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EXPRESS #4

Heat pumps in Europe show record growth

November 14, 2017



"When collecting heat pump data for 2016, we got increasingly optimistic", write the authors of the latest **European Heat Pump and Statistics Report 2017**, which was released on 7 November.

"For the 3rd year in a row, heat pump markets across Europe have grown, by 12% in 2016, to be exact", the two author write in the introduction to the report.

The report itself, however, notes that "European heat pump sales grew by 13% in 2016 – the second double-digit growth in a row and the fourth consecutive year of market uptake."

"With 999,682 units sold across Europe a new sales record has been achieved and is soon expected to pass the 1 million mark", notes the report. "Assuming a life expectancy of approx. 20 years this brings the European heat pump stock to almost 9.5 million units. With approximately 244 million residential buildings in Europe, the heat pump market share in the building stock is about 4%."

| | SUM EU-11 | SUM EU-21 | TOTAL STOCK |
|------|-----------|-----------|-------------|
| 2005 | 446 037 | | 1 141 016 |
| 2006 | 504 428 | | 1 655 022 |
| 2007 | 568 131 | | 2 239 159 |
| 2008 | 770 538 | | 3 047 855 |
| 2009 | 686 076 | | 3 750 012 |
| 2010 | 671 392 | 800 388 | 4 542 759 |
| 2011 | 666 873 | 808 591 | 5 341 930 |
| 2012 | 621 818 | 750 436 | 6 083 976 |
| 2013 | 635 273 | 769 879 | 6 846 410 |
| 2014 | 659 911 | 792 621 | 7 603 977 |
| 2015 | 715 581 | 892 809 | 8 516 317 |
| 2016 | 806 336 | 999 682 | 9 491 676 |

Table 1-1: Heat pump sales in Europe, 2005–2016, absolute numbers

Heat pump market growth is mainly influenced by three trends, the European Heat Pump Association writes:

- From a technology perspective todays heat pumps can cover a wider temperature range. They still operate at -25°C and they increasingly often provide hot water at 65°C in an efficient manner. That enables their deployment in a much larger share of buildings than a decade ago. Hybrid systems enable heat pumps even in the renovation segment.
- The need to accelerate the energy transition also in the heating and cooling sector moves heat pumps to the centre of attention of policy makers. Legislation passed in the past 8 years is now transposed in all member states and it starts to show impact. Building standards limit maximum heat demand per m2, mandate the integration of renewable energy and favour smart buildings. This is often substantiated by institutional and financial subsidies that make market development easier.
- Continuously larger and increasing sales numbers result in lower cost. Economies of scale are materialising on the component and the product level. The fast decline of production cost of PV systems influences also the heating market: using self-produced electricity in a buildings heat pump system provides a very low cost energy source. Additional benefits like demand response services provided to the grid (which could become a business model and provide an income for their providers) are on the horizon, but have not yet materialised.

The country with the largest number of heat pumps is **France**, as shown in this table:

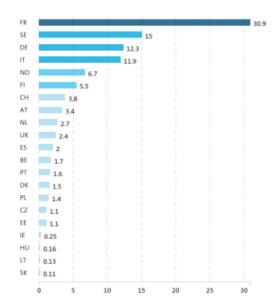


Figure 1-3: Renewable energy generated by the stock of heat pumps, 2016

To order the full report, you can follow this link.