



# Geothermae

# NER 300

## The project

Technology category: Geothermal energy

Location: Prelog, Medjmurje, Croatia

Max. NER 300 funding: EUR 14.7 million

Final investment decision: March 2015

Entry into operation: December 2017

## State of advancement

- Drilling works site is fully constructed and equipped
- Contract with town Prelog for heat delivery signed
- Separator unit for first phase produced and tested
- Drilling of 2 wells completed, 3<sup>rd</sup> well ongoing

## Outlook for coming year

- Drilling of wells 3-5 completed
- Obtaining exploitation concession & building permit
- First phase of power plant constructed
- Start of operational testing period

## Outlook for coming 5 years

Delivery of the full capacity of the power plant

## Project sponsor

AAT Geothermae d.o.o. za proizvodnju energije

## Project website

<https://aatg.energy/>

## Project summary

The innovative advanced geothermal power plant is driven by the full energy content of the geothermal brine, consisting of heat of thermal water used in an Organic Rankine Cycle turbine (geothermal electricity output min. 3.1 MWe) and the energy of aquifer gasses such as methane dissolved in the same water in a closed loop process (gross energy output of 18.6 MWe).

The CO<sub>2</sub> from aquifer gas combustion is being kept in the internal system, cleaned and injected into the same geothermal aquifer, contributing to stability, sustainability and enhanced productivity of the geothermal brine. This makes the technology nearly 100 % emission-free. The project is a blueprint for more sustainable, green and higher efficiency exploitation of the geothermal resource, opening up replication opportunities for many potential new geothermal sites where aquifer gases are present all over Europe and worldwide.

The project will provide cheap and clean locally sourced energy, contribute to economic growth and quality of life in Croatia and beyond. It is an innovative first-of-a-kind combination of existing technologies providing green and sustainable base-load energy production with high efficiency, reducing need for energy imports.

The technology is produced and developed in Europe and the intellectual property is owned by European firms.

[setis.ec.europa.eu/ner300](https://setis.ec.europa.eu/ner300)