



BUHLE POWER

Copenhagen oil refinery uses 25kW photovoltaic energy storage container





Overview

How can oil refineries transition to a low carbon future?

Given the urgency to transition to low carbon future, oil refineries need to identify feasible strategies for decarbonisation. One way to address this is by integrating renewable energy systems. However, the high initial costs and intermittency appeared to be the key barriers for the adoption of renewable energy technologies.

Can solar energy systems decarbonize oil refineries?

Other studies in the literature considered coupling solar energy systems to oil refineries to decarbonize their operation. The applicability and feasibility of introducing a concentrated solar power (CSP) system to reduce partial reliance on process heaters of a crude oil refinery was studied by Danish et al.

Why should oil refinery plants use hybrid energy systems?

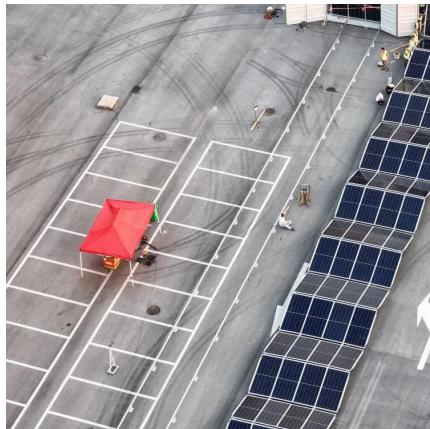
This significantly enhances the economic viability and environmental sustainability of the oil refinery plant, contributing valuable insights into the optimal configuration of hybrid energy systems for large-scale industrial applications and addressing the challenges of energy security, cost-effectiveness, and environmental impact. 1. Introduction.

Is pumped-hydroenergy storage a peaking power plant in India?

Jacob AS et al (2021) Techno-economic analysis of pumped-hydroenergy storage as peaking power plants in India for high renewable energy scenarios. In: Mohapatro S, Kimball J (eds) Proceedings of Symposium on Power Electronic and Renewable Energy Systems Control. Springer Singapore, Singapore, pp 307–316



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Infrastructure

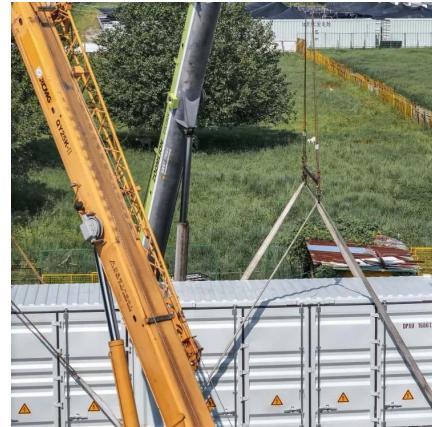
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Planning and Optimisation of Renewable Energy

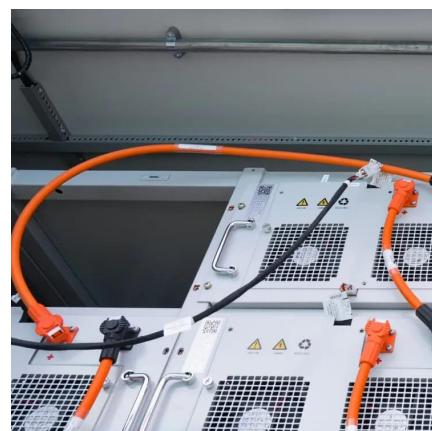
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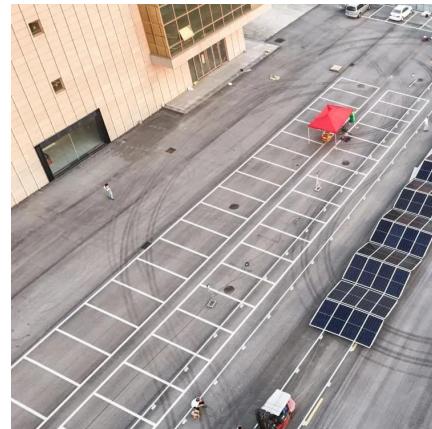
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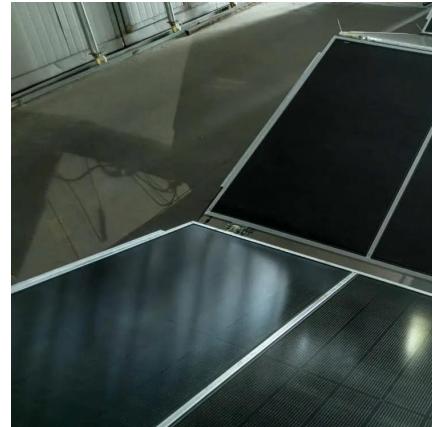
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