



# GMUNDEN HIGH TEMPERATURE HEAT LINK R&D

“The project in Gmunden contains several innovations which in combination are a real novelty and open a high replication potential for other installations. The implementation of ceramic high temperature gas filtration allows a highly efficient recuperation of the exergy contained in the cement gas, opening the way for cost efficient heat storage solutions.”

MARKUS HAIDER, Head of Institute for Energy Systems and Thermodynamics, TU Wien

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The main project goal is to develop, engineer and implement 10MWth heat recovery at 400°C from a cement plant. The main technological characteristics are the implementation of ceramic gas cleaning and the use of molten salt or supercritical CO<sub>2</sub> in a cement plant, the development and design of a thermal storage unit with a capacity comprised between 24 hours and 60 days and the 1,5km heat transport at temperatures between 240 and 350°C across public land to the city area.

### KEY FACTS

Duration: 09/18 – 07/21

Project volume: € 1,257,366

### MAIN GOALS

Ceramic gas filtration of cement gas

Implementation of finned tube heat recuperation with novel fluids

Cost efficient bulk thermal energy storage

High temperature heat transport over 1,5 km of public land

