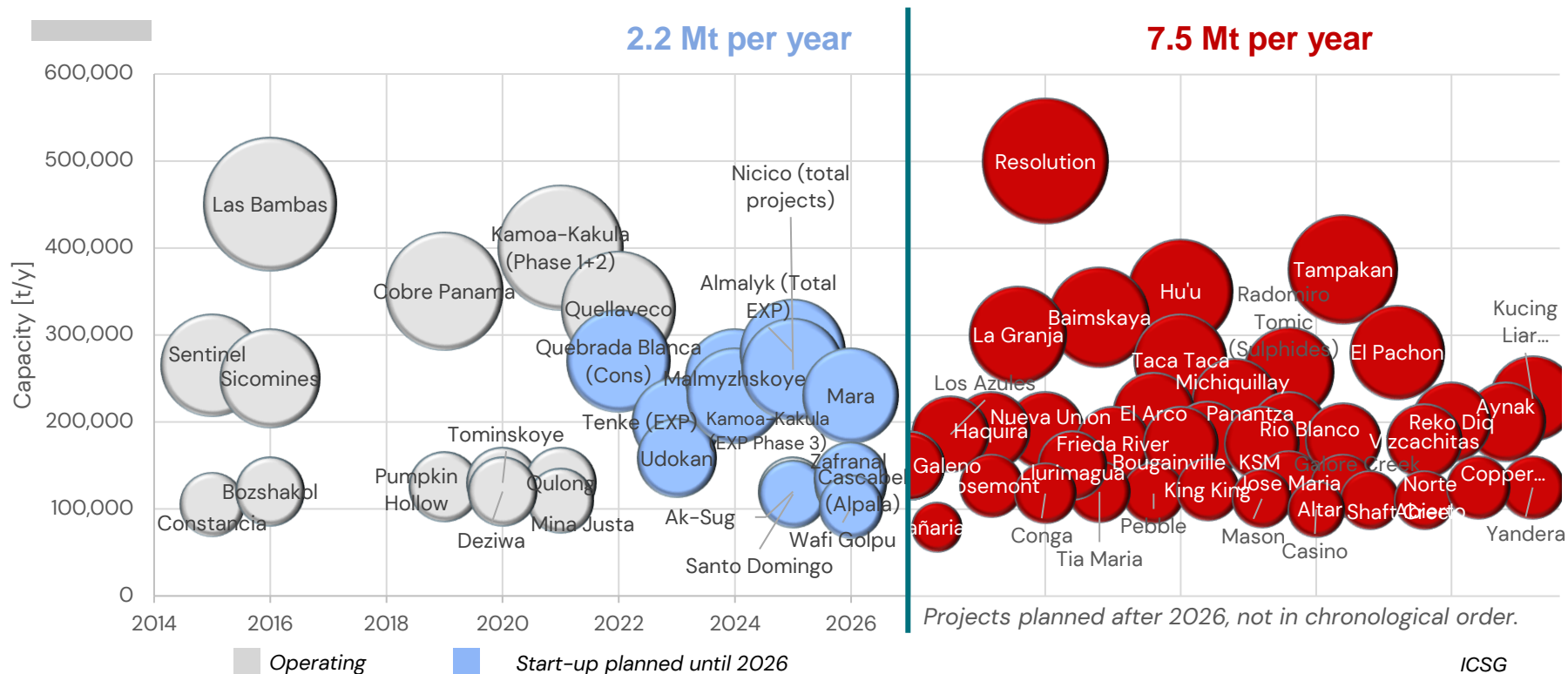


Stylized forecast

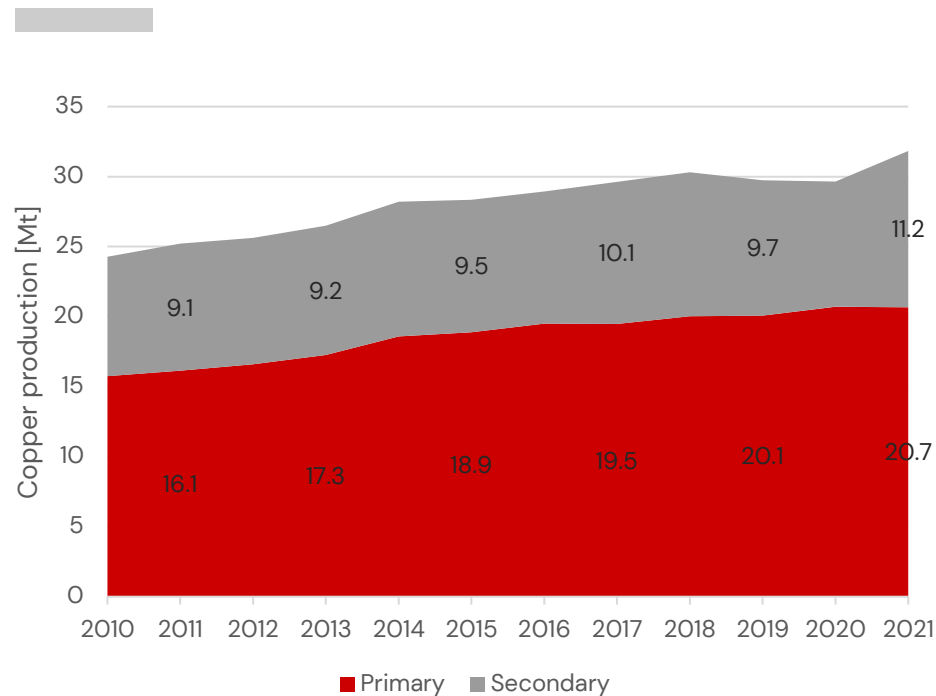


Stylized estimation based on various sources

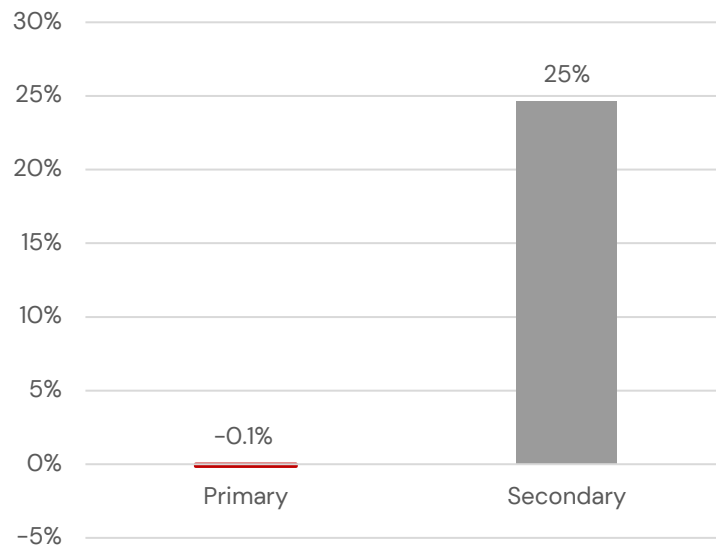
Copper Mine projects pipeline



Copper production per source



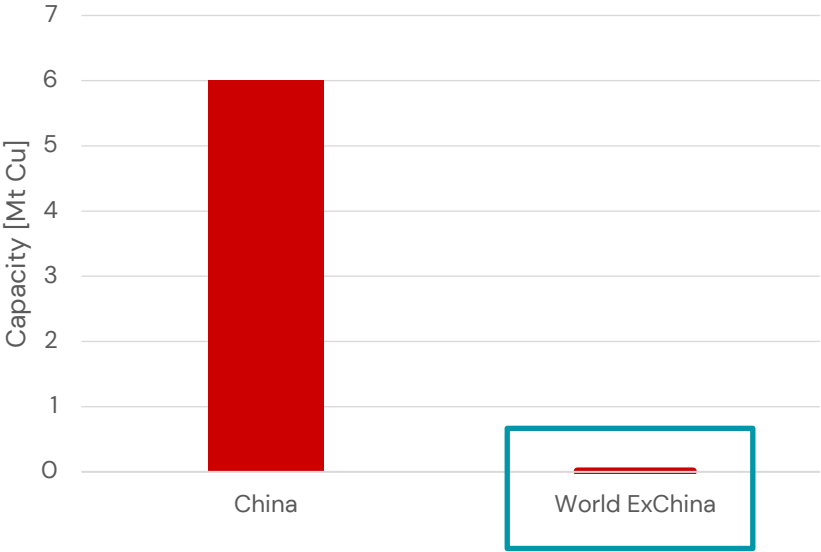
Increase rate 2020-2021



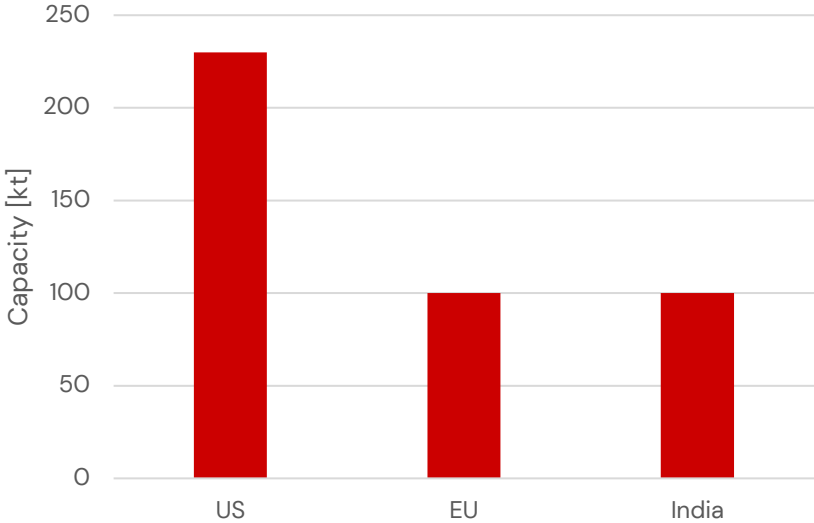
Growth in refined copper demand



Annual growth in refined copper demand
2012-2021



More investment in copper refineries using
scrap in 2022-2025



The bumps



Geopolitics conflict could interrupt globalization.



A new European energy strategy could slow down the speed of the energy transition.



A circular economy could increase the secondary supply share.



Complexity to develop a new mining project.

European Energy Supply



Despite decarbonization targets, **coal consumption will grow** marginally to compensate for gaps in gas supplies.



More **extreme weather** events will force many countries to **fall back on fossil fuels**, delaying the energy transition.



The **energy crisis** will prompt some governments to backtrack on efforts to phase out the use of nuclear power



Nuclear power can play a major role in enabling secure transitions to low emissions energy systems.

[1] EIU. 2022. *Energy Outlook 2023. Surviving the energy crisis.*

[2] IEA. 2022.

Circularity



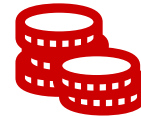
From trash to treasure: Green metals from recycling.



Countries' action plans for the circular economy.



Circular solutions can boost supply chain resilience and decarbonization.



New copper scrap regulations will create new opportunities

New strategy



Tesla could enter the mining industry if it must.

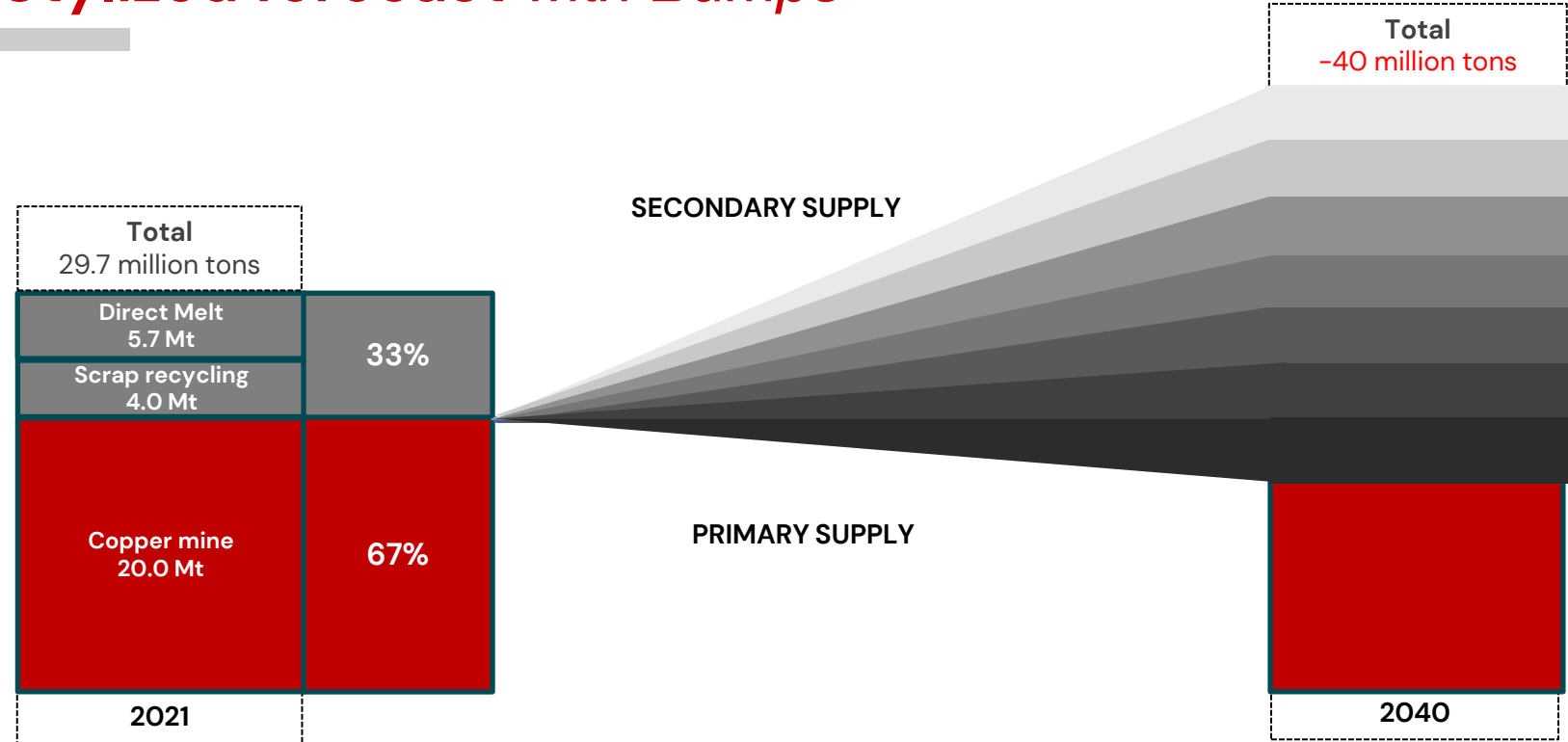


Canada orders China to divest from the country's mining companies.



Chinese copper companies say more mining is needed to boost supply.

Stylized forecast *with Bumps*



Stylized estimation based on various sources

Question for the dialogue

- Copper has a great future, but **supply strategies of geopolitical blocs**, advance on **circular economy** and **complexity for new mining projects** could change the participation between primary and secondary sources.
- Changes in **energy strategy** could change the medium-term forecast for **copper demand**.
- Do these changes have an **impact** on **copper companies' strategies?**



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