

SolarInnovate Energy Solutions

Qatar Photovoltaic Energy Storage Power Station





Overview

How many solar PV projects are there in Qatar?

The installed capacity of solar power generation in Qatar was recorded as 5.1MW, as of 2020, which is far from the required targets to have a considerable share of renewables in the energy mix. Thus umpteen solar PV projects are lined up to boost the capacity in the nation.

Is Qatar a good place to develop solar energy?

Qatar boasts the ideal conditions for developing solar energy with its exceptional sunshine and vast unoccupied spaces. This is where the Al Kharsaah solar power plant, developed by TotalEnergies and its partners QatarEnergy and Marubeni, was inaugurated in October 2022.

What is Qatar's first large-scale solar project?

Al Kharsaah, Qatar's 1st large-scale solar project, will start providing sustainable, economical, and clean energy to enterprises, organizations, and citizens via the Qatari grid in 2021, with a 350 MWp capacity initially, before attaining maximum capacity in 2022.

What is Qatar's Solar Energy Future?

The country's solar energy future seems bright. Its weather conditions with little cloud cover and on average 9.5 hours of sunshine daily along with a large area makes it suitable for enormous photovoltaic (PV) installations. Qatar has an annual worldwide horizontal irradiation of 2,140 kWh per m2, making it ideal for solar energy generation.

What is Al Kharsaah solar?

of Qatar's peak electricity demand covered by Al Kharsaah. Located 80 km west of Qatar's capital, Doha, the Al Kharsaah Solar PV Independent Power Producer (IPP) project is the country's first large-scale solar power plant and is set to significantly reduce its environmental footprint.



How much energy does the Al Kharsaah solar power plant generate?

The Al Kharsaah solar power plant was built in two phases of 400 megawatts-peak (MWp) each, and therefore has a full capacity of 800 MWp. During its first year of operation, it is expected to generate almost two million megawatt-hours (MWh), the equivalent energy consumption of approximately 55,000 Qatari households.



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