GRETA (near-surface Geothermal REsources in the Territory of the Alpine space)





The European challenge:

The Alpine region must tackle rising energy consumption and, accordingly, CO2 emissions reduction, related mostly to heating needs (mainly from residential and tourism sectors). **The potential of renewable energy sources** to handle this energy requirement has been discussed in some recent studies. However, the opportunity to utilize Near-Surface Geothermal Energy (NSGE) has not yet been properly highlighted. Moreover, differences in country-specific regulations and practices currently impede a successful increase of use of this technology.

The Project

The project GRETA (Near-surface Geothermal Resources in the Territory of the Alpine Space) has started, aiming at improving energy efficiency and sustainable production of renewable geothermal energy in the Alpine region.

GRETA is built on three specific objectives:

- ✓ Increase the knowledge of the spatial distribution of Near-Surface Geothermal Energy (NSGE) potential in the Alpine region.
- Exchange knowledge and best practices for the utilization of NSGE on a transnational basis.
- ✓ Develop a knowledge base for the inclusion of NSGE in planning tools.

These objectives will be accomplished by creating geothermal potential maps which act as a decision support tool for the integration of NSGE into policy instruments, e.g. energy plans and strategies, and can be used for the spatial planning of geothermal installations by public and private stakeholders.

In addition, guidelines will be developed to encourage the harmonization of regulations, authorization procedures and operational criteria for NSGE utilization in the Alpine region. Strategies for the inclusion of NSGE in policy instruments will also be formulated, thus contributing to a growth of NSGE utilization.

The territory of the project:



Financial support:

GRETA is co-financed by the European Regional Development Fund through the Interreg Alpine Space programme. The Amount of co-financing is 2.308.232,91€.

Politecnico di Torino - DIATI is partner of the GRETA project and leader of WP4 - Assessment and mapping of Near Surface Geothermal Energy (NSGE) potential with a total contribution of 297.646,85€. The coordinator for DIATI is **Prof. Rajandrea SETHI**.

Project period: 16/12/2015-15/12/2018

