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Identification of most promising markets and promotion of standardised system configurations for the market entry of small scale combined solar heating & cooling applications

EIE/07/158/SI2.466793

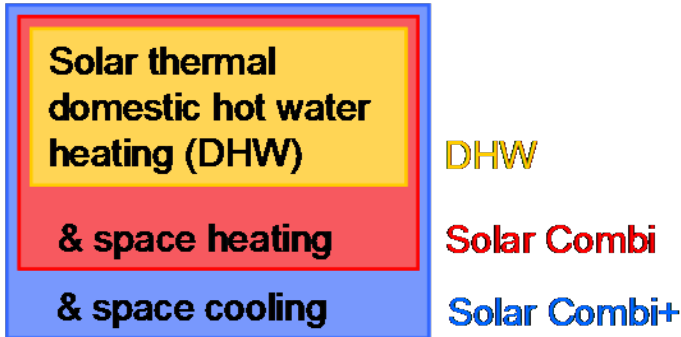
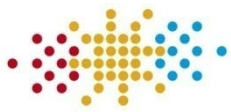
09/2007 – 02/2010 (30 months)

slides updated in March 2009

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Intelligent Energy  Europe

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Main Aim: Identify and promote standard system configurations for small scale (up to 20 kW) solar heating and cooling applications

Partnership: 12 partners from 7 countries (Italy, Austria, France, Germany, Greece, Spain, Sweden) including the 5 leading European small scale sorption chiller producers

Approach: To identify standard system configurations and most promising applications, the project proposes to perform **virtual case studies**, where promising system configurations are defined (based on a thorough analysis of the market) and validated by simulations and economical and ecological ratings for different typical conditions (i.e. utilization, climate, building type).



Background

Small scale sorption chillers are now commercially available, but there are several non-technical barriers which can bother a smooth market entry:

- ① Combined solar heating & cooling needs **high effort in design stage**, which is not affordable for small applications
- ② Small scale sorption chillers are at the moment expensive due to **low production numbers**
- ③ Small scale combined solar heating & cooling is **not enough known by key actors**, such as installers and planners on the one side as well as public authorities and consumers on the other side



Objectives & main steps

Proposed solutions to the barriers

① High effort in design stage

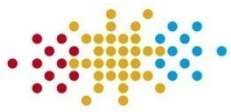
→ Reduce design effort, identifying **standardised system configurations** (technology independent) and **package solutions** (for single chiller) through **virtual case studies**

② Low production numbers

→ Trigger application by identifying **most promising markets** (both in the sense of applications and regions)

③ Not enough known by key actors

→ Rise awareness with **targeted dissemination and promotion**, towards professionals (training, presentations), policy makers (pro-active approach) and end users (media campaigns)



Expected results

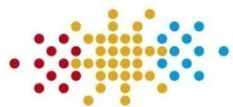
Standard system configurations, which work best under different circumstances, are described in a **brochure** and disseminated to professionals

Package solutions for the single chiller technologies are broadcasted at fairs and taught in special **trainings** (focusing on solar thermal enterprises and installers)

Most promising markets are identified (both in the sense of applications and regions) and promoted

Knowledge among professionals is increased, inter alia offering access to virtual case studies through an **online tool** enabling early decision on feasibility

Awareness within public authorities is enhanced, assistance for integration in support schemes and implementation of EPBD is given, **pilot installations** are initiated



Partners & Contact

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Germany

Austria

Italy

France

Spain

Industrial partners:

Fagor Electrodomésticos, S.Coop,
ClimateWell AB,
SorTech AG,
Solution Solartechnik GmbH,
SK Sonnenklima GmbH,

Spain

Sweden

Germany

Austria

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