

Grid air energy storage





Overview

Could liquid air energy storage outperform batteries?

MIT and NTNU research shows liquid air energy storage (LAES) offers a cost-effective, efficient solution for long-duration grid storage. With competitive LCOS and reliable performance, LAES could outperform batteries and pumped hydro for a decarbonized power network.

What is compressed air energy storage (CAES)?

Compressed air energy storage (CAES) is an effective solution for balancing this mismatch and therefore is suitable for use in future electrical systems to achieve a high penetration of renewable energy generation.

Could liquid air energy storage be a low-cost alternative?

A new model developed by an MIT-led team shows that liquid air energy storage could be the lowest-cost option for ensuring a continuous supply of power on a future grid dominated by carbon-free but intermittent sources of electricity.

What is liquid air energy storage?

Liquid air energy storage (LAES) is a technology that converts electricity into liquid air by cleaning, cooling, and compressing air until it reaches a liquid state. This stored liquid air can later be heated and re-expanded to drive turbines connected to generators, producing electricity.



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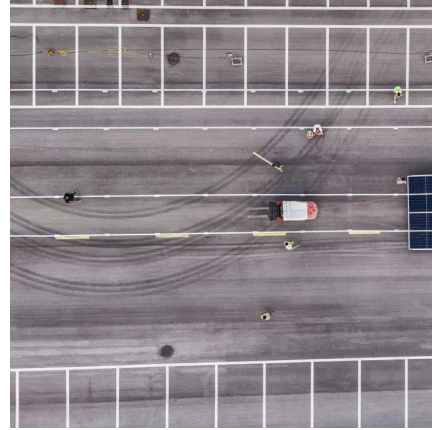
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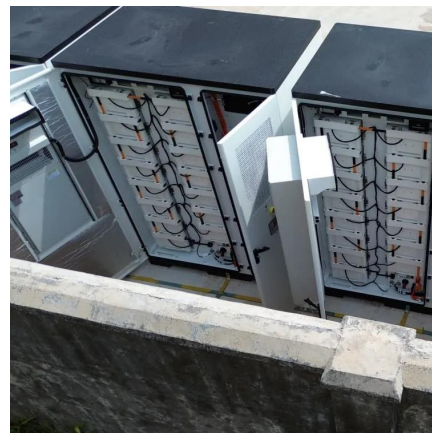
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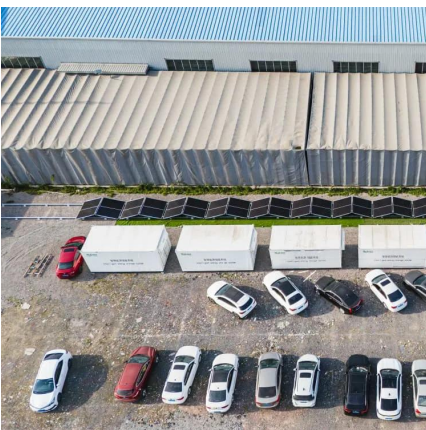
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