

Handout about SDH for communities

Subject:	Handout about SDH for communities
Description:	Publication of a handout "Future Sun! Solar Thermal Energy and District Heating: A guideline for practical application" (German language)
Date:	20.11.2018
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Document download:	www.solar-district-heating.eu/en/knowledge-database/

Summary description of the instrument

Region: Thuringia, Germany (A-Region)

Partners involved: Steinbeis Innovation gGmbH Solites, HIR Hamburg Institut Research gGmbH, in.RET Institut für Energietechnik, Technische Universität Ilmenau, Thüringer Energie- und GreenTech Agentur ThEGA

Short description of the measure: Publication of a handout "Future Sun!" containing a question-answercatalogue with respect to technical, economical and juridical aspects of the application of solar thermal energy in district heating as well as three relating case studies.

Initial situation

Already within the final report of the Thuringian energy monitoring (FH Nordhausen, 2013) it was stated, that the high share of renewable energy sources within the heat supply system in Thuringia is basically due to the usage of biomass. Furthermore it was found out that the potentials for generating heat from biomass and waste are nearly exploited in Thuringia. In comparison to that, the potentials of solar thermal energy are used only insufficiently until now.

Following, the possibilities of the application of solar thermal energy within existing heating grids, existing larger buildings and new stand-alone heating grids were discussed with local stakeholders such as researchers, experts and energy suppliers. As a result, the question-answer-catalogue was developed. Three concrete and relating case studies concerning the application of solar thermal energy in different heat supply systems were developed as well.

While first experiences with solar thermal energy in heating grids are made by Thuringian actors until now potential actors, which do not command a broad and detailed knowledge concerning solar district heating,





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should be supported. For that reason within the SDHp2m-project a printing and publication of the handout "Future Sun!" containing the question-answer-catalogue as well as the three case studies was carried out.

Objectives

This handout for communities about technical, economical and juridical aspects of the use of solar thermal energy in district heating should enable potential actors, thanks to the question-answer catalogue "Solar thermal energy and district heating", to make first steps on their own and to evaluate and compare different possibilities of the application of solar thermal energy in district heating systems.

Three concrete and relating case studies create a link between theoretical and practical issues of the possibilities of the application of solar thermal energy in district heating systems.

This could be relevant for several market segments of solar district heating and especially potential investors such as energy suppliers, district heating network operators and citizen cooperatives beside communities as well. To sum up, this handout is a fundamental information measure.

Measures and actions

Within the start-up meeting of the regional stakeholder advisory group the prepared question-answercatalogue "Solar thermal energy and district heating" as well as the three case studies were presented to the members of the regional stakeholder advisory group and concerning its printing and publication discussed collaboratively. For further feedback a contact person was named.

Beside the publication of the print version in October 2016, the handout is available online since February 2017 at the SDH-Website: http://solar-district-heating.eu/de/en-gb/landesinitiativen/th%C3%BCringen.aspx

This publication was announced within the German SDH-Newsletter. Additionally it was provided to the Thuringian Association of Municipal Companies to be spread within this local stakeholder network.

The final version of the handout was presented to the stakeholders at the second meeting of the regional stakeholder advisory group meeting in March 2017 officially.

The printed version was and will be available at solar district heating events and workshops for stakeholders.





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Barriers and opportunities

The publication of the handout "Future Sun!" is a fundamental measure concerning the support of information and public acceptance for SDH / RES DHC, which can be combined with other measures and activities as well. For example, the handout can be distributed to potential actors and stakeholders at several workshops and other events.

This was already taken into account as described above. Due to that, a multiplication might occur as well, for example if the members of the regional stakeholder advisory group are spreading the handout, too.

As described above, the publication of the handout is a fundamental measure that supports potential actors and stakeholders to make first steps on their own. It can be combined with several other measures and activities.

Results

The handout "Future Sun!" contains 58 pages. The first part consists of the question-answer-catalogue concerning technical, economical and juridical aspects of the application of solar thermal energy in district heating and gives a broad overview about commonly discussed aspects concerning solar district heating.

The second part of the handout consists of three case studies for the regions Erfurt, Werther and Sondershausen in Thuringia. Therewith, the case studies are covering possible applications of solar district heating in quarters, cities and rural areas. Each case study consists of a summary, some background information, the description of the local initial situation, the explanation of the possibility of the integration of solar thermal within the heat supply system, the presentation of the calculated results as well as information about economic aspects, possible collector areas, citizen participation and business models.



Figure 1: Cover of the handout "Future Sun!"

Lessons learned

The feedback concerning the handout was only positive.

The publishing of a handout is a good fundamental and long-term measure that can support stakeholders.





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