

SolarInnovate Energy Solutions

Final demand for energy storage batteries



Overview

Battery demand in the energy sector, for both EV batteries and storage applications, reached the historical milestone of 1 TWh in 2024. What is the future of battery energy storage?

Demand for energy storage continues to escalate, the global battery energy storage (BESS) landscape is poised for significant installation growth and technological advancements.

Do battery demand forecasts underestimate the market size?

Just as analysts tend to underestimate the amount of energy generated from renewable sources, battery demand forecasts typically underestimate the market size and are regularly corrected upwards.

Are EV batteries still a major driver of battery demand?

Electric cars remain the main driver of battery demand, but demand for trucks nearly doubled. Battery demand in the energy sector, for both EV batteries and storage applications, reached the historical milestone of 1 TWh in 2024. Demand for one average week alone in 2024 exceeded the total demand for an entire year just a decade earlier.

What is European battery demand & production capacity up to 2035?

Figure 1 shows European battery demand and its domestic production capacity up to 2035. Fuelled by substantial BEV diffusion up to 2035, European battery demand is likely to surpass 1.0 TWh yr⁻¹ by 2030 (in 69% of all scenarios). The interquartile range (IQR) in 2030 is 0.97–1.2 TWh yr⁻¹.

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.

Which sector has the most EV battery demand in 2024?

Electric cars remain the principal factor behind EV battery demand, accounting for over 85%. Compared to 2023, the sector whose demand grew the most was electric trucks, growing over 75% in 2024 to reach nearly 3% of global EV battery demand.

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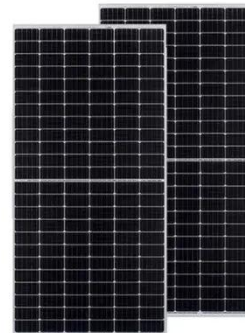


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