



## 2nd International Solar District Heating Conference

Solar District Heating has got increased interest all over Europe in recent years. District heating is one major approach to increase the overall energy efficiency in urban areas, either by refurbishment of existing systems or by the introduction of new systems in existing or new building establishments and solar heat is available in principle anywhere all over Europe. A prevailing success factor of realized solar district heating plants is the involvement of local actors and policy makers with interest and knowledge to develop and demonstrate the new technologies.

The 2014 edition of the 'Solar District Heating Conference' takes place on 3 and 4 June 2014 in Hamburg. Market actors and experts are invited to gather for exchanging experience on the newest developments and networking at international level.

The conference is hosted in the halls of the old waterworks of Hamburg's municipal energy supplier 'Hamburg Energie', who at the same time will present its outstanding solar district heating project 'Energy Bunker' in technical tours before and after the conference sessions.

For further information please visit [www.solar-district-heating.eu](http://www.solar-district-heating.eu)

Special thanks to:



### Organizational information

**Time:** 3-4 June 2014  
**Conference venue:** Hamburg Wasser, CCR  
Billhorner Deich 2  
20539 Hamburg

**Attendees:** Approx. 100 persons

**Included in participation fee:** Abstracts, lunch, dinner, coffee breaks, technical tour

**Accommodation:** We have reserved a limited number of rooms in the following hotels:

Quality Hotel Ambassador  
Heidenkampsweg 34, 20097 Hamburg  
Phone: +49 40 238823 802,  
Email: [reservierung@ambassador-hamburg.de](mailto:reservierung@ambassador-hamburg.de)  
Price: € 78,- incl. breakfast, incl. VAT  
You can book the rooms until 12.05.2014.

Steigenberger Hotel Hamburg  
Heiligengeistbrücke 4, 20459 Hamburg  
Phone: +49 40 36806 180  
Email: [reservierung@hamburg.steigenberger.de](mailto:reservierung@hamburg.steigenberger.de)  
Price € 165,- incl. breakfast, incl. VAT  
You can book the rooms until 06.05.2014.

Please use the password „SDH conference“.

**Participation fee:** *Early bird registration until 2nd May 2014:*  
€ 230,- per person excl. 19 % VAT  
*Registration from 3rd May 2014:*  
€ 290,- per person excl. VAT

**Confirmation and invoice:** Will be sent to you by post.

**Registration:** Online ([agfw.de/veranstaltungen](http://agfw.de/veranstaltungen)), by email or by fax. The registrations will be considered in chronological order. Reservation or registration by phone is not possible.

**Withdrawal:** In case of withdrawal of the registration until 14 days before the beginning of the conference we will charge a handling fee of € 50,-. In case of withdrawal later than that we will charge the full participation fee. The nomination of a substitute is free of charge.

### More organizational information

**Cancellation:** In case this conference has to be cancelled for important reasons, you will be informed immediately and fees already paid will be refunded. Other demands can not be claimed.

**Contact persons:** Organizational committee (AGFW)  
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**Organizer:**  
AGFW | Energy efficiency association for heating, cooling and CHP

**Organization:**  
AGFW-Projekt-GmbH, Solites Steinbeis Research Institute for Solar and Sustainable Thermal Energy Systems

The general terms and conditions of AGFW-Projekt-GmbH apply.

### Data privacy

With my registration I agree that AGFW-Projekt GmbH is entitled to process and use my personal data for the completion of the concluded contract as well as sending me information regarding further services offered by AGFW-Projekt GmbH or AGFW e. V. via post and/or email. You may at any time advise AGFW-Projekt GmbH that you object to future processing and use of your data for these purposes.

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**2nd International  
Solar District Heating  
Conference**  
3-4 June 2014, Hamburg

**SDH**  
solar district heating

Supported by



## Programme

### Tuesday, 3 June 2014

**09:00h - 12:00h Technical tour to Hamburg Energie „Energy Bunker“**

**12:00h - 13:00h Lunch at Hamburg Wasser, CCR**

**13:00h - 15:00h Opening plenary session**

Opening  
*BMW i - Federal Ministry for Economic Affairs and Energy*

Welcome address  
*Hamburg Energie GmbH*

Solar thermal in the context of the district heating economy  
*AGFW - German Energy Efficiency Association for District Heating, Cooling and CHP*

Introduction to the 2nd International Solar District Heating Conference  
*Thomas Pauschinger, Solites*

Comprehensive modelling and analysis of a future German energy system with a dominant supply from renewable energies  
*Hans-Martin Henning, ISE - Fraunhofer Institute for Solar Energy Systems*

**15:00h - 15:30h Coffee break**

**15:30h - 17:30h Parallel session 2.1 - Solar district heating for housing areas and villages**

New solar heated residential area in Vallda Heberg - Initial experiences related to system performance  
*Jan-Olof Dalenbäck, Chalmers University of Technology*

Lessons learnt from the first French case study on the integration of a central solar plant into an existing district heating  
*Amandine Le Denn, Tescol*

Extending the decentral district heating network in Hamburg Wilhelmsburg from the „Energy Bunker“  
*Joel Schrage, Hamburg Energie GmbH*

Optimization of a low temperature solar district heating system by integrating space and domestic hot water loads  
*Reda Djebbar, Natural Resources Canada*

The role of solar thermal in urban heat supply - Pilot scheme Freiburg „Gutleutmatten“ in Freiburg  
*Axel Oliva, ISE - Fraunhofer Institute for Solar Energy Systems*

Land lease models for increased use of free land area for solar district heating in Austria  
*Moritz Schubert, S.O.L.I.D. GmbH*

**15:30h - 17:30h Parallel session 2.2 - Technical system integration of solar thermal into district heating**

Experiences from national first movers in solar assisted district heating systems with seasonal storage  
*Dirk Mangold, Solites*

Integration of solar thermal systems into district heating  
*Martin Heymann, Technical University of Dresden*

Decentral feed-in of solar heat into district heating systems - Technical analysis of realized plants  
*Kai Schäfer, Solites*

Energy optimization of district heating networks via direct solar heating  
*Rasmus Aaen, AAEN A/S Consulting Engineers*

Ecodistrict Villeneuve: How to develop solar energy with an existing high temperature district heating and a new low consumption housing area  
*Cédric Paulus, CEA INES*

High temperature SDH with CPC evacuated tube collector systems in practice  
*Rolf Meissner, Ritter XL Solar GmbH*

**19:00h Dinner event**

### Wednesday, 4 June 2014

**09:00h - 10:45h Parallel session 3.1 - Policy, market strategies and business models**

Monitoring results and detailed system analysis of five Austrian solar district heating plants constructed in the framework of a national funding programme  
*Franz Mauthner, AEE INTEC*

SOLID Invest - New business model for civic investments in solar thermal systems launched  
*Nicole Olsacher, S.O.L.I.D. GmbH*

The effect of electricity generation by renewable energies on the profitability of solar district heating - an economic point of view  
*Evelyn Sperber, DLR - German Aerospace Center*

This is not our mandate - new business models for district heating face stiff challenges  
*Florian Reinert, Master Thesis*

District heating and low energy buildings: how to compete with low gas and electricity prices?  
*Emmanuel Goy, AMORCE*

**09:00h - 10:45h Parallel session 3.2 - Smart district heating systems including solar thermal / Sunstore 4**

Almere, NL - Smart district heating from waste heat and solar thermal  
*Christian Engel, Thermaflex*

Potentials for solar thermal smart grids in Germany  
*Roman Marx, ITW - University of Stuttgart*

Sunstore 4 - Design of the plant  
*Niels From, Planenergi*

Sunstore 4 - Design of pit heat storage  
*Morten Vang Jensen, Planenergi*

Monitoring results from the Sunstore 4 smart district heating plant in Marstal, Denmark  
*Thomas Schmidt, Solites*

**10:40h - 11:15h Coffee break**

**11:15h - 13:00h Closing session with panel debate**

Panel debate „Strategies for solar thermal in district heating“  
*Panelists are representatives of solar thermal and district heating industry as well as policy consultants*

Conference wrap-up  
*Thomas Pauschinger, Solites; Heiko Huther, AGFW*

**13:00h - 14:00h Lunch at Hamburg Wasser, CCR**

**14:00h - 17:00h Technical tour to Hamburg Energie „Energy Bunker“**

## Poster presentations

Modelling and simulation of large-scale thermal energy stores in district heating systems  
*Fabian Ochs, University of Innsbruck*

Monitoring results of Germany's largest solar district heating plant with seasonal thermal energy storage in Crailsheim  
*Dan Bauer, ITW - University of Stuttgart*

Comparison of thermal performances of different solar collector technologies for solar district heating systems based on Solar Keymark certificates and SCEncOcalc  
*Stephan Fischer, ITW - University of Stuttgart*

Simulating a small scale polygeneration thermal network: numerical model and first results  
*Biagio Di Pietra, ENEA*

Solar district heating concepts of the new residential area in Hamburg-Jenfeld, Germany  
*Dominik Bestenlehner, SWT - Solar and Heat Technology Stuttgart*

Different technologies and an optimal integration to combined heat and power  
*Flemming Ulbjerg, Ramboll*

Development outlooks for solar district heating in France  
*Julien Dumas, Clipsol*

European research school on large scale solar thermal SHINE  
*Chris Bales, Dalarna University*

Towards district heating with 80-100 % solar fraction  
*Daniel Trier, Planenergi*

Enhancing district heating performances with solar thermal energy use: a case study at 2000 m above sea level  
*L. Degiorgis, Polytechnic of Turin*