

Digital Tools for Solar Design: International team of researchers publishes results of multi-country survey

September 2011. The International Energy Agency's Solar Heating and Cooling Programme (IEA SHC) has published the results of a survey of architects in 14 countries. The study shows high awareness of solar energy amongst architects, but researcher identify a lack of widely accepted software packages as an important barrier to solar design.

“Architects recognize the importance of solar energy in buildings,” says project leader Maria Wall of Lund University in Sweden. *“But they often find it difficult to include solar strategies in their designs due to the lack of standardized software that is intended for use by architects at the early design stage of the project.”*

The survey was carried out as part of the IEA SHC project “Solar Energy and Architecture”, in which researchers from 14 different countries aim at furthering the integration of solar energy into buildings. Architects in their respective countries were contacted and questioned about their use of digital tools for solar design and related themes. The results revealed that majority of existing solar design tools are intended for engineers and require data input that is more suitable for the later design stages, *after* majority of important design decisions which are usually done by architects are already made. Architects also perceive existing tools too complex, expensive and time-consuming. These findings also affirm results of former investigations by others presented in literature review.

“We will use the results of the survey to develop guidelines for both professionals and software tool developers,” explains Dr Wall the next steps. *“Our ultimate goal is to support design methods and enhance the use of solar energy in building projects.”*

Download: The survey and other documents of the IEA SHC project “Solar Energy and Architecture” can be downloaded from <http://www.iea-shc.org/publications/task.aspx?Task=41>

About the International Energy Agency's Solar Heating and Cooling Programme (IEA SHC):

- The Programme was established in 1977.
- Its objectives are co-operative research, development, demonstration and exchange of information regarding solar heating and cooling systems.
- 19 countries and the European Union are IEA SHC members.
- The research topics of the current 9 projects range from more general topics, such as "Solar resource assessment and forecasting", system research, such as "Large solar thermal systems" to material research, such as the use of "Polymeric materials for solar thermal applications."
- Additional information: www.iea-shc.org

Contact information:

- **IEA SHC information centre:**
Uwe Trenkner, communications@iea-shc.org, Telephone +32 499 265 865