Electric vehicles and bottlenecks in the battery metals supply chain

Alex Laugharne, CRU, New York, USA

The burgeoning ramp-up in electric vehicle (EV) production is driving rapid growth in the market for battery metals, and we have already seen substantial price gains in key raw materials. This presentation will outline CRU's EV uptake forecasts, and how these are driven by predictions of future regional transportation needs, policy environments, consumer preferences and the lifetime cost of vehicle ownership.

The presentation will move on to present the resultant demand for lithium, cobalt, nickel, and graphite, and how variable these consumption volumes might be in the case of EV sales being higher or lower than the base case, which is important given the degree of uncertainty regarding EV forecasts.

We will then discuss the ability of the market to supply battery-appropriate forms of these products. The availability of sufficient material in coming years is far from guaranteed, with each market facing differing challenges varying from a lack of economic resources to the lead times involved in ramping-up output and qualifying battery quality products.

Attendees will gain invaluable insight into a range of demand outcomes for critical battery metals, as well as supply chain bottlenecks and potential shortfalls in each of these markets, along with an understanding of possible future price scenarios.