

SolarInnovate Energy Solutions

How much lithium battery pack is consumed each year





Overview

How has lithium consumption changed over the years?

From primarily being used for ceramics, battery demand has taken over global lithium consumption and driven an almost four-fold increase since 2010. Between 2000 and 2010, lithium consumption in batteries increased by 20% on average every year.

What is the global market for lithium-ion batteries?

The global market for Lithium-ion batteries is expanding rapidly. We take a closer look at new value chain solutions that can help meet the growing demand.

How big will lithium-ion batteries be in 2022?

But a 2022 analysis by the McKinsey Battery Insights team projects that the entire lithium-ion (Li-ion) battery chain, from mining through recycling, could grow by over 30 percent annually from 2022 to 2030, when it would reach a value of more than \$400 billion and a market size of 4.7 TWh. 1.

Why is the demand for lithium increasing?

The growing adoption of electric vehicles (EVs) is rapidly increasing the demand for lithium. Despite a slowdown in the market, global battery demand raised in 2020, supported by a shift in the design and advancement of battery technology. In the same year, batteries alone accounted for majority of total lithium consumption.

Will lithium-ion batteries become more popular in 2022?

Their potential is, however, yet to be reached. It is projected that between 2022 and 2030 the global demand for lithium-ion batteries will increase almost seven-fold, reaching 4.7 terawatt-hours in 2030. Much of this growth can be attributed to the rising popularity of electric vehicles (EVs).



How does battery demand affect nickel & lithium demand?

Battery demand for lithium stood at around 140 kt in 2023, 85% of total lithium demand and up more than 30% compared to 2022; for cobalt, demand for batteries was up 15% at 150 kt, 70% of the total. To a lesser extent, battery demand growth contributes to increasing total demand for nickel, accounting for over 10% of total nickel demand.



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