

## PBL® Circulation Subs Successfully Used in Multi-Well Geothermal Project for Innargi in Aarhus, Denmark



### Challenge

The Innargi geothermal project in Aarhus, Denmark, began drilling in 2024 to establish the EU's largest geothermal district heating system. The project involves seven sub-plants, with the first expected to deliver heat by 2025. Once completed, the system will provide 20% of Aarhus' district heating needs, significantly contributing to the city's goal of CO<sub>2</sub> neutrality by 2030. The project aims to reduce annual CO<sub>2</sub> emissions by up to 165,000 tonnes

### Solution

For this vital geothermal project, the DSI team recommended utilizing their 8 1/4-in. PBL® Subs in the 17 1/2-in. sections of two wells. Additionally, 6 3/4-in. PBL® Subs were successfully deployed in three wells as the 8 1/2-in. sections were drilled.

### Execution

During the drilling process, after completing coring operations, the 8 1/2-in. section was drilled using the 6 3/4-in. PBL® Subs in the same bottomhole assembly (BHA).

#### The tools were activated to:

- Pump high-viscosity mud
- Facilitate circulation
- Clean the borehole
- Increase the mud weight at the depth of approximately 2460m

