Turboden Geothermal references in Bavaria: technology, drivers and operation

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ABSTRACT

The presentation introduces the recent experience of Turboden with three 5 MW geothermal reference power plants in Bavaria, and the status of the operations.

A focus on the technology of these plants is made, particularly describing the type of thermodynamic cycle, the adopted cogenerative scheme for district heating heat decoupling, the optimization drivers.

The importance of working fluid selection for optimized efficiency considering the key components like heat exchangers and air-cooled condenser is highlighted.

Also the German frame regulation on grid requirements, island mode operation will be pointed-out with realization schemes.

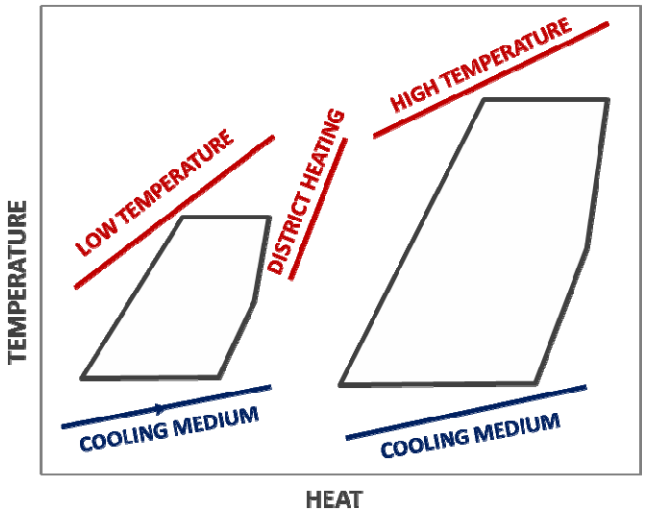

Figure 1: Schematic of Double Pressure Cycle ORC Power Plant.



Figure 2: Turboden Geothermal ORC - 5 MW CHP Power Plant, Sauerlach.