

TURBODEN STRENGTHENS ITS LEADERSHIP IN THE BAVARIAN REGION WITH A NEW GEOTHERMAL POWER-PLANT

The Italian company signed an order with **E.ON Business Solutions** for a 4 MWe binary system in Kirchweidach, Germany for the final customer **FG Geothermie GmbH**.

Brescia, November 16th, 2020

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:

- Three geothermal plants for SWM - Stadtwerke München, for a total of 16.2 MWe
- One geothermal plant for Geothermische Kraftwerksgesellschaft Traunreut GmbH, of 4.1 MWe
- 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.” **Paolo Bertuzzi – Managing director & CEO Turboden S.p.A.**

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

Turboden S.p.A., is an Italian firm and a global leader in the design, manufacture and maintenance of Organic Rankine Cycle (ORC) systems, highly suitable for distributed generation, that generate electric and thermal power exploiting multiple sources, such as renewables (biomass, geothermal energy, solar energy), traditional fuels and waste heat from industrial processes, waste incinerators, engines or gas turbines. Today Turboden expands its solutions with gas expanders and large heat pumps to play a broader role in the decarbonisation of the District Heating sector and of some energy-intensive industrial processes.

E.ON Business Solutions GmbH is an international, privately owned energy supplier based in Essen, Germany. With a clear focus on two strong core businesses it aims to become the partner of choice for energy and customer solutions.

FG Geothermie was founded in the year 2010. The business purpose of the company is research into and acquisition of suitable locations for the construction of geothermal power plants, the construction and operation of such plants, and acquisition of such plants. The company also has the object of participation in projects in context with the extraction of renewable energies.

GGSC is a specialized law firm with an integrated business consulting practice. Since 2004 it has provided professional service for numerous geothermal energy projects thus becoming the leading German business and legal consultants for deep geothermal with multiple references in district heating and electricity production.