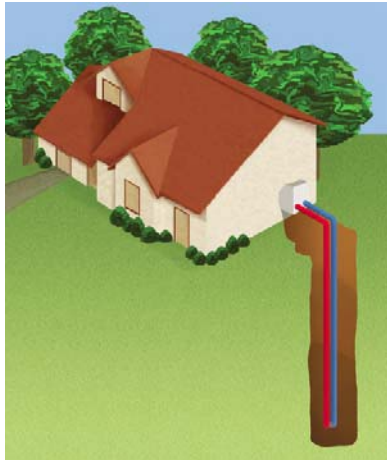


Ground-Reach project: 2nd Press Release

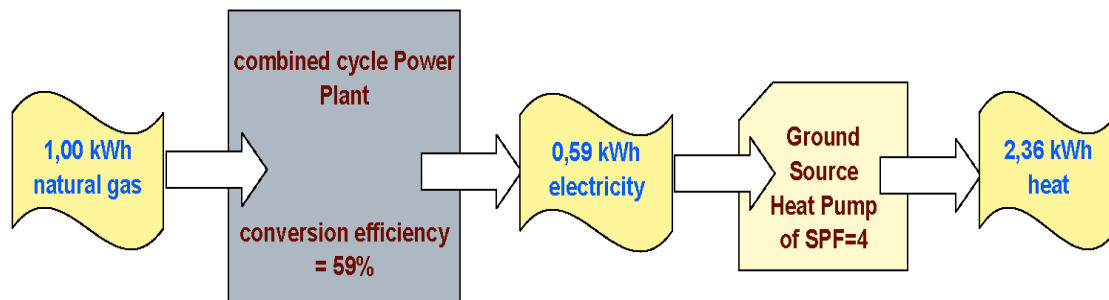
GROUND-SOURCE HEAT PUMPS



Ground Source Heat Pumps (GSHP), a standard and reliable technology to provide heating, cooling and domestic hot water, utilise the available anywhere soil energy, by coupling a heat pump to a ground heat exchanger. The ground heat exchanger includes pipes placed in trenches within the ground, or within boreholes, where water is circulated in closed loop. During winter GSHP remove heat from the ground and add it to the building heating system. This process is inverted during summer in order to provide air-conditioning (cooling). Preferred indoor heating-cooling systems are floor heating, fan coils and air supply through air ducts.

As ground temperature at few meters depth remains almost stable throughout the year, no matter what the external weather conditions are, GSHP provide efficient heating, cooling and domestic hot water, saving energy and reducing greenhouse gas emissions, effectively contributing to the efforts against climate change. Other benefits of GSHP are clean local environment, added value to the building due to low operational costs, and high quality indoor comfort.

The scheme below illustrates how 1 unit of fuel energy is transformed to 2,36 units of useful heat by ground source heat pumps, indicating that GSHP can play a major role to rational use of energy and fighting climate change. This is being recognised more and more by European citizens, who adopt the technology in increasing numbers.



The European project Ground-Reach, co-financed by the Intelligent Energy for Europe programme, supports GSHPs by estimating their potential contribution to the Kyoto targets for EU in terms of CO₂ emissions reduction and by providing a lot of information on the technology presented during the 20 project workshops, also available at the project web site <http://www.groundreach.eu/>. This information includes among others, prevailing legislation, technological details, market data, latest news, as well as a well documented database of best practice case studies.