

# SolarSave: Emergency EV/Offgrid Charging Blanket

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## Overview

SolarSave is a flexible, lightweight, foldable solar blanket designed to provide emergency power to electric vehicles and essential equipment during off-grid situations. This concept envisions a trunk-sized backup charging solution deployable when traditional infrastructure is out of reach - ideal for travelers, survivalists, or emergency responders.

## Problem

Electric vehicles are rising in adoption, but charging stations are still limited in remote areas or during disasters. Drivers who run out of charge in these environments face major safety risks. Similarly, off-grid campers or responders may lack power for lights, radios, or medical gear.

## Solution

SolarSave provides a stowable, rapidly deployable photovoltaic blanket that unrolls across a car's roof, hood, or on the ground. Its purpose: generate just enough power to re-energize a vehicle's emergency battery or reach a safe zone. The system is modular, scalable, and made from high-efficiency flexible solar material.

## Core Features

- Lightweight, foldable design for trunk storage
- Charges EV directly or via backup lithium battery system
- Daisy-chains with other units for greater output

- Compatible with 12V/24V systems and USB-C emergency ports
- Reflective underside doubles as thermal shield in harsh environments

## Use Cases

- Emergency EV recharging when stranded
- Backup power in disaster zones
- Off-grid camping power supply
- Government/military field use
- Remote fleet and cargo backup

## Technology Outlook

SolarSave would use advanced flexible solar cells such as perovskite, thin-film CIGS, or next-gen monocrystalline folds. Compact charge controllers, inverters, and safety features would be embedded in the carrying case. Future versions could interface with smart vehicle management systems or double as a climate tarp.

## Vision

As EV infrastructure grows, SolarSave fills the essential emergency-use niche. With rising temperatures, power grid failures, and long-distance vehicle usage, it becomes a trusted companion for both everyday users and field professionals.

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