Energy research for practical applications

Pressinformation



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Solar energy supports industrial processes

A constant heat requirement below 100 °C is particularly well-suited

Whether it's drying, cleaning or pre-heating: There is a large number of heating processes used in the industrial and commercial sector which can be supported with solar thermal energy. In the long term, companies can use this energy to improve their CO_2 balances and save on energy costs. The current BINE-Themeninfo brochure, "Solar process heat", presents potential areas of use and the particular technical features.

In theory, the potential for using solar thermal energy is great. Around 30 percent of heat requirements in the industrial sector extend over the temperature level of up to 200 °C which is highly suitable for solar energy. However, the technology is competing with alternative or supplementary measures such as the use of exhaust heat, CHP solutions and efficiency measures.

The BINE-Themeninfo brochure describes how and at which points solar thermal energy can be integrated into industrial processes. With this in mind, individual integration points are analysed and potential processes are described. Practical recommendations for action and sector concepts provide an orientation as to the feasibility of solar energy use in individual companies. The food industry in particular offers several potential areas of use.

Currently, there are over 200 solar process heat plants in Germany, which are either already in operation or are at the construction or planning stage. The publication contains practical information on economic efficiency and funding opportunities. Specific examples of plants demonstrate the theoretical information in operation.

The BINE-Themeninfo brochure has been produced by a team of authors from the Institut für Energietechnik at the University of Kassel and the Institute for Solar Energy Research in Hamelin (ISFH). The free BINE-Themeninfo brochure "Solar process heat" (II/2017) is available from the BINE information service at FIZ Karlsruhe by downloading it online at www.bine.info or by calling +49-228 92379-0. Contact Uwe Milles presse@bine.info

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