



LLSE CONTAINERS

# Off-grid solar container for highways 500kW vs diesel engine





## Overview

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What is a solar diesel hybrid system?

Solar hybrid systems are power systems that combine solar power from a photovoltaic system with another energy source. One of the most common hybrid systems being PV diesel hybrid system, coupling PV and diesel generators, also known as diesel gensets.

What are the best use cases for a solar diesel hybrid system?

The best use cases for a solar diesel hybrid system can normally be found in remote areas. These places are often off-grid and transport and storage of diesel can be expensive. But be it, poor grid or off-grid, all situations can benefit from a hybrid system.

Are solar+storage systems better than diesel gensets?

Moreover, solar+storage solutions have minimal variable costs compared to diesel. Maintenance expenses are lower, and the systems do not incur fuel costs, which contributes to a more predictable and stable LCOE. When comparing the LCOE of diesel gensets to solar+storage hybrid systems, several factors come into play.

Can a diesel generator be converted into a solar/diesel hybrid system?

For this reason, there is a clear financial justification for converting almost every diesel-powered system into a solar/diesel hybrid system. Every unused diesel kWh saves money. The combination of diesel generators with PV systems quickly pays for itself through the large savings in fuel costs.



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### Solar Hybrid vs Diesel Generator - Which Reduces OPEX More?

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