



# Abu Dhabi Energy Storage Power Station System Specifications





## Overview

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Battery Energy Storage Systems (BESS) are revolutionizing Abu Dhabi's energy landscape, supporting the UAE's commitment to sustainability and clean energy transition. As solar and wind energy adoption rises, BESS plays a vital role in maintaining grid stability by storing surplus energy and.

The United Arab Emirates has broken ground on a solar+storage project in Abu Dhabi that will be capable of delivering 1 GW of continuous baseload power. Developed by Masdar and the Emirates Water and Electricity Company (EWEC), the project will combine a 5.2 GW solar PV plant with a 19 GWh battery.

A landmark 108 MW / 648 MWh grid-scale energy storage project for critical grid stabilization in the UAE. This pioneering project involved the deployment of the world's largest virtual battery plant, a distributed network of 15 NAS® Battery systems across 15 different sites in Abu Dhabi. The system.

The record-breaking solar power and battery storage project will create over 10,000 new jobs, driving innovation and economic growth Abu Dhabi Future Energy Company PJSC – Masdar and Emirates Water and Electricity Company (EWEC) announced today the launch of the world's first large-scale 'round the.

Masdar and EWEC are pioneering the world's first gigascale, 24/7 solar and battery storage facility in Abu Dhabi, aiming to produce continuous renewable power and revolutionise global clean energy standards. Masdar, working closely with the Emirates Water and Electricity Company (EWEC), is leading.

HE Dr. Sultan Al Jaber, UAE Minister of Industry and Advanced Technology and



Chairman of Masdar, unveiled the world's first renewable and battery storage facility to provide uninterrupted power at scale, around the clock in Abu Dhabi. The announcement came on the sidelines of the Opening Ceremony. Why is UAE launching a solar power and battery storage project?

The launch of the solar power and battery storage project marks a pivotal moment in the clean energy transformation, allowing renewable energy to be dispatched 24 hours a day, seven days a week, reaffirming the UAE's position as a global pioneer in renewable energy deployment.

What is EWEC doing in Abu Dhabi?

Located in Abu Dhabi, the project will feature a 5.2 gigawatt DC solar photovoltaic plant, coupled with a 19 gigawatt-hour battery energy storage system, setting a global benchmark in clean energy innovation. "In collaboration with EWEC and our partners, we will develop a renewable energy facility capable of providing clean energy round the clock.

What is Abu Dhabi Sustainability Week 2025?

The announcement came on the sidelines of the Opening Ceremony of Abu Dhabi Sustainability Week (ADSW) 2025. Located in Al Azeezah, Abu Dhabi, the innovative project will be the world's largest round-the-clock combined solar power and Battery Energy Storage System (BESS), delivering reliable renewable energy 24 hours a day.

How will the solar power and battery storage project impact the economy?

The record-breaking solar power and battery storage project will create over 10,000 new jobs, driving innovation and economic growth



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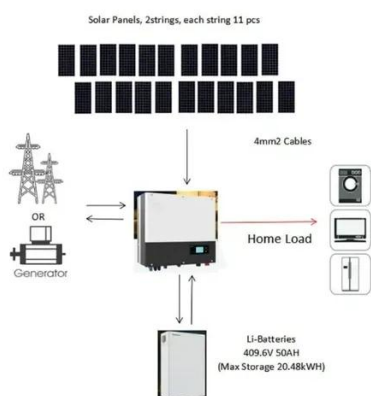


### UAE Launches World's Largest Integrated Solar & Battery Storage ...

The solar power plant, with a capacity of 5.2 gigawatts of direct current, coupled with energy storage systems capable of 19 gigawatt-hours, intends to establish a new global ...

### [EWEC To Develop 400mw Battery Energy Storage ...](#)

EWEC is advancing a 400MW Battery Energy Storage System in Abu Dhabi, offering 800MWh storage. This project supports renewable integration, ...



### Abu Dhabi Energy Storage Solutions

As Abu Dhabi increases its renewable energy capacity (notably solar farms), the intermittent nature of these sources poses challenges for the electrical grid.

### [UAE Launches World's Largest Integrated Solar](#)

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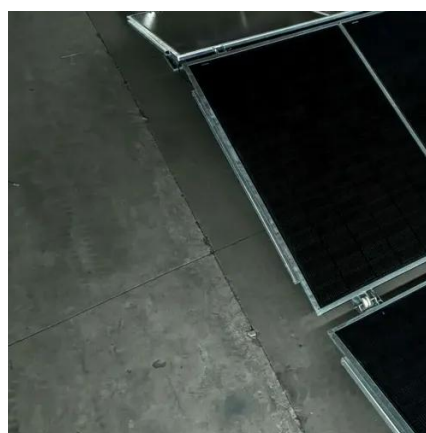


### [Abu Dhabi announces 5.2GW Solar PV Project](#)

Located in Al Azeezah, Abu Dhabi, the innovative project will be the world's largest round-the-clock combined solar power and Battery Energy Storage System (BESS), delivering ...

### [Energy Storage in Abu Dhabi and Dubai - A closer lo](#)

in terms of installed capacity is about to ex-ceed 10%. The rapid deployment of renewables, mainly consisting of PV Solar Assets, must how-ever be integrated efficiently in the grid to ...



### **Abu Dhabi "Virtual Battery Plant"**

A landmark 108 MW / 648 MWh grid-scale energy storage project for critical grid stabilization in the UAE. This pioneering project involved the deployment of the world's largest virtual battery ...





## The UAE starts building 5.2 GW solar and 19 GWh storage ...

Developed by Masdar and the Emirates Water and Electricity Company (EWEC), the project will combine a 5.2 GW solar PV plant with a 19 GWh battery energy storage ...



## **Abu Dhabi's gigascale solar and storage project sets new global**

The project reflects the UAE's broader push to become a leader in clean energy. With a hefty US\$6 billion investment, it combines a massive 5.2 GW of solar photovoltaic (PV) ...

## Abu Dhabi announces 5.2GW Solar PV Project

Located in Al Azeezah, Abu Dhabi, the innovative project will be the world's largest round-the-clock combined solar power and Battery ...



## Battery Energy Storage System in Abu Dhabi - ...

As solar and wind energy adoption rises, BESS plays a vital role in maintaining grid stability by storing surplus energy and supplying it during ...



## [World's first 24/7 solar PV, battery storage](#)

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Located in Abu Dhabi, the project will feature a 5.2 gigawatt ...



## **EWEC To Develop 400mw Battery Energy Storage System In Abu Dhabi**

EWEC is advancing a 400MW Battery Energy Storage System in Abu Dhabi, offering 800MWh storage. This project supports renewable integration, enhances grid stability, and aligns with ...

## **World's first 24/7 solar PV, battery storage gigascale project to be**

Located in Abu Dhabi, the project will feature a 5.2 gigawatt DC solar photovoltaic plant, coupled with a 19 gigawatt-hour battery energy storage system, setting a global ...



 **LFP 48V 100Ah**



## [Battery Energy Storage System in Abu Dhabi - SEN EDS](#)

As solar and wind energy adoption rises, BESS plays a vital role in maintaining grid stability by storing surplus energy and supplying it during high-demand periods. This ensures a reliable, ...



## The UAE starts building 5.2 GW solar and 19 GWh storage project in Abu

Developed by Masdar and the Emirates Water and Electricity Company (EWEC), the project will combine a 5.2 GW solar PV plant with a 19 GWh battery energy storage ...







## Contact Us

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