INTERVIEW

Project Financing for Gas-to-Power Project in Indonesia

Flagship Project under JBIC's Global Facility for QI-ESG^{*1}

Interview with then Deputy Director Yohei Oishi and then Deputy Director Osamu Matsumoto Unit 3, New Energy and Power Finance Department I, Infrastructure and Environment Finance Group

Deputy Director Oishi

Deputy Director Matsumoto

The Japan Bank for International Cooperation (JBIC) signed in October 2018 a loan agreement for project finance amounting up to approximately USD604 million (JBIC portion) with PT Jawa Satu Power (JSP) and PT Jawa Satu Regas (JSR) for the Jawa 1 Gas-to-Power Project^{*2} in Indonesia. Both JSP and JSR are Indonesian companies. The former is invested in by Marubeni Corporation, Sojitz Corporation and PT. Pertamina (Persero), the state energy company of Indonesia, and the latter by Marubeni, Sojitz, Mitsui O.S.K. Lines, Ltd., Pertamina, and others. The loan is co-financed by Mizuho Bank, Ltd., MUFG Bank, Ltd., and others. The portion co-financed by commercial banks is covered by Nippon Export and Investment Insurance (NEXI).

World's First Large Gas-to-Power Project (generating capacity of 1,000 MW or more)

Yohei Oishi explained, "Electricity demand is increasing in emerging countries due to steady economic growth. Amid growing environmental awareness, more attention is drawn to gas power generation, which produces less CO2 than coal and oil-fired power generation. Emphasizing gas-fired power generation as its middle-load power source for sustainable electricity supply, the Indonesian government aims to use it to produce more than 25% of the country's total power capacity. In the Jawa 1 Gas-to-Power Project, electric and gas power facilities and associated infrastructure will be built in West Java, Indonesia. JSP will construct, own and operate a 1,760 MW gas-fired combined cycle power plant while JSR will construct, own and operate an offshore floating storage and regasification unit (FSRU) for LNG to be supplied as fuel to the power plant. The electricity produced will be sold to PLN, a state-owned power utility in Indonesia, for 25 years. This project is challenging in that the two projects—FSRU, which can be built at a lower cost and in less time than an onshore LNG receiving terminal, and the gas-fired power plant-will be developed and operated in an integrated manner. Also, as the first project financing for a gas-to-power project in Asia and its scale as the world's largest project of its kind, it has attracted much attention."

Appropriate Risk Allocation among Project Participants

In 2016, prior to international bids for this project, some of the consortiums planning to submit bids contacted JBIC to request project financing. Oishi looked back on the project: "Up to now, JBIC has supported various projects involving Japanese firms, such as upstream gas field development and construction of LNG carriers as part of the LNG gas value chain. However, as this was the first gas-to-power project for JBIC, we thoroughly carried out due diligence on every aspect of risks. We discussed with consortiums about the possibility of financing even ahead of their bid submissions, and negotiated with PLN on a Power Purchase Agreement (PPA) after the bid. As revenue from selling electricity to PLN according to the PPA is the only source of cash for the project, the PPA is critical to the success of the project. We thoroughly negotiated with PLN on the detailed terms and conditions of the PPA."

Following the conclusion of the PPA, JBIC started negotiations for financing arrangements in April 2018. Osamu Matsumoto said, "As power generation and FSRU are

Osamu Matsumoto said, "As power generation and FSRU are interrelated in this project, it is necessary to establish a financing structure which ensures the integrated operation of both businesses. Considering such a financing scheme was challenging because JSP and JSR have different investors. In addition, we also had to take into account local regulations in Indonesia. Further, many companies participated in this project, including not only Japanese



companies but also Pertamina. Therefore, we put in great effort in coordinating views and opinions between sponsors and lenders."

Flagship Project Supported under QI-ESG

JBIC launched its new global financing facility for QI-ESG in July 2018 to further support the development of infrastructure which is expected to help preserve the global environment, including renewable energy projects.

Oishi explained, "The Japanese government also expressed its intention to support projects to establish the LNG market in Asia and for ensuring a stable supply of natural resources and energy to Japan. In fact, at the Management Council for Infrastructure Strategy held in April 2018, the government stated that support for gas-to-power projects was added to its strategic plans to promote Japan's infrastructure exports. As this is the first project financing a gas-to-power project for JBIC, we position it as a flagship project supported under QI-ESG. This project will introduce one of the most efficient gas turbines manufactured by General Electric Company in a gas-fired combined cycle power plant. This arrangement was also mentioned at the April 2018 Second Public-Private Sector Roundtable Discussion on U.S.-Japan Cooperation on Third Country Infrastructure."

Growing Needs for Gas-to-Power Projects

Oishi also gave his outlook for future gas-to-power business: "The Indonesian government and Pertamina expect this project to pave the way for future gas value chain development in the country. Developing a project, not merely selling LNG but also combining that with the construction of a power plant, will lead to the creation of new value and employment. There are various gas-to-power projects under consideration in Asia and Africa, which create more potential business chances for Japanese companies with extensive experience in the establishment of gas value chains, including trading houses, utility firms, shipping firms and power-generating facility manufacturers. Going forward, an evolving model of gas-to-power projects may be seen, which covers the range from upstream gas exploitation and distribution to downstream power generation."

Matsumoto also expressed his aspiration. "This project serves as an example for future gas-to-power projects. Based on the experience gained, I would like to support Japanese companies in joining gas-to-power projects overseas and the infrastructure business by drawing on our diverse financing tools and schemes as well as by our risk-taking function."

 $^{\rm r1}$ Quality Infrastructure Investment for Environmental Preservation and Sustainable Growth $^{\rm r2}$ A project to construct and operate a gas-fired power plant and gas-related facilities in an integrated manner



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