



Sweden

The Swedish national team is represented by **SP**, the Technical Research Institute of Sweden.

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NCC Teknik
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LB-Hus AB
<http://www.lbhus.se>



Väst kust Stugan
<http://www.vastkuststugan.se>



Sätla Bygg AB
<http://www.satilabygg.se>

Swedish national project

The Swedish low energy house market is in the beginning. Up to now, only single residential areas according to the German passive house concept have been built and measured as demonstration projects, e.g. the Lindås houses of the architect Hans Eek near Gotenburg.

Adequate system technologies, however, is still missing. A pre-study of SP has shown, that heat pumps are a viable option for low energy houses at the boundary conditions of the Swedish climate and energy prices. Moreover, marketable components and systems are not adequate for the application in low energy houses, since

- the size and energy output is too large/high
- the total efficiency of pumps and fans is too low
- the prices are too high

so the units yield too low COP-values in low capacity range.

Therefore, product development is needed and consequently the focus of the Swedish national project in Annex 32 is the examination and redesign of Swedish heat pumps for the application in low energy houses. Emphasis shall be laid on exhaust air system with air reheating, e.g. air-to-air heat pumps as they are very common in German passive houses, but system solutions with different heat sources and combination of sources and surface heat distribution will be investigated, as well. The product development comprises prototyping and lab testing of the new layouts. Concerning the real-world operation of systems existing field monitoring will be scanned with regard to their relevance for the low energy house application.

Moreover, smaller field tests of one or two of the developed prototypes are intended.

The Swedish participation in IEA HPP Annex 32 is supported by the Swedish Energy Agency.

Swedish links



Swedish heat pump association

Website of the Swedish heat pump association, offering news, contact information of members and information for consumers. A discussion forum is available, where questions can be asked to SVEP or other organisations. The website is in Swedish.

 <http://www.svepinfo.se/>



Swedish energy agency

The Swedish Energy Agency works towards transforming the Swedish energy system into an ecological and economically sustainable system through guiding state capital towards the area of energy. This is done in collaboration with trade and industry, energy companies, municipalities and the research community. The website gives information about energy research and market development among other things.

 <http://www.energimyndigheten.se>

IEA HPP Annex 32

IEA HPP Annex 32 is a corporate research project on technical building systems with heat pumps for the application in low energy houses.

The project is accomplished in the Heat Pump Program (HPP) of the International Energy Agency (IEA).

Internet: <http://www.annex32.net>

