

**SolarInnovate Energy Solutions**

# **Site Energy Photovoltaic Sites in Morocco**



## Overview

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This Paper discusses the possibility of installation of large-scale Photovoltaic (PV) power plants in the Eastern region of Morocco. For this purpose, a large database of land exclusion with “high spatial reso.

Can large-scale photovoltaic power plants be integrated in Morocco?

In this paper, the technical and economic potential of large-scale integration of photovoltaic (PV) power plants in Morocco is assessed. For this purpose, environmental and technical constraints were first evaluated and gathered into a land exclusion map to identify the unsuitable areas for PV deployment.

Does Morocco have a solar potential?

Morocco has a significant solar potential, exceeding 2,200 kWh/m<sup>2</sup> /year, in terms of Global Horizontal Irradiation (GHI) . Such potential promotes PV power plants' installation, and it may attract overseas shareholders to invest in Morocco. However, the solar resource is not merely the criterion that determines the site's potential.

What is the PV potential of Morocco?

While, the sites with lower potential are mainly concentrated in the northern outskirts with a minimum value of 1.06 GWh/ year under the scenario 3. It is noteworthy that Morocco possesses a high PV potential from a technical point of view quantified for the third scenario at around 49,643 TWh/year.

Can solar power increase Morocco's share in the national energy mix?

Overall, this study is the first of its kind for Morocco and it is set up to highlight the significant technical and economic potential that the country possesses in terms of PV, enabling it to increase RE's share in the national energy mix as envisaged by Moroccan policy.

What is Morocco's Solar Plan?

In 2009, the Kingdom launched the Moroccan Solar Plan (MSP), a strategy to deploy RE resources by increasing its share to 52% by 2030 in the national

mix . Among the benefits of this policy is to lower the country's energy dependence, which stood at 93.3% in 2016, due to the fact that the energy sector in Morocco is heavily marked by fossil .

Where are grid-connected PV & concentrating solar power systems available?

Polo et al. estimated the technical potential of grid-connected PV and Concentrating Solar Power (CSP) by combining the theoretical potential with restriction layers. Findings indicated that the available areas for CSP systems are restricted to the Central Highlands and Southeast of Vietnam.

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### Identification of suitable sites for large-scale photovoltaic

Nov 26, 2020 · Identification of suitable sites for large-scale photovoltaic installations through a geographic information system and analytical hierarchy process combination: A case study in ...

### TotalEnergies has commissioned solar power plants at five Safran sites

Jan 10, 2025 · \*\*Casablanca, Morocco - January 10, 2025 -\*\* TotalEnergies Renewables Distributed Generation, a major player in B2B solar solutions, has successfully installed ...



### 117 megawatts of solar sites were awarded to Voltalia in Morocco ...

Apr 27, 2022 · This programme aims to accelerate the development of private solar projects within the framework of Law 58-15 on renewable energy in Morocco. In this context, Voltalia was ...

## A novel method for the site selection of large-scale PV farms ...

Jul 15, 2023 · Instead of using the data in the literature or conducting a survey analysis, technical documents were used while defining the criteria affecting the site selection process. [24], [25] ...

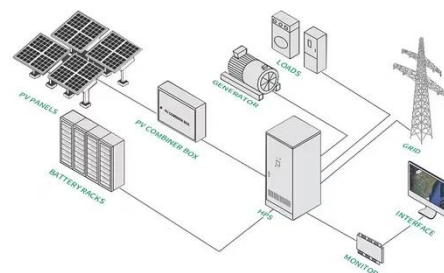


## OCP Group, Jet Energy announce a mega project of four photovoltaic

Jan 17, 2024 · The plants' main objective is to provide on-site clean energy to OCP's industrial sites. Benguerir and Khouribga, possessing the world's major phosphate reserves in Morocco, ...

## Yield analysis and economic assessment for GIS-mapping of ...

Oct 1, 2021 · In this paper, the technical and economic potential of large-scale integration of photovoltaic (PV) power plants in Morocco is assessed. For this purpose, environmental and ...



## TotalEnergies Commissions Solar Power Plants at Five



## Safran Sites ...

Jan 9, 2025 · TotalEnergies Renewables Distributed Generation, a major player in B2B solar solutions, has successfully installed photovoltaic systems on five Safran sites in Morocco, ...

## 117 Megawatts of Solar Sites Awarded to Voltalia in Morocco

Dec 4, 2024 · Gaining these sites consolidates Voltalia's presence in Morocco. In operation since 2015, Voltalia's Moroccan team is dedicated to supporting the national energy transition, ...



## Energy performance of 3 silicon-based PV module technologies in ...

Dec 1, 2019 · There are very few studies treating, with the same protocol, data arising from several identical photovoltaic systems installed at several sites. Results from the 'Propre.Ma' ...

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