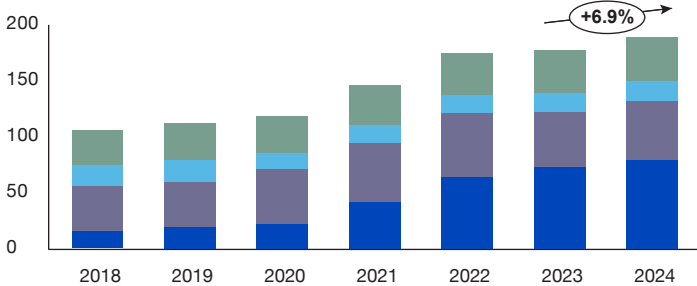


DEMAND FROM EV AND SUPERALLOYS SECTORS CONTINUED TO RISE IN 2024

Cobalt Demand by Subsegment

kt Co

EV Portables Superalloy Others



Cobalt demand from EVs and portables (unadjusted) rose by 8% year on year (y-o-y) to 81kt and 54kt, respectively, in 2024, up from 75kt and 50kt in 2023.



Benchmark estimates stronger growth of +13% y-o-y from the Energy Stationary Storage (ESS) market, but this was from a low base, yielding demand of under 4kt in 2024. As a result, total unadjusted battery demand for cobalt is estimated at 139kt in 2024, an annual increase of +8%.



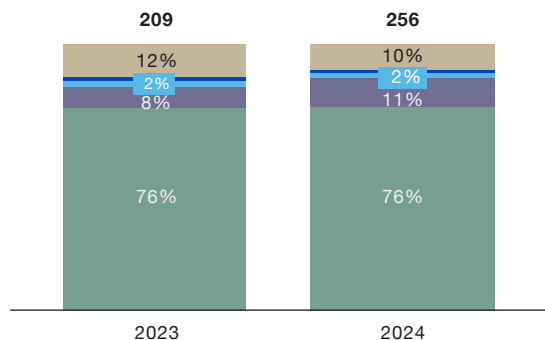
We estimate cobalt demand growth from superalloys at 5% from 2023-24 – rising to 18.5kt – with a further +5% growth expected in 2025. This is equivalent to around 34% of total industrial cobalt demand.

2024 SAW RECORD COBALT SUPPLY, WITH CMOC VOLUMES PUSHING GLOBAL MINED SUPPLY OVER 250KT

Mined Cobalt Supply by Major Country

kt Co

DRC
Indonesia
Australia
Philippines
ROW



Benchmark estimates total cobalt mine supply in 2024 of 256kt. The most notable change to the view has been an increase in the assessment of CMOC's African copper-cobalt assets.



Benchmark has also increased its assessment of Indonesian cobalt supply, following a revision to its nickel output expectations from HPALs in the country. This revision was made following a field trip to several sites in Indonesia.



The DRC is the world's largest producer of cobalt, and will remain so throughout the forecast period. Indonesia is the second largest producer, and is forecast to eclipse all other countries except the DRC in output.

DRC-ZAMBIA COPPERBELT BECOMES GEOPOLITICAL BATTLEGROUND AS US AND CHINA COMPETE FOR INFLUENCE THROUGH RAILWAY INFRASTRUCTURE



The US and China are competing beyond critical minerals security, with investment from both countries in railways through Africa's resource-rich Copperbelt region, which expands across Zambia and the DRC.



The US-led Lobito Corridor project – which has seen more than \$6bn of investment pledged towards it – aims to connect the Copperbelt with the Atlantic port of Lobito in Angola and could allow for more volumes to be shipped to the US or the European markets.



In contrast, China's revitalization of the Tanzania-Zambia Railway Authority (TAZARA) line aims to strengthen its long-standing presence and influence in the region by pledging to invest around \$2bn to modernize the line that links Zambia to the Tanzanian port of Dar es Salaam on the Indian Ocean.

Please do not hesitate to get in touch if you have any questions:

Market analysis prepared by Benchmark Mineral Intelligence

