

## Turboden awarded a new Geothermal Power Plant in Germany for Geothermie Holzkirchen GmbH

*Turboden supplies a 3.4 MWe geothermal ORC unit in Bavaria*

Brescia, September 12<sup>th</sup> 2017 – **Turboden**, a group company of Mitsubishi Heavy Industries (MHI), leader in Organic Rankine Cycle (ORC) turbogenerators for distributed power generation employing renewable sources and waste heat, signed an order with **Geothermie Holzkirchen GmbH** for the supply of an ORC turbogenerator, that exploits geothermal brine from a deep geothermal well, for the production of electricity and heat for the district heating network.

The project company **Geothermie Holzkirchen GmbH**, is a wholly owned subsidiary of the local utility of Holzkirchen, a town located just south of Munich, in the upper Bavaria, Germany. Geothermie Holzkirchen GmbH originally planned in 2015 to realize a deep geothermal project, to feed the local grid of renewable electric energy and provide clean thermal energy for household connected to the district heating network. In 2017, the company chooses Turboden to supply the complete ORC geothermal power station (including equipment, control system of the power plant, construction at site, commissioning).

The solution proposed by Turboden allows **to maximize the Net Present Value** of the business plan with **combined heat production and electricity generation**, with **expected yearly revenues of more than 6 Million Euro**.

Turboden will employ a double pressure level process, with proprietary turbine, process and air cooled condenser. To provide a turnkey solution, a consortium will be established with the partner company Th. Arens Anlagenbau GmbH.

While pure heat geothermal energy projects are less profitable during the summer due to lack of heat demand, more electricity can be produced in a combined heat and power project in the summer and heat supply in the winter. This means an optimum economic exploitation of the available geothermal water, providing the best advantage for the citizens.

Turboden confirms its leadership in German geothermal market, after having successfully delivered four geothermal projects in the area (Sauerlach, Duernnhaar, Kirchstockach, Traunreut), in operation since 2013.

The Holzkirchen plant is currently under construction and it is planned to be in operation in the first quarter of 2019.

**Turboden**, a Mitsubishi Heavy Industries company, is an Italian company and a global leader in the design, manufacture, and maintenance of Organic Rankine Cycle (ORC) turbogenerators, which harness heat to generate electric and thermal power from renewable sources (biomass, geothermal and solar energy), traditional fuels and waste heat from industrial processes, waste incinerators, engines or gas turbines. Turboden has more than 350 plants in 38 countries and offers turbogenerators up to 20 MWe. [www.turboden.com](http://www.turboden.com)

**Geothermie Holzkirchen GmbH**, is a wholly owned subsidiary of the local utility of Holzkirchen, dedicated to the supply of renewable electricity and heat. <https://www.gw-holzkirchen.de/cms/Geothermie/Geothermie.html>