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PRESS RELEASE

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Our associations, representing the European geothermal industry, the European Geological Surveys and the European geologists welcome the proposal tabled on 23/01/08 by the European Commission for a Directive on the promotion of the use of renewable energy sources.

This proposal sets the framework to achieve the target of a 20% share of renewable energy sources in the final energy consumption by 2020. The attainment of this target will require the use of the diverse renewable non-fossil energy, sources, among which geothermal energy.

We welcome particularly the **proposal's** distinction of heat pumps using shallow geothermal energy (ground and groundwater) from those using ambient heat, two distinct renewable energy sources.

Geothermal energy is the heat beneath the surface of the Earth. It is a sustainable, renewable, nearly infinite energy source, delivering heat and power 24 hours a day throughout the year and available all over Europe. It is environmentally friendly and contributes to reduce CO₂ emissions. It uses very little land, has almost no visual impact and reduces Europe's vulnerability to energy imports. It has considerable economic potential, can foster significant development of enterprises and related job creation.

Geothermal energy represents an important resource for the renewable primary energy production.

The areas of application of geothermal energy are :

- **Geothermal Electricity generation:** Heat from the underground is converted into electricity. The relevant resources are far from being fully developed in Europe. The concept of Enhanced Geothermal Systems (including the classical Hot-Dry-Rock-idea) is going to add a tremendous increase to the potential. Installed capacity is almost 10 GW_e of electric power worldwide (about 1 GW_e of that in Europe, with ca. 7000 GWh electricity production per year);



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- **Geothermal heating and cooling:**

- Direct Use: Heat is produced at sufficiently high temperature levels (above ca. 25 °C), suitable for direct heating or cooling;
- Indirect use via geothermal Heat Pumps (Ground Source Heat Pumps, GSHP): Low temperature heat from the underground is used, so a heat pump is required to increase the temperature to useful levels.

Geothermal energy provides about 10 GW_{th} for heating and cooling in Europe alone, producing about 120 PJ per year, whereby direct and indirect uses are comparable in size.

The Directive recognizes the requirement for renewable energy regulations. Therefore European regulations should be established without delay to standardise and promote procedures for geothermal energy development.

Our associations jointly call for some improvements of the Directive proposal:

- 1) Some definitions must be clarified, in order to facilitate the implementation of the Directive. The **definition of geothermal energy** is so far lacking in the *acquis communautaire*, with heterogeneous national definitions and practices. This leads to confusion, hindering the development of most up-to-date geothermal technologies. The Directive is a unique occasion to provide a definition of geothermal energy.
- 2) The Annex IV to the Directive, providing for the accreditation of installers **must include specific criteria for the certification of shallow geothermal installers**. This must cover the different categories of professionals intervening in the design and installation of geothermal heating/ cooling systems, to ensure that they have the necessary knowledge to provide for the optimal use of this renewable energy source. Guidance for professionals foreseen in the Directive proposal should include the development of on-line information services on the local geothermal potential.

A Manifesto will develop proposals on these issues and will present the actions needed to foster the contribution of Geothermal Energy to the targets set in the directive proposal..