

Geology

Underground natural gas storage Zakovo/Senovo

Project type
Feasibility study

Location
Senovo, Slovenia

Year(s)
2008

Services
Detailed geological field survey
surface mapping,
aerofotogeological analysis,
geological survey of bores,
survey of drilling and geological
survey of core drilling,
preparing a program of field and
laboratory investigations
survey of field research and
sampling,
geological and geomechanical
classification of rock
determination of rock behavior,
feasibility study.

Investor
Termoelektrarna (thermal power
station) Brestanica d.o.o.



The project of high-pressure warehouse of natural gas (Lined Rock Cavern) in Senovo foresaw the construction of one or more underground caverns below Graz hill, located N of Senovo in the area of the mine in closure Senovo. Area under construction is made of Triassic dolomites and limestones, which are in the south limited by Oligocene sediments (including coal horizons).

Elea iC was contracted in May 2008 to conduct a feasibility study on underground gas storage Zakovo / Senovo. The project foresaw two switchings, Block A, which included the implementation of additional field surveys, detailed geological and geotechnical study and analysis of geotechnical risks, Block B, which included a schematic plan including results to be determined in part A.

To this end, a detailed geological survey was done with the surface terrain inventory, structural and fotogeological analysis, construction and geological description of the drilling and the construction and geological survey of two bore holes (80 m and 210 m) with associated field and laboratory research. On the basis of the results a geological model of the area was made, geomechanical properties of rock have been determined and geotechnical risk studies carried out.