



## WEEKLY

JANUARY 27, 2025

### ANALYSIS

#### JAPAN WARY OF ENERGY POLICY UPHEAVAL AS TRUMP RETURNS

- In Japan, the response to Trump's second term is mixed. Calls to boost LNG supplies are welcome, but pulling out of the Paris Agreement causes concern.
- As METI collects feedback on its next Basic Energy Plan draft, Trump's tone may tip the balance between energy security and climate commitments.

#### JAPAN LOOKS TO THE MOON AND BEYOND TO TACKLE RESOURCES SCARCITY

- Japan's nascent space startup sector is taking off. The space boom has practical applications to the energy sector.
- Some startups are testing energy production technologies in the stratosphere and above. Raw materials are another reason to explore space.
- With sparse natural resources, Japan is searching for new sources of critical metals and rare earths.

### ASIA PACIFIC REVIEW

This column provides a brief overview of the region's main energy events from the past week

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- Govt to codify emissions trading: GX amendment to be submitted to Diet

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- MLIT sets up floating offshore wind tech research association

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- LNG stocks up double-digits from last week, and up YoY

#### CARBON CAPTURE & SYNTHETIC FUELS

- Marubeni and MOL establish JV for nature-based carbon credit business
- Nippon Paper to transition fuel source for boiler facilities

## EVENTS

- Jan 6-24 FIT/FIP solar auction #23
- Jan 29-31 Offshore Technology & ENEX  
Exhibition @ Tokyo Big Sight
- Feb 19-21 Smart Energy Week 2025 @ Tokyo Big  
Sight



## JAPAN NRG WEEKLY

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### OFTEN-USED ACRONYMS

METI	The Ministry of Economy, Trade and Industry	mmbtu	Million British Thermal Units
MoE	Ministry of Environment	mb/d	Million barrels per day
ANRE	Agency for Natural Resources and Energy	mtoe	Million Tons of Oil Equivalent
NEDO	New Energy and Industrial Technology Development Organization	kWh	Kilowatt hours (electricity generation volume)
TEPCO	Tokyo Electric Power Company	FIT	Feed-in Tariff
KEPCO	Kansai Electric Power Company	FIP	Feed-in Premium
EPCO	Electric Power Company	SAF	Sustainable Aviation Fuel
JCC	Japan Crude Cocktail	NPP	Nuclear power plant
JKM	Japan Korea Market, the Platt's LNG benchmark	JOGMEC	Japan Organization for Metals and Energy Security
CCUS	Carbon Capture, Utilization and Storage		
OCCTO	Organization for Cross-regional Coordination of Transmission Operators		
NRA	Nuclear Regulation Authority		
GX	Green Transformation		

## NEWS: GENERAL POLICY AND TRENDS

### SoftBank and OpenAI back AI infrastructure project in U.S.

(Financial Times, Jan 21)

- OpenAI and SoftBank plan to spend \$100 billion on building a U.S. artificial intelligence infrastructure project, dubbed Stargate, with the figure rising to as much as \$500 billion over the next four years.
- President Trump announced the project on Jan 21, in the presence of SoftBank chair Son Masayoshi, OpenAI chief Sam Altman and Oracle co-founder Larry Ellison.
- “This is the beginning of a golden age,” said Son, adding that the company would not have made the investment had Trump not won re-election. Son has a sweeping vision for what SoftBank can do in AI, from robotics to data centers, underpinned by his UK-based semiconductor designer Arm, which he wants to produce its own chips.
- The SoftBank founder has also a significant stake in OpenAI. SoftBank’s shares rose more than 10% in Tokyo on Jan 22 after the news.
- Stargate aims to boost capacity to run new AI models. It’ll initially build a data center in Texas — construction is already under way, the companies said.
- *CONTEXT: The announcement comes as tech execs court Trump, who is eager to score investment wins. Trump said Stargate would keep “the future of technology” in America. SoftBank has ultimate financial responsibility for the new company, with OpenAI taking operational responsibility. Son will chair the JV. Abu Dhabi’s AI-focused state fund MGX and Oracle are also providing funding; SoftBank-owned Arm, and Microsoft and Nvidia will be technology partners.*
- **TAKEAWAY:** The rapid development of AI systems over the past two years has strained U.S. infrastructure, with data centers emerging as a bottleneck. Cutting-edge chatbots such as OpenAI’s ChatGPT, Google’s Gemini and Anthropic’s Claude require enormous amounts of data, computing power, and electricity. The Stargate project will likely be significant for more than AI – it will upend the energy strategy of the U.S. and likely influence actions in Japan. According to various U.S. sector specialists, each of the \$100 billion super-computers that the project aims to build (and there could be five in total) will require about 5-6 GW of capacity. Due to the 24/7 nature of the facilities, that capacity will need to be firm, which implies that solar and wind power supplies will have to be backed by ample battery installations or have other options to fill the gap during low-generation times. While talk among major U.S. IT firms is now around nuclear power, Son became a vocal nuclear critic in the aftermath of the 2011 Fukushima Daiichi accident in Japan. The prospects of bringing new nuclear capacity online in time for the launch of the first Stargate hub are also dim. It took 15 years to build two new units at the Vogtle nuclear station in the U.S., and the added capacity is less than half of the demand for one Stargate. Putting aside questions of cost, the sheer scale of the undertaking has some suggesting that most of the electricity will come from burning natural gas. That tallies with the favorable environment that President Trump seeks to create for the domestic oil and gas industry. It does, however, make corporate pledges of net zero by 2030 much harder to execute.

### Japan tightens foreign investment rules to protect national security

(Nikkei, Jan 22)

- Japan will introduce a new pre-screening system for foreign investments, targeting firms potentially cooperating with foreign governments. Designated as “specific foreign investors,” these entities must submit prior notifications for all projects, addressing concerns over information leaks, particularly around Chinese firms.

- Current exemptions for investments below 10% of shares in "core industries", such as nuclear and telecommunications, will no longer apply to "specific foreign investors".
- The move follows incidents such as Tencent taking a 3.65% stake in mobile operator Rakuten. The deal bypassed pre-screening, raising security concerns due to China's 2017 law mandating cooperation of Chinese firms with state intelligence efforts.
- The revised regulations will require prior notifications for any acquisition of 1% or more of listed shares in regulated sectors, regardless of exemptions. These rules also apply to organizations substantially controlled by "specific foreign investors" or with more than 50% voting rights owned by them.
- *CONTEXT: Amid rising global security concerns, similar measures have been enacted internationally, such as the U.S. FIRRMA law (2018) and the EU's 2019 framework for scrutinizing foreign investments in sensitive sectors like semiconductors. Japan seeks to balance stricter rules with attracting foreign investment to support economic growth.*

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## Govt to codify emissions trading: GX amendment to be submitted to Diet

(Denki Shimbun, Jan 21)

- On Jan 24, the govt submitted to the Diet an amendment to the GX Promotion Law to set up a legal framework for a CO<sub>2</sub> emissions trading system. It launches in FY2026. Companies emitting over 100,000 tons of CO<sub>2</sub> a year will have to participate.
- The amendment also seeks to lock in the introduction of fossil fuel surcharges in FY2028. It includes penalties for non-payment, and exemptions for fuels not used in the country. Companies will calculate their emissions and offset them with allowances.
- These free allocations will also take into account risks such as the relocation of manufacturing to third countries. Other risks considered are R&D trends in GX-related technologies and changes in facility operations.
- To ensure price stability within the emissions trading market, there'll be a price floor and ceiling. If allowance prices have a sharp rise, companies could pay a set price to meet obligations. If prices fall, the GX Promotion Organization will intervene by purchasing allowances.
- Participating companies will also have to establish medium- to long-term emissions reduction targets.
- **TAKEAWAY:** Most of this information was already part of the GX strategy unveiled over the past 18 months. However, it will now move into law. The steady approach of the officials has frustrated some who wished for the government to introduce carbon taxes or compulsory carbon caps and trading earlier. Still, this approach allows for the companies to prepare for changes that will take place as soon as 14 months from now. We expect this to present huge opportunities for carbon credits generation, though the application of overseas credits to the Japanese market is yet to be clarified.

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## METI proposes FY2025 auction criteria for renewables projects

(Government statement, Jan 17)

- METI proposed a new auction system starting FY2025. For utility-scale solar power, auctions will be held four times a year, with prices disclosed in advance. The initial auction will target 79 MW.
- For onshore wind power, 900 MW will be offered; if total bids exceed 1.2 GW, then there'll be additional auctions. Rates will be disclosed in advance.
- For offshore wind projects not covered by the Renewable Energy Sea Area Utilization Act, 190 MW will be offered; prices won't be disclosed beforehand.

- For biomass, 30 MW will be offered in categories such as general wood-based fuels (10 MW and above) and liquid fuels (all scales), with prices undisclosed.
- METI also proposed removing biomass categories such as general wood-based fuels (10 MW and above) and liquid fuels from the FIT/FIP.
- For existing projects, to prevent conversion to thermal power after the procurement period ends, METI plans to monitor biomass usage ratios through regular reporting and change notifications. If the biomass ratio falls below a certain threshold, corrective measures will be issued.

## NEWS: ELECTRICITY MARKETS

### OCCTO issues nationwide power demand forecasts through FY2034

(OCCTO statement, Jan 22)

- OCCTO announced nationwide power demand forecasts over the next ten years. By FY2034, maximum nationwide power demand is predicted to reach 164.6 GW, and electricity demand at 852.4 TWh.
- For FY2033, the maximum power demand forecast was revised upwards by 3.1 GW, and electricity demand was revised upwards by 18 TWh.
- In the residential sector, a downward trend is expected to continue as energy conservation is more widespread and energy efficiency improves. The commercial sector's demand is expected to remain flat over the forecast period.
- The industrial sector's demand is expected to grow due to the proliferation of new data centers and semiconductor factories. The forecasts up to FY2029 are lower than previous ones, but the forecasts from FY2030 onwards are expected to be higher than the previous ones as those high tech projects come online.
- The increase in maximum power due to the construction of new data centers and semiconductor factories was projected separately. In FY2034, the maximum power forecast is 6.16 GW for data centers (vs 470 MW in FY2025) and 0.99 GW for semiconductor factories (vs 90 MW in FY2025). Electricity demand is forecasted at 44 TWh for data centers and 7.3 TWh for semiconductor factories, accounting for about 4.3% of the nation's peak demand by FY2034 (vs 0.4% in FY2025).
- *CONTEXT: Every year, OCCTO publishes estimated demand, which is the sum of estimated demand for each service area. It also checks on the validity and compliance with the guidelines for electricity transmission/distribution and demand estimation of each TSO.*
- **TAKEAWAY:** We view the latest forecasts as very conservative. The Rapidus chip plant being built in the Hokkaido region is due to go into mass-production around FY2027 and, according to its management, will require 600 MW capacity all by itself. TSMC in Kyushu is planning a second chip plant in the prefecture. While OCCTO likely sees energy efficiency as a counterbalance, the absolute size of power demand growth from the data sector is likely to result in much higher net gains in GWs.

### EEX power futures trading volume surged fourfold in 2024

(Exchange statement, Jan 24)

- EEX-cleared power futures grew fourfold YoY to 72.9 TWh in 2024, with the number of trading participants rising 30% to 89 companies (44 Japanese, 45 foreign). This marked the highest annual growth rate among EEX-operated power markets globally.
- Trade volume reached 85,779 contracts.

- **CONTEXT:** *On Feb 3, EEX plans to launch power futures options and screen-based trading ("order book") by March, alongside annual futures covering up to six years.*
- **TAKEAWAY:** Japan's power futures market was one of the biggest energy stories of 2024. The growth is set to continue with ICE entering the market as another platform promoting electricity derivatives trading, and thanks to a continued flow of new trading participants. However, as the market platforms add more contract options, it will be important to see whether the liquidity splits. The arrival of the JJ-Link system, which syncs TOCOM futures with the JEPX wholesale market, is another one to watch this year.
- **SIDE DEVELOPMENT:**  
**Spot market supply increased in Dec, avoiding supply-demand tightness**  
 (Denki Shimbun, Jan 22)
  - Daily average spot market supply in December increased 18.8% MoM to 1.26 TWh, while demand (buy bids) rose 9.4% to 978.5 GWh, according to JEPX data.
  - Total monthly supply rose 22.7% to 38.9 TWh; demand rose 13.1% to 30.3 GWh.
  - Stable operations of thermal and nuclear power plants, including the Shimane NPP Unit 2 restart in late December, ensured ample supply during the winter peak.
  - Supply-demand conditions remained loose, with selling bids peaking at 39.2 GWh (Dec 31), and demand at 27.6 GWh (Dec 20).

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## EPRX prepares system upgrade for FY2025 demand adjustment market

(Denki Shimbun, Jan 20)

- The Electric Power Reserve Exchange (EPRX) held an online briefing on Jan 17 to discuss system changes for FY2025, with over 140 participants, including trading members and prospective entrants.
- Adjustments for "tertiary reserve (2)" will shorten bid intervals from 3 hours to 30 minutes, and revise activation and duration to within 60 and 30 minutes, respectively.
- System testing is scheduled for Feb 3–28, with the switchover planned for March 12–13, after which FY2025 operations will begin for March 14 deliveries.
- Unlike previous years, there's no backup date for potential delays in the transition.

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## Eneres to launch switchable PPA service starting April

(Company statement, Jan 23)

- Starting April, Eneres will offer a Hybrid Offsite PPA, allowing companies to switch freely between physical PPAs (which procure electricity and environmental value together) and Virtual PPAs (which procure only environmental value).
- As a retailer and aggregator, Eneres will handle all tasks required for each type of PPA contract. The service will be available nationwide, enabling flexible procurement methods to adapt to business environments and market conditions.

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## TEPCO PG forecasts 2.64 GWh in renewables curtailment in FY2025

(Company and government statement, Jan 23)

- TEPCO Power Grid said that for the first time, it may need to curtail renewable energy output in FY 2025.



- Based on solar and wind generation performance and interconnection line utilization in FY2023, TEPCO PG forecasts an annual reduction of 2.64 GWh, which represents only 0.009% of total solar and wind generation.
- The curtailment is expected to occur during the Golden Week holidays in May and during maintenance periods for pumped storage power plants in autumn.
- *CONTEXT: Installed capacity of solar and wind power in the TEPCO PG area has been increasing by 1 GW annually, reaching close to 21 GW in late 2024.*
- To accommodate more renewable energy, TEPCO PG is negotiating curtailment measures with operators of non-adjustable power sources and seeking further reductions in the minimum output of adjustable power sources.

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## Hitachi Energy expands workforce in component factory in Sweden

(Company statement, Jan 16)

- Hitachi Energy is increasing by 50% the workforce in its composite component factory in Piteå, Sweden; and also investing in new machinery.
- The factory produces composite insulators used in transformers, circuit breakers, and power electronics, components in systems used to transfer large amounts of energy between countries and over long distances.
- *CONTEXT: In December, Hitachi Energy acquired the existing property. The new expanded factory is scheduled to launch in fall 2026.*
- **TAKEAWAY:** The factory addresses growing global demand for power transmission equipment as the energy transition gathers steam and energy demand rises to power new technologies such as AI. Utilities must modernize and strengthen their power systems to accommodate these developments.

## NEWS: HYDROGEN

### Hydrogen strategy faces challenge from China's rapid advances: Nikkei

(Nikkei, Jan 18)

- *CONTEXT: This is part-commentary, part analysis, warning that Japan risks losing its leadership in hydrogen tech. It calls on the govt and industry to move quicker.*
- Nikkei raises concerns that Japan's "adjustment-based" industrial policies focus narrowly on fuel cell cars and household usage while relying on hydrogen imports, which limits innovation and competitiveness.
- Major power sources for green hydrogen, such as offshore wind, are under-developed due to unclear national goals and risk aversion by industry players.
- Meanwhile, China's hydrogen industry is rapidly advancing with a "low-altitude economy" strategy, leveraging state-driven innovation to dominate the global hydrogen supply chain, including production, transportation, storage, and usage. The "low-altitude" term in China refers to economic activities that take place in low airspace, such as drones for delivery, surveillance, etc.
- These strategies, backed by state investment and a call for mass production, will see China produce more than 50% of the world's green hydrogen, or about 220,000 tons.

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## Daido Steel develops hydrogen-compatible materials

(Nikkei, Jan 23)

- Daido Steel is accelerating development of steel materials resistant to hydrogen embrittlement that have applications in power generation, transportation, and hydrogen liquefaction.
- *CONTEXT: In 2023, Daido Steel invested ¥600 million to install advanced testing equipment at the Hydrogen Energy Product Research and Testing Center in Fukuoka Pref to evaluate material performance under high-pressure hydrogen gas conditions. Daido Steel is promoting its products through the Chubu Hydrogen Utilization Council that it joined in 2023. Annual hydrogen consumption in the Chubu region alone is expected to exceed 0.2 million tons by 2030.*

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## Tsubame BHB earns honor on list of Global Cleantech 100

(Company statement, Jan 21)

- Tsubame BHB, a Yokohama-based startup specializing in low-pressure, low-temperature ammonia synthesis, was named among the 2025 Global Cleantech 100 for its contributions to sustainable innovation.
- *CONTEXT: Founded in 2017 using proprietary electrode catalyst technology developed by Professor Emeritus Hosono, the company focuses on decentralized, onsite ammonia production to address environmental and food security challenges.*
- The firm is set to deliver its first commercial ammonia synthesis equipment this year, and begin ammonia production for blue hydrogen demos.
- Overseas, interest in the company's tech has grown, with delegations from Estonia's MP Industries and Indonesia's PT PLN visiting the pilot plant.
- Tsubame BHB raised ¥5.3 billion in a Series C round last year, attracting its first overseas investors, and was the only Japanese startup selected for Germany's "Startup Scale Program."

## NEWS: SOLAR AND BATTERIES

### METI seeks to mandate exclusive use of FIP for solar power and biomass

(Government statement, Jan 17)

- Starting FY2026, METI seeks to mandate the exclusive use of the FIP scheme for solar power installations of 50 kW or more, and starting FY2027 for biomass power installations of 50 kW or more.
- METI said that the balancing cost for the FIP scheme will also be increased. For variable renewable energy sources, such as solar and wind power, an additional ¥1/ kWh will be added until the FIP ratio reaches 25%.
- A proposal was made for a "price adjustment scheme" aimed at reducing project risks for offshore wind power, with an upper limit of 40% on price fluctuation rates.
- METI is also introducing new support measures for geothermal power, assuming the development risk at the initial stage.

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## Pacifico Energy to build a large-scale solar farm in Yamaguchi Pref

(Company statement, Jan 21)

- Pacifico Energy issued its environmental impact assessment for its solar farm in Shunan City, Yamaguchi Pref. The company plans to repurpose land now used as a golf course to build a 120 MW solar farm.
- The project plans to install up to 221,000 solar modules, each 545 W.
- Construction begins in October, with commercial operations to begin in Nov 2027.

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## NSG to produce transparent conductive oxide glass for solar panels

(Company statement, Jan 16)

- Nippon Sheet Glass completed a factory for transparent conductive oxide (TCO) glass used in solar panels.
- This facility, located in Ohio, begins production in March.
- *CONTEXT: The investment was made in response to demand from U.S. solar panel maker First Solar. Nippon Sheet's TCO glass is produced using an online coating that forms a transparent conductive oxide film on the surface. The highly durable glass is suitable for a wide range of applications.*
- **TAKEAWAY:** While Trump's reelection and energy policy has raised huge concerns on the renewables businesses, he has stated numerous times that he supports solar power. His plans for tariffs are also likely to spur more Japanese companies to set up shop in the U.S.

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## YKK AP partners with Sapporo on PSC pilot project

(Company statement, Jan 20)

- Manufacturer YKK AP agreed with Sapporo City to do a pilot project to test and integrate PSCs into building materials (BIPV).
- They will explore the potential for implementing the tech in municipal facilities, and assess the impact of snow on PSCs and other performance factors.
- YKK will showcase a demo house with such BIPV tech at the Sapporo Snow Festival, starting Feb 4.

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## Nissan to build plant for LFP battery production

(Company statement, Jan 22)

- Nissan Motor agreed with Fukuoka Pref and Kitakyushu City to build a factory to produce lithium iron phosphate (LFP) batteries.
- Total investment amounts to ¥153 billion. Construction begins this year and operations will start in FY2028.
- The project is part of a METI program to strengthen Japan's battery supply chain. Around ¥56 billion in subsidies will be provided. The factory will produce vehicle batteries at a scale of 5 GWh/year.

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## ENECHANGE and Chubu Electric Group set up EV charging business

(Company statement, Jan 24)

- ENECHANGE will separate its core EV charging business and set up a JV with Chubu Electric Power Miraiz.
- ENECHANGE will first set up a subsidiary to spin off the business. Chubu Electric's subsidiary will invest about ¥3 billion to acquire shares in it.
- *CONTEXT: In March 2024, an accounting issue in ENECHANGE's EV business surfaced, leading to the resignation of the CEO. ENECHANGE hopes this JV will help it regain trust by collaborating with one of the country's top power utilities.*
- **SIDE DEVELOPMENT:**

[PowerX unveils ultra-fast charging plan for corporate clients](#)

(Company statement, Jan 23)

- Starting next month, PowerX will launch an ultra-fast EV charging plan for corporate clients, with one of the fastest charging speeds in Japan at 150 kW.
- Charging is available at 58 charging stations nationwide, with plans to expand to 80 locations by March 2025, and 250 by March 2026.

## Sun Village develops grid-scale battery for ML Power

(Company statement, Jan 20)

- Renewables developer Sun Village agreed with energy firm ML Power to develop a grid-scale battery system in Hokuriku Electric's service area.
- Sun Village plans to install a lithium-ion battery system in Echizen City, Fukui Pref, with a capacity of around 2-8 MWh, connected to the high-voltage grid; operations are expected to start in October 2025.
- The JV will operate the battery in the wholesale electricity market, capacity market, and supply-demand adjustment market.

## NEWS: WIND POWER AND OTHER RENEWABLES

### Orix sells \$1.46 bln stake in Greenko Energy

(Company statement, Jan 20)

- In a \$1.46 billion deal, Orix sold its entire 20% stake in Greenko Energy, an affiliate engaged in renewables in India, to AM Green Power, a wholly-owned subsidiary of next-gen energy company AM.
- A portion of the proceeds will be invested in companies involved in hydrogen and other related businesses.
- Orix will subscribe to convertible bonds worth \$731 million issued by AM Green (Luxembourg), the 100% parent company of AMG. The transfer of shares and subscription to convertible bonds are expected to be completed by end-March 2025.
- *CONTEXT: AMG focuses on decarbonization and green solutions, advancing projects for the production of green hydrogen, green ammonia, and water electrolysis equipment. Greenko manages projects across India in solar, wind, and hydropower, with a total operational capacity of 7.3 GW.*

## MLIT sets up floating offshore wind tech research association

(Government statement, Jan 16)

- The Floating Offshore Wind Construction System Technology Research Association (FLOWCON) has been set up with MLIT approval to develop a system for large-scale deployment of floating offshore wind power.
- The association includes seven core member firms: Penta-Ocean Construction, Toa, Toyo Construction, Nippon Steel Engineering, Wakachiku Construction, IHI Transport Machinery, and Sumitomo Heavy Industries.
- It will work with three supporting members — Kanadevia (formerly Hitachi Zosen), JFE Engineering, and Japan Marine United.
- FLOWCON aims to achieve rapid, large-scale construction and cost-efficient development. Its efforts will focus on three key areas:
  - Research on construction systems for floating offshore wind power;
  - Development of technologies necessary for offshore construction bases;
  - Development of weather and sea condition forecasting systems for marine construction.
- Initially, the group will focus on one of the most critical aspects of offshore construction: installation of wind turbines onto floating platforms. It will compare and evaluate installation at base ports vs installation at offshore construction bases.
- FLOWCON will also collaborate with the Floating Offshore Wind Technology Research Association (FLOWRA), led by power generation companies and that operates under METI'S approval.
- **TAKEAWAY:** The govt seeks to speed up development of infrastructure and technological systems needed to install floating wind power; offshore wind projects often stall due to rising costs of imported components. If the companies involved in floating tech R&D succeed, then this technology, which is still nascent, could draw interest from investors or buyers abroad.

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## Local communities oppose HSE's wind farm in Fukushima

(Government statement, Jan 24)

- On Jan 21, Fukushima Mayor Kohata said the city won't approve installation of a wind farm proposed by renewables firm HSE due to concerns about potential natural disasters and harm to the landscape.
- The project calls to install 11 wind turbines on 354 hectares spanning Fukushima City and Koori Town, with a generation capacity of 46 MW.
- As the turbines are to be placed in a national forest, the law requires the consent of municipal leaders for such installations. Mayor Kohata cited local concerns about the risks of deforestation-related disasters and the destruction of scenery. Koori Town also decided not to approve the project.

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## NYK and Akita Kairiku launch JV for offshore wind vessel maintenance

(Company statement, Jan 20)

- Nippon Yusen Kaisha (NYK) and logistics firm Akita Kairiku created a JV, Japan Offshore Support (JOS), to provide vessel maintenance and management services for offshore wind projects.
- JOS will also focus on crew training, and recruiting local talent to offshore wind power in Akita Pref.
- The JV is 51% owned by NYK and 49% by Akita Kairiku.

## NEWS: NUCLEAR ENERGY

### TEPCO to complete Kashiwazaki-Kariwa NPP restart and post-Fukushima restructuring

(Nikkei, Jan 22)

- TEPCO and the Nuclear Damage Compensation and Decommissioning Facilitation will draft a restructuring plan by the end of FY2024 for scenarios to restart the Kashiwazaki-Kariwa NPP. Possibilities include a restart in FY2025 or delaying it to FY2026, or even later.
- The plan, called the General Special Business Plan, needs state approval. It will address TEPCO's over ¥16 trillion debt from the 2011 Fukushima nuclear disaster.
- *CONTEXT: Restarting one reactor at Kashiwazaki-Kariwa could improve revenue by ¥100 billion a year. TEPCO's free cash flow has been negative for six consecutive years, with a cumulative deficit of ¥1.2 trillion. Despite a net profit in FY2024, major safety investments have strained the firm's finances.*
- In FY2024, capital investment plans are about ¥1 trillion. Interest-bearing debt is rising to ¥6.5 trillion. Asset sales and cost-cutting have reached their limits, leaving little room for growth investments.
- *CONTEXT: Kashiwazaki-Kariwa's restart is part of a broader shift in energy policy outlined in the 7th Basic Energy Plan. Now, the goal is to boost renewables' share of the national power mix to 40-50% by 2040, with nuclear power holding at 20%.*
- **TAKEAWAY: The restart is not only important for TEPCO's financial recovery, but also essential for meeting national energy goals. Without the restart, the existence of TEPCO in its current structure will be questioned and may spur a broader restructuring of the holding.**

- **SIDE DEVELOPMENT:**

[TEPCO head meets Niigata gov over Kashiwazaki-Kariwa safety measures](#)

(Nikkei, Jan 21)

- TEPCO President Kobayakawa met with Niigata Governor Hanazumi Hideyo, their first private meeting since the NRA lifted its operational ban on the Kashiwazaki-Kariwa NPP in late 2023.
- Kobayakawa explained the plant's safety and disaster prevention measures. Governor Hanazumi urged the company to prove its commitment to safety through actions and tangible results. He did not comment on whether the plant should restart.
- *CONTEXT: Kashiwazaki-Kariwa NPP faced an operational ban in 2021 due to security lapses. The ban was lifted in 2023. TEPCO has already completed nuclear fuel loading for Unit 7 and plans to begin loading fuel into Unit 6 starting in June. Yet, it still needs local govt approval to restart the plant.*

### FEPC issues opinion on Basic Energy Plan, urges govt to set nuclear goals

(Company statement, January 21)

- The Federation of Electric Power of Japan (FEPC) submitted an opinion on the draft of the next Basic Energy Plan, calling to lift restrictions on building new NPPs.
- The Basic Energy Plan draft includes relaxing conditions for modernizing NPPs. Still, FEPC said that Japan's nuclear power capacity will decline after 2040.
- FEPC also urged the govt to reconsider operator liability in the event of an accident. FEPC also seeks a review of the compensation system for nuclear accidents. Currently, operators are liable for unlimited compensation regardless of fault.
- On electricity rates, FEPC proposed measures to end regulated tariffs.

- *CONTEXT: Since the unveiling of METI's nuclear roadmap over a year ago, there has been almost no tangible progress on the commercial side.*

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## MoE welcomes comments on Fukushima's radioactive management regulations

(Government statement, Jan 20)

- From Jan 17 to Feb 15, the MoE is open to public feedback on changes to radioactive pollution handling measures at the site of the Fukushima accident. Proposed changes include revisions to regulations about radioactive soil management.
- There are also proposals for updated methods for water quality testing. Guidelines for construction and maintenance are also under discussion.

## NEWS: TRADITIONAL FUELS

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### Petroleum Federation head says Trump unlikely to spur rapid oil production increase

(Nikkei, Jan 22)

- Kito Shunichi, head of the Petroleum Federation and CEO of Idemitsu Kosan, commented on Trump, saying he's unlikely to quickly boost oil development and that shale oil production is already at high volumes. This leaves limited room for profitable production increases and more exports of LNG.
  - *CONTEXT: Trump has signed executive orders to expand permits for fossil fuel development, reversing restrictions imposed by Joe Biden. Also, Trump resumed LNG export permit reviews.*
  - In Japan, govt gasoline subsidies were reduced on Jan 16, and retail prices have stabilized around ¥185/ liter. Kito supports a gradual reduction of subsidies.
- **TAKEAWAY:** [See the Analysis section for a full overview of Trump policies and the reaction in Japan.](#)

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### LNG stocks up 10% from previous week, up 7.9% YoY

(Government data, Jan 22)

- As of Jan 19, the LNG stocks of 10 power utilities were 2.32 Mt, up 10% from the previous week (2.11 Mt), up 7.9% from end January 2024 (2.15 Mt), and up 18.4% from the 5-year average of 1.96 Mt.
- *CONTEXT: Utility companies have been ramping up their LNG stocks preparing for the coldest month – February. However, JMA's long-term forecast says temperatures over the next several weeks will be higher than past averages.*

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### MOL's LNG-fueled ferry begins operations

(Company statement, Jan 23)

- Mitsui O.S.K. Lines (MOL) launched the LNG-fueled ferry *Sunflower Kamuy* on the Oarai-Tomakomai route between Ibaraki Pref and Hokkaido.
- LNG is its primary fuel, reducing CO2 emissions by 35% compared to older vessels.

- *CONTEXT: Alongside the upcoming Sunflower Pirqa, MOL will operate four LNG-fueled ferries by late 2025. MOL Sunflower, a subsidiary of MOL, runs 10 ferries and four RORO vessels across six routes in Japan.*

## NEWS: CARBON CAPTURE & SYNTHETIC FUELS

### Marubeni and MOL establish JV for nature-based carbon credit business

(Company statement, Jan 20)

- In order to create, trade, and retire nature-based carbon credits, Marubeni and Mitsui O.S.K. Lines (MOL) have set up Marubeni MOL Forests.
- This involves absorbing and removing CO<sub>2</sub> through afforestation, reforestation, and soil carbon storage. The first project is a 10,000-hectare tree-planting initiative in India. Operations for carbon credits are expected to begin in 2028. Marubeni will hold a 60% stake in the JV; MOL will hold 40%.
- Nature-based credits enhance biodiversity conservation, soil improvement, and water resource management.

### Nippon Paper to transition fuel source for boiler facilities

(Company statement, Jan 21)

- Nippon Paper Industries plans to transition the fuel source for boiler facilities at its Ishinomaki Mill in Miyagi Pref. The company was selected under the govt's GX Economic Transition Bond program.
- Nippon Paper will decommission existing coal-fired boilers and introduce boilers fueled by black liquor – a liquid byproduct generated during wood pulp production – and steam turbine generators.
- Total investment is ¥55.5 billion, with up to ¥18 billion in state subsidies. Operations are scheduled to begin by spring 2028.



## ANALYSIS

BY MAGDALENA OSUMI

### Japan Wary of Energy Policy Upheaval as Trump Returns

President Donald Trump's swift rollback of climate policies during his first week in office marks a stark departure from his predecessor's agenda. In ordering a pullout of the Paris Agreement and prioritizing fossil fuel production, the administration has declared energy dominance its central goal. While wind projects and green subsidies are on pause, permits for new oil and gas infrastructure will be fast-tracked.

In Japan, the response is mixed. METI welcomed the potential boost to LNG exports, but the announced exit from the Paris Agreement (for a second time) is a concern because the Agreement is a catalyst for international carbon accounting and trading, which Japan sees as business opportunities and vital in meeting net-zero goals.

As METI collects the last of the feedback on its next Basic Energy Plan draft, with a view of presenting a final version in February, the Trump Administration's tone may tip the balance between energy security and climate commitments.

#### Part 1: What the White House announced

##### President Trump's America First Priorities

In his first days in office, Trump issued a number of energy, climate and trade policies that may be relevant to Japan. Aiming to expand U.S. energy production and streamlining regulations, the White House has:

- Ordered a withdrawal from the Paris Climate Agreement
  - This includes the key Article 6, which governs the international crediting of CO2 reductions and potential trading of such reductions as offset credits
- Halted offshore wind farm leases on the outer continental shelf
  - Existing leases will remain intact but undergo comprehensive reviews to assess ecological, economic, and environmental impacts
  - High-profile projects may face additional moratoriums, delays, or potential cancellations
  - An immediate halt on leases from Jan 21, 2025 will affect both onshore and offshore projects
- Declared an energy emergency
  - Enables shortcuts which circumnavigate current regulations, especially regarding permitting and environmental assessments
  - Calls for lower reliance on non-U.S. supply chains
- Abolished the previous administration's freeze on new LNG export licenses
- Revoked a ban on offshore oil and gas leases that enable drilling in coastal waters
- Vowed to refill the U.S. strategic oil reserve to the maximum
- Revoked Biden's electric vehicle mandate that wanted 50% of U.S. new car sales by 2030 to be EVs
- Put on pause subsidies related to the Inflation Reduction Act (IRA) and the [Infrastructure Investment and Jobs Act](#) (IIJA) pending a review by the new administration to ensure they adhere to new energy strategy
  - The office set up to distribute the funds related to the above acts, had made 55 conditional commitments totaling \$109 billion and closed 25 deals totaling \$61 billion in loans and loan guarantees
  - As of December, 191 "active" deals that had requested \$298 billion

Trump vowed to "unleash American energy" by ending what he called "climate extremism" policies. This stands in stark contrast to Biden's push for decarbonized

power sources, and translates into ending his predecessor's policies on climate action. The above indicate renewed support for the oil, gas, and nuclear industries, and an end to federal government support of renewable energy, such as offshore wind. Trump plans to loosen emission regulations, and revise or repeal tax incentives for some clean energy projects and for EVs.

Also, Trump has made aggressive statements to return the Panama Canal to U.S. ownership. Whether that is a bluff or not, it indicates a desire to regain control of a key logistics hub through which a big number of U.S. LNG carriers and other vessels travel.

### National energy emergency

Trump's goal is to expedite domestic energy development, with a strong emphasis on critical minerals and fossil fuel energy infrastructure. Measures include fast-tracking permitting and accelerating projects in Alaska, the Northeast and the West Coast. The Defense Production Act and amendments to the Endangered Species Act will be utilized to overcome current regulation and other obstacles.

Meanwhile, Trump issued orders to revoke those of the previous administration:

1. [Executive Order 13990 of January 20, 2021](#) (Protecting Public Health and the Environment and Restoring Science to Tackle the Climate Crisis);
2. [Executive Order 13992 of January 20, 2021](#) (Revocation of Certain Executive Orders Concerning Federal Regulation);
3. [Executive Order 14008 of January 27, 2021](#) (Tackling the Climate Crisis at Home and Abroad);
4. [Executive Order 14007 of January 27, 2021](#) (President's Council of Advisors on Science and Technology);
5. [Executive Order 14013 of February 4, 2021](#) (Rebuilding and Enhancing Programs to Resettle Refugees and Planning for the Impact of Climate Change on Migration);
6. [Executive Order 14027 of May 7, 2021](#) (Establishment of the Climate Change Support Office);
7. [Executive Order 14030 of May 20, 2021](#) (Climate-Related Financial Risk);
8. [Executive Order 14037 of August 5, 2021](#) (Strengthening American Leadership in Clean Cars and Trucks);
9. [Executive Order 14057 of December 8, 2021](#) (Catalyzing Clean Energy Industries and Jobs Through Federal Sustainability);
10. [Executive Order 14072 of April 22, 2022](#) (Strengthening the Nation's Forests, Communities, and Local Economies);
11. [Executive Order 14082 of September 12, 2022](#) (Implementation of the Energy and Infrastructure Provisions of the Inflation Reduction Act of 2022); and
12. [Executive Order 14096 of April 21, 2023](#) (Revitalizing Our Nation's Commitment to Environmental Justice for All).

As Trump said in his inauguration speech, his focus will be boosting oil and gas output, and expanding energy exports: "We will be a rich nation again and it is the liquid gold under our feet that will help us do it."

## **Part 2: Reaction in Japan**

### **METI Minister Muto**

Muto emphasized that climate change is a global issue requiring all nations' efforts. He said Japan will continue to decarbonize and pursue international initiatives like the Asia Zero Emission Community (AZEC).

Muto commended Trump's stance to resume LNG export approvals. If implemented, "this could stabilize global LNG markets and support Japan's energy security by diversifying import sources."

#### **PM Ishiba's administration**

Chief Cabinet Secretary Hayashi reaffirmed the importance of the alliance with the U.S. as a cornerstone of Japan's foreign and security policy. He expressed hope for early talks between PM Ishiba and Trump to "build a strong, trusting relationship and elevate Japan-U.S. ties."

On the U.S. withdrawal from the Paris Agreement, Hayashi said climate change remains a pressing global issue and that the U.S. should be involved. Japan will seek ways to cooperate with the U.S. on climate issues.

#### **Political parties**

Komeito leader Saito expressed concern over Trump's decision to withdraw from the Paris Agreement, stating, "The U.S. must work with others to address global challenges, but I am worried about how this system will be maintained." He emphasized the importance of building a strong relationship of trust between PM Ishiba and Trump.

Communist Party Secretary-General Koike criticized Trump's withdrawal from the Paris Agreement and from the WHO. The "America-First" stance could lead to contradictions with allied countries and that Japan should not be a passive follower; it should insist on its own position when necessary.

#### **Business / industry response**

*Top big-business lobby, Keidanren:*

Keidanren welcomed Trump's reelection, but appealed to him to maintain bilateral ties. The group remains supportive of the central role of the U.S. to the global economy and climate action, emphasizing that the U.S. is Japan's most important ally. It pointed out that Japan has been the top investor in the U.S. for the last five years, and Japanese companies have created nearly one million jobs there. The group urged the Trump Administration to create a predictable, stable environment to allow businesses to invest with confidence.

*Non-profit group Central Research Institute of Electric Power Industry (CRIEPI):*

While Japan supports decarbonization efforts through initiatives like AZEC, it views the potential LNG policy changes as a way to enhance energy security and diversify imports. It stressed the importance of IRA-linked loans and grants to reduce GHG emissions, but warned that it's now unlikely that the prior administration's climate/ energy targets will be met. The Institute forecasts that the gap between 2050 net-zero goals and reality will widen.

*High-ranking official at pro-renewables organization:*

Trump's stance on the climate crisis is already affecting Japan and the policy direction it is about to take. His reelection came just as Japan was drafting the new Energy Basic Plan, which is expected to be finalized next month. "Japan has most likely set targets for [renewables] energy sources much lower, mirroring Trump's comments," the official said.

*The Renewable Energy Institute (REI):*

In early November, following Trump's re-election, REI highlighted concerns about U.S. federal government disengagement from climate action. It said, however, that global and domestic progress on renewables and coal reduction during his previous term suggests that a transition to clean energy, driven by economic and corporate interests, is

irreversible. REI said Japan must not slow its climate actions, otherwise it will fail its climate responsibility and harm its international competitiveness.

*Political commentator Takeda Tsuneyasu (great-great-grandson of the Emperor Meiji):* He said that Japan also withdrew from the Paris Agreement. "It makes no sense for Japan to invest ¥150 trillion in decarbonization when the top four emitters are doing virtually nothing." He said that putting public funds into GX in such an environment was a "misuse of taxpayer money."

*Japanese Youth Organization SWiTCH*

Saza Mana, the leader of Japanese youth organization "SWiTCH," and a Japan delegation member at COP29 last year, said that the U.S. withdrawal from the Paris Agreement will have a significant impact on international relations, including a loss of funding to developing nations. She forecasts that Japan and European countries will fill the gap.

*Regular member of METI expert committees:*

Professor Takamura Yukari of University of Tokyo's Institute for Future Initiatives expressed concern about Trump's actions, highlighting the potential negative impact on global climate action. However, she noted that many countries and companies are ready to continue advancing such goals and see climate change as a direct risk to their operations.

### Part 3: Potential impact

#### **Japan's LNG supply from Russia's Sakhalin-2 project**

On January 10, the U.S. announced additional economic sanctions against Russia. Among these, over 100 tankers, referred to as the "shadow fleet," were added to the sanctions list. However, on Jan 21, METI Minister Muto reiterated that the U.S. sanctions do not affect Japan's supply of LNG from the Sakhalin-2 project in Russia.

#### **Japanese businesses investing in EV-related projects in the U.S.**

Chemical company UBE: Set to invest \$500 million to build the first U.S. plant producing dimethyl carbonate (DMC) and ethyl methyl carbonate (EMC), essential chemicals for EV batteries. Located in Louisiana, the facility is planned to open in late 2026.

Panasonic: Plans a third EV battery plant in the U.S. despite scrapping a tentative plan in 2023. The company is a supplier to Tesla. Panasonic's \$4 billion EV battery plant in De Soto, Kansas, hopes for launch early in 2025.

Komatsu: Japanese heavy equipment maker revealed last December plans a fourfold expansion of production capacity for batteries at its U.S. unit, eyeing the mining industry's growing push toward electrification and decarbonization.

Toyota Motor: Increased its investment in a Greensboro, North Carolina-area plant to make batteries for fully electric and plug-in hybrid cars. Production at the new plant, which is under construction, will be expanded as part of a \$13.9 billion outlay.

#### **Japanese businesses investing in wind projects in the U.S.**

JERA: Recently signed an agreement with BP to merge their offshore wind power businesses under a standalone joint venture. Both BP and JERA eyed the U.S. market as part of their investment strategy, hoping to build 13 GW of capacity.

## ANALYSIS

BY MAGDALENA OSUMI

### Japan Looks to the Moon and Beyond to Tackle Resources Scarcity

Over the last decade, nearly \$300 billion has been poured into equity investments in private space companies. The U.S. captured almost half of this, China close to a third. Japan, by contrast, has barely registered – until now.

Japan's nascent space startup sector, which quietly emerged in the 2010s, is finally taking off as a real business. Last month, the fourth Japanese space startup in two years held an IPO. A few weeks ago, Toyota Motor announced a second investment in a space startup, and last year, the government launched a multi-billion-dollar fund to support private space firms over the next decade.

The space boom has several practical applications to Japan's energy sector. Some of these startups are testing energy production technologies in the stratosphere and above, seeking either to beam electrons back down to Earth or create fuel to power further space exploration. China has similar plans, recently unveiling a project to build an orbiting solar power station with 1 MW of capacity by 2030.

There is another vital reason for Japan to explore space: raw materials. With sparse key resources within its own land mass, the country is searching for new sources of critical elements such as lithium, cobalt, nickel, and rare earths. These materials are indispensable for everything from batteries to wind turbines, and chips for decentralized energy systems. And certain parts of space are estimated to hold an astronomical amount of these elements.

#### Unlocking the Moon's potential

Pursuing deep space exploration is still far away, but one celestial body that's assessed as a valuable resource target is visible to the naked eye nearly every night.

Many scientists believe that the Moon and Earth share a common origin, implying that the former contains many of the same materials and minerals as found on Earth. That's one reason Tokyo-based lunar exploration startup ispace launched a mission to the Earth's satellite on Jan 15, aiming to help build an ecosystem and infrastructure for space exploration that will help other businesses pursue energy and mining projects.

On the back of a SpaceX rocket, launched from Florida, ispace is carrying a payload for Japan's Takasago Thermal Engineering, which produces hydrogen through electrolysis and wants to trial the same in outer space.

As part of its flagship lunar program, HAKUTO-R, ispace also plans to collect regolith using a Swedish shovel made by excavation equipment producer Epiroc. Regolith refers to dust and rock fragments covering the Moon's surface, which will be used as a building material for in-situ resource utilization. The firm will sell part of the regolith to NASA.

In 2010, the Japanese space agency, JAXA, led a mission to successfully bring back samples from the asteroid known as Itokawa. In 2020, a second mission returned samples from the asteroid Ryugu, which are being analyzed for organic compounds and minerals.

Mining just one of the reachable asteroids closest to Earth's orbit could yield fantastic profits in the trillion-dollar range despite billions of dollars in outlays. One asteroid observed by NASA a little further out – 16 Psyche – is reported to carry enough gold

that in theory it would be a hypothetical \$93 billion windfall (at today's market prices) for every single person on earth.

With the expenses involved high, and the risk even higher, Japan is following the U.S. in allowing more space sector development to be conducted by private capital and businesses, with the state space agency as the coordinating hub.

For firms like ispace, this is a chance to be at the forefront of developing technologies to utilize lunar resources, with the vision of creating a sustainable space-based economy.

#### Why bother with space?

With many metals and minerals still abundant on Earth, why bother with venturing into space? Access to minerals is becoming increasingly tangled in geopolitics, with supply of some materials limited, held up or stopped altogether on political and ideological grounds. For example, China dominates the mining and processing for more than half of the key metals and minerals required for energy transition technologies.

As U.S.-China trade tensions increase, there is concern about China's efforts to restrict raw material exports, as it has done in the past with rare earth elements and more recently with critical minerals gallium and antimony.

The cost of mining is also increasing globally due to depletion of the easier-access deposits, declining ore grades, and the difficulties in securing water and other resources. Community opposition is also a challenge in almost every jurisdiction and can lead to the shutdown of even operating assets. In 2019, the Cobre Panamá mine in Panama started to supply about 1% of the world's copper, but in 2023 a local court ruled to shut the mine due to protests over its environmental impact.

The biggest issue for land-based mining, however, may be the timescale of developing new deposits. The average time required to start a new mining operation from scratch rose to 18 years, up from 16 years, according to the latest estimate published by the International Energy Agency in 2024. For the U.S., the average timeframe is now over 20 years.

Faced with such long-term investment prospects on Earth, the Moon and asteroids may not be such a wild gamble after all. And Japan's demand for raw materials is only growing.

The country's land mass has almost no nickel, cobalt, bauxite, nitrates, rock salt, potash and phosphates. Yet all these are key to clean energy technologies. In 2022, Japan imported \$1.07 billion worth of lithium carbonates, making it the third-largest importer globally. In the same year, Japan imported \$585 million worth of cobalt, ranking as the No.2 importer.

The Moon's lack of atmosphere also makes it uniquely suited for resource exploration. Unlike Earth, where asteroid impacts are often mitigated by the atmosphere, the lunar surface has been directly bombarded by asteroids over billions of years. This may have enriched the Moon's surface with reserves of rare and valuable materials.

#### ispace's role in Japan's energy transition

Once commercially-viable travel to the Moon becomes possible, it should also be sustainable. To do that, a sound economic system is required, says CEO of Tokyo-based ispace, Hakamada Takeshi. He believes that the initial driving force would be utilization of water resources on the lunar surface. Hydrogen extracted from the water could then be used as a fuel for rockets.



ispace drew global attention with its HAKUTO-R Mission 1 in 2023, although the mission did not successfully complete a soft landing on the Moon. Despite the setback, it demonstrated ispace's ability to develop and operate advanced lunar technology. METI selected the firm for a Small Business Innovation Research (SBIR) grant worth ¥12 billion.

Now, ispace partners with organizations like NASA and uses rockets supplied by SpaceX to deliver payloads and collect crucial data. The landers and rovers are designed not only to support scientific research but also to lay the groundwork for infrastructure needed to extract and process lunar materials.

The startup is one of over 100 companies involved in space exploration in Japan today.

#### **Building a sustainable space economy**

While Japan's ispace is not itself a miner, it has signed agreements with domestic and international mining firms seeking to haul in such gains. The role of ispace will be to enable these entities to expand their operations both into and in space, confirming its place as an infrastructure builder in what could become an immensely lucrative industry.

From the nation's perspective, there's more than money at stake. Space R&D has historically propelled advancement across key computing, machinery, energy, materials, and a host of other sectors. Beyond that, the potential for resource procurement outside of its isles could offer Japan a competitive advantage in a geopolitically constrained world.

The new space race has just begun.

*The above story is an adaptation of a GxxD series report published by the Japan NRG parent company, K.K. Yuri Group, earlier this month. To view the report, see: <https://www.yuri-group.co.jp/gxxd>*

## ASIA ENERGY REVIEW

BY JOHN VAROLI

*A brief overview of the region's main energy events from the past week*

### **Australia / Energy storage**

The govt has allocated an additional AU\$2 billion to its green bank, the Clean Energy Finance Corporation (CEFC), to support renewable energy generation and storage.

### **China / Power consumption**

In 2024, the country's total electricity consumption was 9,852 TWh, a YoY increase of 6.8%, which is more than the GDP growth of 5%. This phenomenon is partly due to the continuous increase in electrification across industries such as construction and transportation, significantly boosting energy demand.

### **China / Renewable energy**

With increased renewable energy capacity, by 2025 renewable sources will meet all of China's new electricity demand. This paves the way for China's power sector to achieve peak emissions by 2025, said Greenpeace East Asia.

### **India / Oil imports**

The state agency in charge of shipping has extended permission to both sanctioned and authorized Russian insurance companies to provide policies for Russian oil tankers shipping to Indian customers. Recent U.S. sanctions have targeted Russian shipping companies and insurers. India is the world's third largest oil buyer.

### **Nepal / Hydropower**

India's Renewable Energy Development Agency will create a JV with SJVN, GMR Energy, and Nepal Electricity Authority to develop the 900 MW Upper Karnali Hydroelectric Project in Nepal.

### **Nuclear power**

Global nuclear energy is projected to make a strong comeback this year with more than 70 GW of new capacity under construction. According to the IEA, this is one of the highest levels in the past 30 years. There are over 40 countries with plans to expand nuclear power in their energy systems.

### **Singapore / Energy corridor**

Singapore and India are studying the establishment of an energy corridor that will focus on renewables between the two countries, said the Ministry of External Affairs. The Singapore govt said there is already some work on a green hydrogen corridor between the two.

### **Southeast Asia / Renewable energy**

SUSI Partners raised an additional \$139 million for its SE Asia-focused energy transition strategy, bringing the total fund to \$259 million. The investment includes significant contributions from British International Investment and Dutch development bank FMO, with \$70 mln and \$50 mln allocated, respectively. These funds will support the SUSI Asia Energy Transition Fund and the Sustainable Asia Renewable Assets (SARA) platform that aims to develop a 500 MW portfolio of greenfield renewable energy projects across SE Asia.

### **South Korea / Biomass**

South Korea will not support any new biomass power plants. Subsidies for six existing state-owned plants that co-fire coal and biomass will end this year; the value of

renewable energy certificates for three state-owned dedicated biomass plants will be phased down by 2027. At privately owned plants, subsidies for co-fired biomass from six plants will be phased out over the next decade, while subsidies will be reduced for 12 dedicated biomass plants over the next 15 years.

#### **Taiwan / Offshore wind**

Pine Wind Power will acquire a 26% stake from Macquarie Asset Management in Formosa 2 International Investment, which runs a 376 MW operational offshore wind farm near the coast of Miaoli County (Formosa 2 Offshore Wind Farm).

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