Solar district heating **Instruments for policy and legal framework**



Integrated Energy and Climate Strategy at regional level

Subject:	Integrated Energy and Climate Strategy
Description:	Development of a Draft of an "Integrated Energy and Climate Strategy"
Date:	20.02.2018
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Document download:	www.solar-district-heating.eu/en/knowledge-database/

Summary description of the instrument

Region: Thuringia, Germany (A-Region)

Short description of the measure: The Thuringian Ministry for Environment, Energy and Nature Conservation (TMUEN) is coordinating the development of an "Integrierte Energie- und Klimaschutzstrategie" ("Integrated Energy and Climate Strategy").

Initial situation

The Free State of Thuringia wants to cover its own energy consumption on a yearly balance with a mix of renewable energies until 2040. Therefore a certain amount of effort not only within the power sector but within the heating sector as well is necessary. One important cornerstone is the reduction of greenhouse gas emissions by heat supply from district heating networks and their further extension.

The "Thuringian Climate Law", which's Draft Law was handed over to the State Parliament for further decision in January 2018, could build a framework for the climate and energy politics of Thuringia. Therefore, a Draft Law has been elaborated by the Thuringian Ministry for Environment, Energy and Nature Conservation (TMUEN), which was accepted by the State Government in December 2017. In January 2018 the Draft Law has been handed over to the State Parliament, which has legislative power to pass the Draft Law.

The draft of the "Thuringian Climate Law" contains a notice concerning the development of an "Integrated Energy and Climate Strategy". This "Integrated Energy and Climate Strategy" again should regulate more concrete measures and actions to reach the climate protection targets set within the "Thuringian Climate Law".





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Objectives

A broad public discussion enabled several stakeholders to participate within the development process of the "Integrated Energy and Climate Strategy" and to find appropriate measures and actions to reach the targets set within the "Thuringian Climate Law".

A study of the Leipziger Institut für Energie is building the basis for the development of the strategy. The study states, related to the greenhouse gas emission reduction targets of the Free State of Thuringia, several fields of actions with high potentials for single greenhouse gas emission reductions. These fields are: energy supply, economy, traffic, buildings, private households, agriculture and land use as well as public authority.

Within the multilevel dialogue concrete measures and actions have been developed for each field of action. Finally those are building the basis for the draft of the "Integrated Energy and Climate Strategy", which needs to be accepted by the State Parliament. A regular update of the strategy by the State Parliament is foreseen.

Measures and actions

From March until November 2017 interested stakeholders and experts, such as social groups and associations, municipal associations, representatives of the economy and nature conservation representatives, as well as citizen were receiving the opportunity to take part in a relating broad public discussion and therefore the development of the "Integrated Energy and Climate Strategy".

The "Integrated Energy and Climate Strategy" is developed within a multilevel dialogue. A study of the Leipziger Institut für Energie was building the basis for the development of the catalogue of measures 1.0.

This catalogue of measures 1.0 was discussed within a first workshop series with several experts in March 2017. Taking into account the results of the first workshop series, the catalogue of measures 2.0 was developed, which could have been commented and evaluated online. Commenting and evaluating was also possible in the Climate Pavillion of the Thuringian Ministry of Environment, Energy and Nature Conservation (TMUEN) on the occasion of the horticultural show in Apolda. Furthermore, also a target-group workshop series was running.

The results of this feedback period were taken into account within the catalogue of measures 3.0, which finally was discussed within a second workshop series with experts in October 2017.



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In January 2018 the catalogue of measures 4.0, which is taking into account the results of the second workshop series, was finalized. Currently, on this basis the draft of the Integrated Energy and Climate Strategy is under development.

The catalogue of measures 4.0 contains nine measures concerning the field of action 'energy supply'. The study of the Leipziger Institut für Energie highlights amongst others the necessity of the transformation of district heating networks and the importance of renewable energies within these systems to reach the climate protection and greenhouse gas emission reduction targets set. This leads to measures such as 'development of concepts for a CO₂-neutral heat supply system with public district heating networks and transparent product information' and 'support of the extension of local district heating networks on the basis of renewable energies'. Also measures such as the 'implementation of a pilot project concerning the transformation of a district heating network from high flow temperature to lower flow temperature' are discussed. Furthermore the catalogue contains measures such as 'continuation and further development of programs for the support of the application of solar energy' and the 'supply of public areas for the application of renewable energies'.

All catalogues of measures containing the discussed measures in the form of factsheets are available online in German language: <u>https://klimastrategie-thueringen.de/ieks/de/home/informieren</u>.

Barriers and opportunities

The broad public discussion enables several stakeholders to participate within the development process of the "Integrated Energy and Climate Strategy". This should lead to a catalogue of measures that is appropriate for the local conditions in Thuringia and the transformation of its heat supply system. The possibility of participation also was foreseen to intensify the public acceptance for the local energy and climate politics.

The draft of the "Integrated Energy and Climate Strategy" will be handed over to the State Parliament, which has to discuss and vote over the draft. Within this process, adjustments might occur also the State Parliament could refuse the draft.

Results

Under the coordination of the Thuringian Ministry for Environment, Energy and Nature Conservation (TMUEN) the basis of the draft of the "Integrated Energy and Climate Strategy" was developed by the IFOK GmbH and the Leipziger Institut für Energie GmbH. Within this factsheet aspects of the "Integrated Energy



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and Climate Strategy" concerning solar district heating are documented. Beside these aspects, other energy and climate protection relevant measures, such as mobility, industry, households and others are part of the "Integrated Energy and Climate Strategy".

Lessons learned

The Draft Law of the "Integrated Energy and Climate Strategy" will be handed over to the State Parliament for further discussion and voting over it and could build – connected to the "Thuringian Climate Law" a strong framework for the development of the climate protection and energy supply system of Thuringia, when getting accepted. Furthermore it is a measure with long-term impact due to practical approaches. Still, elaborating a Climate Strategy is a time- and labor-intensive measure, which's result depends on the participation of stakeholders and political decisions of the State Parliament.

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