

Japan s high-capacity energy storage





Overview

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Japan's energy storage sector is expanding, though growth remains uneven across segments. The overall market is expected to grow 11% annually, from USD 793.8 million in 2024 to USD 2.5 billion by 2035. Residential adoption is moving faster. Home lithium-ion battery systems generated USD 278.5.

The subsidy covers up to 2 billion yen per project. A total of 12 projects totaling 180MW/595.3MWh was awarded 13 billion yen through Tokyo's FY2024 subsidy for promoting grid-scale battery storage, the metropolitan government's document released in February 2025 shows. The subsidy covers up to two.

Global energy storage capacity was estimated to have reached 36,735MW by the end of 2022 and is forecasted to grow to 353,880MW by 2030. Japan had 1,671MW of capacity in 2022 and this is expected to rise to 10,074MW by 2030. Listed below are the five largest energy storage projects by capacity in.

Japan's energy storage market is experiencing a wave of significant growth, as ESN Premium hears from Eku Energy and BloombergNEF. In the past few months, Energy-Storage.news has reported on energy storage project development, new business divisions and strategic partnerships in Japan. These have.

But here's the kicker: This island nation is quietly revolutionizing high-capacity energy storage like a ninja perfecting stealth technology. With 6.4 GWh of installed battery storage capacity as of 2024 (up 300% since 2020) [3],



Japan's storage sector is growing faster than a Tokyo skyscraper. Why.

Investors are pouring billions of dollars into Japan's nascent electricity storage market as power demand is growing after a long decline, but changes proposed to smooth the flow of energy onto the grid and to lower prices threaten to curb returns. Japan, which relies on imported fossil fuels for. How big is Japan's energy storage capacity?

Global energy storage capacity was estimated to have reached 36,735MW by the end of 2022 and is forecasted to grow to 353,880MW by 2030. Japan had 1,671MW of capacity in 2022 and this is expected to rise to 10,074MW by 2030. Listed below are the five largest energy storage projects by capacity in Japan, according to GlobalData's power database.

Why are battery storage projects growing in Japan?

The ramp up of battery storage projects in Japan continues apace, aided by growing subsidy avenues and rising volumes on various electricity markets, from spot to balancing to capacity.

How is Japan's energy storage landscape changing?

Japan's energy storage landscape is shifting, pushed by household demand, corporate ESG mandates, and domestic battery manufacturing. The residential lithium-ion market, projected to grow at a CAGR of 33.9% through 2030, remains one of the fastest-expanding segments.

What is Japan's energy storage policy?

As policy, technology, and decarbonization goals converge, Japan is positioning energy storage as a critical link between its climate targets and energy reliability. Japan's energy storage policy is anchored by the Ministry of Economy, Trade and Industry (METI), which outlined its ambitions in the 6th Strategic Energy Plan, adopted in 2021.

How big is Japan's battery storage market?

In the commercial space, Japan's battery storage market was valued at USD 593.2 million in 2023 and is projected to reach USD 4.15 billion by 2030. While commercial installations currently dominate revenues, industrial adoption is expected to scale faster. Utility-scale storage is also gaining ground.

Will Japan triple its storage capacity by 2025?



Japan's storage capacity hit 6.4 GWh in 2023 —enough to power 1.2 million homes for a day. But here's the kicker: the government aims to triple this by 2025. Why?

Three words: security, sustainability, and solar overload.



Japan s high-capacity energy storage



[Modelling 24/7 Carbon Free Electricity in Japan](#)

2 ???· Despite new targets in Japan's Seventh Strategic Energy Plan to raise renewables to 40-50% of all electricity generation by 2040, the expansion of renewable capacity has actually ...

THE 2035 JAPAN REPORT

The study finds that a 90% clean energy grid that features accelerated solar and wind capacity additions, new battery storage, and new interregional transmission infrastructure can be ...



[Booming Battery Storage Pipeline Gives New Impetus ...](#)

The results of the first round convinced METI to double the capacity allocated for battery storage. As Japan takes a leading role in Asia's ...

[Japan Confirms Five New Battery Storage Projects](#)

Stonepeak and CHC's energy storage platform will develop five new battery storage projects in Japan. These projects have a combined capacity



of 348 megawatts (MW). ...



Microsoft Word

The uses for this work include: Inform DOE-FE of range of technologies and potential R& D. Perform initial steps for scoping the work required to analyze and model the benefits that could ...

Japan scales up batteries but companies worry rule changes may ...

Investors are pouring billions of dollars into Japan's nascent electricity storage market as power demand is growing after a long decline, but changes proposed to smooth the ...

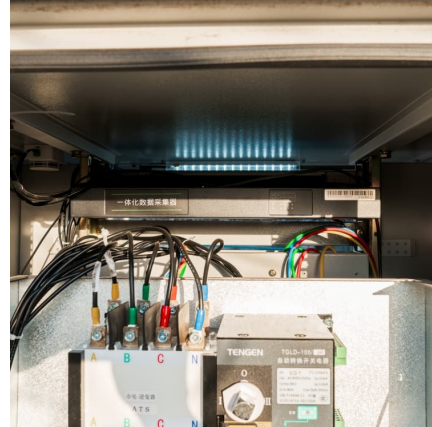


[Is the Japanese energy storage market moving forward?](#)

With multiple revenue streams supporting renewable energy, and extremely high demand for electricity, it may not be surprising that Japan ...

[Top five energy storage projects in Japan](#)

Japan's energy storage market is experiencing a wave of significant growth, as ESN Premium hears from Eku Energy and BloombergNEF. In the past few months, Energy ...



Country Analysis Brief: Japan

Although renewables (10%) and nuclear (3%) accounted for the smallest portions of Japan's primary energy consumption in 2021, renewables and nuclear were the only energy ...



[Gotion launches 7 MWh BESS container, 650 Ah cell](#)

At the Japan show, Gotion has also presented its first 600+ Ah cells. A 650 Ah large-capacity energy storage cell was also officially unveiled, ...



Mitsubishi Electric Delivers High-capacity Energy-storage ...

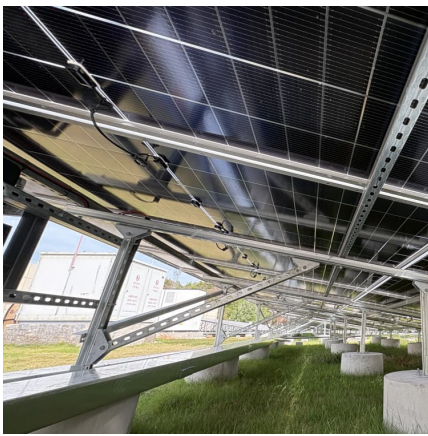
The system, which is part of a pilot project to balance supply and demand via high-capacity energy-storage systems, was installed at the Buzen Substation in Buzen, Fukuoka Prefecture. ...





2025 Japan Energy Storage Scale: Trends, Innovations, and ...

By 2025, Japan's energy storage scale is projected to skyrocket, driven by renewable energy adoption and post-Fukushima reforms. Let's unpack how this tech-savvy ...



[Sumitomo targets 500 MW of battery storage in Japan ...](#)

Sumitomo Corp plans to install 500 MW of battery energy storage in Japan by 2031 to stabilize the supply of renewable energy and improve the efficiency of ...

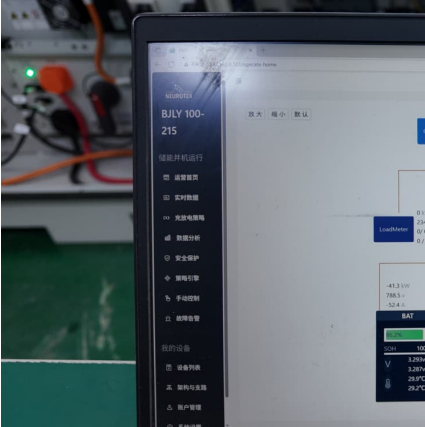
Japan Battery Energy Storage System

6 ???· Japan Battery Energy Storage System
Gur?n Energy is developing a pipeline of utility-scale battery energy storage system (BESS) projects to ...



Japanese Energy Market

DERs making energy system more resilient o
DERs (CHP, FCV/PHEV, Battery Storage),
provided electricity to the locals in Chiba
Prefecture, when power outage happened.



Jinko Power Storage Secures 4.5 MWh C& I Energy Storage Project in Japan

6 ???· The project is designed to address Japan's growing demand for energy optimization in the C& I sector. By combining energy storage with energy efficiency management, it will help ...



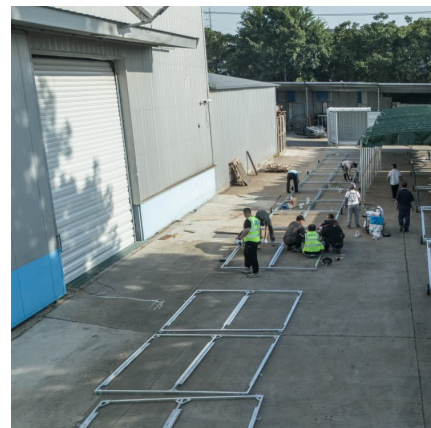
Japan's High-Capacity Energy Storage: Powering a Sustainable ...

Let's face it - when you think of Japan, you probably picture bullet trains and sushi rolls before energy storage solutions. But here's the kicker: This island nation is quietly ...



[Japan's energy policies aim to reduce use of fossil...](#)

Japan's ample natural gas storage capacity contributes to the country's energy security by helping to meet seasonal demand peaks and ...





[Battery Storage In Japan - Policy Deep Dive](#)

Energy Security: Storage batteries are key to stabilizing Japan's energy system. Given Japan's limited natural resources and dependence on imports, combined with its ...

Battery Innovation System of Japan

Total battery funding by NEDO between 2009-2022 (for Solid-EV and RISING 1, 2 and 3 projects) is estimated by ca. 58 billion yen. In the Battery Industry Strategy (2022), the government ...



[THE RENEWABLE ENERGY TRANSITION AND SOLVING ...](#)

ENERGY STORAGE IN JAPAN Some of the more recent new-build renewable power plants in Japan include an energy storage component. The two largest solar PV power plants in ...

[Gotion Launches 7 MWh BESS Container](#)

At the Japan show, Gotion has also presented its first 600+ Ah cells. A 650 Ah large-capacity energy storage cell was also officially unveiled, and the company also ...



[Powering Up Japan: NTT's Big Bet on Battery Storage ...](#)

Telecom giant NTT Group's energy subsidiary, NTT Anode Energy, has officially launched its energy storage business by commissioning ...



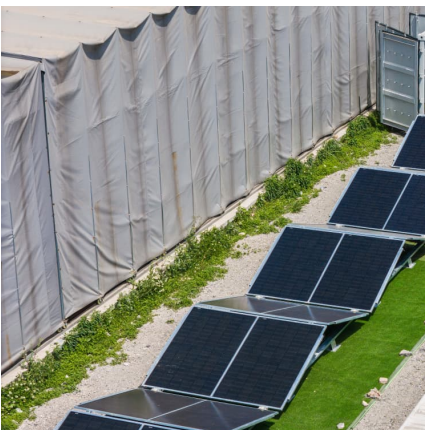
[Japanese gov't selects aggregators for JPY9 billion ...](#)

The market for utility-scale BESS in Japan has opened up through policy and regulatory support, energy trading opportunities, an early ...



[12 grid-scale BESS projects totaling 180MW/595MWh ...](#)

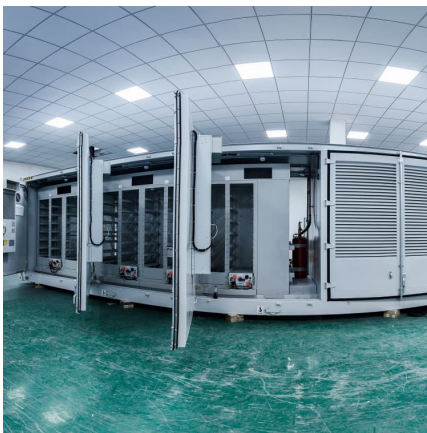
5 ???· A total of 12 projects totaling 180MW/595.3MWh was awarded 13 billion yen through Tokyo's FY2024 subsidy for promoting grid-scale battery ...





Supercapacitors: An Emerging Energy Storage System

Electrochemical capacitors are known for their fast charging and superior energy storage capabilities and have emerged as a key energy storage solution for efficient and ...



Developer commissions first BESS in Japan to trade energy

Milestone reached in utility-scale battery storage market development in Japan, with Pacifico Energy trading energy from two new projects.

Japan: panel on BESS market growth, opportunities and challenges

Japan is one of the most talked-about emerging grid-scale BESS markets in Asia and featured prominently at the Energy Storage Summit Asia.



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