

## CIGLENA GEOTHERMAL POWER PLANT

### LOCATION

Velika Ciglena

### PHASE

preliminary, main and  
detailed design

### USE

production; geothermal  
power plant

### SIZE

17 MW

### AUTHOR

Maja Vukušić

### CHIEF DESIGNER

Anđelko Mikulandrić

### CLIENT

Geoen d.o.o.

### year

2018

Velika Ciglena 17,5 MW geothermal powerplant is the first Organic Rankine Cycle geothermal powerplant in Croatia and the biggest such in Europe. It has been constructed near Bjelovar in the open country surrounded by corn fields. The plant is fueled by steam and 170°C hot water in order to produce electrical power and supply it to the grid. A mining plant with a borehole consisting of production and injection wells and pipelines is also a part of the geothermal power plant. The complexity of managing geothermal fluids, which is the essence of this complex project, is mirrored in an intricate, harmonic composition of mechanical elements, thus becoming the basis for the industrial design aesthetic.

