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The government's nuclear pivot continues but obstacles persist

Key takeaways

- The forthcoming seventh basic energy plan is expected to promote the fullest possible use of nuclear power, including support for both restarting offline reactors and facilitating the construction of new reactors.
- While public opposition to nuclear power has softened, national and local opposition to nuclear power remain meaningful constraints, complicating the government's efforts to realize its goal of generating 20% of Japan's electricity from nuclear power.

The Ministry of Economy, Trade, and Industry (METI) is in the process of finalizing Japan's seventh basic energy plan, which will outline the government's vision for energy usage through 2040. The first update following former prime minister Kishida Fumio's pivot on nuclear power in 2022, the plan is expected to drop the goal of reducing Japan's dependence on nuclear power – introduced following the March 2011 incident at the Fukushima Dai-ichi Nuclear Power Plant – and support the maximal deployment of nuclear and renewable energy sources in order to achieve Japan's goal of net-zero carbon emissions by 2050, consistent with the 2023 green transformation implementation plan.

This change, which reflects an extensive push by METI, corporate Japan, and pro-nuclear political forces to reverse course on nuclear power, is a meaningful shift, but the politics of nuclear power may continue to complicate a full-scale nuclear renaissance in Japan. Thus, the basic energy plan envisions Japan generating roughly 20% of its electricity from nuclear power, the same proportion that the sixth energy plan envisioned for 2030, well beyond the 7.7% of Japan's electricity provided by nuclear power in 2023.

Japan's climate goals, its need for energy security and reduce its dependence on costly imported energy, and the growing demands for electricity to power semiconductor manufacturing and generative AI will ensure that pro-nuclear interests will remain robust; a survey by Keidanren, Japan's leading business federation, found that 90% of companies supported restarting offline reactors, while 70% supported replacing and building new reactors in addition to restarting reactors. But despite this solid support for nuclear power, these interests will still have to contend with lingering public skepticism about nuclear power, a cumbersome regulatory process, and lengthy timelines for building new reactors.

The path to 20%

Kishida announced in 2022 that, after a decade in which the Japanese government sought to reduce Japan's dependence on nuclear energy following the March 2011 triple disasters, the government would now aim to maximize the use of nuclear power to meet Japan's decarbonization and energy security goals. Kishida said the government would aim to restart an additional seven from the summer of 2023. However, as of October, only thirteen reactors total were online, fewer than half of the country's thirty-six surviving reactors. METI estimates that to reach the sixth basic energy plan's goal of generating roughly 20% of Japan's electricity from nuclear power by FY 2030, virtually of the remaining offline reactors would need to resume operation. While Japan achieved an important post-Fukushima milestone in October when it restarted the no. 2 reactor at the Onnagawa Nuclear Power Plant, the first boiling water reactor (BWR) – like the reactors in use at the Fukushima Dai-ichi plant – to be restarted, local communities and the public are still ambivalent about nuclear power generation.

As a result, the process of restarting the remaining offline reactors will continue to be slow as the Nuclear Regulation Authority (NRA) reviews applications and, even after the NRA renders decisions, the national government works with local and prefectural governments to secure their approval. Even political will at the highest levels has been insufficient to overcome the obstacles to increasing Japan's nuclear power generation.

While the debate on nuclear power has focused on restarting – and extending the operating life – of offline reactors, the advanced age of Japan's fleet means that METI is increasingly concerned that in order to maintain even the 20% target through 2040, Japan will need to begin building new reactors, which it has been unable to do since the 2011 disasters. Even getting approval for an advanced large capacity reactor that was all but completed at the time of the disasters – the no. 3 reactor at the Shimane Nuclear Power Plant – has proved difficult, as a safety review by the Nuclear Regulation Authority (NRA) that began in 2018 has postponed the start of the reactor's use indefinitely.

Accordingly, in addition to dropping the goal of reducing Japan's dependence on nuclear power, the basic energy plan is expected to propose a change that would

enable power companies to build on new sites instead of limiting reactor construction to replacing decommissioned reactors at existing power plants. The basic energy plan will also likely propose new incentives to encourage private investment in nuclear power. Making it easier to construct new plants is imperative given that METI estimates that it can take as long as twenty years from the start of the application process to the completion of a new reactor, meaning that to sustain nuclear power generation beyond 2040 Japan needs to begin planning now.

Lingering opposition

The Japanese government's nuclear pivot was possible in part because public opposition to nuclear power – the major factor in the post-2011 turn away from it – softened considerably following Russia's invasion of Ukraine. The passage of time had dulled some of the concerns about a Fukushima Dai-ichi-like incident, while the public increasingly had to grapple with higher costs for imported energy (as well as dependence on geopolitically unstable regions for Japan's imports).

However, public opposition did not dissipate entirely, and polls conducted earlier in 2024 showed that pluralities were again opposed to restarting offline reactors, albeit with considerable divides on age (younger Japanese are more pro-nuclear, older more anti-nuclear) and gender (men are more pro-nuclear, women are more anti-nuclear) lines. Public opinion remains highly sensitive to events, including the occurrence of natural disasters, which likely boosts opposition to nuclear power. The upshot is that without a robust majority in favor of the large-scale use of nuclear power, it is difficult for political leaders to spend their political capital on accelerating the pace of restarts or the construction of new reactors.

And even if the national mood were more favorable, the government and corporate Japan still has to contend with the resistance of local communities and prefectural governments that host nuclear reactors, who continue to worry about possible meltdowns leading to contamination and evacuation and the management of spent fuel. Thus, while Prime Minister Ishiba Shigeru, who abandoned his nuclear skepticism during his bid for the Liberal Democratic Party's (LDP) leadership, is at best a half-hearted champion of nuclear power, even more enthusiastic political leadership – like, say, Kishida – could struggle to overcome the public's nuclear skepticism. The result is that while the Japanese government is no longer actively working to reduce Japan's use of nuclear power, it still faces an uphill battle to meet its targets for nuclear power, let alone to expand its use.

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