

## KEEP COOL II

Transforming the market from "cooling" to "sustainable summer comfort"



### General Information on Keep Cool II

#### Summary

Despite the availability of passive solutions, the standard way of securing summer comfort is still the application of mechanical air conditioning. It is thus the overall goal of the project to contribute to a broad market transformation from "cooling" to "sustainable summer comfort" which can be defined as follows: Achieving good summer comfort conditions with no or limited use of conventional energy and through the use of environmentally non-harmful materials.

The project Keep Cool II will propose different actions to achieve this goal. For this it is divided in two phases. The first one provides analysis and technical tools to overcome the most important barriers by introducing sustainable summer comfort. The second phase is addressing existing networks and policy makers on national and European level by providing them information materials with good practice examples designed especially for the target groups. It will accompanied by dissemination campaigns.

#### Objectives

In particular, the project pursues the following objectives:

- Consolidating the market chain of sustainable summer comfort solutions; Creating incentives for designers and planners towards integrated planning;
- Introducing and strengthening sustainable summer comfort into national Energy Efficiency Action Plans, guidelines for public procurement and national building regulation;
- Transporting the results directly into the relevant target group through a wide range of dissemination activities on the national as well as on the European level.

#### Direct outcomes

- Increased awareness among building owners to ask for "summer comfort" instead of "cooling" and among planners and suppliers on how to sell "summer comfort" as a service;
- Stronger cooperation of the various professions along the market chain; Comprehensive information material in seven languages, used by initiatives and networks of all target groups;
- Recommendations for sustainable summer comfort incorporated in either public procurement schemes, national building regulations or the Energy Efficiency Action Plans (EEAP) in every participating country;

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- New design rules for cooling systems and innovative remuneration schemes used by a “critical mass” of planners, designers, building owners and building energy consultants;
- The results of the project are demanded or already used by projects, energy agencies, public authorities etc. in countries which are not represented in the project.

## **Results of KeepCool I**

### "State of the Art" of Sustainable Summer Comfort

In order to make the information on the state of the art in passive cooling technologies usable for building owners and planners, we developed a logical pathway to reduce cooling energy demand in buildings, towards a target that we call “sustainable summer comfort”. In addition, we provided detailed technology profiles for the most important steps of this strategy, and summarised the legislative and market situation in every participating country. Best practice reports on most of these technologies and a list of suppliers and experts make this information package complete.

### Toolkit for Sustainable Summer Comfort

The information provided in the "State of the Art" of Sustainable Summer Comfort and additional information material has been processed into a web-based toolkit for building owners, planners, building users and facility management professionals. The toolkit combines our approach for sustainable summer comfort with the complex set of roles the different actors take when constructing, using, operating or maintaining a building, linking the main target groups to those pieces of information which are relevant for them.

### Marketing and Dissemination of Sustainable Cooling

The dissemination of the prepared knowledge is the main part of the project. With the involvement of key actors in each participating country we give concrete advice to building owners and planners. The strategic approach for sustainable summer comfort will be tested by at least five pilot projects. In addition, we are present in specialist and mass media, take part and organise events on this topic and present all relevant information at the project's website. KeepCool will present its results in the EPIC 2006 AIVC Conference 20-22 November 2006 in Lyon, France.

### Improving the policy framework

KeepCool succeeded to include the Adaptive Comfort Model into the European Standard EN 15251 "Indoor environmental input parameters for design and assessment of energy performance of buildings - addressing indoor air quality, thermal environment, lighting and acoustics" and to remove further barriers towards the use of passive cooling solutions. In the Austrian Building Code, limits have been set to externally induced cooling demand for service buildings, and in Italy, sun shadings have been made compulsory for large service buildings as well as incentives for passive cooling measures have been foreseen in the new legislation due to KeepCool's direct influence. In Spain, we included passive cooling measures into the Andalusian funding scheme for sustainable energy projects. In Sweden, KeepCool initiated a dialogue between authorities and the HVAC designers association, which was highly appreciated and interest to continue the cooperation was stated.

### Partners and Regional Contact Points

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KeepCool was a joint project of nine partners from eight European countries: Austria, Germany, Italy, Lithuania, Portugal, Spain, Sweden and the United Kingdom. It was coordinated by the Austrian Energy Agency. Here, interested readers can find contact information for each participating country.



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