• Integration of large-scale solar thermal plants in new and existing district heating networks supplying heating and cooling for residential and industrial use

• Actions for preparing a commercial market introduction of solar district heating in Europe

• Expected results:
  – market know-how and improved boundary conditions
  – industry standards on solar district heating
  – transfer and dissemination to other European countries

• The project is implemented in a cooperation of associations, companies and institutes of the district heating and solar thermal sectors

• Partner countries: AT, BE, CZ, DE, DK, IT, SE
Solar district heating (SDH) plants supplying heating and cooling for residential and industrial use

- 1,000s up to 100,000s kWth of solar collectors
- Local heat distribution networks (block heating) and large CHP district heating networks
- With and without long term heat storage
- Temperature range between 50 and 150 °C
- Integration and combination with other DH technologies (CHP, waste heat, biomass and biogas, heat pumps)
- Cooling applications
**Background and Objectives**

**Starting situation:**
- Market understanding
- Policy
- Standards
- Supply side capacity

**Contribution to SDH strategic goals:**
- 2012: 500 MWth in planning
- 2020: 9 GWth (1% of DH)
- Long term: 47 GWth (5% of DH)

**Demonstration:**
- Technical know-how
- Project and operation experience

**Gap between DH and solar:**

**Communication, Dissemination, Transfer:**
- DH suppliers, policy makers, demand side

**After this project:**
- Improved base for commercial application
- Well known, more activities
  - Plants
  - Programmes

**Common understanding by DH and solar**
European level:
Euroheat & Power (EHP), Belgium
CIT Energy Management AB (Enerma), Sweden

5 national tandems:
DH associations & consultants:

DE: AGFW, German Heat and Power Association
Solites, Steinbeis Research Institute for Solar and Sustainable Thermal Energy Systems

AT: Energie Graz GmbH & Co KG (EGG)
S.O.L.I.D. Company for Installation of Solar and Design mbH (Solid)

DK: Marstal District Heating (MDH), PlanEnergi (PlanEnergi)

IT: Italian District Heating Association (AIRU), Ambiente Italia (Ambita)

CZ: Association for District Heating of the Czech Republic (ADHCR)
CITYPLAN spol. s r.o. (CP)

In addition the project is supported by industry enterprises of the solar thermal and the district heating sector.
Contact [www.solar-district-heating.eu](http://www.solar-district-heating.eu) for latest results and upcoming events.

*Welcome to www.solar-district-heating.eu, the website of the Intelligent Energy Europe SDHtake-off - Solar District Heating in Europe project! SDHtake-off is supporting the market rollout of solar district heating in Europe.*

This website provides you with updated news and informations on solar district heating as well as project products and services presented here according to the SDHtake-off project progress.
Tools available from the project

- Common slides: master version in English, translation in national languages available
- Questionnaire for evaluating the feasibility of a SDH plant
- National markets conditions ("macro analysis")
- Plant database and plant sheets ("micro analysis")
- Standard factsheets (both technical and non-technical)
- Supply side clusters
- Help desks
- Questionnaire for evaluation
Tools available from the project
Publications

Success Factors in Solar District Heating

National market conditions and plant sheets
Tools available from the project
Plant database
Tools available from the project
Standard factsheets

SDH Guidelines Discussion Board

This discussion board presents various technical and non-technical fact
sheets of the SDH guidelines produced by the SDH-TO project team
together with external partners. For a certain period the fact sheets
remain open for commenting and discussion. Click the fact sheet which
you want to comment on or for which you would like to see the
suggestions from other partners. The discussion board offers standard
functions which you already know from other forums (comment, respond
to comments etc). The responsible project partner will be notified about
your contributions. Thanks for your cooperation!

Fact sheets

1. Introduction to SDH – from idea to operating system
   1.1 Overview of SDH implementation steps
2. Preliminary investigations
   2.1 Solar heat combined with other fuels
   2.2 Where to place the solar collectors
   2.3 Feasibility study
2.4 Questionnaire for SDH site assessment
2.5 Ownership and financing
3. Permissions, tendering, contracts and guarantees
   3.1 Permissions from authorities
   3.2 Tendering and contracts
   3.3 Performance guarantees
4. Implementation
   4.1 Supervision of construction and commissioning
   4.2 Monitoring
5. Miscellaneous
   5.1
6. System
   6.1 Categories of solar district heating systems
   6.2 Decentral integration of ST in DH networks
   6.3 Control strategies
7. Components
   7.1 Solar collectors
Tools available from the project
Find professionals

Find Professionals

The 'Find Professionals' tool allows you to search for business partners, component suppliers, consultants and service providers with long term experience on the field of solar district heating. Use the filter tool to easily select the right partners active in your country or corresponding to the desired category.

Benefit from this well introduced platform for presenting your own company.

For more information contact ssc@solar-district-heating.eu.

SDH-Professionals Overview

Company | Contact | Category | Countries of activity
--- | --- | --- | ---
Ambiente Italia | Mr. Riccardo Bettisti  
tel: +39 0644340129  
riccardo.battisti  
@ambienteitalia.it  
www.ambienteitalia.it | Consultant  
Education  
Energy Concepts / Feasibility Studies  
Research | Italy

Solites - Steinbeis Research Institute for Solar and Sustainable Thermal Energy Systems | Mr. Thomas Pauschinger  
tel: +49-711-5732000-40  
pauschinger@solites.de  
www.solites.de | Consultant  
Education  
Energy Concepts / Feasibility Studies  
Project Developer (public/private)  
Research | Europe  
Denmark  
Germany  
Italy  
Norway  
Spain
SDHTake-off strategic results

• Common (DH + ST) development of SDH
  (e.g. working groups and events of DH associations)

• Common assessment of the application cases
  (e.g. area of conflict: CHP / waste heat versus solar heat)

• New pilot initiatives
  (e.g. solar feed-in model of E.On Hanse Wärme, more to come)

• New projects in newcomer countries
  (e.g. Italy: first 3 pilot plants in 2012)

• www.solar-district-heating.eu as recognized platform for SDH
Contact and Support

**Project website:**  www.solar-district-heating.eu

**Coordinator:**  Solites
Steinbeis Research Institute for Solar and Sustainable Thermal Energy Systems

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**Supported by:**

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