

NEWS

Homepage (<https://www.thinkgeoenergy.com/>) / Technology (<https://www.thinkgeoenergy.com/category/technology/>)

Turboden chosen to build 4 MW geothermal plant at Kirchweidach, Germany

Italian turbine supplier Turboden signs contract for the delivery of a 4 MWe binary system plant with E.ON Business Solutions and final customer FG Geothermie GmbH for the Kirchweidach geothermal power project in Bavaria, Germany.

The 4 MWe ORC turbogenerator will exploit geothermal brine from deep geothermal wells, to produce power that the German Company FG Geothermie GmbH will sell to the local grid. The saving of CO₂ emission per year is estimated in about 13.850 Ton/year.

The Kirchweidach plant confirms Turboden design and manufacturing approach to the binary plants in the region: thanks to the high permeability the deep geothermal reservoir is used to produce power with zero CO₂ emissions thanks to the full reinjection of the brine.

The low-temperature geothermal plant in Kirchweidach benefits also from the optimized process designed by Turboden: a two level ORC cycle feeding a single turbine. "As demonstrated by the Holzkirchen plant, this is not only a cost-effective and proven solution, but also a way to increase the overall isentropic efficiency of the expander. The plant is already capable to be connected to a district heating, according to the future expansion plans of the project" Joseph Bonafin –Sales & Business Development Manager Geothermal Turboden S.p.A.

The feasibility of the project was also possible thanks to the integrated leasing solution provided by E.ON Business Solutions GmbH.

"We are pleased to have found Turboden as an experienced and well established manufacturer of highly efficient power plants for the Kirchweidach project. This enables us to fully exploit the energy potential of our wells and combine green power generation with heat supply. The power plant project was realized thanks to technical, economic and legal advice from Dr. Hartwig Schröder and Dr. Thomas Reif (GGSC) and their teams. These consultants considered the feasibility, arranged the lease model with E.ON, drafted and negotiated the contracts for the power plant delivery. With their extensive geothermal experience, they are now supporting the project in the implementation phase." Mr. Wolfgang Hageleit – CEO of FG Geothermie

"Turboden geothermal fleet in Bavaria is growing. In the Region Turboden has already delivered other 5 geothermal plants. The list includes three geothermal plants built for the local utility SWM/ Stadtwerke München, for a total of 16.2 MWe, one geothermal plant for Geothermische Kraftwerksgesellschaft Traunreut GmbH of 4.1 MWe, and one geothermal plant for Geothermie Holzkirchen GmbH, of 3.4 MWe.

All these projects and the future ones in the Region are supported by a specialized local after sales team based in Turboden Munich Branch. The team can provide tailor made Long Term Sales Agreement solutions resulting in a very positive customer satisfaction rate." so Paolo Bertuzzi – Managing director & CEO Turboden S.p.A.

The start-up of Kirchweidach plant is expected by the end of 2021.

Source: Company release by email