

Japan's Largest^{*1} Offshore Wind Power Human Resource Training Center Opens

Effort toward carbon neutrality accelerates from Nagasaki

As part of The Nippon Foundation's training of human resources in the ocean development sector, led by offshore wind power generation, The Nippon Foundation Offshore Wind Power Human Resource Training Center opened on November 7. The center is operated by the Nagasaki Marine Industry Cluster Promotion Association, and will begin offering courses the following week. The Center, the largest of its kind in Japan, will train roughly 1,000 offshore power technicians (able to install, operate, and maintain offshore wind power generation equipment) annually, which is equivalent to the number required to maintain 500 wind turbines, generating electricity for roughly 3 million households.

Classes will include drills in both Japanese and English in areas including training in working at heights and sea survival, which are indispensable for offshore wind power operations, and students will be able to obtain internationally recognized GWO^{*2} certification, which is needed to work on offshore wind power facilities. The world's first^{*3} offshore training facility (for accessing offshore towers from an access vessel) in an actual offshore location is also scheduled for completion during fiscal 2026. Estimates are that roughly 16,000 engineers and technicians^{*4} will be needed by 2030, and through this Center, The Nippon Foundation will promote the wider use of offshore wind power and contribute to the realization of a carbon-neutral society by 2050.

- ^{*1}. According to The Nippon Foundation's research (as of October 2024), the number of students to be accepted and the facility's floor space are Japan's largest.
- ^{*2}. GWO: Global Wind Organisation; A nonprofit organization headquartered in Denmark that develops and certifies training standards for offshore power technicians.
- ^{*3}. According to The Nippon Foundation's research (as of October 2024), this will be the world's first training facility for accessing offshore towers from an access vessel in actual ocean conditions.
- ^{*4}. According to Japan Wind Power Association statistics (2023). The 16,000 figure includes engineers, while the number of technicians only is roughly 9,000.



The completed human resource training center (left), Nov. 7 demonstration of working at heights (right)

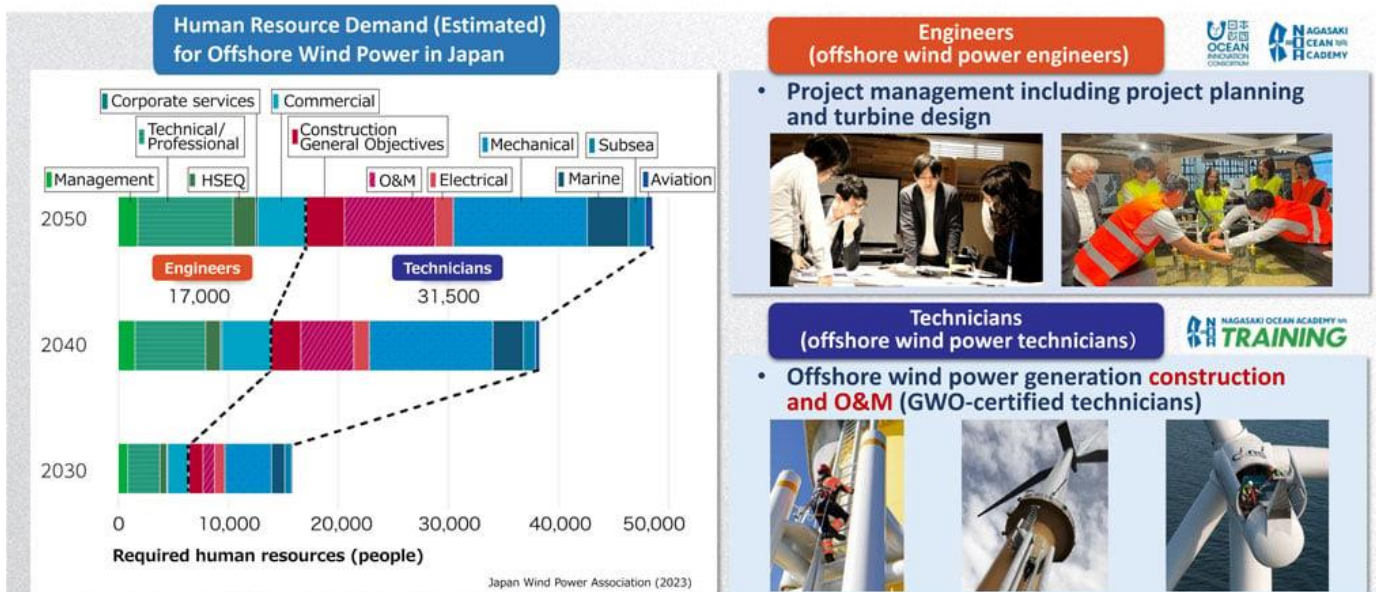
Insufficient human resources involved in offshore wind power generation

To achieve Japan's offshore wind power capacity targets of 10GW by 2030 and 35-45GW by 2040, it is estimated that 15,700 engineers and technicians will be needed by 2030 and that 48,500 will be needed by 2050. There are only roughly 5,000 of these staff in Japan today, showing that there is a wide gap, making the training of staff to support the promotion of offshore wind power an urgent issue.



Human Resources Shortage in Offshore Wind Power Engineers and Technicians

- Human resource demand for offshore wind power generation is **15,700 by 2030** and **48,500 by 2050** (vs. roughly 5,000 currently)
- **Securing and training human resources** specializing in offshore operations is an urgent issue



Features of The Nippon Foundation Offshore Wind Power Human Resource Training Center

The portion completed on November 7, 2024, is The Nippon Foundation Offshore Wind Power Human Resource Training Center's Safety Training Building. It is a facility to train offshore wind power technicians responsible for the construction and installation of offshore wind power generation equipment and its operation and maintenance.

Next to this building, a Technician Training Building is scheduled for completion by the end of fiscal 2025, where training programs are planned in areas including machinery, electricity, and hydraulic operations. In addition, an Offshore Training Facility (offshore tower) is scheduled to be installed by the end of fiscal 2026.



The Nippon Foundation Offshore Wind Power Human Resource Training Center (completed Nov. 7, 2024)

- Based in Nagasaki Prefecture, which has offshore wind power generation facilities and has developed together with the ocean including through long-established fishery and shipbuilding industries
- Using expertise gained to date, Nagasaki aims to become a **“Leading model for human resource training in offshore wind power generation”**



Technician Training Building

Scheduled for completion by end of fiscal 2025



Offshore Training Facility (ocean near Takashima island)

Scheduled for completion by end of fiscal 2026



The Nippon Foundation Offshore Wind Power Human Resource Training Center (Safety Training Building)

Completed Nov. 7, 2024



1. Japan's largest safety training center (1,000 students annually)

GWO safety training (including sea survival), rescue training, and first aid training will be offered in English and Japanese.



2. Comprehensive program for engineers and technicians

In addition to The Nippon Foundation Offshore Wind Power Human Resource Training Center (“NOA TRAINING”), which opened today to train offshore wind power technicians, The Nippon Foundation Ocean Development Human Resource Training and Field Center (“Nagasaki Ocean Academy”), which trains offshore wind power engineers, and The Nippon Foundation Ocean Innovation Consortium aim to promote new entries to the growing field of offshore wind power generation.



3. Training advanced technical human resources (scheduled for completion in fiscal 2026)

In addition to GWO certification, the world's first training in actual ocean conditions (in the ocean near Takashima island, Nagasaki City) for accessing an offshore tower from wind power generation access vessels is being planned in cooperation with Nagasaki Prefecture, Nagasaki City, and local fishery associations.



The Nippon Foundation Ocean Innovation Project

The Nippon Foundation Ocean Innovation Project is promoting human resource training and technological development to enable Japan to play a leading role in the field of ocean development, including offshore wind power generation. Human resource training began with the launch of The Nippon Foundation Ocean Innovation Consortium human resource training institute in 2016. In 2020 The Nippon Foundation Ocean Development Human Resource Training and Field Center opened in Nagasaki City, and to date has trained roughly 7,200 university students and company employees. The project is expected to contribute to human resource training in the field of offshore wind power generation, which is seen being installed on a large scale going forward.



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