



New IEA Task on New Generation Solar Cooling Systems

Task Definition Workshop

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The Bavarian Center for Applied Energy Research e.V. (ZAE Bayern) is a registered, non-profit association, founded in December 1991. ZAE Bayern is running a research institute with about 180 employees in three divisions located in Würzburg, Erlangen and Garching.

Its purposes are the:

- development and investigation of materials, components and systems to be applied in energy technology
- development of new energy saving technologies and concepts
- development of regenerative energy sources, especially solar energy

EvaSolK (FhG-ISE, ILK Dresden, ZAE Bayern):

→ Comparison of solar thermal and PV-electric cooling

Solar Heating and Cooling with Latent Heat Storage

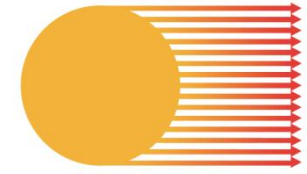
→ Product and System development of Latent heat storage

Double/Single-Effect Chiller / Heat pump (Project Lindner)

→ System development and experience for Solar Heating and Cooling with integrated Backup

ZAE-ST: Simulation of PV driven heat pump

→ Evaluation of the technical and economical potential for this technology

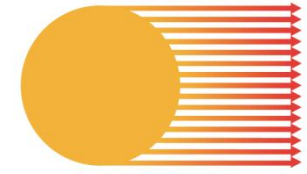


Planned Project

→ PV driven reversible compression chiller with storage as demonstration plant.

- Storage or no storage, electric or thermal, or both?
- Best Control strategy
- Possibilities for demand site management
- Reachable system efficiency
- Design directive: Which system fits most for the designated application and climate?

Task Input, Responsibilities



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- Nothing yet, because of the lack of a funded project.