## SOLAR PRO. Japan s new energy storage plant is running

### When will ORIX Energy Storage Plant be built?

TOKYO,Japan - May 30,2024 - ORIX Corporation ("ORIX") announced today that it will be constructing Maibara-Koto Energy Storage Plant,one of Japan's largest \*1 energy storage plants,in Maibara,Shiga. Construction will begin in November 2024,with the commencement of operations scheduled for 2027.

### Will Orix build the world's largest power storage facility?

Japanese financial services group Orix is set to build one of the country's largest power storage facilities, partnering with Tesla Inc. for the supply of industrial-scale batteries. The project in Maibara, Shiga prefecture, will incorporate Tesla's Megapack units with a total capacity of 548 megawatt-hours.

### Why are Japanese utilities investing in pumped hydro power plants?

Utilities are also making investments in existing plants so they are more responsive to contemporary energy needs. Japan already has the world's second largest pumped hydro generating capacity and by far the largest per capita.

### When will Maibara-Koto energy storage plant be built?

Construction will begin in November 2024, with the commencement of operations scheduled for 2027. With a rated output of 134 MW and rated capacity of 548 MWh \*2, Maibara-Koto Energy Storage Plant is a power grid \*3 energy storage plant that will be constructed after ORIX bid and won at a long-term decarbonization energy auction.

### Will pumped storage hydropower bring balance and stability to Japan's grid?

Pumped storage hydropower, a late 19th century technology that was largely ignored by the markets for decades, is now emerging as pivotal to bringing balance and stability to Japan's grid as the nation both reboots nuclear energy and moves to rely more on solar and wind generation.

### Can Orix capitalize on Japan's Energy Transition?

For Orix, which has diverse interests spanning leasing, real estate, and renewable energy, the Maibara project marks its most significant move into the power storage sector, positioning the company to capitalize on Japan's energy transition. Financial services firm taps U.S. technology for renewable energy push in Shiga prefecture .

Energy storage plays a pivotal role in the energy transition and is key to securing constant renewable energy supply to power systems, regardless of weather conditions. Energy storage technology allows for a flexible grid with ...

China is currently the world"s largest market for energy storage, followed by the US and Europe, according to BloombergNEF. This position was driven by a combination of market need for balancing renewable energy

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and government efforts to build a "new power system". External link. CarbonBrief, 23 Jan 2025: Q& A: How China became the world ...

Overview of Power Plants in Japan. Energy Mix: Japan relies on a combination of natural gas, nuclear, coal, oil, hydropower, solar, wind, and geothermal power. Following the Fukushima Daiichi nuclear disaster in 2011, Japan reduced its dependence on nuclear energy and increased the use of fossil fuels, especially LNG. However, the country is now working to ...

Tesla was awarded a contract to supply batteries for the 134MW/548MWh Maibara-Koto Energy Storage Plant being developed by Orix, the manufacturer announced on ...

The Matsuyama Mikan Energy is planning construction of Matsuyama Storage Plant utilizing grid energy storage systems that could adjust power consumption by either charging or ... The Hitachi Group will support both the expansion of the renewable energy ratio in Japan and the stable supply of electric power by providing aconsistent support system ...

The Fund is planning to launch an energy storage plant in its first project in FY2025 and to successively develop and operate energy storage plants. To meet the needs of ...

The new energy plan says that nuclear power should account for 20% of Japan's energy supply in 2040 while expanding renewables to 40-50% from nearly 23% and reducing coal-fired power to 30-40% from nearly 70%. The current plan set a 20-22% target for nuclear energy, 36-38% for renewables, and 41% for fossil fuel, for 2030.

The idea of geothermal for electricity generation in Japan is not new: The first geothermal power plant began operation in 1919 in the hot springs resort town of Beppu, Oita Prefecture.

The Government of Japan formulates the "Strategic Energy Plan" to show the direction of Japan's energy policy. It is reviewed at least every 3 years in view of the latest energy situations at home and abroad, and revised if ...

With a rated output of 134 MW and rated capacity of 548 MWh \*2, Maibara-Koto Energy Storage Plant is a power grid \*3 energy storage plant that will be constructed after ORIX bid and won at a long-term decarbonization energy auction. The long-term decarbonization energy auction is a bidding system to encourage new investments into decarbonized ...

The new BESS facility uses TMEIC batteries. (Image: Kansai EPCO) On December 1, 2024, Kansai Electric Power and Orix commissioned the 48MW/113MWh "Kinokawa Power Storage Plant," which is both companies" first grid-scale BESS facility to come online. The project, announced in July 2022, is owned by Kinokawa Chikudensho LLC, a 50:50 joint ...

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According to Storage Discover, on February 4, 2025, Nikkei News and several other media outlets reported that Tesla (TSLA.O) has entered into a partnership with Japanese financial services group ORIX to provide a Megapack energy storage system with a total capacity of 548 megawatt-hours (MWh) for its energy storage plant in Yonehara City, Shiga Prefecture, central ...

Sungrow said it will supply a full turnkey energy storage system for the island, with around 30MWh storage capacity and 23 containers of inverters. It will utilise lithium nickel manganese cobalt oxide (NMC) batteries from the Sungrow-Samsung SDI joint venture. The JV began a series of demonstration energy storage projects in China in April 2016.

Current Status of Renewable Energy in Japan 19 Oil Coal LNG Hydropower Renewable energy (excluding hydropower) 42.5% 27.6% 18.3% 1.7% 8.4% 1.6% (Source) Federation of Electric Power Companies of Japan Composition of power generation by energy source in Japan (FY 2012) Renewable energy accounted for approximately 10% of power ...

Ono Sumitomo Corporation''s energy storage business began in 2010 when we established the joint venture "4R Energy" with Nissan Motor to explore repurposing used EV batteries. In FY2013, we launched the world''s ...

Financial services firm Orix Corporation selected Tesla to supply 134MW/548MWh of BESS to the Maibara Koto Power Storage Plant project in the city of Maibara, Shiga ...

The project, which is expected to be operational by 2027, will be one of the largest energy storage facilities in Japan, helping the country address the challenge of renewable ...

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 ...

The basic direction of energy policy of Japan Best mix of "3E + S'' (Energy Security, Economic efficiency, Environment and Safety) Current energy mix : dominated by fossil fuels. ->The goal of the 2030 energy mix: reduce GHGs by 26%. Japan has positioned "Long-term Strategy" under the Paris Agreement as an economic growth strategy,

The project will be a 4-hour duration asset with 25MW power output to 103.7MWh of energy storage capacity, delivered through a wholly owned subsidiary of the corporation in the Hokkaido city of Kitahiroshima. ...

The NDRC said new energy storage that uses electrochemical means is expected to see further technological advances, with its system cost to be further lowered by more than 30 percent in 2025 compared to the level at

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the end of 2020.

The PSPS consumes some electricity in running, instead of ... Techno-economic review of existing and new pumped hydro energy storage plant. Renew Sustain Energy Rev (2009) ... Present status of pumped hydro storage operations to mitigate renewable energy fluctuations in Japan. Global Energy Interconnection, Volume 2, Issue 5, 2019, pp. 423-428 ...

International Renewable Energy Agency"s (IRENA) 1.5°C Scenario target of 420 gigawatts of pumped storage worldwide by 2050, according to new data from Global Energy Monitor. PSH is a crucial component of the global energy tran-sition, and GEM"s new Global Hydropower Tracker, which catalogs PSH projects as well as conventional

Regular readers of Energy-Storage.news will likely be aware that grid-scale battery storage activity in Japan has shown early signs of being on an upward trend, with major Japanese players and foreign market entrants ...

Japanese financial services group Orix is set to build one of the country"s largest power storage facilities, partnering with Tesla Inc. for the supply of industrial-scale batteries. ...

Tokyo, September 30, 2024 - Japan will need investment of about ¥320 trillion (\$2.2 trillion) over the next decade if it is to stay on course to reach net-zero by 2050, according to BloombergNEF"s (BNEF"s) New Energy Outlook: Japan, a ...

With reactors now coming back online and variable renewable energy (VREs) expanding, the once predictable recharge timetables for pumped hydro are becoming chaotic. Japan NRG looks at how pumped hydro ...

On December 1, 2024, Kansai Electric Power and Orix commissioned the 48MW/113MWh "Kinokawa Power Storage Plant," which is both companies" first grid-scale BESS facility to come online. The project, announced in July 2022, is owned by Kinokawa ...

Why. Resolving issues facing the spread of renewable energy with large storage batteries. Despite the global trend toward decarbonization, the share of renewable energy in Japan remains at a low level of roughly 20%, as ...

Two new pilot projects for producing "green ammonia" from renewable electricity are now up and running and successfully producing ammonia. In April 2018, the Ammonia Manufacturing Pilot Plant for ...

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Renewable Japan announced its first grid-scale battery storage project. The company expects the

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2MW/7.8MWh facility in Hidaka City, Saitama Prefecture, to start commercial operations in March 2025.

Web: https://www.eastcoastpower.co.za

