Heat pump news

USA market for VRF AC's

U.S. VRF AC demand in 2013 was 28,000 units, a 22% increase compared with 2012. Nonetheless, this is a small share of the market compared with unitary systems and chillers, but there is potential for a larger portion of the U.S. unitary market to convert to mini VRFs, VRFs, and ductless PACs in the coming years. Source: www.ejarn.com

Large heat pumps in Europe

Large heat pumps can provide heating, cooling and hot water for factories and large service areas. The heat pump units are integrated into industrial or commercial processes for waste heat recovery. In terms of thermal output, large heat pumps can provide an amount greater than 100 kW.

This type of heat pumps has been overlooked the past years even though its potential can change the arena of renewable heating & cooling. EHPA together with a number of manufacturers have decided to join forces and set up a working group so as to discuss the opportunities and challenges of large applications as well as what needs to be done in order to achieve a bigger deployment in Europe.

Source: www.ehpa.org

ATW market accelerated by policies and standards in China

Among the air-to-water (ATW) heat pump water heater industry development, 2012 and 2013 were the two years with great significance in China. In 2012, ATW heat pump water heater was included by the state energy saving subsidy for the first time in the country; in 2013, energy saving subsidy came to an end and new energy efficiency standard was enforced, leading the development of ATW heat pump products to a higher level. The government also delivered stronger assistance to ATW products.

Source: www.ejarn.com

Emerging refrigeration markets spur the global demand

Currently, the United States, Europe, and Japan account for a large share of the global refrigeration market. However, the standard of living in developing markets such as China, Southeast Asia, India, and Latin America has risen markedly over the last 20 years and with it, demand for food preservation through refrigeration and freezing has also increased. The current demand for refrigeration equipment in these regions is relatively small, but the market is expected to grow significantly over the next several years.

It is thought that 20-40% of fresh food in India is thrown out while in transport, so developing cold chain infrastructure as a way to reduce the amount of food waste is an important issue for the government as well. The Indian Ministry of Food Processing Industries (MFP) is providing subsidies of up to Rs 100 million (about US$ 1.6 million) for construction of storage facilities. In addition, renovations and improvements to existing facilities are being done, and an increasing number of public-private projects in the cold chain industry are expected.

Source: JARN, August 25, 2014

French trends in ATA Heat Pumps

In a relatively stable overall market in France for air-to-air (ATA) heat pumps, large heat pumps for industrial environments have suffered in recent years. In the past, industrial applications were more popular, but now smaller systems are more in demand. The French market has also seen an increase in combined installations, such as heat recovery systems, which are expected to further increase the demand for heat pumps in the coming years.

Source: www.ejarn.com

Ongoing Annexes

IEA HPP Annex 36
Quality Installation / Quality Maintenance Sensitivity Studies

Annex 36 is evaluating how installation and maintenance deficiencies cause heat pumps to perform inefficiently (i.e., decreased efficiency and/or capacity). Also under investigation are the extent that operational deviations are significant, whether the deviations (when combined) have an additive effect on heat pump performance, and whether some deviations (among various country-specific equipment types and locations) have greater impact than others.

<table>
<thead>
<tr>
<th>Annex 36 Participants</th>
<th>Focus Area</th>
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<tbody>
<tr>
<td>France</td>
<td>EDF - Space heating and water applications.</td>
</tr>
<tr>
<td>Sweden</td>
<td>SP - Large heat pumps for residential and commercial buildings</td>
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<tr>
<td>United Kingdom</td>
<td>DECC - Home heating with water, water-to-water, air-to-air systems.</td>
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The following figures present each country's cold chain market scale is forecast to hit US$ 8 billion in 2015, more than 2.5 times larger than the current scale of US$ 3 billion. The government has taken some moves to reform the economy, including significantly relaxing restrictions on foreign companies operating in the retail sector. This is expected to increase foreign private investment in the cold chain market. Thus, the market is forecast to grow at an average annual rate of 16% over the next several years.

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