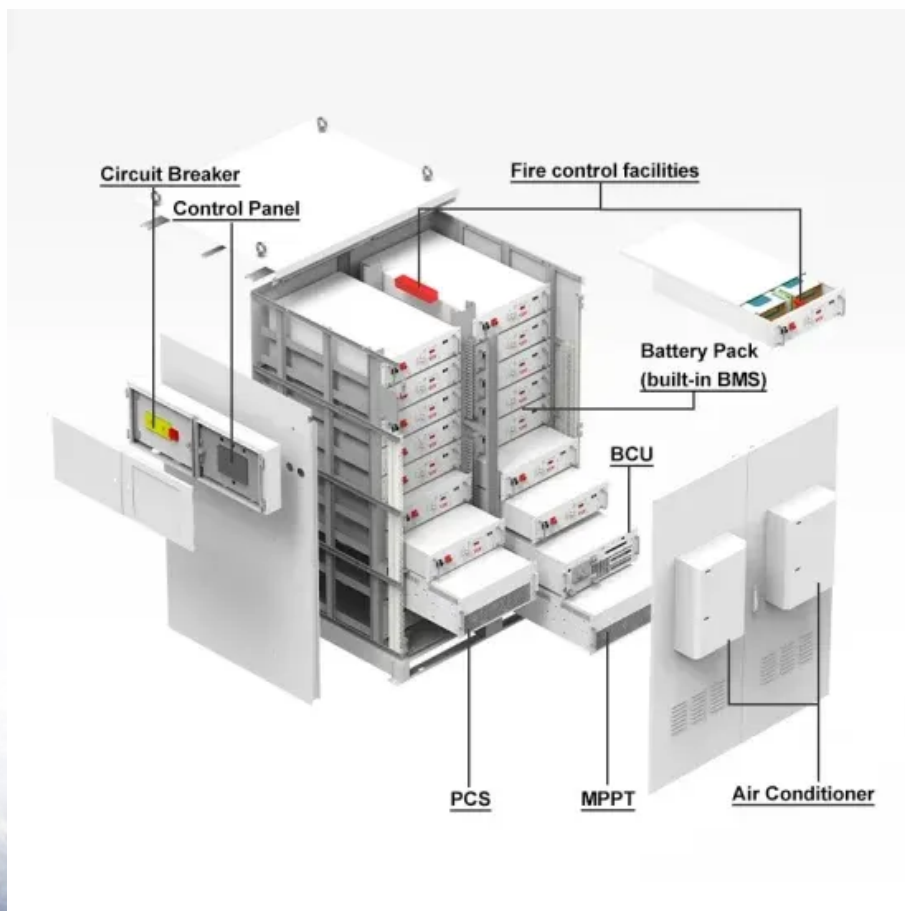


European Solar and Energy Storage Solutions

Announcement of Environmental Impact Assessment of Photovoltaic Panel Dismantling Project



Overview

What is the environmental impact of EOL PV panels?

The environmental impact of EOL PV panels is influenced by various factors and dynamic processes, which poses challenges to the application of LCA methodology. These challenges can be summarized as follows: It is necessary to establish a unified LCA framework, such as a unified system boundary, functional unit, and LCIA model.

Why is a proper disposal of decommissioned PV panels important?

As a consequence of the photovoltaic (PV) market expansion in the last 20 years, the cumulative global PV waste is expected to exponentially grow. A proper disposal of decommissioned PV panels is crucial for avoiding environmental risks and for recovering value-added materials.

Are PV module design changes affecting recycling infrastructure?

Recycling infrastructure is capital-intensive and long-lived, yet significant PV module design changes have been observed in recent years and more are expected.

Does Second-Life use of PV panels affect environmental impact?

At present, there has been no report on the environmental impacts of the second-life use of waste PV panels. This study focuses on the environmental impact of landfill disposal and recycling. The studies used a range of impact categories to quantify the environmental impact of recycling.

What happens if a PV panel is decommissioned?

When lifetimes are less than 30 years, decommissioned PV panels are replaced with new, higher-efficiency panels for technical or economic reasons, such as a loss of performance of one panel in a string or the availability of more efficient panels.

Do PV panels affect the landscape?

Most of the PV power plants are installed in rural areas, hence, their negative influence on the landscape is significant (Torres-Sibille et al., 2009). A possible practice to minimize this negative impact is to mount PV panels on the rooftop and building facades (Salameh et al., 2020d; Bazán et al., 2018).

Announcement of Environmental Impact Assessment of Photovoltaic



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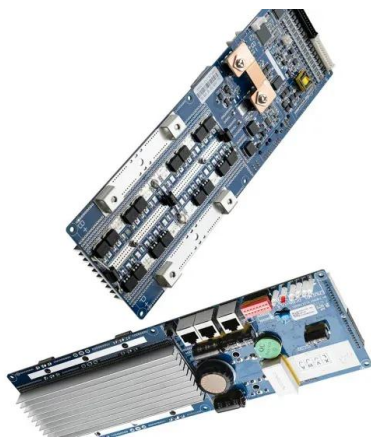


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