Swift policy action needed to fuel energy transition in heating sector

by Thomas Nowak, Secretary General, EHPA

Five years ago the European Parliament took a landmark decision to trigger the use of renewables in Europe. Today, this Directive on the promotion of the use of energy from renewable sources seems to have lost importance. Looking at recent data, the achievement of the RES targets for the sectors covered (transport, heating & cooling and electricity) is getting more and more unlikely. Thus it may be time to put renewables back on centerstage.

For heat pumps, the 2020 contribution target was set at 144 TWh. A forecast executed by EHPA based on current data puts a huge question mark next to this value.

Since 2005, 5.5 million heat pumps were sold in Europe. In 2012, heat pump sales in 21 countries covered by the EHPA report reached 755,043 units (~7.4%).

All heat pumps installed in 2012 have a capacity of 5.7 GW, providing approx. 9.5 TWh of heating. 6.22 TWh of renewable energy were employed to provide this service. This means an improved energy efficiency whereby 1.7 Mt of greenhouse gas emissions were saved and at the same time 4.61 TWh of primary and 8.19 TWh of final energy were saved.

The heat pump stock is expected to have grown to 14.5 million units that can provide approx. 130 TWh of renewables. Yet they are missing the target by roughly 10%.

This situation is unfortunate, taking into consideration that heat pumps tick pretty much all the boxes of the declared energy and climate targets of the European Union. They improve energy efficiency, use renewables, and reduce GHG emissions. The technology contributes to a diversification of energy sources, as well as to affordability and security of energy supply. As a side effect, properly dimensioned, heat pumps can provide load balancing to the increasingly green electricity mix. Lastly, the technology contributes to keep know-how in Europe and provides local employment.

Should a technology with such an array of benefits not deserve stronger policy support? Should it not be given priority in future scenarios?

In our opinion, the answer is a clear yes. Policy makers should take swift and immediate action to ensure a continuous and steady growth of the heat pump sector to make full use of the technology’s contribution potential.

The Renewable Heat Incentive (RHI) announced by the UK Government is an important first step. Another good example is the decision to rule out the use of oil and gas boilers in new buildings. As introduced by Denmark in 2013, ambitious requirements for the energy efficiency of new and renovated buildings as well as a reduction of subsidies for fossil fuels would be triggering measures as well.

It is high time for all Member States to address this challenge. In a first step, existing legislation like the European Directives on the Energy Performance of Buildings and on Energy Efficiency should be quickly implemented. In addition, a focus on heating (and cooling) should be given in all planned activities. Action should be made measurable by improving the availability of statistical data for modelling and policy evaluation. For the period from 2030 to 2050 clear and ambitious targets are necessary for energy efficiency, RES and GHG emissions to ensure investment security. Contradicting legislation should be avoided: a discussion like the one currently taking place in Brussels, were heat pumps - clearly identified at best in class technology from an energy efficiency perspective may be severely affected by imprecise legislation in the regulation on the use of fluorinated gases should (and can still) be avoided.

The success of all measures taken will depend on simple and cost efficient administrative procedures. If not imperative for safety reasons, applications to use renewables should be replaced by simple notification procedures. Today’s patchwork of requirements on quality, energy efficiency and procedures is hardly helpful for a faster implementation of the technology.

The future of heat pumps can be bright, if all relevant actors join forces to make it a mainstream technology. A “business as usual” approach is not sufficient.

I would like to congratulate FETA for 30 years of successful work towards this goal and would thank the current team for their good cooperation.