

RESEARCH NOTE

Japan Prepares to Intervene in Energy Market Ahead of Winter Demand; Asia Gas Prices Set to Rise Further

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Executive Summary

Growing risks of electricity demand in Japan outstripping supply this winter

Japan has one of the lowest energy self-sufficiency rates among G7 countries, making it heavily reliant on imports to meet its energy demands

PM Kishida has not been able to divest from joint oil and gas projects in Sakhalin

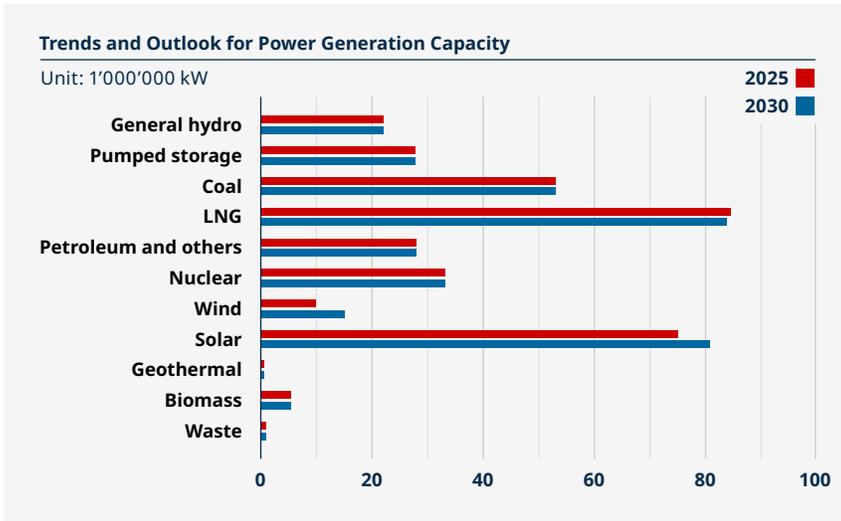
With soaring oil and gas prices, there is now greater support from the public and the political elites for a nuclear restart

Background and Analysis

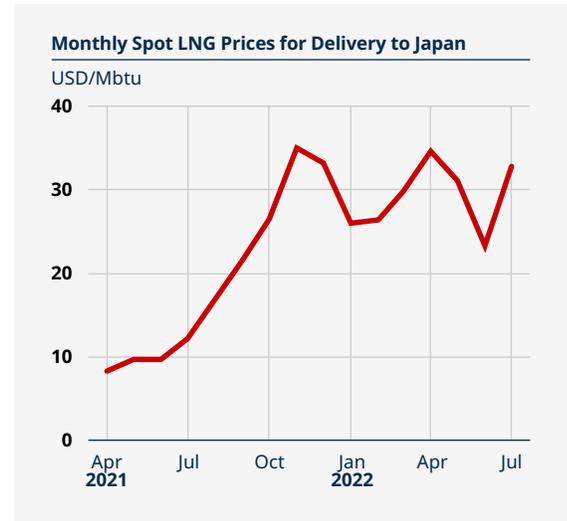
As early as March 25, Japan's Ministry of Economy, Trade and Industry (METI) warned that Japan will face a precarious electricity supply-demand balance this winter. The outlook is particularly bleak for the Tokyo area, which is expected to have just a 0.1% surplus power supply (the difference between maximum projected demand and supply) in January 2023 and a 1% surplus in February 2023, much below the minimum 3% needed for a stable supply.¹ Heatwaves across Japan have eroded much of the Japanese LNG stocks, further raising the risk of electricity demand outstripping supply this winter. Growing uncertainties over Russian supplies of gas have forced Japanese utilities to accelerate discussions with suppliers to secure additional gas shipments for winter.² Japan's JERA, Tokyo Gas Co. and Kyushu Electricity Power Co. have already sealed supply deals with Sakhalin Energy to stabilize supply volumes from the Sakhalin-2 project, where most of Japan's Russian LNG comes from. On August 31, the Japanese government announced that it will set up a framework for the state-owned Japan Oil, Gas and Metals National Corp. to import LNG on behalf of Japanese companies.

ECONOMIC IMPLICATIONS OF JAPAN'S ENERGY CRISIS

Japan's energy supply crunch made front-page news after METI issued an electri-



Source: Natural Gas and LNG Data Hub 2022, Japan Oil, Gas and Metals National Corporation



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cal-power capacity warning for the first time earlier this year owing to the worst power supply squeeze Japan has experienced in decades. Although Japan narrowly averted large-scale blackouts after the government called for voluntary conservation of power by households and businesses, the worst may not be over for Tokyo. Japan has made impressive progress in reducing its overall energy consumption—decreasing it by 6.7% year on year in 2021—but it still has one of the lowest energy self-sufficiency rates among G7 countries, making it heavily reliant on imports to meet its energy demands. Upward pressure on imported fuel costs resulting from the Ukraine crisis pushed up retail gasoline prices in Japan—which already has one of the highest gasoline prices in Asia-Pacific—to a 13-year high in February. Despite heightened tensions with Moscow due to the Ukraine crisis and Russian military drills on the disputed Kuril Islands, PM Fumio Kishida has not been able to divest from joint oil and gas projects in Sakhalin. While UK-based oil company Shell walked out of the Russian Sakhalin-2 LNG project, major Japanese trade houses Mitsui & Co. and Mitsubishi Corp. retained their stakes after consultations with the Japanese govern-

ment. Japan’s long-term policy approach of importing LNG to reduce reliance on coal-fired electricity generation is being tested, forcing the country to increase imports of coal and rely upon aging, less efficient coal-fired power stations like the Takasago Thermal Power Plant.

In August, inflation exceeded the Bank of Japan’s 2% target for the fourth straight month and is likely to increase toward the end of the year.³ The core consumer price index in Tokyo, which excludes fresh food and energy, rose 2.6% in August, indicating high broad-based inflationary pressures.⁴ Japan’s electricity rates have been extremely volatile, and power prices in Tokyo jumped to their highest level in 18 months in August.⁵ Exacerbating the pain of rising prices for Japanese households is a weaker yen, which dropped below 140 yen to the dollar in September and is expected to plummet even further in the coming months, reducing its buying power for consumers. Big Japanese companies such as Toyota, Takeda Pharmaceutical Co. and Nintendo have benefited from a weaker yen, which boosts their sales and profits despite economic uncertainty. Japan has extended the temporary subsidy program

for gasoline, diesel, kerosene and heavy fuel oil implemented in January until the end of September, and the government is expected to announce more relief measures against price hikes.

What's next?

In August, Japan's weather bureau indicated a 60% chance of La Niña—a weather phenomenon that typically delivers harsher winters—continuing in the northern hemisphere through early winter. If this happens, heating demand will likely increase, further straining Japan's tight energy supply. On July 14, PM Kishida asked for up to nine nuclear power plants to be in operation over the winter. While 10 reactors are listed as having been restarted, only five are currently providing power, and the return online of four more reactors—idle since the Fukushima disaster—may take longer than anticipated given the extensive approval process involving the Nuclear Regulation Authority as well as approval from local communities.⁶ Because of soaring oil and gas prices, there is now

much greater support from the public for a nuclear restart. This bodes well for the ruling Liberal Democratic Party, which has taken a stronger pro-nuclear stance under Kishida. Nevertheless, in the short term, it is clear that Japan will continue to rely on imported energy sources and increase its fossil fuel supply to address the ongoing power shortage. An early restart of nuclear energy can also help Japan meet its ambitious climate goal of reaching carbon neutrality by 2050. In the long term, managing such an energy transition would require redirecting investment toward solar, wind and other renewable sources of energy, while ensuring a stable energy supply.

We will continue to closely monitor Asian spot LNG prices, which climbed to near-record levels in August and are likely to increase further due to robust competition for LNG cargoes from European buyers. Tight LNG supplies are forcing Asian countries to revisit their procurement strategies, while resource-poor countries like Bangladesh and Pakistan focus on drastically reducing energy consumption.

¹ <https://www.spglobal.com/commodityinsights/en/market-insights/latest-news/energy-transition/032522-japan-set-for-another-severely-tight-electricity-supply-situation-next-winter-meti>

² <https://www.bloomberg.com/news/articles/2022-08-12/asian-gas-prices-rally-on-rush-by-japan-to-secure-winter-supply?leadSource=uverify%20wall>

³ <https://www.boj.or.jp/en/mopo/outlook/gor2207b.pdf>

⁴ <https://www.reuters.com/markets/asia/tokyo-aug-core-consumer-prices-rise-fastest-pace-nearly-8-years-2022-08-26/>

⁵ <https://www.bloomberg.com/news/articles/2022-08-02/blistering-heat-sends-tokyo-s-power-price-to-18-month-high>

⁶ <https://www.japantimes.co.jp/news/2022/07/15/national/kishida-nuclear-power-plants-online-winter/>