



Smart and Flexible 100 % Renewable District Heating and Cooling Systems for European Cities

Regional strategy of Schleswig-Holstein (EN)

Deliverable

WP 2	Improving the regional framework
Task 2.1	Survey of regional RES DHC framework
Del. 2.1	Regional strategy

MELUR

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1. Introduction

The regional strategy for Schleswig-Holstein in the framework of SmartReFlex follows three parallel paths:

1. Covenant for Heat Transition
2. Pilot projects for Solar District Heating
3. Regional workshops

2. Action Plan

This section describes the most important actions planned for the project period (and beyond). This table is updated by the regional partners every 6 months.

			Timeline	
Required action	Stakeholders needed	Resources / instruments needed	Planned date	Real implementation
<p><i>The first step is to agree on the covenant of heat transition.</i></p> <p><i>At the beginning only the housing industry is needed. After that, other relevant stakeholders such as municipalities, utility companies, crafts chambers and consumer protection agencies should be invited.</i></p>			06 / 2015	Autumn 2015
			<p><i>In the 2. Task Force Meeting in May 2015 it has been agreed, that the MELUR creates a first draft version of the covenant of heat. On this version should be agreed on until end of September 2015.</i></p>	
<p><i>In Schleswig-Holstein a pilot project for solar district heating should be initiated.</i></p> <p><i>At first suitable municipalities / regions have to be identified. Then all relevant stakeholders have to be convinced to use solar thermal district heating.</i></p> <p><i>Resources/instruments that are needed: Screening to identify a location, information process to convince the inhabitants, an investor and an operator have to be found. The regional workshops should be offered in the region, where the pilot project will be located. The workshops should help to convince the stakeholders.</i></p>			Beginning in Autumn 2015	...
			<p><i>Lessons learned: agreement to the covenant of heat hard to find. Collecting and evaluation of best and worst practice examples together with the housing industry has started. The idea is to use actual building / renovation projects of the housing industry in SH and to find a good location to initialize a first big solar thermal district heating in SH</i></p>	
<p>Covenant of Heat: Collecting and evaluation of best and worst practice examples preparing the communication strategy to promote district heating and renewable energies in district heating.</p>			Autumn 15 - 16	
			<p>Unfortunately the covenant of heat could not be closed. There were no further activities within the framework of the Task Force.</p>	

<p>SmartReFlex Workshops</p> <p>Workshop 1 (design and planning): 23. February 2016 at BNUR in Flintbek</p> <p>Workshop 2 (technical): 28. / 29. April 2016 at the Wissenschaftszentrum Kiel</p> <p>Workshop 3 (organisation and financing): 18. Mai 2016 at BNUR in Flintbek</p> <p>Workshop 4 (district heating for financing institutions): 16. September at "Dreiklang" in Kaltenkirchen</p> <p>Despite the non-closed covenant of heat, the workshops were very successful, with a total of over 100 participants. These mainly gave a positive feedback.</p>	<p>Spring till Autumn 2016</p>	
	<p>The workshops were important for networking and establishing contacts with the Danish project partners.</p>	

<p><i>Activities after SmartReFlex</i></p> <p><i>The regional energy- and climate protection initiative (EKI) will work at least until 2020 to offer municipalities help within the energy transition and climate protection. Till the end of 2016 there have been already more than 70 initial consultancies in Schleswig-Holstein.</i></p> <p><i>The goal is to help building new district heating grids and to build more renewable energies plants for district heating.</i></p>	<p><i>From autumn 2016</i></p>	
	<p><i>In the first two years of EKI there have been more than 70 initial consultations in the region.</i></p>	

3. Regional strategy

1. “Covenant for Heat Transition”

As a means to implement the SmartReFlex work program, a working group/task force has been established to institutionalize the framework for a generally accepted long-term transition of the heating sector towards efficiency and renewable energies (RES).

The primary focus of the task force is to cooperate with all relevant stakeholders to establish common goals and instruments for the transition of the heating sector. As a first step, there has been an initial meeting with the housing business and homeowners, represented by all relevant federations of homeowners, landlords and public housing companies. After the successful start, other relevant stakeholders such as municipalities, utility companies, crafts chambers and consumer protection agencies will be involved in the process.

2. Pilot projects for Solar District Heating

As a direct neighbor of Denmark with comparable geographical conditions, it is particularly interesting for Schleswig-Holstein to learn from the Danish success of solar district heating (SDH) and to transfer it to Germany. The partners of SmartReFlex agree that successful pilot projects for SDH could give a significant boost for RES in DH and that Schleswig-Holstein would be a very suitable region for pilot projects. These pilot projects should prove that SDH is competitive under today's market conditions for the regular use in DH existing and new DH systems in SH.

Schleswig-Holstein wants to support the initiation of such SDH pilot plant. As a first step, there should be a systematic screening of potential suitable sites with different criteria by the Hamburg Institute to identify towns with particularly favorable conditions for SDH. SH has discussed with the Hamburg Institute (HI) that this screening study could be implemented by HI within the framework of SmartReFlex and that SH would be willing to transfer, depending on the effort, up to 20% of SH's project budget to HI in order to finance the study. The project leader and EASME are sought to grant this transfer within the project budget. The screening study will first identify the most important criteria to discover good conditions for pilot projects and then apply these criteria to certain regions of SH with the goal to finally come up with concrete suggestions for suitable sites for pilot projects.

3. Regional workshops

Within SmartReFlex there will be (within Work package 3) workshops for RES in DH in SH. These workshops will be set up in a way that complies with the goal to initiate a pilot SDH in SH: The workshops shall be used to disseminate knowledge and foster acceptance for SDH in the towns that have been identified through the screening study to have favorable conditions.

Since there are two German regions in Germany part of SmartReFlex, it is planned to have two workshops in SH and two in Baden-Württemberg (each half a day or one day).

The first workshop in SH addresses municipalities, especially those with favorable pre-conditions for SDH. Associations of municipalities should also be addressed to enable future multiplication of the knowledge among municipalities. Planned topics:

- Local heat planning as an instrument to provide cost efficient solutions for heating.
- Introduction to SDH and experiences in Denmark with a focus on the potential economic advantages for the municipalities.

The second workshop will take place a few months after the first workshop. To be able to react to the reactions and needs of the municipalities, the content of the second workshop will be determined after the completion of the first workshop. If there is a great response of municipalities in the first workshop, the second workshop should be used to support communities in their first practical steps to implement heat planning and/or projects for SDH. If there is only little response in the first workshop by municipalities, the second workshop should address professionals in the planning sector that are involved in energy planning and local climate protection planning.

4. Improving the framework

Technical, organizational and legal issues	<i>Recommendations to improve the framework regarding technical topics.</i>
<p>Within SmartReFlex, a thorough analysis of the legal framework for RES in DH has been completed by the Hamburg Institute (see the respective document with an English summary). Schleswig-Holstein aims to draw conclusions from the findings of this analysis and contribute to lower the identified obstacles. This comprises in particular:</p> <ul style="list-style-type: none"> • to search for ways or support initiatives to improve federal law in the field of consumer protection in DH • to support strategies at the federal level to improve the economic framework for RES DH in comparison to conventional CHP in DH. • to search for practical ways to solve legal uncertainties in the planning process for SDH, particularly regarding the application of state law on water protection in planning permit procedures for SDH units 	

5. SURVEY RESULTS

In Germany the Hamburg Institute elaborated the survey document ‘**The Legal Framework for Renewable District Heating in Germany**’.

Within this document the legal framework in Germany as well as in particular in Schleswig-Holstein and in Baden-Württemberg has been analyzed. The German version of the document has been elaborate within the project SolnetBW (www.solnetbw.de) financed by the state of Baden-Württemberg.