



Increase SHIP Deployment

Fanny Hübner

Solar Heating Technologies for Industry



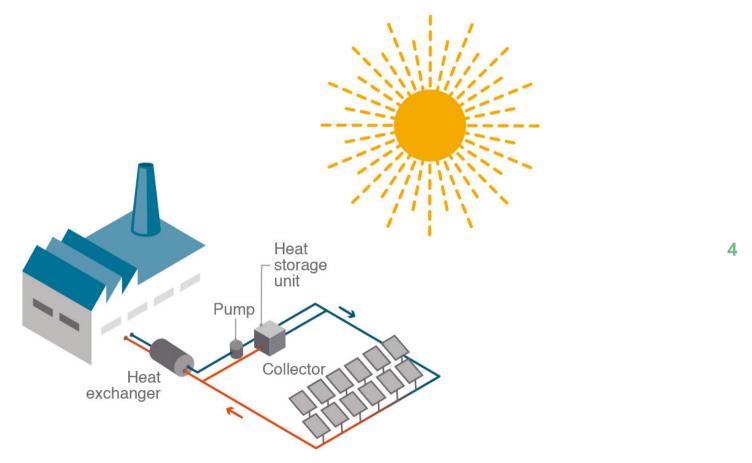
There is more final energy consumption of heat in industry than there is electricity consumed worldwide.

Photos: Cape Brewing Company, Zehnder Group, Inventive Power, CSP-F Solar





Solar Heat for Industrial Processes (SHIP)



Huge SHIP potential, but only around 500 plants worldwide.





Solar Payback: Objectives

- increase awareness of the technical and economic potential of SHIP-technology
- increase willingness to invest in and to promote this promising technology in four partner countries: Brazil, India, Mexico and South Africa
- Break the vicious circle of small deployment rates

High upfront investment costs plus low energy prices

Long payback periods

Little visibility of existing systems

Low awareness







Solar Payback: Fact Sheet

COORDINATOR



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GERMAN IMPLEMENTING PARTNERS





KFW DEG



www.ise.fraunhofer.de

www.deginvest.de

www.solrico.com

DURATION

BUDGET

October 2016 to September 2019

Total funds available for all four countries: EUR 2,958,920



Solar Payback: Partners in the target countries













www.ahkbusiness.de



www.mexiko.ahk.de



www.indien.ahk.de







Solar Payback: Activities



Drafting a National Solar Process Heat Potential Study



Developing policy recommendations for the uptake of SHIP technologies at national level



Organising train-thetrainer workshops on planning and designing SHIP plants



Offering bankers and investors training on how to finance SHIP systems



Organising a local industry and stakeholder conference



Implementing an online matchmaking network for investors and technology



Developing a funding and business tool for planners and investors to create preliminary analyses of SHIP plants





Identifying reference cases in manufacturing to conduct three pre-studies, plus detailed monitoring of one site to facilitate the set-up of a demonstration system (in South Africa, Mexico and Brazil)



Identifying reference cases among existing SHIP plants to carry out detailed monitoring of one system (in India)







Solar Payback: Funding

- Part of International Climate Initaitive (IKI)
- Funded by Federal Ministy for the Environment Nature Conservation Building and Nuclrea Safety (BMUB)

Supported by:



Federal Ministry for the Environment, Nature Conservation, **Building and Nuclear Safety**

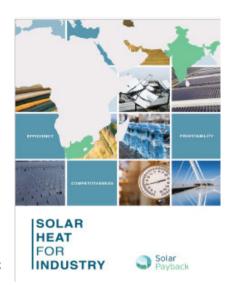
based on a decision of the German Bundestag





Solar Payback: Service

- Visit the Solar Payback Website: https://www.solar-rule. payback.com/?lang=pt-br
- Use the Technology Brochure Solar Heat for Industry" for your communication with stakeholders (download link e.g.: http://www.solrico.com/fileadmin/solrico/media/doc/other articles/Broc hure EN Solar Payback digital.pdf
- View worldwide suppliers of SHIP Systems https://www.solar-payback.com/fornecedores/?lang=pt-br
- Use the financial tool for preliminary economic analysis for SHIP plans https://www.solarpayback.com/calculator/?lang=pt-br
- Share info, results and findings of solar payback in your network



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Solar Payback: Further information

We are available for all questions, comments and suggestions!

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Thank you • Obrigado • Gracias

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