

Awarded 50MW class Biomass-fired Power Plant Project in Japan

September 28, 2021
Toyo Engineering Corporation
Nippon Steel Engineering Co., Ltd.

Toyo Engineering Corporation (TOYO, President and CEO Haruo Nagamatsu) and Nippon Steel Engineering Co., Ltd. (NSE, Representative Director and President Yukito Ishiwa) have been awarded a contract for a project to construct a 49,900 kW biomass power plant. This plant will be built in Karatsu-shi, Saga, Japan for Karatsu Biomass Energy G.K.

This project is to construct a dedicated biomass-fired power plant using fuels such as wood pellets and PKS (Palm Kernel Shells). This power generation facility is a highly efficient biomass-fired plant based on the reheat system (*). Joint Venture between TOYO and NSE will carry out the EPC contract on a full turn-key basis that includes engineering, procurement, construction and commissioning services for a power generation unit.

Since TOYO and NSE signed a comprehensive collaboration agreement in 2017, both companies have been collaborating in mutual support of engineering resource as wide range as practical, including business initiatives that would be able to raise corporate value. This is the second Joint Venture project awarded in the biomass-fired power plant, which is realized through competitive solutions that leverage the strengths of both companies.

TOYO has positioned the infrastructure field centered on power plants as one of its core businesses and is actively working on renewable energy projects such as biomass power generation, following photovoltaic generation projects in Japan which TOYO has ten project experiences. Regarding biomass power generation, this project is the ninth project, after the six 50 MW class and two 75 MW class projects currently under construction.

NSE has been actively engaged in and contributing to the realization of a carbon-neutral society through the businesses such as renewable energy facilities (i.e. biomass power generation, offshore wind power generation, geothermal power generation), hydrogen infrastructure, and Energy-Saving CO2 Absorption Process. Regarding biomass power generation, this project is the fourth project following Kanda Biomass Power Plant (75MW class) started commercial operation in June 2021 (located in Kanda, Fukuoka, Japan).

TOYO and NSE will continue to contribute to creating a carbon-neutral society by expanding our approach to renewable energy projects through competitive solutions that leverage the strengths of both companies.

(*) Reheat system: Steam, after expansion through high pressure steam turbine, is sent back and reheated in the boiler, then resent to the low pressure steam turbine for further expansion. This system realizes high power generation efficiency.

Contract Summary

Client: Karatsu Biomass Energy G.K.
Contractor: Joint Venture between Toyo Engineering Corporation and Nippon Steel Engineering Co., Ltd.
Site: Karatsu-shi, Saga, Japan
Facility: 49,900kW dedicated biomass-fired power generation facility
Scope: Turnkey contract for engineering, procurement, construction and commissioning service
Completion: Scheduled for 2024

3D Model of Biomass-fired Power Plant



<Contact>

TOYO Engineering Corporation, Corporate Communications Department
[Phone: +81-47-454-1113]

Nippon Steel Engineering Co., Ltd., PR Room, Sustainability & PR Department
[Phone: +81-3-6665-2366]