

**Position on the upcoming EuP implementation  
measures on boilers and water heaters (lot 1 and 2)**

February 4<sup>th</sup>, 2008

EHPA would like to stress the willingness and ability of its members to contribute to increase the energy-efficiency of their products, namely heat pumps. EHPA thus welcomes the current debate on the Energy using Products Directive and would like to emphasize the contribution potential of heat pumps as part of this directive (Lot 1 and 2) towards the EU’s energy savings and climate goals. The association supports the approach as presented by VHK in the ecoboiler study.

**Heat pumps are an existing technology that can contribute to the EU’s energy savings and climate goals**

- Heat pump technology is mature, reliable and cost efficient.
- Heat pumps can produce heating, cooling and hot water using ambient heat as a renewable energy source.
- Heat pumps are an available technology with wide distribution in the market place. In Sweden and Switzerland more than 75% of all new one/two family houses are equipped with heat pumps. In Austria, Finland, France, Germany and Norway this applies to more than 20% of this segment. Developing markets can be seen in most other EU countries – however market share is limited. In Sweden and Switzerland heat pumps have already reached a considerable share of the renovation market. The total number of heat pumps sold for heating purposes only exceeded 350.000 units in 2006 in the EU.

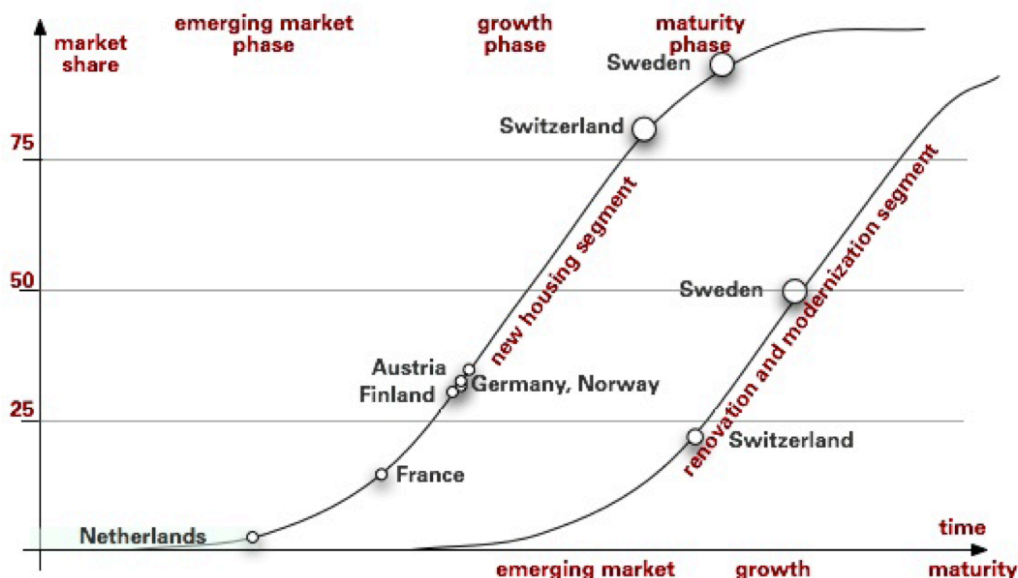
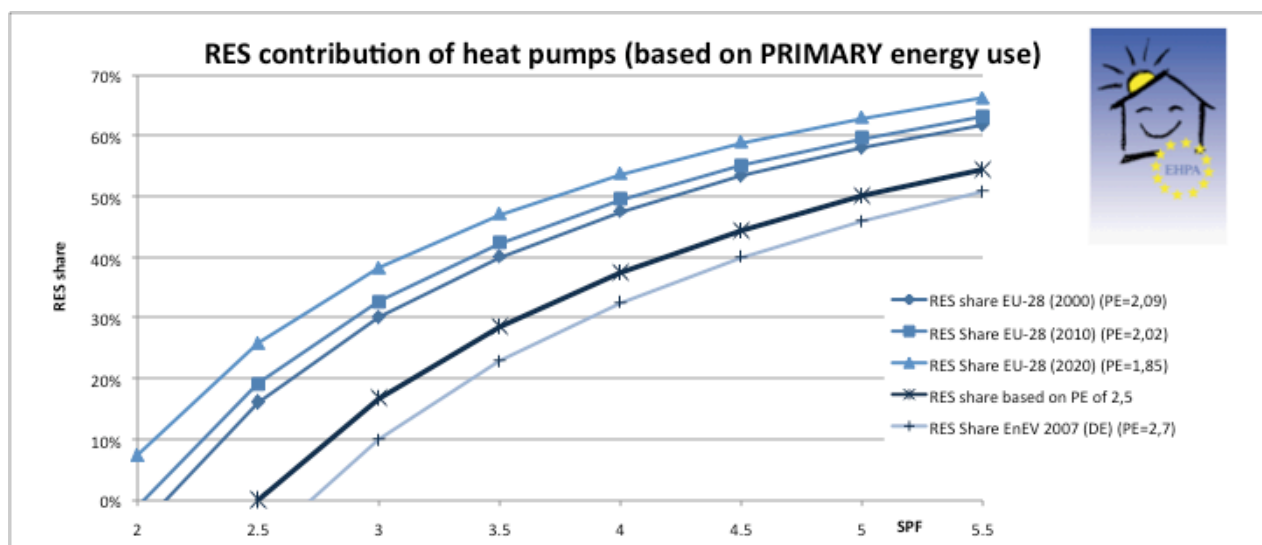


Figure 1: Market share of heat pumps in the residential market (2006).

- Heat pumps are the only mass-market product that can provide 100% of the energy demand for heating, cooling and hot water from renewable energy sources.
- When compared with regard to primary energy efficiency, heat pumps are considered the best available technology (see Figure 2). Based on a primary energy factor of 2,5 kWh primary energy per kWh of electricity, all heat pumps with a minimum SPF of 2,5 save primary energy. New heat pumps installed by certified installers and even most existing systems achieve and exceed this requirement. It should additionally be noted that all heat pumps installed will benefit from future improvements in the electricity mix. Figure 2 shows that with year 2000 electricity mix (primary energy factor of 2,09) a heat pump with an SPF of only 3 provides a share of 30% of total energy output from RES. This share will increase – simply from improvements in the electricity mix – to nearly 40% in 2020. State of the art performance figures are shown in Table 1.



**Figure 2: RES contribution of heat pumps based on different primary energy factors (PE) and seasonal performance factors. Data source: IEA and Primes Modell.**

	new	renovation
Air-to water HPs	3,5	3
Brine-to-water HPs	4,0	3,5
Water-to-water HPs	4,5	4
Direct expansion	4,2	3,7

**Table 1: State-of-the art performance figures for heat pumps.**

Based on the above data heat pumps are a relevant product, with regard to market share, their use of renewables, and their electricity consumption.

EHPA thus welcomes their inclusion in the Energy using Products Directive on lots 1 and 2.

## **EHPA position on labelling**

EHPA welcomes the Commission's efforts to support the development and implementation of energy efficient devices for heating, cooling and hot water.

Such products should be labelled accordingly to guide consumers buying decisions towards the most energy efficient products. An efficiency-based label will enable decision makers at national and regional levels to set up support schemes to further increase the market penetration of these products.

Consequently EHPA calls for the Commission to create an energy source independent, transparent labelling scheme, which will allow comparison of systems with similar functionality. The label should be suitable to accommodate for combi-systems.

In order to provide greater flexibility, heating and hot water using devices should be covered by separate efficiency indicators.

While this is not part of the current lot 1, EHPA calls for the Commission to foresee a future extension of the final labelling scheme including the cooling function.

Only a label comparing appliances with similar function will create the necessary transparency for the consumer and increase market penetration of energy efficient devices. Such a label should also be designed in a way that allows for the accommodation of future efficiency improvements. A mono-energetic label – as proposed by other stakeholders – would lead to confusion for consumers and other decision makers as

- it changes the approach of the existing labelling schemes where units with similar function (i.e. lamps, fridges) are compared and this is well understood by the consumer.
- it requires additional explanation to make clear, that an A-labelled device in the gas-category is not comparable to an A-device in the heat pump category

EHPA particularly values the work presented in the study by **VHK-study** as it is seen as comprehensive study on the products that provide heating and hot water to the end consumers. **EHPA would therefore like to stress its support to the presented approach to use a systems perspective for assessing and labelling these products.**

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