



Watts Up with the Battery Metal Market

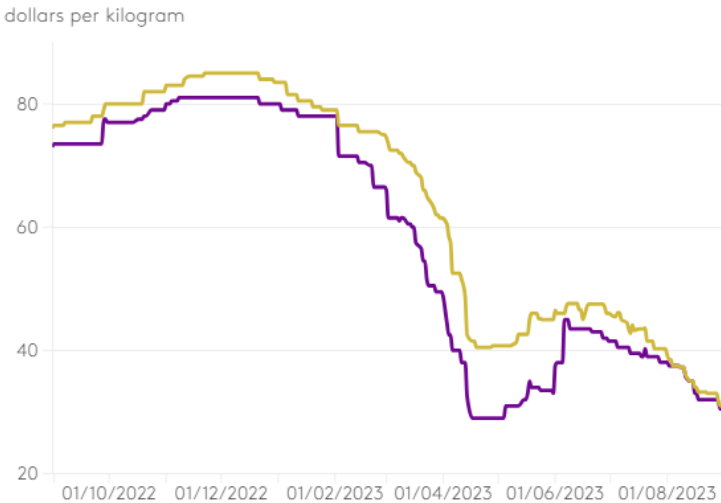
Prices are down, but not out

Consisting of lithium, cobalt, aluminium, manganese and nickel, Lithium-ion batteries are a key input in the production of electric vehicles (EV). Besides their role in transitioning away from internal combustion engines, their economic importance for certain regions in the world cannot be understated. With over half the global supply of hard rock lithium, Australia has optimised this resource in line with the soaring demand for EVs, even having the gold mining town of Kalgoorlie named "the lithium corridor of power". Yet, since 2022, lithium prices have dropped over 80% while nickel and cobalt have plummeted by around 40%. In this article, we seek to dissect the reasoning behind this downfall, and the prospects of a return to prosperity.

The success of lithium-ion batteries as a commodity are largely dependent on the success of EV sales in the market. Maintaining the label of a luxury good, demand for EVs failed to reach the impressive levels of years prior in 2023, ultimately succumbing to the effects of the pandemic. These effects, namely inflation and a slowing economy, put EVs outside the spending range for many households, and the effects are still lingering today.

Coinciding with the pandemic was the arrival of an energy crisis in Europe, triggered by the Russian invasion of Ukraine. Historically, governments tend to avoid providing environmental incentives through taxation during inflationary periods on the premise that going green is not a priority in times of economic hardship. This has been evident since 2022, causing governments to soften their approach on environmental policy and subsequently creating a lacklustre of incentives for consumers in purchasing EVs.

Lithium prices extend downtrend on muted demand
August 2022 - August 2023



Source: [Fastmarkets, Lithium carbonate 99.5% Li₂CO₃ min, battery grade, spot prices cif China, Japan & Korea, \\$/kg](#), [Lithium hydroxide monohydrate 56.5% LiOH.H₂O min, battery grade, spot price cif China, Japan & Korea, \\$/kg](#)



Despite the demand for EVs suffering for the reasons outlined above, sales are still expected to rise in 2024 by an estimated 23%, down 13% from 2023. As such, when observing the downward trajectory in battery metals, analysts point to the oversupply of metals in the market instead of EV sales as the main driver for plummeting prices.

China has dominant role in the battery raw material supply mix. China receives 97% of Australia’s total lithium exports. It is the world’s biggest producer of EVs, with Bryd overtaking Tesla as the world’s largest producer of EVs. This dominance has led other countries to outline investment and targets to increase their domestic production.

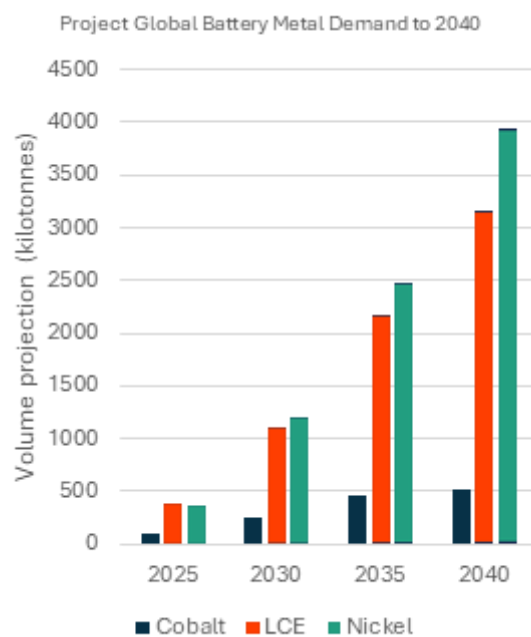
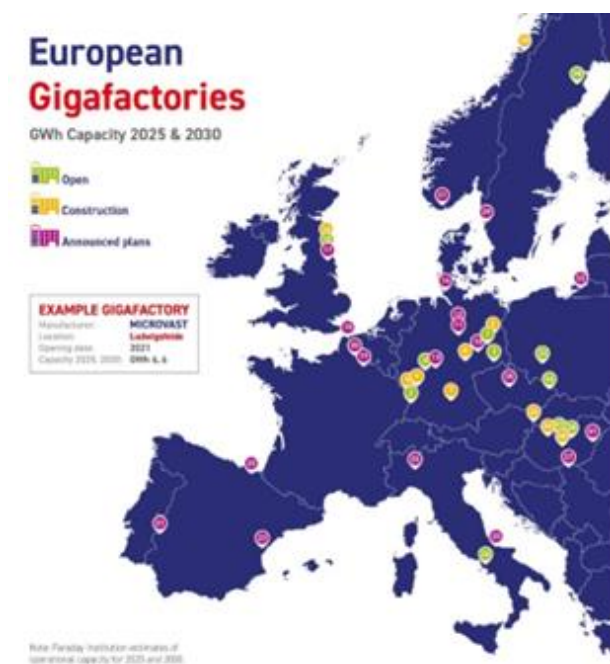
Future outlook: Growing demand factors are waiting to come online

Despite the market’s recent price falls, future demand is expected to rise dramatically in certain areas of the world. For example, the European Commission forecasts that the demand for rare earth metals should increase “six-fold by 2030 and seven-fold by 2050, for lithium, EU demand is expected to increase twelve-fold by 2030 and twenty-one-fold by 2050”¹. Recently, two of the top energy transition investors unveiled a Eur500 mn fund focusing on battery materials, including lithium, nickel, cobalt, further aiming at reducing Europe’s reliance on supply coming from abroad.

In Europe, several countries have announced new projects or already opened some gigafactories. As it can be seen in the graph below, Germany is the country with the lion’s share, but the overall number of factories should increase by 2050.

In the US, the Inflation Reduction Act (IRA) along with other incentives is looking to invest some \$135 billion in the American EV and critical mineral sourcing and processing.

Zero emission vehicle mandates, banning the sale of new combustion engine vehicles, is set for 2030 in the UK, and 2035 in Canada and the EU. This will further drive demand for battery production and raw materials.



¹Source: European Commission, Critical Raw Materials Act

Chart sources: The Faraday Institute, FIS

The EU predicts a global demand increase for batteries of 14 times by 2030 compared to 2019 levels. Lithium alone is predicted to increase by 30% year-on-year. Ambitions across the Europe and the Americas for a significant increase in battery production, as well as demand for finished product in batteries and EVs.

The growing importance of these physical markets has also enabled the launch of derivatives. Contracts are now offered on the CME, SGX and LME exchanges, including contracts for (Cobalt Hydroxide, Lithium Hydroxide, Lithium Carbonate, Molybdenum Oxide). Derivative battery volumes have had healthy volume increases since their respective launches. FIS has been a key driver in the launch of these contracts and command a strong market share.

Battery Metal Deriv. Contract	2022 Market Vol	2023 Market Vol	Mkt Vol 23 vs 22
CME Cobalt (broker)	15,966	25,426	59%
CME Lithium (broker)	426	17,355	3974%
CME Moly (broker)	0	1,701	/

The growing sources of demand from EV production to grid level battery storage means that the future looks set to be interest for these key green transition materials. The growth in uptake of derivative contracts also demonstrates the increasing requirement from the market for risk management tools that reflect an increasing market exposure.

In conclusion, it is reasonable to expect that the increasing demand for the battery metals will drive up supply accordingly, and this will have effects on their derivatives markets. As more investors are looking to this space, we believe that getting involved early is a key factor for supply chain risk management, as well as the wider ESG portfolio push.

Contracts offered by FIS

Cobalt

- CME Cobalt (Fastmarkets) Futures
- LME Cobalt Futures (physical)
- LME Cobalt Futures (cash settled)
- SGX FM Cobalt Metal In-whs Rotterdam
- SGX FM Cobalt Hydroxide CIF China

Lithium

- CME Lithium (Fastmarkets) Futures
- LME Lithium (Fastmarkets) Futures
- SGX FM Lithium Carbonate CIF CJK
- SGX FM Lithium Hydroxide CIF CJK

Molybdenum

- CME Molybdenum Oxide (Platts) Futures

Contacts

Anna Chadwick – AnnaC@freightinvestor.com

Luke Vint – LukeV@freightinvestor.com



Disclaimer: *The information provided in this communication is not intended for retail clients. It is general in nature only and does not constitute advice or an offer to sell, or the solicitation of an offer to purchase any swap or other financial instruments, nor constitute any recommendation on our part. The information has been prepared without considering your investment objectives, financial situation, or knowledge and experience. This material is not a research report and is not intended as such. FIS is not responsible for any trading decisions taken based on this communication. Trading swaps and over-the-counter derivatives, exchange-traded derivatives, and options involve substantial risk and are not suitable for all investors. You are advised to perform an independent investigation to determine whether a transaction is suitable for you. No part of this material may be copied or duplicated in any form by any means or redistributed without our prior written consent. Freight Investor Services Ltd (FIS) is authorised and regulated by the Financial Conduct Authority (FRN: 211452) and is a member of the National Futures Association (“NFA”). Freight Investor Services PTE Ltd (‘FIS PTE’) is a private limited company, incorporated and registered in Singapore with company number 200603922G, and has subsidiary offices in India and Shanghai. Freight Investor Solutions DMCC (‘FIS DMCC’) is a private limited company, incorporated and registered in Dubai with company number DMCC1225. Further information about FIS including the location of its offices can be found on our website at freightinvestorservices.com.*