

**SolarGrid Energy Solutions**

# **Indonesian Bay Port Energy Storage Project**



## Overview

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Does Indonesia need battery storage?

Indonesia aims to convert 250MW of diesel-generated power to renewable energy this year and will need battery storage to do this successfully. Image: PLN. Indonesia's state-owned utility and battery producer have launched a 5MW battery energy storage system (BESS) pilot project as it seeks to move away from diesel-generated power.

Why is battery energy storage system important in Indonesia?

However, given the challenge of Indonesia's geological landscape, with many off-grid and remote areas, there is growing intermittency issue that hamper the development of solar and wind generation. Hence, the battery energy storage system (BESS) technologies have a critical role in the development of Indonesia's renewable energy.

Does Indonesia have a grid-connected energy storage system?

There, the global system integrator Fluence recently turned on a 20MW/20MWh grid-connected BESS as part of a 1,000MW portfolio in development and construction for power company SMC Global Power. Indonesia's current pipeline of energy storage projects is mostly pumped hydro, totalling 4,063MW according to IHS Markit.

How can energy storage support Indonesia's decarbonization agenda?

A key measure to support Indonesia's decarbonization agenda is the development of energy storage to enable integration of renewable energy into the grid. Pumped storage hydropower plays a crucial role in this approach.

Does Indonesia need solar & wind energy storage?

Although, there is no policy mandating the installation of energy storage in solar or wind projects in Indonesia, the abundance of solar and wind resources in Indonesia's archipelago and increased potential demand across industries

indicate that BESS demand is poised to grow substantially in the near future.

Can green hydrogen be used to power ships in Indonesia?

Additionally, HDF Energy has also signed an agreement with Indonesian shipping firm PT Pelayaran Bahtera Adhiguna to explore the use of green hydrogen for powering larger vessels. Indonesia is partnering with HDF Energy to explore solar-powered green hydrogen as a pathway to decarbonise its shipping sector.

## Indonesian Bay Port Energy Storage Project

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### **RGE, TotalEnergies to develop solar power, ...**

May 28, 2025 · Upon completion, the project will provide significant green energy supply for domestic consumption to power green industrial complexes in Riau ...

### **Dutch tech helping Inpex bring Indonesian LNG project to life**

Apr 26, 2025 · The tool considers potential risks relating to weather conditions, equipment failure, and scheduling fluctuations. Briain O'Dowd, Royal HaskoningDHV's Global Director for Energy ...



### **TotalEnergies and partners to import clean energy from Indonesia ...**

Jun 13, 2025 · French energy giant TotalEnergies and Singapore-headquartered RGE, a group operating in the bio-based resources and energy sectors, have joined forces to develop a ...



## The Role of Ports in the Energy Transition

Mar 24, 2023 · The Role of Ports in the Energy Transition Rotterdam is one of the ports that combines energy along with its cargo operations (file photo) ...



## Indonesia Teams Up with HDF Energy to Explore Green ...

Apr 21, 2025 · In the region, HDF Energy is building 23 hybrid power plants that integrate solar energy with green hydrogen storage to deliver reliable, emissions-free electricity day and ...

## TotalEnergies and RGE Ink Co-Investment Agreement to ...

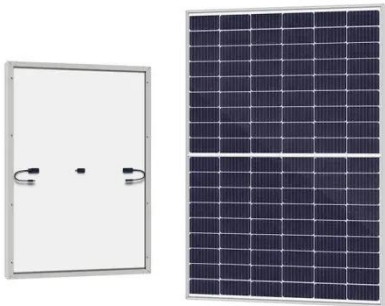
May 30, 2025 · Indonesia & Singapore, 28 May, 2025: TotalEnergies and RGE, through their equally-owned joint venture Singa Renewables (Singa), have entered into a Co-Investment ...



## Key Facts about Indonesia's Energy Storage System

Jun 25, 2025 · Indonesia is planning to develop a vast energy storage system to minimize the carbon pollution and supporting the renewable energy

program



## Optimal energy storage configuration to support 100 % renewable energy

Aug 1, 2024 · This paper, on the long-term planning of energy storage configuration to support the integration of renewable energy and achieve a 100 % renewable energy target, combines ...



## ENERGY STORAGE FOR PORT ELECTRIFICATION

Sep 28, 2023 · Ensuring availability of these electrical resources to meet loads which are intermittent and uncertain is becoming a critical port function. It requires investment in multi ...



## Indonesia launches first containerised energy ...

Feb 26, 2025 · The first and largest containerised battery energy storage system (CBESS) for solar power has been

launched in Indonesia. In a statement, ...



## Carbon capture, utilization, and storage in Indonesia: An ...

Oct 1, 2024 · As part of its climate action policy, Indonesia prioritizes the development of carbon capture, utilization, and storage (CCUS) facilities. Recognizing...

## Offshore LNG import terminal mooring in Indonesia

For this project, Haskoning supported Golar LNG Energy - one of the world's largest owners and operators of Liquefied Natural Gas (LNG) carriers - with the development of the world's first ...



## Indonesia building 5MW pilot battery storage

Mar 22, 2022 · Indonesia has launched a 5MW battery storage pilot project and says it could use the technology at all its

state-owned power plants.



## Role of ESS Bintang 230627.pptx

Dec 27, 2023 · PHS and CAES are superior in applications with a duration longer than 10 hours, except for power reliability applications that mandate distributed energy storage systems (i.e., ...



## Sembcorp and PLN Nusantara Power Launches First Utility ...

Jan 20, 2025 · The NSSE Power Plant, built on approximately 87 hectares of land, is the first utility-scale integrated solar and energy storage project in Nusantara, Indonesia. Comprising a ...

## BP, Chubu Electric assess carbon capture for ...

Sep 12, 2023 · Offshore staff JAKARTA - BP Berau, operator of Tangguh LNG, has signed an MoU with Chubu Electric Power Co on a feasibility study for ...

- ✓ LIQUID/AIR COOLING
- ✓ INTELLIGENT INTEGRATION
- ✓ PROTECTION IP54/IP55
- ✓ BATTERY /6000 CYCLES



## Indonesia's Aggressive Renewable Energy ...

3 days ago · In 2023, Indonesia has been able to make progress with policies and actions in several sectors in order to align emission reduction targets with the ...

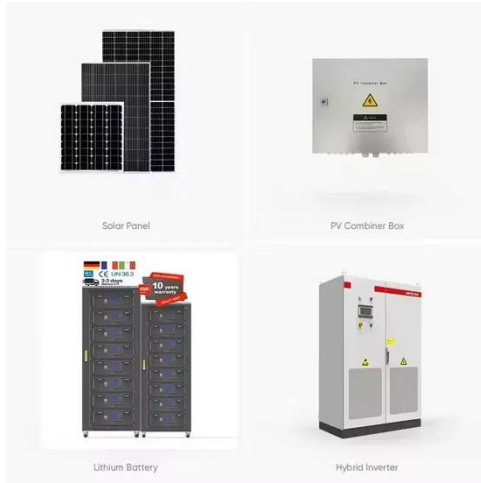
## Vena launches plan to support solar, storage ...

Aug 8, 2023 · Singapore-based developer Vena Energy says it will investigate opportunities to make solar panel components and battery energy storage ...



## Top 5 solar battery storage companies in ...

Jan 22, 2024 · Indonesian solar battery storage companies mainly include energy storage system integrators, charging infrastructure providers,



battery ...

## Battery Energy Storage System (BESS) market di Indonesia

Apr 21, 2021 · The first utility-scale solar + storage to replace peaker generation is in the pipeline Power sector: Solar PV + storage project Indonesia Power's Hijaunesia "equity partner" auction:



## Ej Atlas

Jan 31, 2023 · The Indonesia Weda Bay Industrial Park (IWIP) is a mega-nickel integrated mining and smelter project [1] and also the "first vertical, from mine ...

## Indonesia Opens First Green Container Terminal

May 22, 2015 · Indonesian state-owned terminal operator PT Pelabuhan Indonesia III (Pelindo III) inaugurated the Lamong Bay Terminal in Surabaya, East

Java, today. The Lamong Bay is the ...



### **PRESS RELEASE RGE and TotalEnergies Ink Co ...**

May 28, 2025 · Solar Power and Battery Energy Storage Project in Indonesia  
Imelda Tanoto, Managing Director at RGE (right) and Helle Kristoffersen, President Asia and Member of the ...

### **Battery Energy Storage System (BESS) market di Indonesia**

Apr 21, 2021 · KfW-BMU's Renewable Energy Storage Program: The program aims to encourage further technical development of solar + storage installations and to increase their market ...



### **Indonesian government targets 320GWh BESS in new scheme**

Aug 14, 2025 · The Indonesian energy sector think tank Institute for Essential Services Reform (IESR) praised the

initiative, and its CEO, Fabby Tumiwa, said it was very appropriate for ...



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### **Huayou, Vale Commit to Indonesian Hualihua Project ...**

Aug 28, 2023 · It launched in June the second Hualihua project in the Weda Bay industrial park in Indonesia's north Maluku, with a capacity of 120,000 t/yr ...



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### **Indonesia to build battery energy storage system this year**

Mar 18, 2022 · The program is a follow-up to the IBC's work plan to start a storage battery ecosystem in Indonesia as an effort to accelerate the green energy transition and achieve the ...

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### **AG&P inks 20-year deal to operate Indonesian ...**

Mar 27, 2024 · A consortium comprising three Indonesia-based companies has secured a large-scale 20-year contract for LNG infrastructure with PLN Energi ...



### **Energy storage for Indonesian ports**

This paper, on the long-term planning of energy storage configuration to support the integration of renewable energy and achieve a 100 % renewable energy target, combines multiple energy ...

### **Rept Battero to develop 8GWh Indonesia BESS cell gigafactory**

Jan 17, 2025 · Image: REPT via LinkedIn  
Chinese battery manufacturer Rept Battero has announced plans to develop an 8GWh gigafactory in Indonesia specialising in lithium-ion cells ...



### **Indonesia Clean Energy Battery Storage System**

Apr 19, 2024 · There is growing market potential for Battery Energy Storage System (BESS) solutions for solar and wind energy in Indonesia.



## CATL in BESS agreement for Indonesia-to-Singapore solar project

Jul 17, 2025 · CATL has signed a framework supply agreement for a project to export renewable energy from Indonesia to Singapore.



## ASIA PACIFIC: Indonesia green hydrogen project launches to ...

Apr 17, 2025 · The study will focus on Eastern Indonesia, which is home to ASDP's strategic ferry routes and where HDF Energy is developing 23 hydrogen power plants, combining a solar ...

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