Energy efficient heat pump dryers – European experiences and efforts in the USA

Switzerland – only heat pump tumble dryers allowed on the future market
Tumble dryers with heat pump technology consume 50% less electricity than conventional condenser dryers, and only these qualify for class A of the Energy Label. In Switzerland heat pump dryers reached a market share of 24.5% in 2009. Following the market breakthrough, Switzerland bans tumble dryers not reaching class A requirements starting in 2012 – then only heat pump dryers will be on the Swiss market.

Europe – breakthrough of heat pump dryers expected soon
While ranging at ca 7% in most EU countries, sales shares of heat pump dryers have already risen to substantial levels of 10-15% in certain member states such as Germany and Italy. Roughly 4 million dryers are sold in the EU per year, and the stock of more than 54 million units keeps increasing. Market breakthrough of heat pump driers in the EU can be expected soon, and consideration of this drying technology in policy design is worthwhile: replacement of the entire EU stock with heat pump dryers would lead to electricity savings of around 30 TWh per year. Purchase prices are decreasing – currently heat pump dryers are available for EUR 700.-.

USA – interest in heat pump dryers and first testing programs
In the USA dryer market penetration is much higher than in Europe. According to estimations drying accounts for close to 7% of the nation’s electricity consumption. By now heat pump dryers have not been present on the US market. Recently the Super Efficient Dryer Initiative (SEDI) was launched in North America. It brings together energy efficiency program providers, manufacturers and governments and allows benefitting from European experiences. At the same time a first testing program for heat pump dryers has been taken up. After the necessary adaptations to US consumer expectations, voltage and frequency the program is aiming at accelerating the market introduction of heat pump dryers in the USA.

More information
- Heat pump tumble dryers in Europe: www.topten.info
- EU legislation: Ecodesign and labelling Working Documents and NGO position papers: http://env-ngo.eup-network.de
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