

India Mumbai coal-to-electricity energy storage products





Overview

Why will India pilot battery storage at coal-fired power plants?

India will pilot battery storage at coal-fired power plants to soak up surging midday solar and keep thermal capacity ready for the evening peak—without destabilizing the grid. The move targets a growing bind: solar now forces coal units to back down during the day, yet demand still leans on them after sunset.

What percentage of India's electricity is produced by coal?

Coal remains the backbone of supply, accounting for nearly 73% (157.6GW) of the total daily generation, the report states. As of FY2024, the industrial, commercial, residential, and agricultural sectors accounted for approximately 32%, 10%, 31%, and 22% of India's total electricity sales, respectively.

Why is coal important to India's energy security?

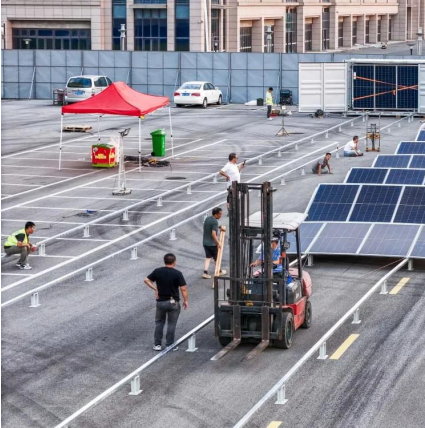
Coal remains vital to India's energy security due to its large domestic reserves (389.42 billion tons), helping reduce reliance on imported fuels and ensuring a stable energy supply. Domestic coal production reached 997.83 million tons in 2023-24, contributing to stable energy costs and reducing exposure to volatile global markets.

Can NTPC battery power India's largest coal generator?

To test a way out, the CEA has asked NTPC, India's largest coal generator, to install batteries at select plants with funding support. The idea is simple: charge when renewable output is high and discharge later, letting coal units run more steadily, cut cycling costs and potentially extend asset life.



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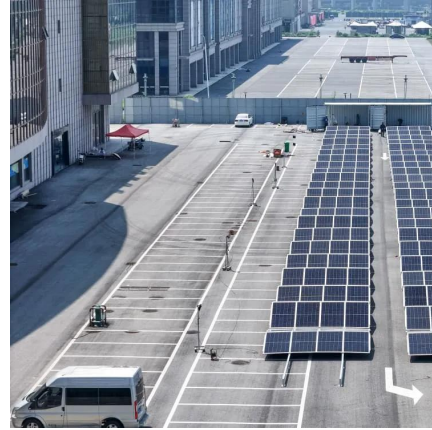


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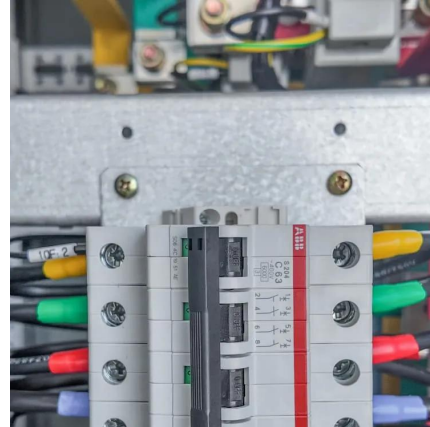
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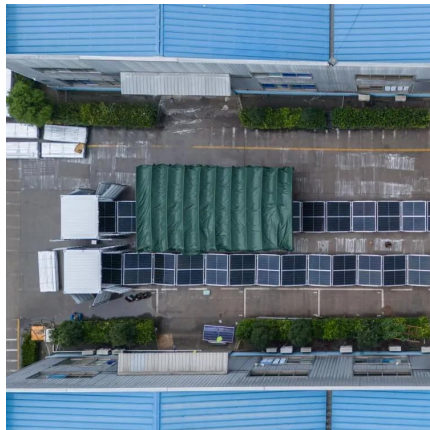
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