

Is Nickel a New Energy Storage





Overview

In 2022, nickel (Ni) was nominated as a critical metal due to its wide applications in the metal industry, especially in clean energy applications to achieve climate mitigation targets. Meantime, rapid industrializati.

Why is nickel important in energy storage?

Nickel is an important element in energy storage technologies and has been for many years. Its ability to improve storage capacity at low cost was instrumental in miniaturizing batteries and enabling the portable electronic devices we use every day.

Why is nickel so important?

This transition relies heavily on nickel. Nickel is a key material in both stainless steel and batteries used in electric vehicles (EVs) and renewable energy storage. Nickel demand is expected to double by 2040 due to growing electrification. That's a problem, because traditional nickel production is far from clean.

Why is nickel a good battery material?

Crucially, nickel is generally cheaper than rival metals such as lithium and cobalt 2; nickel-rich batteries can therefore reduce the cost of storing excess renewable energy production. Nickel's ability to withstand high temperatures and resist corrosion makes it indispensable in many low-carbon technologies.

Can nickel be a part of the energy transition?

Nickel's pivotal role in the energy transition means it can be a part of this. But to become sustainable while continuing to increase production, the nickel industry must innovate. This document is issued by Bank Lombard Odier & Co Ltd or an entity of the Group (hereinafter "Lombard Odier").



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