

The air rush...

AMR International has recently conducted several strategic analysis projects in the renewable energies sector and has worked with various experts on the French market, such as AFPAC (French Heat Pump Association) and ADEME (French Environment and Energy Management Agency).

Main conclusions:

- Growth in the Heat Pump market in France is forecast at +25% CAGR to 2013
- France has become the largest market in Europe for heat pumps, ahead of Sweden, Switzerland and Germany
- As the market matures, consolidation of distribution and economies of scale throughout the value chain should accelerate

French heating goes green

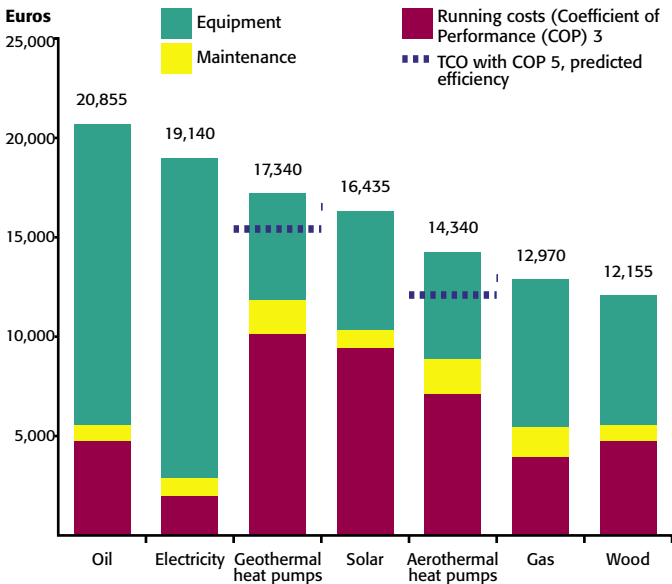
After a first unsuccessful launch in France at the end of the 1970s, the heat pump market truly kicked off in 1997 thanks to EDF. It has steadily developed ever since, driven by environmental concerns and the volatility of oil prices.

Heat pumps capture the calories in the air, water or ground and transfer this into the home. They produce heat from renewable energy sources and as such are an integral part of sustainable development strategies. Based on an energetic performance coefficient of 3 (1KW used generates 3KW), a well dimensioned heat pump can save up to 70% of the energy compared to what a regular electric heater would use. Possible savings will increase further as the technology develops.

According to experts, over 500,000 heat pumps were sold in 2008, in the top eight European markets. Although there are differences in national technical specifications, common trends exist across Europe. The fastest growing segment is the air-source heat pump and multi energy systems (e.g. heat pump plus solar energy) are developing.

Heat pumps are fast becoming as financially efficient as they are energy-efficient.

Total cost of ownership (TCO) by heating equipment (over a five year period) showing the efficiency of heating sources



The efficiency of heating appliances is known as **coefficient of performance (COP)**. It expresses the ratio of necessary electrical input vs. total energy output. A COP of 3 indicates that one unit of electricity is necessary to produce 3 units of energy.

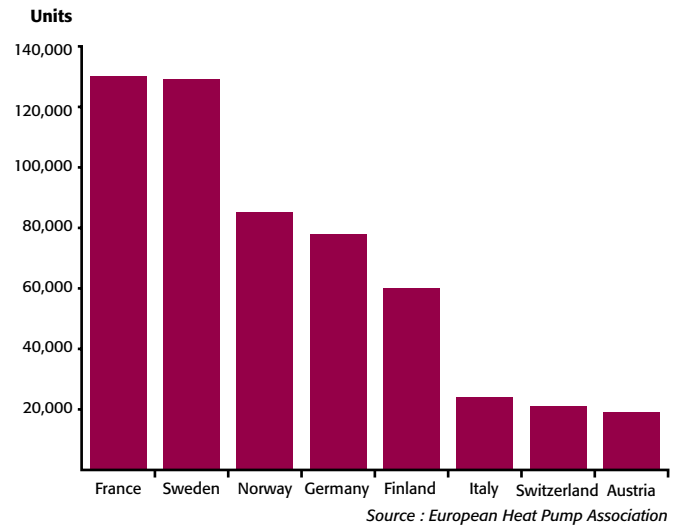
Historically, France was behind other European countries in the use of renewable energy sources, but has now become the largest European market for heat pumps. The market was estimated to be worth €2.8bn in 2008 (consumer prices, including installation) and has been growing at 45% per annum since 2002. Experts believe that more than one million households will have a heat pump in 2010, rising to eight million in 2020.

The competitive landscape which was highly fragmented when the market was launched is now becoming more structured. Distribution networks have also developed. There have been several success stories in the direct-selling segment, some of them backed by private equity funds. The situation is similar for manufacturers. Established players are consolidating and widening their product range through mergers and acquisitions e.g. the acquisition of Rotex by Daikin and the acquisition of Sofath by De Dietrich.

AMR has conducted several projects in the heat pump sector and forecasts three major market changes in the short term:

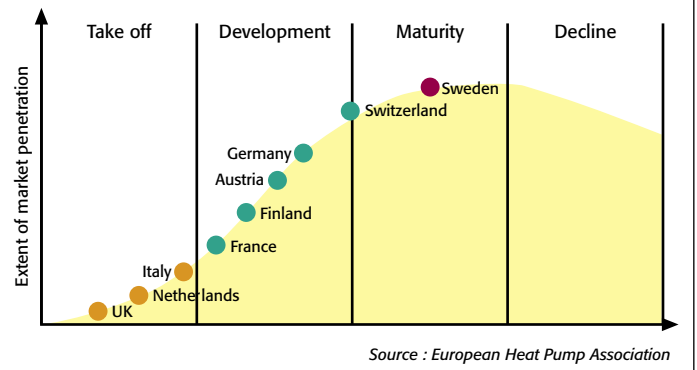
- The transfer of demand from air-air systems towards air-water systems due to the need to replace 500,000 boilers every year.

Heat pump sales by top eight European markets



- A rationalisation of tax breaks and subsidies which will now be allocated on the basis of an overall assessment of the project, with more thorough checks in energy efficiency of the subsidised technologies.
- A shift in how value is distributed along the value chain. Until now, it was distributors and installers who benefited from margin improvements, partly due to tax breaks and subsidies, which allowed them to increase prices. Consolidation in the manufacturer segment will create synergies which increase the profitability of research programmes and generate economies of scale.

Heat pump market maturity by country



The heat pump market is forecast to grow strongly in the next five years (+25% CAGR 2008-2013). This growth will mainly benefit those players who will be able to tackle the market's new challenges.

The air rush goes on, providing attractive investment opportunities.



Leaders in commercial due diligence

AMR International Limited · St George's House · 61 Conduit Street · London W1S 2GB
 T: +44 (0) 20 7534 3600 · F: +44 (0) 20 7534 3636 · E: london@amrinternational.com

AMR International Limited · Mainzer Landstrasse 51 · 60329 Frankfurt am Main · Germany
 T: +49 (0) 69 24 00 86 0 · F: +49 (0) 69 24 00 86 16 · E: frankfurt@amrinternational.com

AMR International Consulting Inc · 655 Third Avenue · Suite 2500-05
 New York NY 10017 · United States of America
 T: +1 646 465 5970 · F: +1 646 465 5988 · E: newyork@amrinternational.com

www.amrinternational.com