



OPERATING AGENT IEA HPP ANNEX 32

ECONOMICAL HEATING AND COOLING FOR LOW ENERGY HOUSES

Annual Report 2008

Author und Coauthors	Carsten Wemhöner, Prof. Dr. Thomas Afjei
Institution / Company	Institute of Energy in Building (IEB), HABG, UASNW
Address	St. Jakobs-Str. 84, CH-4132 Muttenz
Phone, e-mail, Internet	+41 61 467 4573, carsten.wemhoener@fhnw.ch , www.fhnw.ch
SFOE-Number of Project/Contract	101579 / 151885
SFOE-Project Coordinator	Th.Kopp, Head of R&D Program 'Heat Pumping Technologies, Cogeneration, Refrigeration' of SFOE
Project Duration (Start – End)	1 January 2006 – 30 June 2010
Date of Report	8 December 2008

SUMMARY

The project "Operating Agent IEA HPP Annex 32" comprises the project management and reporting of the Annex 32 "Economical heating and cooling systems for low energy houses" in the frame of the Heat Pump Program (HPP) of the International Energy Agency (IEA).

The objective of the project is a categorisation and further development of multi-functional heat pump systems for heating and cooling of low and ultra-low energy houses. The project is accomplished task- and cost-shared with the participating countries Austria, Canada, Switzerland (Operating Agent), France, Germany, Japan, Netherlands, Norway, Sweden and the USA.

A state-of-the-art survey of the markets and systems for low energy houses has been finished mid of 2007. A subsequent assessment of the systems regarding the energy efficiency, the reachable comfort and the costs is presently ongoing. In parallel, field monitoring of the systems is performed to gather more experience with real-world operation. In the final year of the Annex 32 the results shall be transferred to design guidelines, best practice examples and standardised system solutions.

National projects within the Annex 32 framework mainly refer to the development of prototypes of multifunctional, highly-integrated heat pumps for the capacity range 3-5 kW, including also natural refrigerants like CO₂ and propane, as well as comprehensive field monitoring for marketable systems and new developments.

Interim results have been presented on a workshop on the 9th IEA Heat Pump Conference in Zurich in May 2008. Continuously updated information including publications for download are found on the IEA HPP Annex 32 web-site at <http://www.annex32.net>.