

**Promotion of Heating and Cooling from Renewable Energies**

**Public consultation exercise, [9 August to 6 October 2006]**

**Energy and Transport Directorate-General, European Commission**

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*This document commits only the Commission services involved in its preparation. The text has been prepared as a basis for comment and does not prejudge the final form of any decision to be taken by the Commission.*

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## **Introduction**

The European Community aims to promote renewable energies. This supports broader Community objectives in the areas of improving the security of energy supply, improving competitiveness and promoting research and industrial development in Europe (Lisbon Agenda) as well as improving our environment.

As referred to in the recent “Green Paper: A European Strategy for Sustainable, Competitive and Secure Energy”, the international energy situation and Europe’s dependence on imported energy remind us of the urgency to increase the production and use of alternative energies, including renewables. Since 1997, the Commission is working towards the objective of 12% of renewable energies in the EU energy balance by 2010.

While the EU has set legislation on the promotion of electricity generation from renewable energy sources (with an objective of the share of electricity produced by renewable energy of 21% by 2010) and for the promotion of biofuels (with an objective of 5,75% by 2010), the production of heating and cooling from renewable energy has so far not been the subject of specific EU legislation.

On 14 February 2006, the EU Parliament adopted a report by Mrs Rothe (MEP) with recommendations for the Commission to work on heating and cooling from renewable sources of energy (<http://www.europarl.europa.eu/activities/expert/reports/search/go.do>).

The Commission is presently working on a possible initiative to promote Heating and Cooling from renewable energy sources. An Impact Assessment study is currently underway.

## **Purpose of the public consultation**

The purpose of this public consultation is to contribute to the Commission’s Impact Assessment by providing a range of opinions and new and innovative ideas regarding the implementation and the impacts of different types of policies and measures that could be considered to promote heating and cooling from renewable energy sources.

This information will be taken into account in the further preparatory work on this dossier.

This public consultation addresses all renewable energies used to produce heating and cooling: solar thermal, geothermal and heat pumps, and biomass; as well as all types of measures/policies in order to evaluate their potential. Furthermore, all sectors of activity (the public sector, industry, energy services and district heating, tertiary and domestic) are addressed.

The following set of questions seeks to further analyse the obstacles and opportunities in terms of the feasibility and effectiveness of various instrument that could be applied with a view to promoting a larger uptake of renewable energy for heating and cooling purposes. The results will be crossed with the outcomes of an Impact Assessment study currently underway.

In replying to these questions, the Commission services would be grateful if references are provided on these specific issues, as well as if background or substance be given to support the answers. The mentioning of existing practices would be very beneficial.

Suggestions and examples, giving as many details as possible regarding the cost of implementation, benefits, ease of implementation and possible obstacles would be most welcome. The level where actions should be undertaken (regional, local, Member State, EU) would also be valuable information to better draw the approach to take.

Please your answer must be short and to the point. You will not be allowed by the electronic application to provide extensive answers. All the answers must be provided through the IPM application.

This consultation is subject to Personal Data Protection rules. The European Union is committed to user privacy. The policy on "protection of individuals with regard to the processing of personal data by the Community institutions" is based on Regulation (EC) N° 45/2001 of the European Parliament and of the Council of 18 December 2000. A specific "Privacy Statement" in the IPM platform will contain all the information about the use of your data.

## **Questions for debate**

**Question 1** – Considering that a number of technologies are available to promote Heating and Cooling from renewable energies (RES), what are the main obstacles (economic, technological, social, organizational, etc) to their more widespread use? Why are other energy sources more successful in Heating and Cooling than RES?

**Question 2** – In the light of the subsidiarity principle, do you agree that an EU initiative regarding the promotion of Heating and Cooling from RES can be justified? If so, what type of effective measures should be taken by the EU?

**Question 3** – There is a need to identify possible ways to overcome the reasons why this type of energy is not more widely spread. A major role in this is the attitude of end-users, and the potential cost disadvantage, including transaction costs or lack of convenience of some energy sources. Considering all these factors, do you believe that there is a case for a local market for Heating and Cooling from RES strong enough to justify action at EU level?

**Question 4** – Taking into account the different conditions in Member States and regions, according to you, what are the current successful policies/measures on promoting Heating and Cooling from RES? At what level are these actions taken and who is responsible for their implementation? Are they cost effective? What are the success factors (tax incentives, financing schemes, social acceptance, others)? Are they transposable to another level? How?

**Question 5** – There is a need to identify the best strategy to tackle this issue and how actions could deliver bigger benefits. Due account has to be taken to the potential effects on the use of energy sources (considering also their origin – domestic resources or imports). What would be the environmental, economic and social (employment) effects (positive and negative) of an initiative to promote Heating and Cooling from RES, specifically on the substitution of conventional energy sources? Please refer to examples and the appropriate level for action.

**Question 6** – One of the main issues is the low availability and weak quality of statistical data. What measures could be taken to address this situation and should the EU be involved in this process? Do you have knowledge of any reliable and consistent data on this sector?

**Question 7** – Taking into account the quality and availability of EU 25 existing data (which is in many cases rather poor), what is the feasibility of using targets to the promotion of Heating and Cooling from RES? What type of targets should/could be used (on energy produced, on sales of equipment, on the number of installations, on the replacement rate of conventional fuels, etc)?

**Question 8** – Should harmonised indicators be developed at EU level to measure the potential and the development of Heating and Cooling from renewable energies? If so, what type of indicators and how could they be used to do this monitoring? How could these indicators be developed in a way that a level playing field could be raised at EU level?

**Question 9** – Developing standards could be one option to facilitate the implementation of energy efficient equipment and Heating and Cooling from RES. Standards would have also to take into account cultural or geographical characteristics (like architecture). This would imply a legal framework which provides for the political goals, while leaving the details to be defined by the European Standardisation bodies (CEN/CENELEC) and the stakeholders (industry) on how to achieve them.

Should the EU promote the development of standards for RES in Heating and Cooling in order to raise a market for specific equipment? What type of standards could be used? Do you consider that fuel standards (for example) will improve the opening of the market? Would it be feasible to use standards that are currently used in other sectors? Please give evidence.

**Question 10** – In order to facilitate the development of a policy action to promote Heating and Cooling from RES, specific actions towards citizens should be considered as they are often the final decision makers. Would it be useful to facilitate training on the specific technology so that professionals are able to better promote it and install it? Who should facilitate that training? What measures could be taken to raise public awareness in order to promote/market this type of equipment/solution?

**Question 11** – Who could be the main drivers to facilitate the dissemination of Heating and Cooling from RES? Should Local and Regional Energy Agencies be involved on articulating ESCOs, SMEs and Local authorities, providing them with instruments or creating platforms to pursue Heating and Cooling from RES? Is there a role for the Commission? How could this be done? Should local heat planning be pursued in order to take full advantage of the existing potential in a certain area?

**Question 12** – Would financing instruments be significant in promoting Heating and Cooling from RES? If so, what form could these take and what would be the source of the financing? What other forms of support could be envisaged?

**Question 13** – Considering the current uses of renewable energy sources, how could a new initiative on Heating and Cooling from renewable energy sources be better raised in coordination with the existing policies regarding biofuels or electricity generation from renewable energy sources? Would Heating and Cooling from renewable energy sources

distort the market and/or jeopardize the targets for these other policies? Would it affect non-energy use market for biomass? If so, how? How to overcome that possible difficulty?

**Question 14** – Taking into consideration that a large number of industries and incineration plants produce heat as a sub product, how could Heating and Cooling policies be linked with the recovering of this “residual heat”? What synergies could be exploited in promoting Heating and Cooling from renewable energies with a more efficient use of residual heat? Should incentives be developed, a market raised for heat exchanges or another policy be adopted? Who would be the coordinator of these heat exchanges? Should we link this initiative with district heating development?

**Question 15** – Do you have any other considerations on the development of Heating and Cooling from renewable energies?