

JOINT RESEARCH PROJECT HIGH PERFORMANCE SOLAR (HPS2)

Solar energy is available everywhere in the world in enormous quantity. For this reason, it is one of the main pillars of the future international, renewable energy supply. Solar energy is active climate protection because it avoids CO₂ emissions. However, producing electricity from solar power is not free of charge. This requires new concepts and products.

PROJECT SET-UP

The development of further innovations is indispensable. Therefore, the research project High Performance Solar 2 (HPS2) has been launched under the lead of the German Aerospace Center (DLR). The target of the project: To gain long-term experience with the operation of a steam generator powered by a solar thermal energy. The process is characterized by two essential innovative features:

- As a result of high steam parameters, as is customary for conventional, fossil-fired steam power plants, high efficiency levels can be achieved in the generation of electrical energy.
- Due to the use of a heat storage with molten salt as heat transfer fluid, a continuous steam generation is made possible, independently of the short-term weather changes and the sun's course of the day.



The project is the continuation of a research project (HPS, High Performance Solar Thermal), which was launched under the direction of Siemens and in which Steinmüller Engineering, as a former Siemens subsidiary, planned and delivered two key components (steam generator and water / steam circuit).

The first phase is working

A consortium has been set up for the completion of the plant and a minimum of 8 months of testing, in which the following partners are represented:

- German Aerospace Center (DLR) as consortium leader
- Universidade de Évora (Portugal) as owner of the test ground and for the scientific monitoring of the project

RECENT SUCCESSFUL PROJECTS

High Performance Solar Project:
Solution development 2016-2017

The project is funded by the German Federal Ministry of Economics and Energy and the corresponding approval was granted in July 2016. In September, the partners met in Évora, Portugal.

For further information, please visit www.dlr.de



HPS2 Team



*Sabine Wurth-Goller,
Marketing Manager*

PLEASE CONTACT US.

- TSK Flagsol Engineering GmbH for the solar modules
- eltherm production GmbH for the electrical heat tracing
- YARA Industrial GmbH as supplier of salt
- Steinmüller Engineering GmbH for commissioning and supervision of the test phase – in particular for the equipment supplied by SE
- Eskom Holdings SOC Limited for the provision of operating staff during the test operation

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„In order to meet changing market conditions, Steinmüller Engineering is continuing to develop engineering technologies - for you as our customer.“

Thomas Will, Tetsuya Iwasaki

WHAT IS YOUR CHALLENGE?

Contact us for more details.