Offshore Wind Farms in Japan

An overview of the legal framework and recent developments

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With the world’s 6th largest sea space, Japan’s long-term potential for offshore wind energy is estimated by the Japan Wind Power Association to be approximately 600GW. Actual investment in offshore wind projects, however, has been extremely limited. In spite of this potential, Japan boasts only 49.7MW of offshore wind installed capacity using 28 turbines at 8 locations. The relative scarcity of offshore wind farms in Japan is reflected in the somewhat nascent nature of the legal framework surrounding deep-water wind projects. However, Japan’s commitment to expand the share of renewables (and in particular offshore wind) in its overall energy profile is attracting increased interest from prospective international wind farm developers.

Japan’s recent push towards expanding renewable energy development is a direct result of the 2011 Fukushima Daiichi Nuclear Power Plant meltdown. The Fukushima tragedy brought Japan’s use of nuclear power, which had been nearly 25% of total electric consumption, to a virtual standstill. In its place, Japan scrambled to encourage growth in the renewable energy sector with the passage of the Act on Purchase of Renewable Energy Sourced Electricity by Electric Utilities (the "Renewable Energy Act").

The Renewable Energy Act represents a qualified success. In the five years since its enactment, the share of non-hydro renewable energy as a proportion of Japan’s overall energy portfolio has shown a marked increase. But nearly two-thirds of the growth in renewable output has been confined solely to photovoltaic energy development. Experts and policymakers agree on the need for diversification in Japan’s renewable energy profile. Given a political climate hostile to re-commissioning of dormant nuclear power facilities, the push to encourage other renewable energy development (including offshore wind) is even more pronounced.

Recent revisions to the Renewable Energy Act, coupled with certain policies and practices of Japan’s Ministry of Economy, Trade and Industry ("METI"), aim to encourage further growth in renewable energy generation with a goal of raising the share of renewable energy (including hydropower) from 12.2% in FY2014 to 22%-24% by 2030. The Renewable Energy Act’s amendments clarify the process of renewable project development, especially at the METI certification stage. Further to these amendments, a feed-in tariff ("FIT") of 36JPY/kWh (excluding tax) has been assigned to offshore wind projects. This favorable offshore wind FIT rate will apply to any offshore wind projects that are able to obtain METI certification by the end of FY2019.
The Renewable Energy Act

The Renewable Energy Act’s supplemental regulations permit PPAs to include provisions allowing the regional utilities (off-takers of renewable power) to refuse to purchase energy from renewable sources at the applicable FIT rates without compensation in certain circumstances. The Renewable Energy Act permits METI to designate certain regional utilities that can curtail an unlimited amount of renewable energy. The remaining undesignated regional utilities are permitted to curtail up to 720 hours of renewable energy generation annually per project.

The Renewable Energy Act now also requires that a developer agree to interconnection arrangements with the relevant regional utility prior to obtaining METI certification to construct and operate an offshore wind project under the FIT regime. The interconnection arrangement must specify that, following METI certification, the utility operator will connect the project to the existing transmission and other electricity facilities, the priority of interconnection vis-à-vis other projects and the permitted capacity of the project to be interconnected to the grid.

To develop any offshore wind project, the developer must first obtain METI certification to be eligible to participate in Japan’s FIT regime. METI certification will require METI’s confirmation of a project’s feasibility, such as evidence of the local government’s official receipt of the environmental scoping report (“Scoping Report”) and demonstration of ownership or certainty of obtaining use rights for the project site.

The newly-amended provisions of the Renewable Energy Act will apply to all wind farm projects, onshore or offshore, beginning 1 April 2017.

Additional Statutory Requirements

The Environmental Impact Assessment Law (the "EIA Law") governs the EIA process required for wind farm development. Wind farms in excess of 10MW are required to comply with a lengthy EIA process which currently could take up to four years to complete, although there are ongoing discussions between METI and the Ministry of the Environment ("MOE") to attempt to shorten this process in some instances.

In general, the EIA process is nationally-mandated, but it is carried out at a local and prefectural level, requiring close coordination with local authorities throughout the process.

In addition to the Renewable Energy Act and the EIA Law, Japan’s Port and Harbor Act will apply to offshore wind farms developed in Japan’s designated port and harbour areas. The Port and Harbor Act is a national law administered at the local level that governs the development, management and operation of areas designated as ports or harbours. Once a developer determines the location of a prospective offshore wind farm, it can obtain a marine cadastre of the surrounding area from the Japan Coast Guard (a "Marine Cadastre") to determine whether the Port and Harbor Act (and other location-specific statutes) apply to the prospective site.

If a project site is located within areas governed by the Port and Harbor Act, then the developer
will need to obtain separate occupation permits from local port authorities to establish the offshore wind farms. If a project site is not located within areas governed by the Port and Harbor Act, then the developer will need to obtain occupation permits from the relevant local authorities under the National Property Act and applicable local ordinances prior to construction.

Developers will need to ensure they are in compliance with any additional applicable statutes and regulations. Particular attention should be paid when a project site is near national parks, quasi-national parks, areas where third parties own fishing rights or areas zoned under the Fishing Harbor and Grounds Improvement Act.
In spite of its substantial offshore wind power potential, investment in offshore wind projects in Japan remains limited. The Japanese government has subsidized a significant amount of research and Japan is fast becoming a leader in floating technology research, but offshore commercial wind farms are still relatively rare.

Japan's commitment to renewable energy remains strong following the 2011 Fukushima disaster, and there is a sustained push to diversify renewables beyond solar power. Legislative revisions have gone some way towards incentivising and enabling greater investment into non-solar renewables, but it is still too early to know precisely how some elements of Japanese law (and particularly the Renewable Energy Act) will be implemented and how effective they will be.

In the immediate future, each new project is likely to be a pathfinder in some respects and will require careful and methodical planning. The need for strong local counsel cannot be overemphasized, particularly given the importance of monitoring national and local governmental policies, prospective negotiations with fishermen and maritime unions and the myriad of other local issues (such as interconnection with regional utilities) that will require resolution.
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