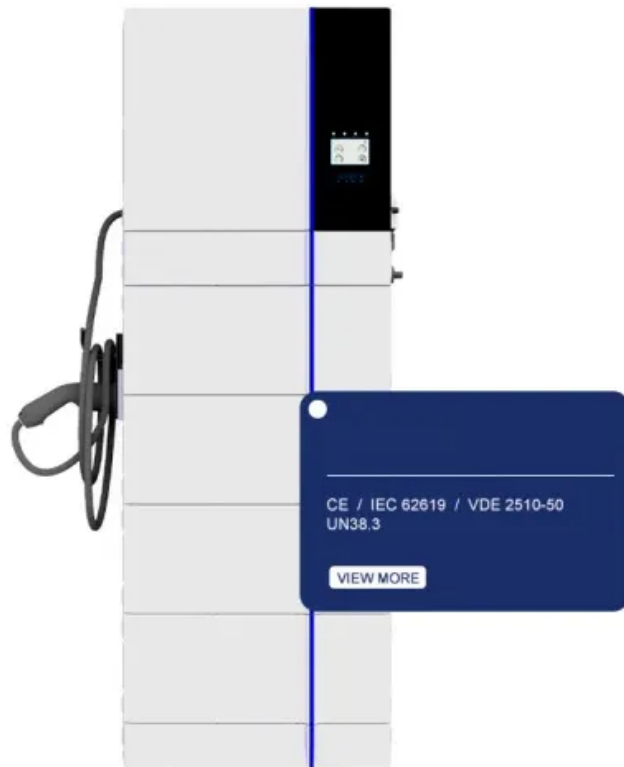


## SolarInvert Energy Solutions

# The industry chain of energy storage lithium batteries



## Overview

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Global demand for Li-ion batteries is expected to soar over the next decade, with the number of GWh required increasing from about 700 GWh in 2022 to around 4.7 TWh by 2030 (Exhibit 1). Batteries for mobility.

Are lithium-ion batteries the future of energy storage?

While lithium-ion batteries have dominated the energy storage landscape, there is a growing interest in exploring alternative battery technologies that offer improved performance, safety, and sustainability.

What is the global battery supply chain?

While the global battery supply chain is complex, every step in it – from the extraction of mineral ores to the use of high-grade chemicals for the manufacture of battery components in the final battery pack – has a high degree of geographic concentration.

What percentage of lithium-ion batteries are used in the energy sector?

Despite the continuing use of lithium-ion batteries in billions of personal devices in the world, the energy sector now accounts for over 90% of annual lithium-ion battery demand. This is up from 50% for the energy sector in 2016, when the total lithium-ion battery market was 10-times smaller.

How to organize a battery supply chain?

When it comes to the organization of the supply chain, the extraction of minerals such as lithium from rock or brine is only the first step in supplying battery manufacturers with raw materials.

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.

Does re-training a battery supply chain affect labor markets?

Re-training and investment in the battery supply chain can reduce the effects on labor markets. For example, studies by McKinsey estimate that on average 80 jobs are created for every 1 GWh of battery production capacity. That number should increase significantly if other parts of the supply chain are also located in a country.

## The industry chain of energy storage lithium batteries

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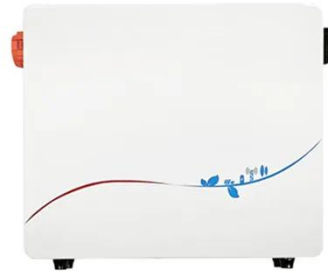
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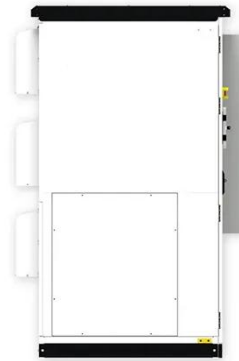
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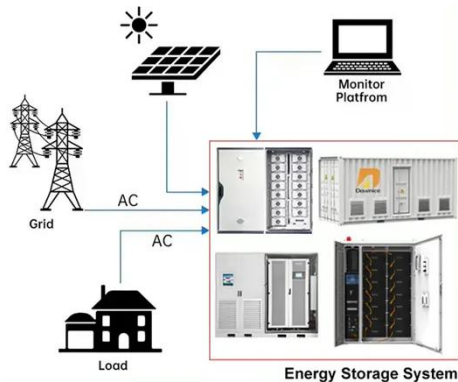
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