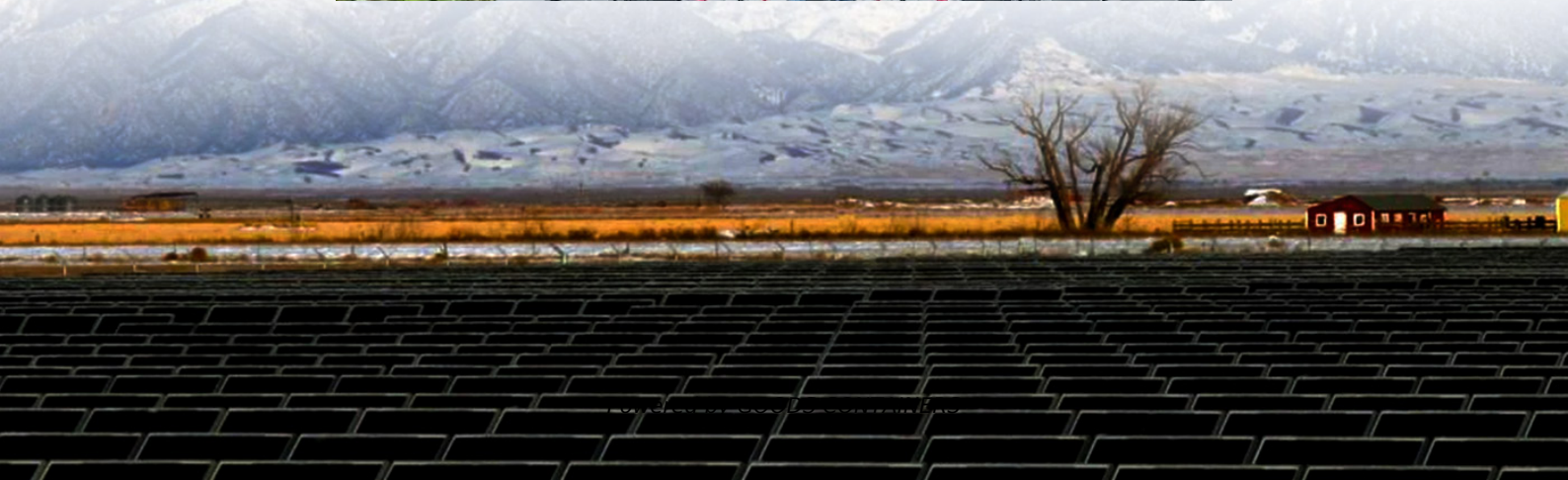


# **Bidirectional charging of photovoltaic folding containers for highways**





## Overview

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What is PV-storage-charging transportation & energy integration?

The integrated development path of PV-Storage-Charging transportation and energy integration can consume renewable energy locally, alleviate grid pressure while promoting the clean energy utilization of highways, showing immense potential.

How can bidirectional charging/discharging a battery achieve maximum PV power utilization?

In addition, with the proposed strategies, the bidirectional charging/discharging capability of the battery is able to achieve the maximum PV power utilization. All the proposed strategies can be realized by the digital signal processor without adding any additional circuit, component, and communication mechanism.

Is there an integrated development mode of Highway PV-storage-charging?

Combined with existing projects of self-consistent modes of transportation and energy integration, suggestions were proposed for the integrated development mode of highway PV-Storage-Charging.

What is isolated solar photovoltaic (PV) array & SEPIC converter?

An isolated solar photovoltaic (PV) array with a SEPIC converter is also being used in the system configuration. The purpose of the PV array is to support batteries during the non-availability of grid power supply and to feed auxiliary loads. The lithium-ion batteries are being used in light electric vehicles.



## Bidirectional charging of photovoltaic folding containers for highway

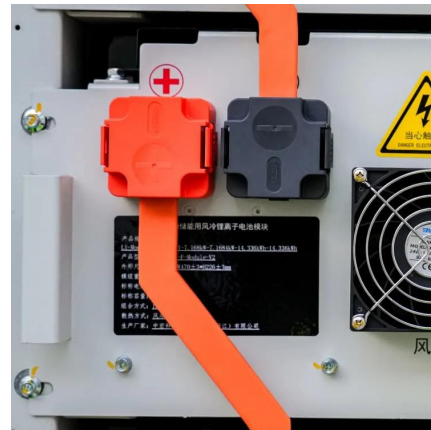


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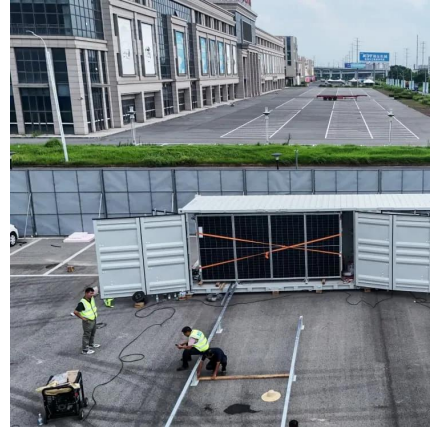
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