



ProSTO - Your Toolbox to implement a Solar Thermal Ordinance

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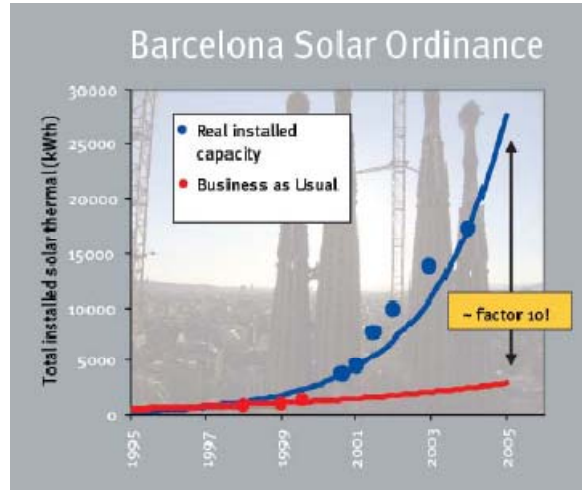
About ...

Solar thermal ordinances (STO) are legal provisions which oblige the use of solar thermal in new and refurbished buildings

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The Bracelona "Boom"



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ProSTO – Best Practice Implementation of Solar Thermal Ordinances

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ProSTO Partnerconsortium



Objectives:

- Tools to support European local authorities in planning, developing, introducing and managing efficient solar thermal ordinances (STOs)
- Five best practice STOs will be developed by the participating local authorities in cooperation with scientific partners.

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Consortium:

5 Countries (IT, DE, SP, PT, RO)
13 partners
(scientific/technical institutes
and local authorities)

Project duration: Jan. 2008 – Dec. 2010

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How ProSTO is Supporting Community Administrations

- Community Administrations are not alone on the road towards solar thermal
- ProSTO Tools:
 - success factors and barriers
 - database of best practice STOs
 - STO Toolbox
 - STO Blueprint
- In 5 languages + English!

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Heat_Law_Baden_Wuerttemberg
Building_Code_of_Caruzate

Statements of successful STO-makers



“Our common target is to tackle all the challenges and take advantage of the opportunities to achieve a real sustainability, both for the municipal administration and the neighbors of our municipality. In this point, Solar Thermal Energy is a very important potential for our municipality. The Solar Thermal Obligation will contribute to regulate, guide and enhance the development of these systems, increasing the use of energy coming from renewable resources and reducing CO₂ emissions.”

Mrs. Adela Martínez Cachá – Deputy Mayor for Environment and Urban Quality at the City Council of Murcia (SP). Vice-President of the Local Agency for Energy and Climate Change of Murcia.

STO Database

German Act on the Promotion of Renewable Energies in the Heat Sector (EEWärmeG)

Germany

The Act on the Promotion of Renewable Energies in the Heat Sector (EEWärmeG) is valid in Germany since 2009. The act introduces the obligation for new buildings to use renewable energies for domestic hot water and space heating. Alternatively the heat demand has to go by 15 % under the limit of EnEV (Act on energy savings). When solar thermal energy is used, it has to cover at least 15 % of heat supply. Other renewable energy sources like biomass and geothermal are also possible as well as the connection to district heating with a minimum share of renewable energies or CHP.




Show details »

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- [Heat Law Baden-Württemberg](#)
- [Building Code of Catalonia](#)
- [Italian national law](#)
- [Portuguese Regulation](#)
- [Building code Rome](#)
- [Regional obligation in Lazio](#)
- [Energy Standards in Ireland](#)
- [Codigo Técnico Spain](#)
- [Decret Catalunya](#)
- [Barcelona Solar Ordinance](#)
- [Pamplona Solar Ordinance](#)
- [German Heat Law](#)
- [Lisbon framework](#)

Summary

The Act on the Promotion of Renewable Energies in the Heat Sector (EEWärmeG) is valid in Germany since 2009. The act introduces the obligation for new buildings to use renewable energies for domestic hot water and space heating. Alternatively the heat demand has to go by 15 % under the limit of EnEV (Act on energy savings). When solar thermal energy is used, it has to cover at least 15 % of heat supply. Other renewable energy sources like biomass and geothermal are also possible as well as the connection to district heating with a minimum share of renewable energies or CHP.



Ordinance Facts

Ordinance title	German Act on the Promotion of Renewable Energies in the Heat Sector (EEWärmeG)
Type of ordinance	renewable heat law
Starting date	1. January 2009
Duration	unlimited
Geographical area	Germany
No. of inhabitants, area	82 Mio., 357.000 km²
Scope	new-build residential and non-residential buildings; there are exclusions for some non-residential buildings
Technology priorities	solar thermal, biomass, geothermal, use of waste heat, heat from CHP
Size of the solar heating system required	In case of solar thermal it has to cover at least 15 % of heat energy demand.
Alternative measures	use of solid biomass, geothermal energy or waste heat meet min. 50 % of heat energy demand ;
Executing authority	According to the regional (Länder) regulations.
Execution mechanism	Not regulated by the law.

Development and Implementation

Background Heat supply in Germany depends at more than 75 % from imported fossil fuel and gas. This results in economical risks, political dependence and

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- Context
- Baseline Assessment
- Ordinance Components
- Flanking Measures
- Monitoring

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STO Toolbox

Web Site

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STO Developers Toolbox

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The various tools range from text proposals for the ordinance over background reports and best practice examples to software tools for mapping the potential of solar thermal in your community. New tools have been developed and already available instruments have been compiled by the ProSTO project partners.

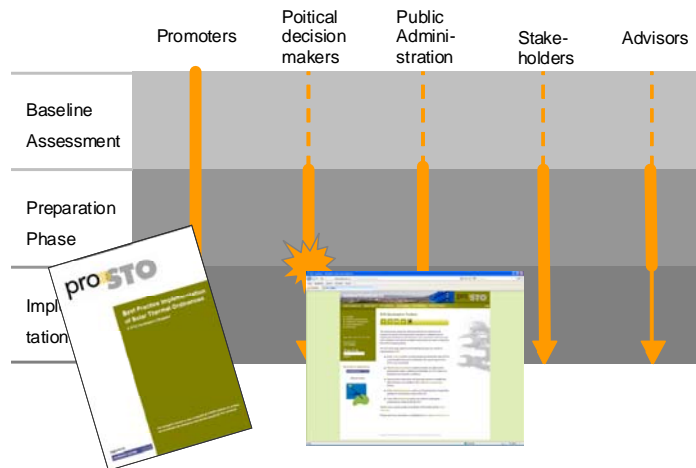
The STO tools shall support you through the process as a whole of implementing a STO:

- In the **Context** section you find background information about STOs, communication tools and in particular many good reasons for a STO in your community.
- The **Baseline Assessment** section provides you with tools for analysing the status, potential and feasibility of a STO under your individual local boundary conditions.
- Approved text components and legal approaches for drafting the right ordinance are available in the **Ordinance Components** section.
- In the **Flanking Measures** section you find proposals of supporting activities for boosting the impact of the STO.
- Tools of the **Monitoring** section are useful for tracking the achievements obtained with the STO.

What is more, project results are available in the section about **project outcomes**.

Please send your comments or contributions to tools@solarordinances.eu.

Holistic process of a STO development and implementation



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The ProSTO Toolbox

Context

- Brochure
- Guidelines ("blueprint")

Baseline assessment

- Local situation
- Potential assessment

STO components

- Scope
- Calculation procedures
- Quality requirements
- Architectural integration
- Administrative procedures

Support measures

- Information campaign
- Supporting demand side
- Supporting supply side
- Financing schemes
- Pilot plants

Monitoring

- Monitoring the market
- Evaluating the internal procedure
- Assessing its own STO

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STO Context Tools

Context

Good reasons for a solar thermal ordinance in your community?

Following categories of STO context tools are available:

Tool 1.1: Brochure
Tool 1.2: Guideline
Tool 1.3: Process

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List of Tools

No.	Title	Type	Info	Download
1.1.1	ProSTO Leaflet	Leaflet	Factsheet	Download
1.2.1	Best practice regulations for solar thermal	Guideline	Factsheet	Download
1.2.2	ProSTO State of the Art Report	Report	Factsheet	Download
1.2.3	Architectural Integration of Solar Thermal Systems	Presentation	Factsheet	Download
1.2.4	STO Developer's Blueprint	Guideline	Factsheet	Download

STO Ordinance Components

Ordinance Components

Drafting the right ordinance

Following categories of STO components are available:

Tool 3.1: Scope
Tool 3.2: Calculation procedures
Tool 3.3: Quality requirements
Tool 3.4: Architectural integration / protected buildings
Tool 3.5: Administration and procedures
Tool 3.6: Else

List of Tools

No.	Title	Type	Info	Download
3.1.1	Scope of a STO	Recommendations	Factsheet	Download
3.2.1	Quantitative Obligation and Calculation Procedures	Recommendations	Factsheet	Download
3.2.2	EN 15316-4-3 Standard	Standard	Factsheet	Download
3.3.2	Quality Label Solar Keymark	Quality Label	Factsheet	Download
3.4.1	Solar Thermal on Patrimony Heritage Buildings	Recommendations	Factsheet	Download
3.6.1	STO Training for public staff	Recommendations	Factsheet	Download

The ProSTO Blueprint



In the ProSTO Blueprint you find for all these STO topics ...

... topic by topic ...

- Understandable introduction
- Insider advices
- References (for detailed info)
- Examples ... by the ProSTO community partners

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The "Hot Spot": Preparation of real STOs



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Conclusions

- STOs are one of the main issues in the Directive and in the National Renewable Energy Action Plan
- STOs should be adequately prepared and managed in order to be actually effective
- “steal” our work ... use ProSTO tools!

Available at: www.solarordinances.eu and on ProSTO national websites

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