

JAPAN S ENERGY STORAGE DEVELOPMENT POLICY



What is Japan's Energy Policy? Japan's energy policy is guided by the principles of energy security, economic efficiency, environmental sustainability and safety (the "three E plus S"). The 5th Strategic Energy Plan, adopted in 2018, aims to achieve a more diversified energy mix by 2030, with larger shares for renewable energy and restart of nuclear power.



What are Japan's Energy plans? Japan's 6th Strategic Energy Plan (released in 2021) and the GX (Green Transformation) Decarbonization Power Supply Bill (released in 2023) target increasing the share of non-fossil fuel generation sources to 59% of the generation mix by 2030 compared with 31% in 2022.



Does Japan have a regulatory framework for energy storage? This briefing examines the regulatory framework for energy storage in Japan, draws comparisons with the European markets and seeks to identify the regulatory developments.



Can storage technology solve the storage problem in Japan? THE RENEWABLE ENERGY TRANSITION AND SOLVING THE STORAGE PROBLEM: A LOOK AT JAPAN The rapid growth of renewable energy in Japan raises new challenges regarding intermittency of power generation and grid connection and stability. Storage technologies have the potential to resolve these issues.



What are energy storage policies? These policies are mostly concentrated around battery storage system, which is considered to be the fastest growing energy storage technology due to its efficiency, flexibility and rapidly decreasing cost. ESS policies are primarily found in regions with highly developed economies, that have advanced knowledge and expertise in the sector.

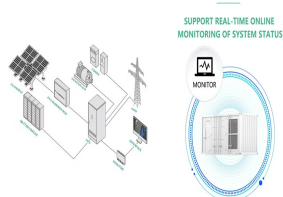
JAPAN S ENERGY STORAGE DEVELOPMENT POLICY



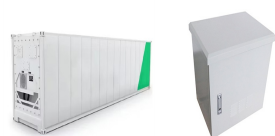
What is the impact of energy storage system policy? Impact of energy storage system policy ESS policies are the reason storage technologies are developing and being utilised at a very high rate. Storage technologies are now moving in parallel with renewable energy technology in terms of development as they support each other.



1.3 Describe the government's role in the ownership and development of renewable energy and any policy commitments towards renewable energy, including applicable renewable energy targets. In October 2020, the government announced the target of achieving carbon neutrality by 2050, as well as announcing in April 2021 a new, ambitious target to



Research and development (R& D) into perovskite solar technology, as well as new battery storage technology and supply chains, will be supported as part of Japan's JPY1.6 trillion (US\$11 billion



US asset manager Stonepeak has entered Japan's energy storage market, forming a partnership with CATL-backed developer CHC. ("GX") policy strategy. "As Japan accelerates the development of renewable energy projects to meet its decarbonisation goals, energy storage will have a crucial role to play in enhancing the reliability of the

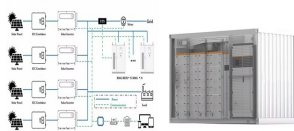


Energy-Storage.news" publisher Solar Media will host the 2nd Energy Storage Summit Asia, 9-10 July 2024 in Singapore. The event will help give clarity on this nascent, yet quickly growing market, bringing together a community of credible independent generators, policymakers, banks, funds, off-takers and technology providers.

JAPAN S ENERGY STORAGE DEVELOPMENT POLICY



Japan's target energy mix for FY2030 set out in the 6th Strategic Energy Plan is to source 19-21% of its electricity generation from solar and wind. When the proportion of intermittent generation such as solar and wind in a country's energy mix increases, then this has an impact on grid stability and large-scale energy storage facilities begin



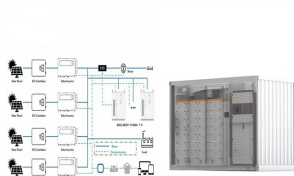
Japan aims to contribute to an 80% reduction of global emissions by 2050 and has accordingly set policies to promote the acceleration of technological development for Carbon Capture and ???



The policy settings in Japan support investment in Battery Energy Storage and are compatible with delivering safe, secure and reliable green energy in a cost-effective manner to energy consumers, which is our mission. Japan is creating business environments to incentivise battery storage development. Opportunities to achieve the trinity of



Japan requires CCS technology to reduce carbon emissions due to limited low-emission energy and dependence on fossil fuels. The policy of CCS in Japan is confronted with social and economic issues that are associated with the technology. The demonstration of the CCS project in Japan has revealed both successful outcomes and encountered challenges.



Japan is one of the most talked-about emerging grid-scale energy storage markets in Asia, and as such, it featured prominently at the Energy Storage Summit Asia, held in Singapore earlier this month. Andy Colthorpe moderated a panel discussion, "Growing the Japanese storage market" on the first day of the event, which was hosted by our

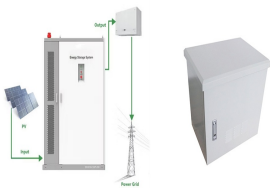
JAPAN S ENERGY STORAGE DEVELOPMENT POLICY



1 INTRODUCTION 1.1 Overview on the current energy structure of Japan. Japan is the third largest economy in the world and the fourth largest exporter, while local fossil energy resources are limited [] nsequently, the current energy supply conditions in Japan are unmistakably sensitive to global issues such as energy security, a drawdown of energy ???



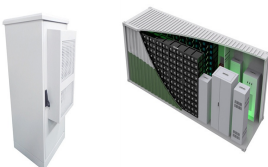
In Japan's power supply structure, hydrocarbons account for 87.5%, with 23.4%, 25.1%, and 39.0% being attributed to LNG, coal, and oil, respectively as of FY 2017 mand for and the consumption of oil in Japan has been continuously decreasing since the oil crises of the 1970s in a national effort to diversify energy sources.



Storage battery facilities of at least 10 MW capacity that can be independently connected to the grid (Stand-alone SB Facilities) are permitted to participate in the Program. Background. Japan has seen a tremendous increase in the development of renewable energy projects over the past few years, in particular solar and wind projects.



Details Battery Storage Subsidies in Japan. Introduction . In the Sixth Strategic Energy Plan, published by the Japanese Government in October 2021, targets are set to (a) achieve carbon neutrality by 2050; (b) increase the share of renewables as part of Japan's total electricity generation to 36-38% by 2030 (including 19-21% from solar and wind) compared to ???



Japan's efforts to deregulate its markets and remove those monopolies are still at an early stage. Efforts to create fertile markets for energy storage meanwhile have received a significant boost in the past year or so, but remain at a ???

JAPAN'S ENERGY STORAGE DEVELOPMENT POLICY



The first is Japan's declaration on carbon neutrality by 2050. The Sixth Fundamental Energy Plan, which was revised based on this declaration, states that approximately 1% of the power generation mix for FY 2030 will be covered by hydrogen and ammonia. Hydrogen and ammonia are positioned to play a role in the future of Japan's energy supply.



In this briefing, we look at Japan's hydrogen strategy and the policy and regulatory initiatives underpinning the development of the sector. We also explore the pioneering research and development being carried out in Japan, including transportation technologies, and consider the challenges to be



Battery storage is urgently needed for the renewable energy transition, and is expected to play a huge role in Japan's future power system. Businesses see battery storage as a complement to their renewable energy strategy, and a strong opportunity to improve their bottom line while accelerating their path to decarbonization.



Read more of Energy-Storage.news' coverage of Japan.

Energy-Storage.news' publisher Solar Media will host the 2nd Energy Storage Summit Asia, 9-10 July 2024 in Singapore. The event will help give clarity on this nascent, yet quickly growing market, bringing together a community of credible independent generators, policymakers, banks, funds



HD Renewable Energy Co., Ltd (HDRE) (6873.TW) announced its Japanese subsidiary's successful acquisition of two bids for long duration decarbonized energy storage systems in the Japanese market.

JAPAN S ENERGY STORAGE DEVELOPMENT POLICY



In October 2020, Japan declared that it aims to achieve carbon neutrality by 2050. Carbon neutrality by 2050 cannot be realized through ordinary efforts. It is necessary to significantly accelerate efforts toward structural changes in the energy and industrial sectors, and undertake bold investment for innovation.



Kishida first announced that Japan would promote the development of technologies such as carbon capture and storage; carbon capture, utilization, and storage; and hydrogen and ammonia. At home, the government announced the scenario that renewables would constitute 50%???60% of Japan's total power generation at most, with nuclear power



To inaugurate the best practices that will sustain the positive economic impact of energy storage development on consumers and local communities. Japan's energy landscape was characterised by deregulation, which gave rise to the commercialisation of increasingly diverse ESS and generation options. International Energy Storage Policy and



During policy discussions to shape the next Strategic Energy Plan by the end of fiscal year 2024-2025, METI Minister Saito Ken remarked, "I have a strong sense of crisis that Japan is in the



Pacifico Energy's Shiroishi Energy Storage Plant in Hokkaido, Japan, one of the two projects recently brought online by the developer. Image: Pacifico Energy. A milestone has been reached in the development of a market for utility-scale battery storage in Japan, with developer Pacifico Energy trading energy stored in two new projects.

JAPAN S ENERGY STORAGE DEVELOPMENT POLICY



Electricity pylons in Japan. Japan is a major consumer of energy, ranking fifth in the world by primary energy use. Fossil fuels accounted for 88% of Japan's primary energy in 2019. [1] [2] Japan imports most of its energy due to scarce domestic resources. As of 2022, the country imports 97% of its oil and is the larger liquefied natural gas (LNG) importer globally.



Over a gigawatt of bids from battery storage project developers have been successful in the first-ever competitive auctions for low-carbon energy capacity held in Japan. A total 1.67GW of projects won contracts, including 32 battery energy storage system (BESS) totalling 1.1GW and three pumped hydro energy storage (PHES) projects totalling 577MW.



Source: "Trade statistics of Japan", Ministry of Finance (The degree of dependence on sources outside Japan is derived from "Comprehensive energy statistics of Japan".) Efforts to secure the stable supply of resources? 1/4 ? Japan is strengthening its relationships with the Middle East countries that are its main sources of crude oil.