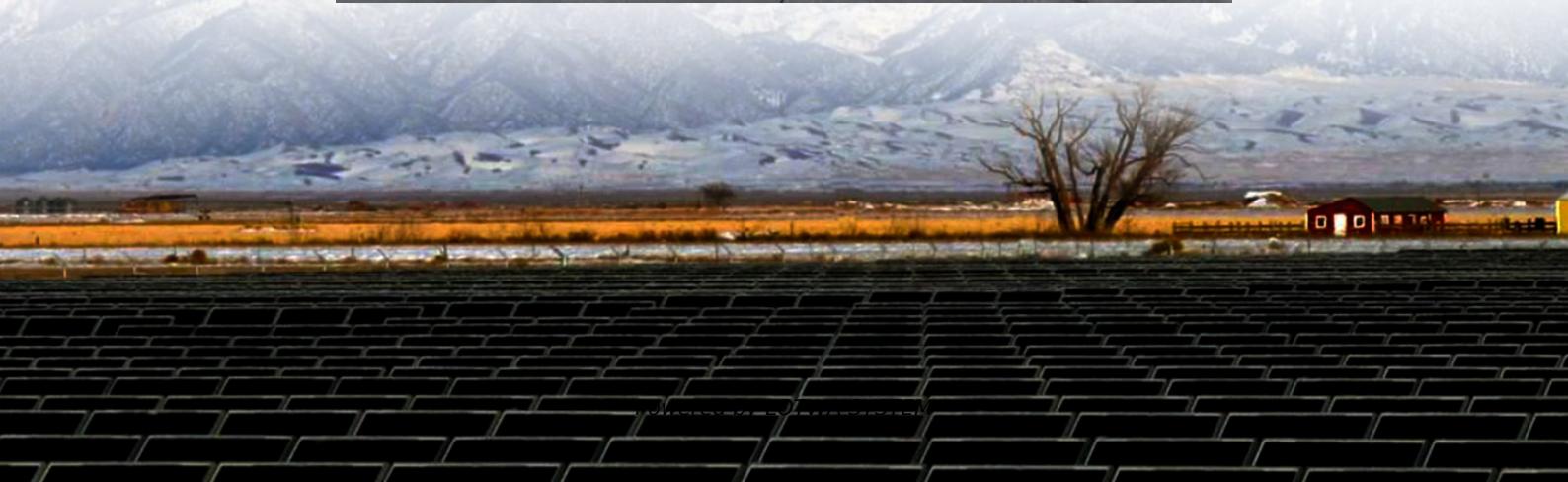




LOTWA SYSTEM

Power generation of polycrystalline solar panels in Nepal





Overview

Based on data, installing 1 kW of solar photovoltaic capacity can generate an average of 1.85 MWh per day in Jomsom, 1.53 MWh per day in Kathmandu, and 1.45 MWh per day in Nepalganj. Is solar PV a solution to energy insecurity in Nepal?

Hence depending nation's majority of electrical sources on a single source is dangerous and can cause catastrophic energy blackout. Solar PV a globally recognized and in trend in later decades is a promising technology which could secure the energy insecurity of Nepal.

How to promote solar PV in Nepal?

Solar PV comes into account in two major ways one, as cheap, green, and sustainable energy technology and another as diversifying the energy production in the country. The first and most reasonable approach for promoting solar in Nepal is to increase the domestic energy generation.

How much solar energy can Nepal produce?

Using just 0.5% of Nepal's total land area, it is possible to produce 429,000 MW of electricity. With technological advancements, power generated from solar panels can be directly connected to the grid without battery installations. Moreover, a World Bank study has shown that Nepal has the potential to generate 30,000 MW of solar energy.

Should Nepal promote solar panels?

Promoting solar will naturally increase energy availability. Nepal has ample marginal land—terraces, slopes, unused hilly areas—not viable for agriculture, suitable for solar panels. Southern/eastern-facing rooftops also offer installation potential. The government should provide subsidies to encourage rooftop solar systems among homeowners.



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