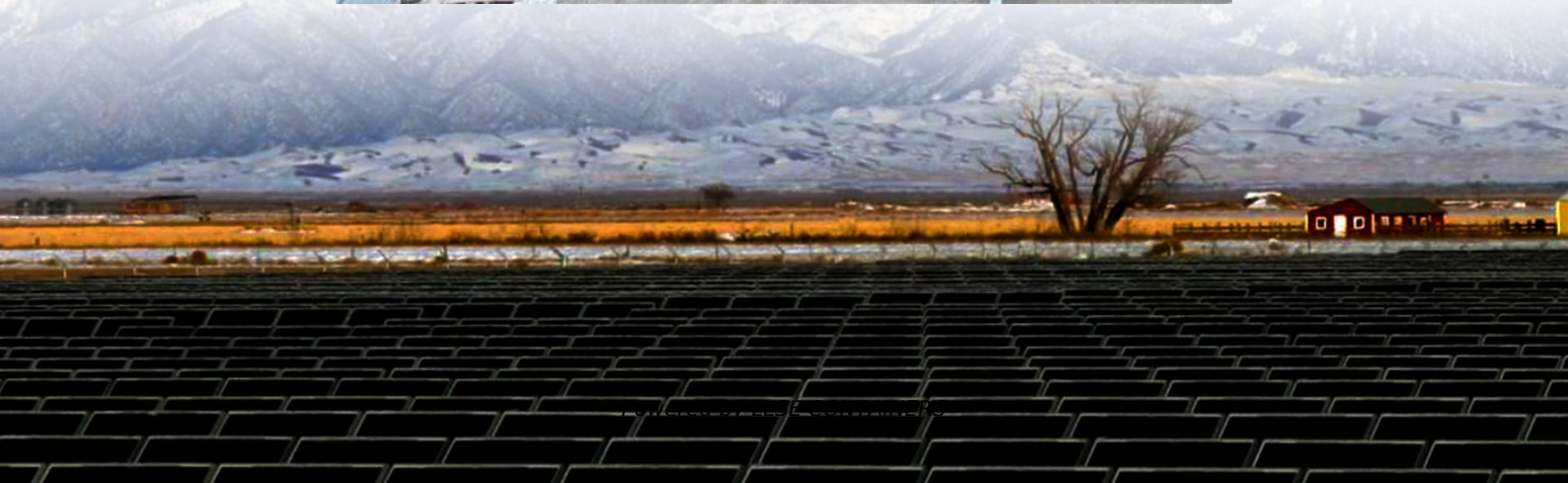


# **Photovoltaic containers used for fast charging in mountainous areas of Georgia**





## Overview

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Are PV-powered charging stations effective?

This report focuses on PV-powered charging stations (PVCS), which can operate for slow charging as well as for fast charging and with / without less dependency on the electricity grid. PVCS can also provide additional services via vehicle-to-grid (V2G) and vehicle-to-home (V2H). These may increase the effective use of locally produced solar power.

What makes a sustainable charging station for electric vehicles?

A sustainable charging station for electric vehicles should collect energy from renewable power sources like photovoltaic, wind, geothermal, hydroelectric, and others.

How can PVCS improve the use of locally produced solar power?

PVCS can also provide additional services via vehicle-to-grid (V2G) and vehicle-to-home (V2H). These may increase the effective use of locally produced solar power. This is the first technical report of subtask 2 of the Task 17.

Does solar photovoltaic power cover the energy demand from sunset to Sunrise?

It is clear that solar photovoltaic power does not cover the energy demand from sunset to sunrise (night hours); nevertheless, this is the period of lowest activity at the charging station, matching the time when the charging station requires low or no energy because of the small number of charging sockets being used.



## Photovoltaic containers used for fast charging in mountainous area

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This report focuses on PV-powered charging stations (PVCS), which can operate for slow charging as well as for fast charging and with / without less dependency on the electricity grid. ...

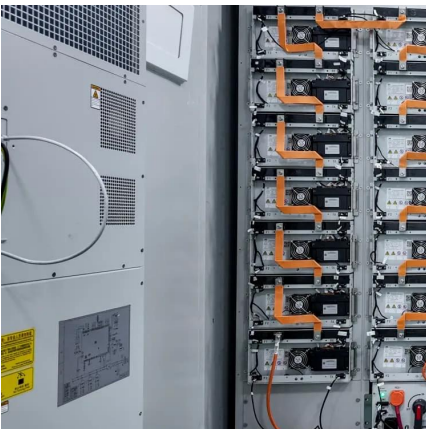
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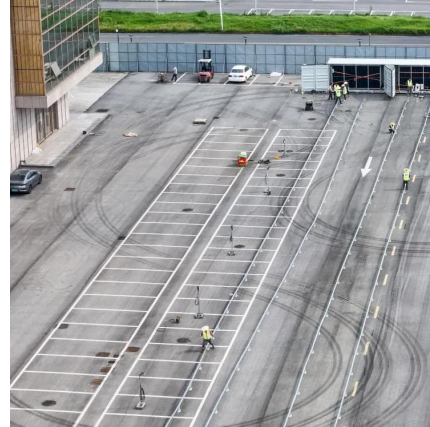
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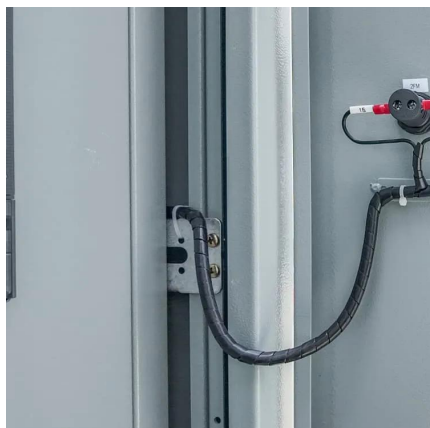
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