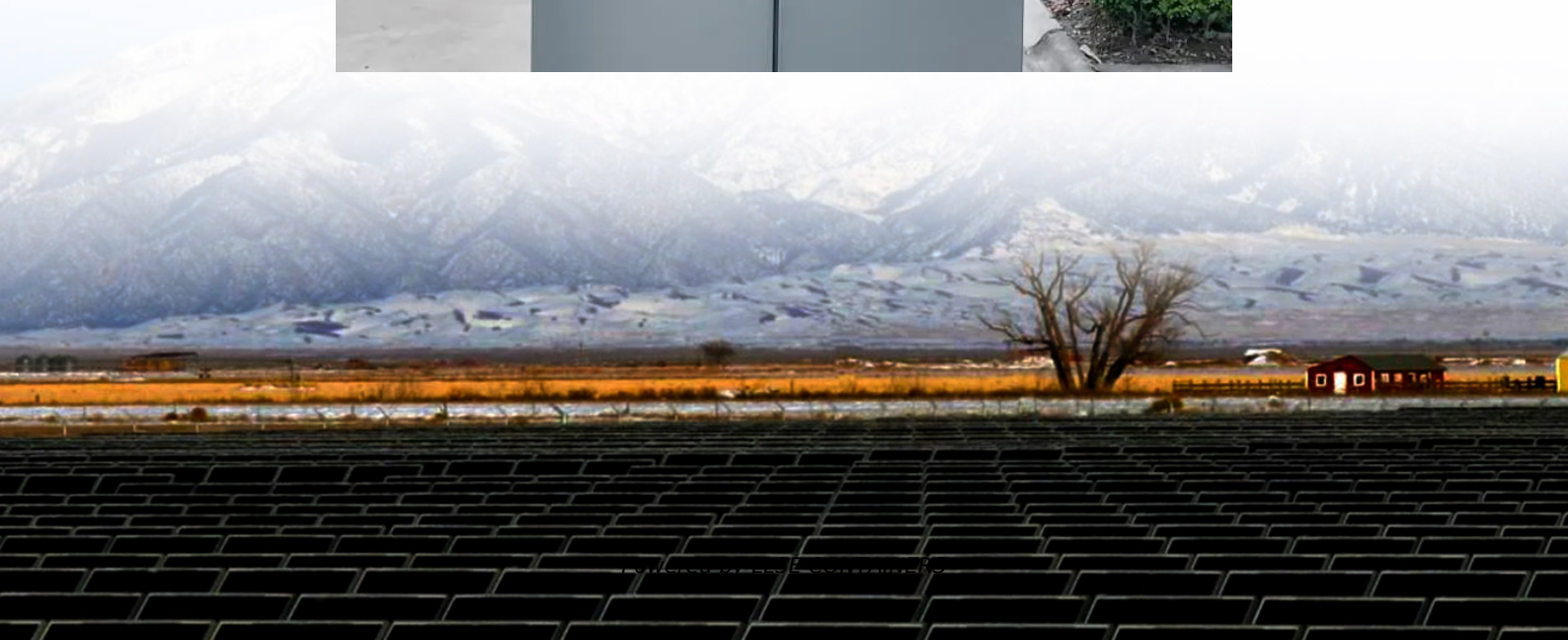


# **Fixed Photovoltaic Container Type for Highways**





## Overview

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What is a highway photovoltaic system?

Schematic diagram of the highway photovoltaics (PV) system. Roofing highways with solar panels generates green electricity that is delivered to the grid to replace the electricity from fossil fuels, thereby contributing to CO<sub>2</sub> emission reductions.

Can Highway PV be used to supply electricity to rest areas & tunnels?

Several pilot projects of highway PV in China, the United States (US), Germany, Austria, and Switzerland have already demonstrated the technical feasibility of using PV to supply electricity for highway rest areas and tunnels (Enkhardt, 2020; Steven, 2016). These projects imply that the benefits of the highway PV mainly embody two aspects.

Can PV panels be installed on highways?

The implementation of PV systems on highways (Figure 1), that is, roofing highways with PV panels, holds great promise to increase renewable energy production and to alleviate the contradiction between land availability and energy accessibility through the three-dimensional space use of land.

Can solar panels be used in a roofing Highway?

Photovoltaic (PV) installations are a leading technology for generating green electricity and reducing carbon emissions. Roofing highways with solar panels offers a new opportunity for PV development, but its potential of global deployment and associated socio-economic impacts have not been investigated.



## Fixed Photovoltaic Container Type for Highways

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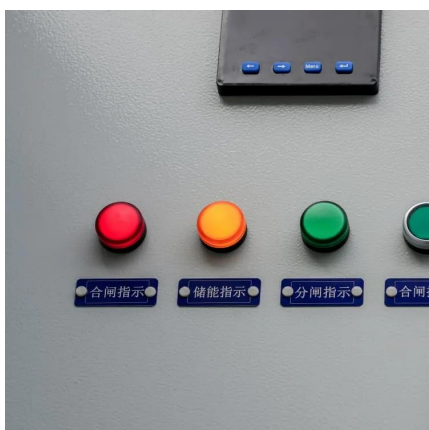
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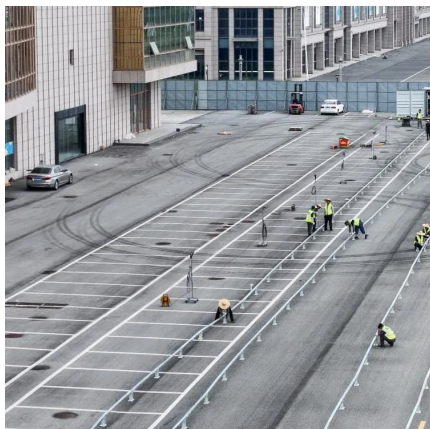






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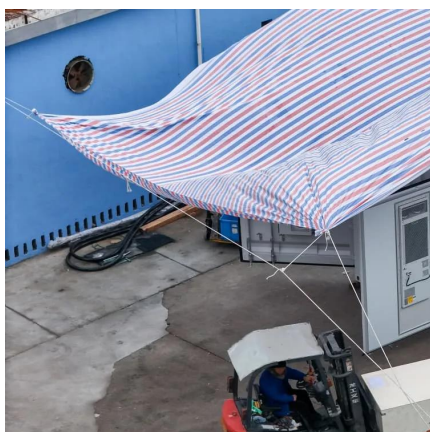
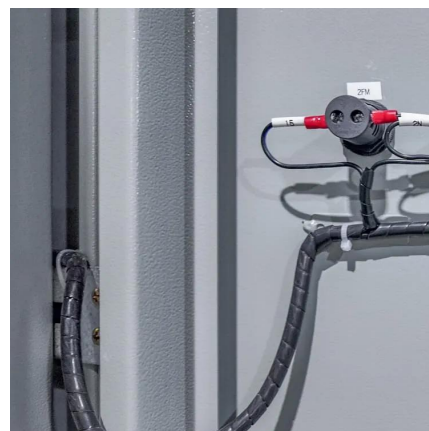


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