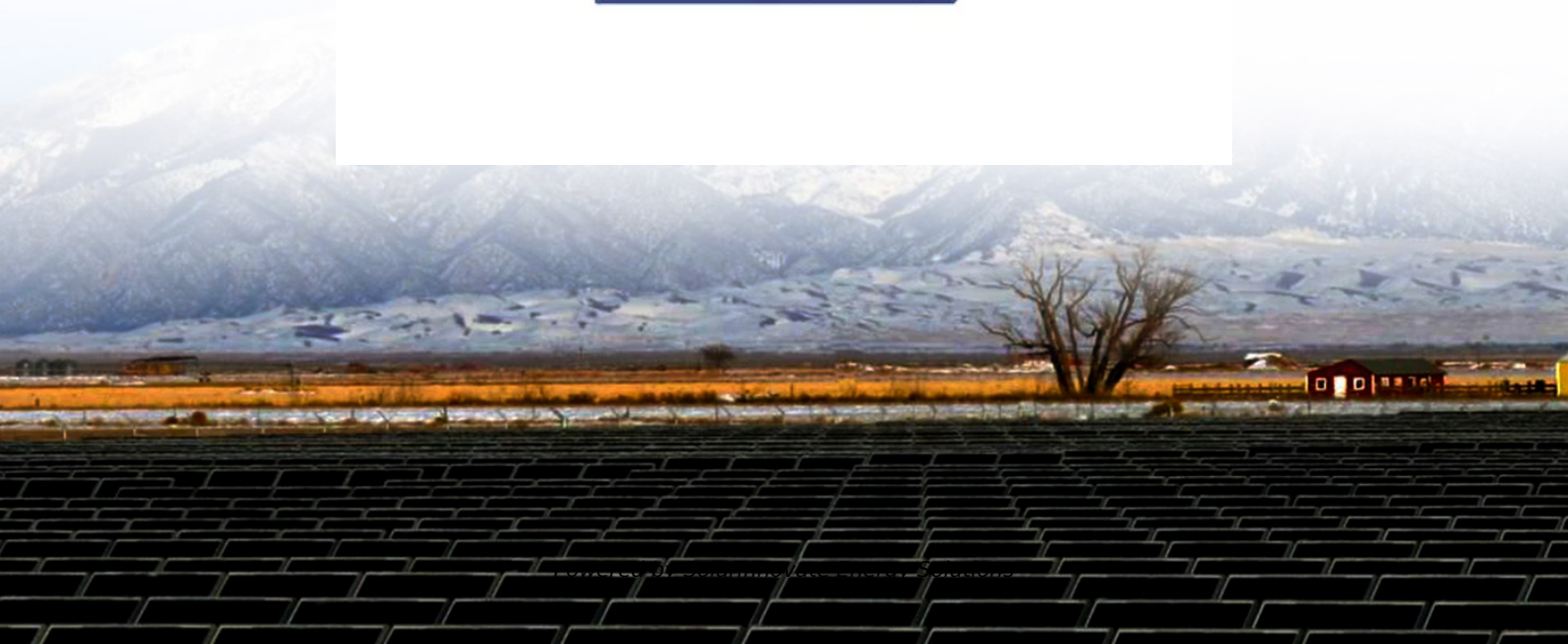


## SolarInnovate Energy Solutions

# Environmentally friendly solar energy system application in Kazakhstan



## Overview

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Is Kazakhstan a good place to invest in solar power?

Kazakhstan has remarkable solar potential with a very well-designed auction system, a clear renewable capacity addition schedule, and a solid decarbonisation target. The country is now also including storage systems as part of its public procurement strategy in a move that will ease further integration of renewables into the grid.

Is solar energy a viable energy source in Kazakhstan?

In 2019, another solar power plant in Kazakhstan, Saran, with a capacity of 100 MW started its operation in the Karaganda region (Satubaldina, 2020). According to the International Energy Agency (IEA), within the period of 40 years, solar energy has a potential to meet about 20-25% of the energy demand of the country.

Where are solar power plants located in Kazakhstan?

In 2019, Nurgisa solar power plant with a capacity of 100 MW in Kapshagay, Almaty region started its operation (informburo.kz, 2019). In 2019, another solar power plant in Kazakhstan, Saran, with a capacity of 100 MW started its operation in the Karaganda region (Satubaldina, 2020).

Can solar power drive Kazakhstan's decarbonisation?

The focus now is on leveraging solar's comparative advantages to drive forward Kazakhstan's decarbonisation and harness its significant solar resources. This report builds on the first edition of solar investment opportunities in Kazakhstan.

Can Kazakhstan produce solar cells using silicon?

As Kazakhstan is rich in silicon (85 million tons), production of silicon solar batteries on the domestic market was started (Sim, 2015). In this light, recently "Astana Solar" plant aimed at the production of photovoltaic modules

was launched in Nur-Sultan. The plant is to produce solar cells using Kazakhstan's silicon.

What is Astana solar?

In this light, recently "Astana Solar" plant aimed at the production of photovoltaic modules was launched in Nur-Sultan. The plant is to produce solar cells using Kazakhstan's silicon. The designed capacity of photovoltaic wafers is 50 MW with a potential to increase up to 100 MW.

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### Deploying a rooftop PV panels in the southern regions of Kazakhstan

Apr 1, 2025 · Solar energy stands out among all types of renewable energy sources (RES) due to the continuous development of technology, improved equipment efficiency and relatively low ...

### Deploying a rooftop PV panels in the southern regions of Kazakhstan

Apr 1, 2025 · Therefore, this study explores the feasibility of deploying rooftop PV panels in the country. It analyses the current situation of solar sector and examines the impact of solar ...



### Solar energy technology and its roles in sustainable ...

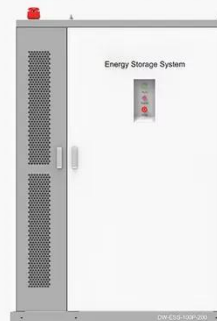
Jun 11, 2022 · Abstract Solar energy is environmentally friendly technology, a great energy supply and one of the most significant renewable and green energy sources. It plays a substantial ...



## The Role of Battery Energy Storage Systems (BESS) in Kazakhstan...

May 28, 2025 · Nazarbayev University (NU) has hosted the international conference "The Role of Battery Energy Storage Systems (BESS) in Kazakhstan's Energy Sector." The main topic of ...

### ◆ PRODUCT INFORMATION ◆



-  **BATTERY CAPACITY**  
50kWh~500kWh
-  **DC VOLTAGE RANGE**  
400V~1000V
-  **DEGREE OF PROTECTION**  
IP54
-  **OPERATING TEMPERATURE RANGE**  
-10~50°C

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