

# INTERVIEW

## Project Financing for World's Largest Offshore Wind Power Generation Project in U.K.

**First Project in Europe Financed under JBIC's Global Facility for QI-ESG**

Interview with Deputy Director **Hideki "Henry" Hiramoto**  
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The Japan Bank for International Cooperation (JBIC) signed, in November 2018, a loan agreement for project financing amounting up to approximately GBP743 million (JBIC portion) with Moray Offshore Windfarm (East) Limited (MOWEL), invested in by Mitsubishi Corporation, Kansai Electric Power Co., Inc., and Mitsubishi UFJ Lease & Finance Company Limited, for the Moray East offshore wind farm project located off the coast of Scotland. Renewable energy company EDP Renovaveis, S.A. (EDPR), a subsidiary of Energias de Portugal, S.A., as well as French and Chinese companies have invested in MOWEL, along with Japanese companies. The loan is co-financed by private financial institutions and the total co-financing amount is approximately GBP1,517 million. Part of the loan by the private financial institutions will be guaranteed by EKF Denmark's Export Credit Agency.

In this project, MOWEL will construct, own and operate an offshore wind farm with a total generation capacity of 950 MW (produced by 100 9.5 MW turbines), located 22 km off the coast of Moray in north Scotland. MOWEL will sell electricity to off-takers for 15 years after the start of commercial operations, scheduled in 2022.

### Background of Offshore Wind Market

Offshore wind projects started in Denmark in 1991. The total generating capacity of global offshore wind reached 2.6 GW in 2018, with 80% generated in European countries such as the UK, Denmark, Germany, Belgium and the Netherlands. European countries continue to promote large-scale offshore wind farms, and Japanese companies seek to participate in those projects. However, competition to obtain concessions for offshore wind farms is intensifying because areas suitable for wind power generation are limited.

### Largest Renewable Energy Project Financed by JBIC

Henry explained, "The UK government introduced a Contracts for Difference (CfD)<sup>\*1</sup> scheme, which is the subsidy regime for renewable energy projects under the Energy Act 2013. JBIC started loan negotiations with MOWEL and the sponsors after MOWEL was awarded a 15-year CfD in September 2017. I felt pressure because it would be the largest renewable energy project ever financed by JBIC.

In this project, 100 wind turbines will be installed in the sea area, which is approximately 300 km<sup>2</sup>. We needed to examine the feasibility of installing the wind turbines in water depths of 37 to 57 meters within the schedule and budget.

With fierce competition in the wind power business, the strike price for offshore wind power projects under the CfD auctions has decreased to a third of the 2015 level. We had to carefully analyze whether the project's forecast cash flow generation at the reduced strike price would ensure successful operation of the project over a long period of time."

"I visited London numerous times, representing a group of lenders, to negotiate with the sponsors. I wanted to strike a deal that would be fair and balanced to both the borrower and lenders. I strived to negotiate policy issues that JBIC addresses as a public financial institution and commercial issues directly linked to the viability of the project. Ultimately, we succeeded in finalizing a loan which was reasonable to both parties. This was JBIC's first transaction with EDPR, and we have built a strong relationship through the loan negotiations for this project."

### The Most Advanced Large-Scale Wind Turbines

"Another important aspect in financing was the technological risk associated with wind turbines. This project adopted the most advanced, efficient 9.5 MW wind turbines developed by MHI Vestas, a joint venture between Mitsubishi Heavy Industries and Vestas, based in Denmark. Since none of the 9.5 MW wind turbines were in operation, we had to examine the risk with the help of a technical advisor, and ensure that risks of a technological failure that would reduce operating time and increase maintenance costs were sufficiently mitigated. We visited MHI Vestas' manufacturing facilities in Denmark during loan negotiations. Vestas' advanced technology was coupled with the Japanese-style production quality control that Mitsubishi Heavy Industries introduced. After careful evaluation, we finally decided that it was bankable."

### Promoting Low-Carbon Infrastructure Business by Japanese companies

The Japanese government has been promoting the "Low-Carbon Infrastructure Export" set out in its "Export Strategy for Infrastructure System" following the Paris Agreement. In response to this policy, JBIC launched its new global financing facility for Quality Infrastructure Investment for Environmental Preservation and Sustainable Growth (QI-ESG) in July 2018 to support infrastructure development that contributes to protecting the global environment. Moray East offshore wind farm is the first project in Europe that JBIC is supporting under QI-ESG.

Henry expressed his aspiration, saying "we have received positive responses from renewable energy developers regarding the loan. As the offshore wind market flourishes in Asia and North America, the global generating capacity of offshore wind is expected to grow at 16% per annum, reaching 9.6 GW in 2027. With intensifying global competition, the number of wind power projects without subsidies is expected to increase. As a Japanese public financial institution, JBIC aims to support various offshore wind projects where Japanese companies participate by utilizing the experience and knowledge gained through this project."

<sup>\*1</sup> The CfD is the UK government's new support mechanism for renewable electricity generation in which developers of renewable energy projects enter into a contract with the government-owned Low Carbon Contracts Company. The CfD scheme is designed to provide project developers a long-term stable revenue stream by adjusting for the difference between the strike price (price of electricity determined by the UK government reflecting the cost of investment in a particular renewable energy technology) and the reference price (the average market price for electricity in the UK market).

