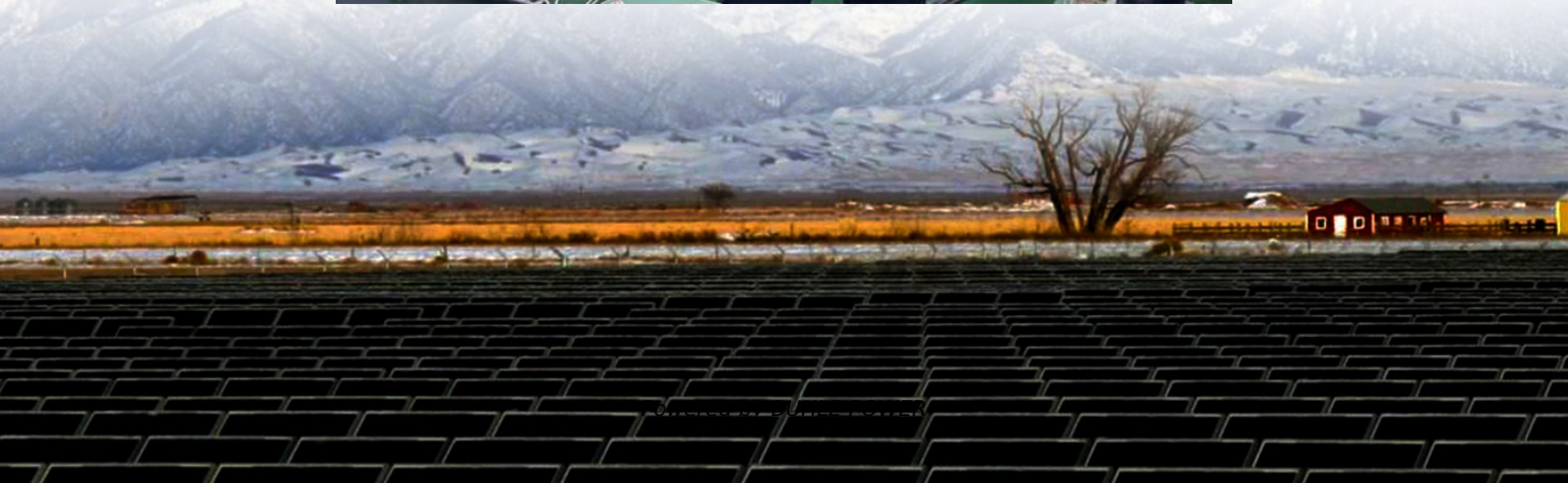


# **Price of hybrid energy for ground wave solar container communication stations**





## Overview

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Renewable energy presents a sustainable solution for tackling both energy access and environmental issues. Hybrid off-grid systems appear to be a promising concept for addressing energy security.

Is PV-we-DG a sustainable solution for telecom towers?

Differentiate and evaluate the financial viability of hybrid systems powered by PV-WE-DG with a battery storage system for telecom towers to the currently available conventional choices. Renewable energy presents a sustainable solution for tackling both energy access and environmental issues.

Are base transceiver stations environmentally friendly?

The only electrical source currently in service in the Base Transceiver Stations (BTS) is a diesel generator. As a result, diesel generators are not economical and are not environmentally friendly. Therefore, these sites must integrate sustainable energy sources like wind and solar [ 4 ].

Why do we need a hybrid energy system?

Promoting equality and employment creation can also improve the region's social and environmental characteristics. A hybrid energy system will assure energy security and reliability, especially when it has a variety of various heterogeneous energy supplies.

Which solar power plant has the lowest LCOE?

Bajaur BTS-07 proved to be the best feasible site in the north region with the least LCOE of 0.1267 \$/kWh and NPC of 0.206240\$M. On the other side, Gilgit BTS-13 reported the highest LCOE in the north region of 0.2325 \$/kWh and NPC of 0.10124\$M, due to the high electrical load and less solar radiation.



## Price of hybrid energy for ground wave solar container communication

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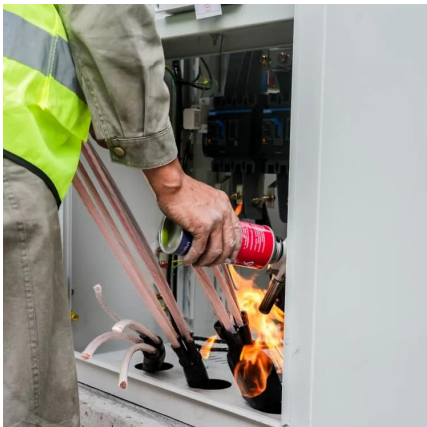
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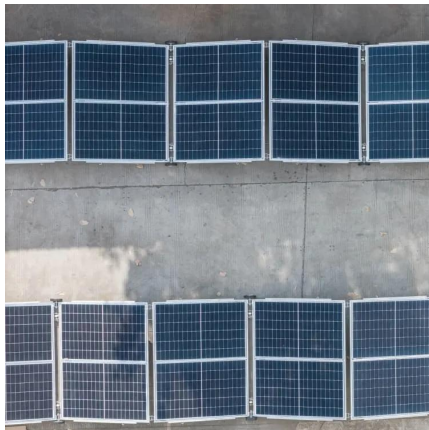






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