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# Battery raw materials are in short supply and prices have doubled

Which battery raw materials have experienced significant price fluctuations over the past 5 years? Battery raw materials like lithium carbonate (Li 2 CO 3),lithium hydroxide (LiOH),nickel (Ni) and cobalt (Co)have experienced significant price fluctuations over the past five years. Figures 1 and 2 show the development of material spot prices between 2018 and 2023.

Are battery demand and battery raw material supply affected by global macroeconomic fluctuations? In recent years the fundamental drivers of battery demand and battery raw material supply have been largely immuneto global macroeconomic fluctuations. This changed in 2023, as growing economic headwinds began to weigh on consumer sentiment.

#### What will the battery materials market look like in 2024?

In 2024, the battery materials market will also be exposed to a complex interplay of economic headwinds, geopolitical developments, trade tensions, disruptions to shipping and the reshaping of international supply chains.

What factors influence the price of battery materials?

The materials under investigation are predominantly used in the battery value chain, so that the dynamics are essentially shaped by battery demand and the expansion of production capacities for materials. Their price therefore particularly reflects market factors such as supply and demand fluctuations.

What contributes to the cost of battery cells?

The largest single contributor to the cost of battery cells is the materials used in them, especially the cathode materials. In addition to lithium, the transition metals manganese, iron, cobalt and nickel are used in particular.

#### What will the global demand for battery materials be in 2040?

The global demand for raw materials for batteries such as nickel, graphite and lithium is projected to increase in 2040 by 20,19 and 14 times, respectively, compared to 2020. China will continue to be the major supplier of battery-grade raw materials over 2030, even though global supply of these materials will be increasingly diversified.

Deficits in the short term are expected for lithium in 2022-2023 (Figure 2). Shortages are also probable for graphite, manganese and nickel supply as the global market balance will remain very tight between now and 2024 for graphite, until 2025 for manganese and up to the end of the decade for nickel. Demand will outstrip supply 3 for all raw materials beyond 2029-2030 (with ...

Prices for key battery raw materials have been subject to enormous fluctuations over the past two years, putting an end, at least temporarily, to the trend of falling battery cell costs. In its Battery Update, ...



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Among the more than 1,100 attendees gathered, a number of topics dominated conversation. Bearish sentiment prevails in spot lithium market. Ongoing sluggish demand and oversupply in the lithium market has led to bearish sentiment toward the near-term outlook among delegates at the conference. "Chile"s lithium carbonate and Australia"s spodumene are still ...

Supply availability and price risks for Lithium, Nickel and the refined salts stem from a potential demand-supply imbalance driven by long lead times... Global supply and supply characteristics for battery raw materials [kt LCE/metal eq. p.a.] Source: Roland Berger "LiB Supply-Demand Model" 364 2024 888 2020 2022 616 2026 1,101 1,328 2028 1,585 ...

Excess EV production capacity, a buildup of inventory and destocking by cathode producers resulted in thin demand for battery materials. This coupled with upstream expansions and market oversupply led to a notable softening of battery raw material prices in 2023. So, what does this year ahead have in store? EV growth to slow further in 2024

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May 22, 2019 | Raw materials pricing and supply hugely impacts the battery market, and William Adams, head of battery research at Fastmarkets Research, argues that lithium and cobalt pricing is evolving, thanks--in part--to the downstream supply chain. A shift is coming, he predicts, from 1 to 1 pricing, to pricing via a PRA, to Exchange pricing.

Geopolitical turbulence and the fragile and volatile nature of the critical raw-material supply chain could curtail planned expansion in battery production--slowing mainstream electric-vehicle (EV) adoption and the ...

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