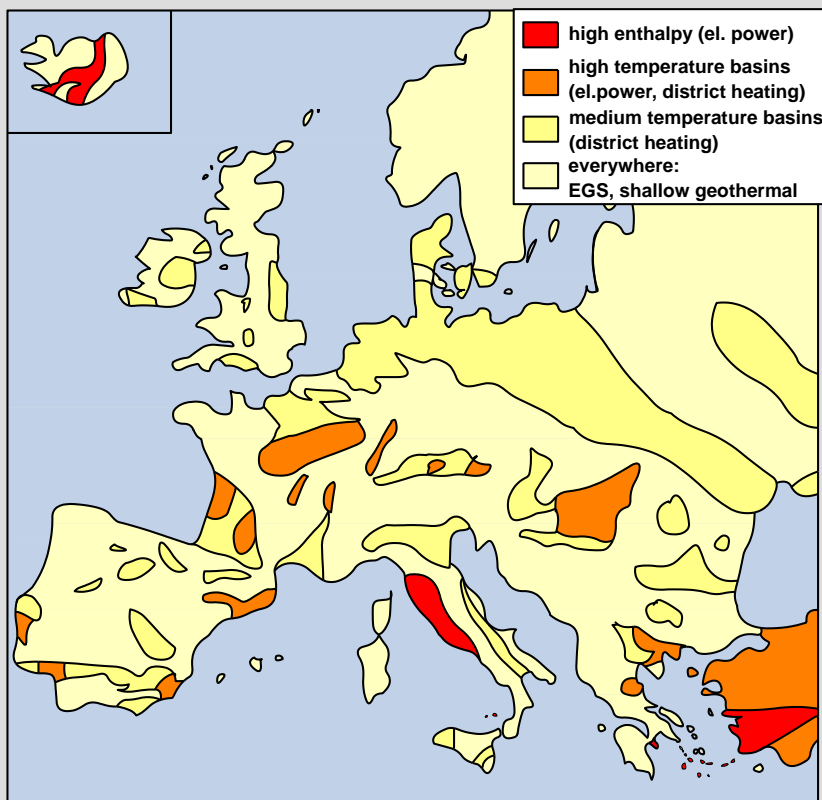


**Geothermal Energy exists
throughout all of Europe !**



**EGEC represents the
European geothermal
energy industry:**

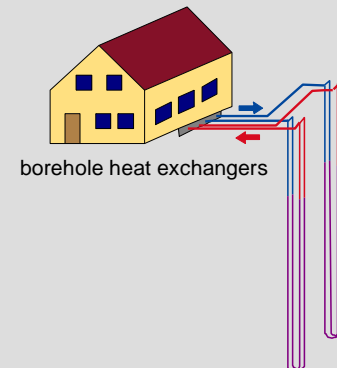
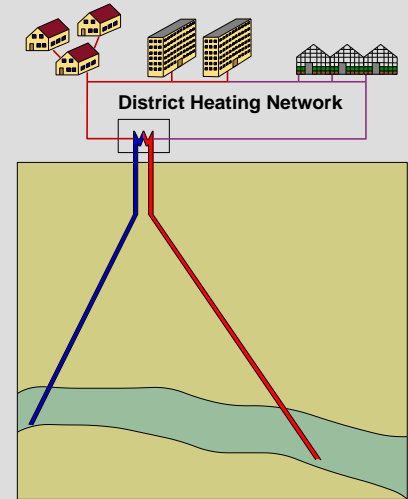
- national associations
- companies
- research institutions

**EGEC is located in the
Renewable Energy
House in Brussels**

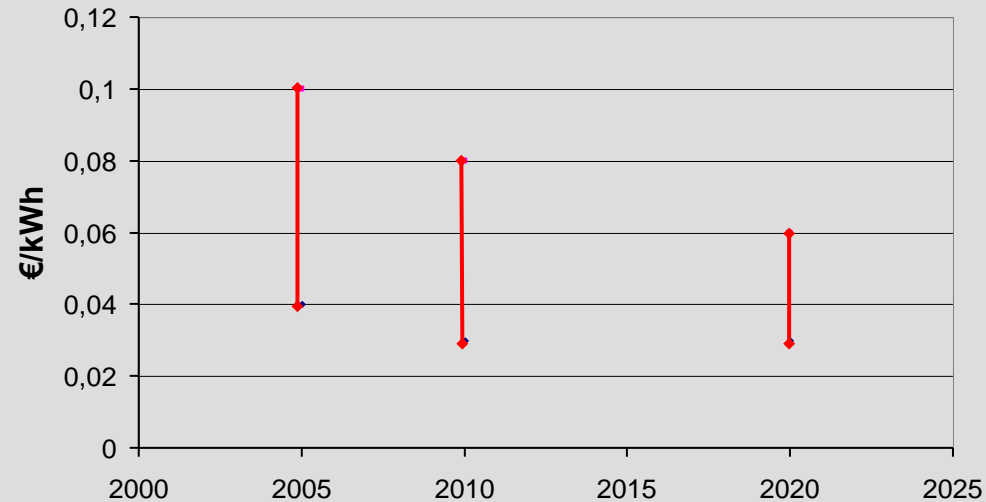
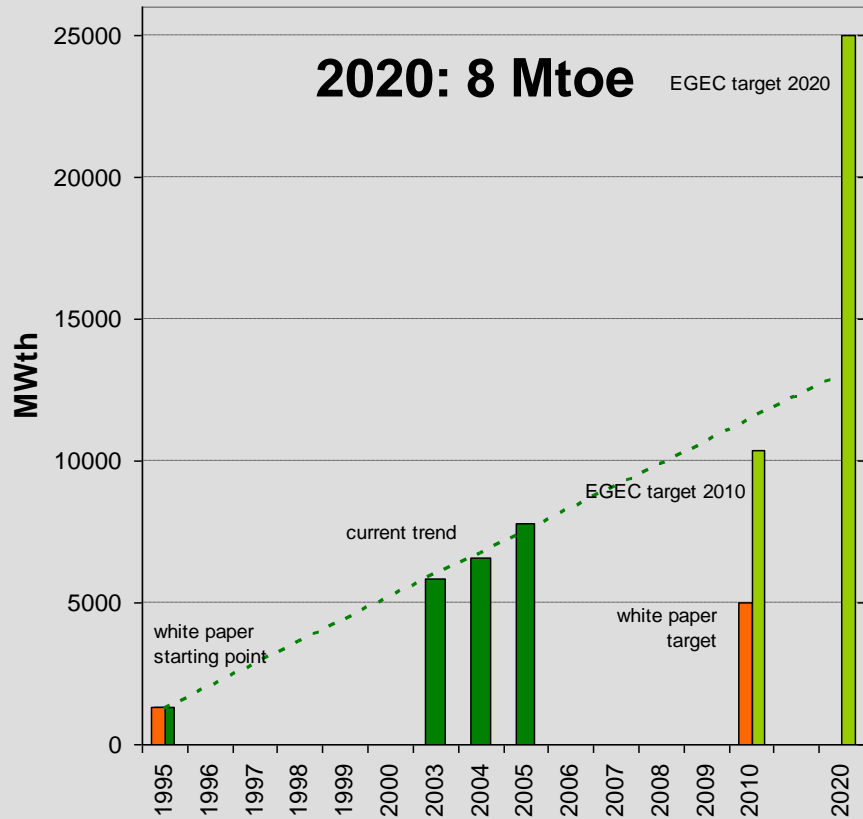
European Geothermal Energy Council

Geothermal Heating and Cooling in Europe

- **Direct Use:**
Heat is produced at sufficiently high temperature levels (above ca. 25 °C), suitable for direct heating
- **Indirect use via geothermal Heat Pumps (Ground Source Heat Pumps, GSHP):**
Heat from the underground is used at low temperature, so a heat pump is required to increase the temperature to useful levels.
- **Geothermal energy provides about 10 GW_{th} of heating and cooling in Europe**
- **Geothermal energy produces about 120 PJ per year**
- **direct and indirect uses are comparable in size.**



Geothermal Heating and Cooling in Europe



Costs and forecasts – H & C

Geothermal installed capacity – H & C

European Geothermal Energy Council



Geothermal Electricity in Europe

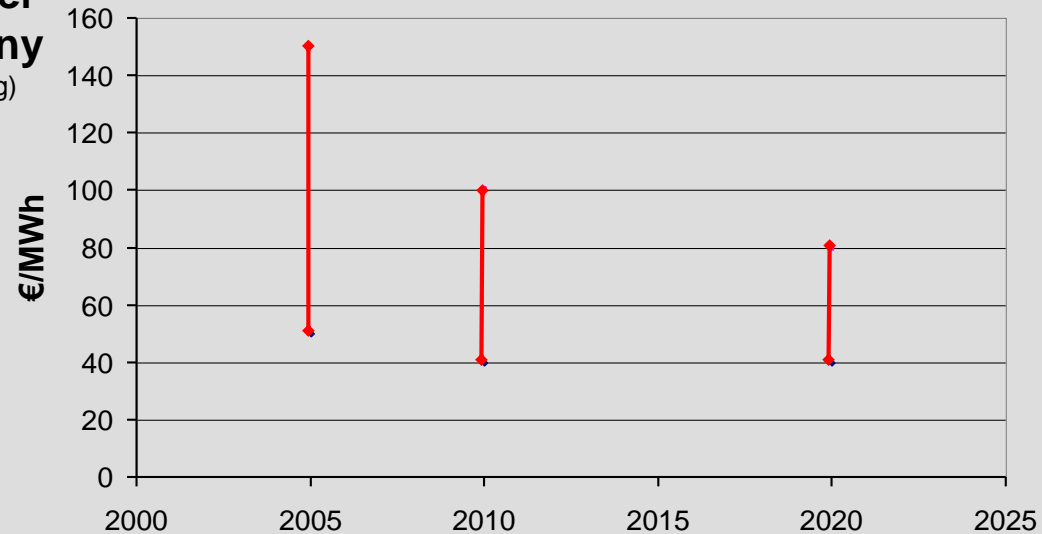
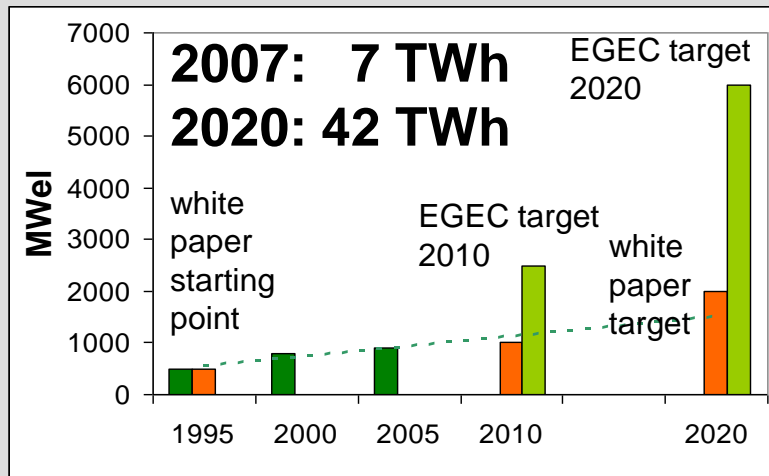


Power plant Unterhaching, Germany

(Photos: Gem. Unterhaching)



Power plant in Travale-Radicondoli, Italy



Costs and forecasts – E

Geothermal installed capacity – E

European Geothermal Energy Council



RES Directive response

- A EU-wide definition of geothermal energy is necessary:
Geothermal Energy is the energy in form of heat beneath the surface of the solid earth.

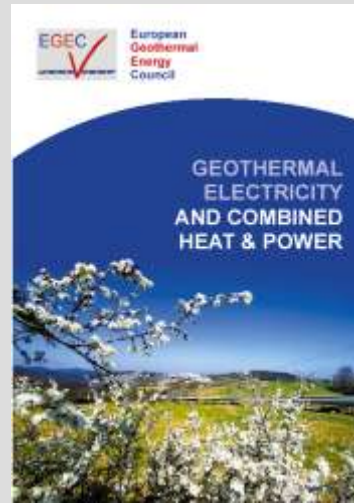
This definition is endorsed by national geothermal associations and by the European Regional Branch of IGA

- Geothermal Energy must be recognised and supported in all its forms, from small heating (GSHP) to large electric power (EGS)
- Transparent, simple and effective legal regulations are required
- For GSHP, the installers of the ground system (shallow geothermal) must be distinguished from the heat pump installers, and trained and certified separately

European Geothermal Energy Council



***Thank you
for your
attention!***



**For more information:
www.egec.org**

European Geothermal Energy Council

