

NEWS

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Turboden to supply ORC geothermal plant for EDC's 29 MW Palayan Bayan expansion

Italian Turboden has been chosen as supplier of a 29 MW ORC geothermal power plant as part of the binary expansion project of Palayan Bayan at the Bacon-Manito geothermal power plant complex of EDC in the Philippines.

Italian ORC supplier Turboden S.p.A., has been selected as the supplier of a 29 MWe geothermal power plant to be installed at the Energy Development Corporation's (EDC) Palayan Bayan expansion project. The plant is to be built at the Bacon-Manito geothermal facility located in Luzon Island, Philippines. We previously reported on the project (<https://www.thinkgeoenergy.com/work-to-kick-off-on-23-mw-palayan-bacon-manito-binary-geothermal-plant-in-the-philippines/>).

EDC, the world's largest vertically integrated geothermal company with over 40 years of expertise, has signed a contract with Turboden to supply a new class binary power generation system to recover heat from a brine flow downstream of an existing flash plant. The project is expected to be operational by end 2022 and is part of overall efforts to reduce CO₂ emissions from thermal power generation by replacing the local grid's dependence on fossil fuels and other energy sources.

In the Philippines, where the demand for electricity is expanding in line with its GDP growth, the introduction of renewable energy is actively promoted. The country consists of many volcanic islands and is one of the world's third largest geothermal producer, next to the U.S. and Indonesia. The ratio of installed capacity to resources (development rate) is the highest in the world, making the Philippines one of the most active countries in geothermal development.

"We are very proud of this new project with a leading clean energy developer such as EDC. The new binary geothermal power generation using ORC technology in this project does not require additional drilling and can generate power by utilizing waste heat water from existing geothermal power plants. This brine recovery solution is highly replicable in many existing high enthalpy geothermal plants both in the Philippines and worldwide," noted Paolo Bertuzzi, CEO Turboden.

In addition, the Ministry of the Environment of Japan selected this project as one of the FY2020 "Bilateral Credit Mechanism (JCM) Funding Support Projects." In addition to contributing to CO₂ reduction in the Philippines, the project will also contribute to achieving Japan's CO₂ reduction goals.

The 29 MWe-class binary power plant is expected to reduce CO₂ emissions by approximately 72,200 tons per year (equal to the CO₂ absorption of a forest area of 4.7 times the area of the City of Manila).

Source: Turboden (https://www.turboden.com/company/media/press/press-releases/4097/turboden-supplies-an-orc-system-to-energy-development-corporations-edc-for-a-29mwe-geothermal-plant-in-philippines?utm_source=newsletter_nur&utm_medium=email&utm_campaign=03-02-2021-ID_306-LANG_GB)

