



European Commission

Heating and cooling
From renewable energies

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Dr. Sam Furfari
DG energy and transport
European Commission





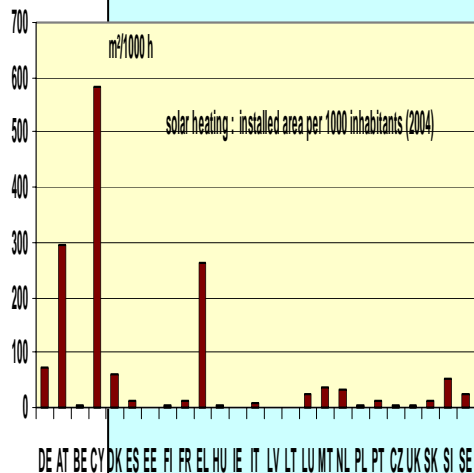
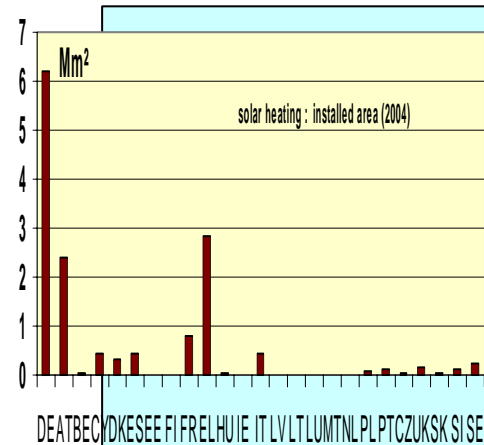
The sleeping giant among renewable energies

- More renewable energies and biomass in EU (EU Council of 24/25 March 2006)
- The Commission adopted a Biomass Action Plan (Dec 2006).
- On 14 February 2006 the EU Parliament adopted the own initiative report of Mrs Rothe with recommendations to the Commission on H&C from renewable sources of energy. This report was adopted by a vast majority, underlining the political back-up for this type of promotion of renewable energies.
- '*H&C from renewable energies*' means all kinds of energy use from renewable energies that are not aimed at the production of electricity or for the use in the transport sector (therefore also hot water production is part of this initiative)
 - solar thermal, geothermal, heat pumps, different forms of biomass
 - in all final use except electricity generation and fuel for transport





Member State actions ?



Source : <http://www.estif.org>

- Without a vigorous development of these energies in the sector of heating and cooling, the overall objective for renewable energies will not be reached.
- Till now Members States have not demonstrated their ability to implement such a policy.
- Why in France a country where there is much more sun shining than in Austria installed capacity per inhabitant of solar thermal is only 4% of that of Austria?
- Is it only because Italy is tall country that the installed capacity per inhabitant is 3% of that in the nearby Greece?
- Why heat pumps are becoming popular in Sweden and still rare in the others Members States?
- Why there is an active market for wood pellets in Austria and not in others Members States?
- Will the development of this market be more rapid and harmonised by an EU action?
- The reasons need to be analysed.





An Impact Assessment is now starting

- IA to provide analysis regarding the impacts of different types of policies and measures and from this information to formulate concrete recommendations to underpin the drafting of measures to promote the development and to improve the competitiveness of H&C from renewable energies.
- The debate in the EU Parliament clearly demonstrated that setting quantitative target for this sector is probably not appropriate.
- Therefore, evaluate way and means to improve the competitiveness and to promote H&C from renewable energies including in the absence of targets.





Objectives and tasks of the IA

- Analysing the issue
- what causes it?
- who it affects?
- Is the EU level the appropriate level to deal with it? (in line with the principle of subsidiarity)
- Propose
 - key objectives to tackle the problem
 - while ensuring that these are consistent with other EU policies and strategies (such as the Sustainable Development and Lisbon strategies)
 - Looking at possible policy options to meet the objectives and examining alternative approaches to regulatory actions
- All possible measures will be considered, regulatory and non regulatory, financial and non financial and – if appropriate – their combination.
- A differentiation between heating end uses (industrial applications, district and residential heating applications, agricultural application...) should also be made.
- Must identify policy options and most appropriate delivery mechanisms, measuring against criteria of effectiveness, cost-efficiency and consistency.





What type of actions we need to implement the objective? (1)

1. New legislation

This will take anyway a different approach from earlier legislation because the key problems lie in lack of market confidence and attitudes as well as in high costs, underperformance as regards convenience and energy content (density of the energy of the fuel, space occupation in houses, etc). This new legislation contents will depend on a critical review of the potential contribution of:

- **possible quantitative targets : pro and cons of specifics targets as they needs to be implemented at Member State level**
- **definition of possible efficiency ratings (e.g. boilers, moisture and ash content of fuels);**
- **measures to ensure that fuel suppliers make biomass fuels available;**
- **equipment labelling to enable people to buy clean and efficient devices;**
- **amending existing legislation;**
- **other technical measures.**





What type of actions we need to implement the objective? (2)

2. Develop standards in order to create a wider market for existing or new equipments.

- **Technology is available (even if there is room for improvement) .**
- **But we need to understand why market is not taking them (including cost drawback) and accordingly foresee possible means to overcome that if appropriate**
- **If H&C from renewable energies is not more widespread, it is the role of policy makers to facilitate this development and developing standards could be an easy way to implement if their setting was identified as possible help to market penetration, avoiding new legislation.**
- **Standards have also to take into account cultural or geographical characteristics (like architecture). This is setting a legal framework which provides for the political goals and leaves to the European Standardisation bodies (CEN/CENELEC) the details to be defined by the stakeholders (industry) on how to achieve the goals set. The standard they develop, if endorsed by the Commission, becomes a harmonized standard.**





What type of actions we need to implement the objective? (3)

3. Raise awareness and help on training of installers

An other possible way to proceed is the develop an EU initiative to facilitate the spreading of the existing equipment, helping the industry to convince the customers to install this type of equipment but also helping the installers to get acquainted with theses technologies (facilitate training) ; actions towards citizen might be considered as often they can decide to install solar panel, heat pumps or wood boilers.

4. Combination of the above

5. Do nothing





Quantifications of the measures analysed

- **As it is a very diffused used of energy, to date Commission do not have a consistent and detailed database on these data. We need to gather figures on capacity installed, potential, costs of the various options (geothermal, solar thermal, heat pumps, ...) and energy used (wood stoves is an example, solar panel to produce hot water is an other).**
- **Analyse the likely contribution toward the global objective of 12% with all the associated impacts and their effects. Particularly,**
 - **impact on the creation of a new market for H&C equipments,**
 - **impact on local environment (elimination of forest residues, lower use of fossil fuels resulting in better air quality, forest fire risk particularly in the Mediterranean region) ;**
 - **impact on progress toward the Kyoto objective**
 - **Impact on growth**
 - **impact on net /replacement employment, including local employment, skilled and unskilled workers (installer of equipment by plumbers).**
 - **impact on economical development in local industry (particularly SME), agriculture and forest industry.**
 - **impact on the overall bill for final users (industries, SME and citizens).**
 - **Community added value (above all principles of proportionality, impacts on other policies)**
- **Comparison of the options: weigh-up of positive and negative impacts of each identified option in terms of effectiveness, efficiency and consistency.**

