

## Denmark: More than 60 MW<sub>th</sub> of new solar district heating in 2011

September 2011. Solar heat is penetrating Denmark's district heating networks at an unprecedented speed. Around 90 000m<sup>2</sup> of collector area (63 MW) will be newly connected to the country's networks in 2011. High fossil fuel prices make solar heat economically interesting also in other countries. The International Energy Agency's Solar Heating and Cooling Programme (IEA SHC) has set up a research project to support the growing market for large solar thermal systems.

*"Compared with last year, the new solar district heating capacity will double this year," says project leader Jan Erik Nielsen. "And the main reason for this dramatic development is simple – it is good business. Due to decreased costs and increased efficiencies, solar district heating is competitive even in the absence of any subsidies."*

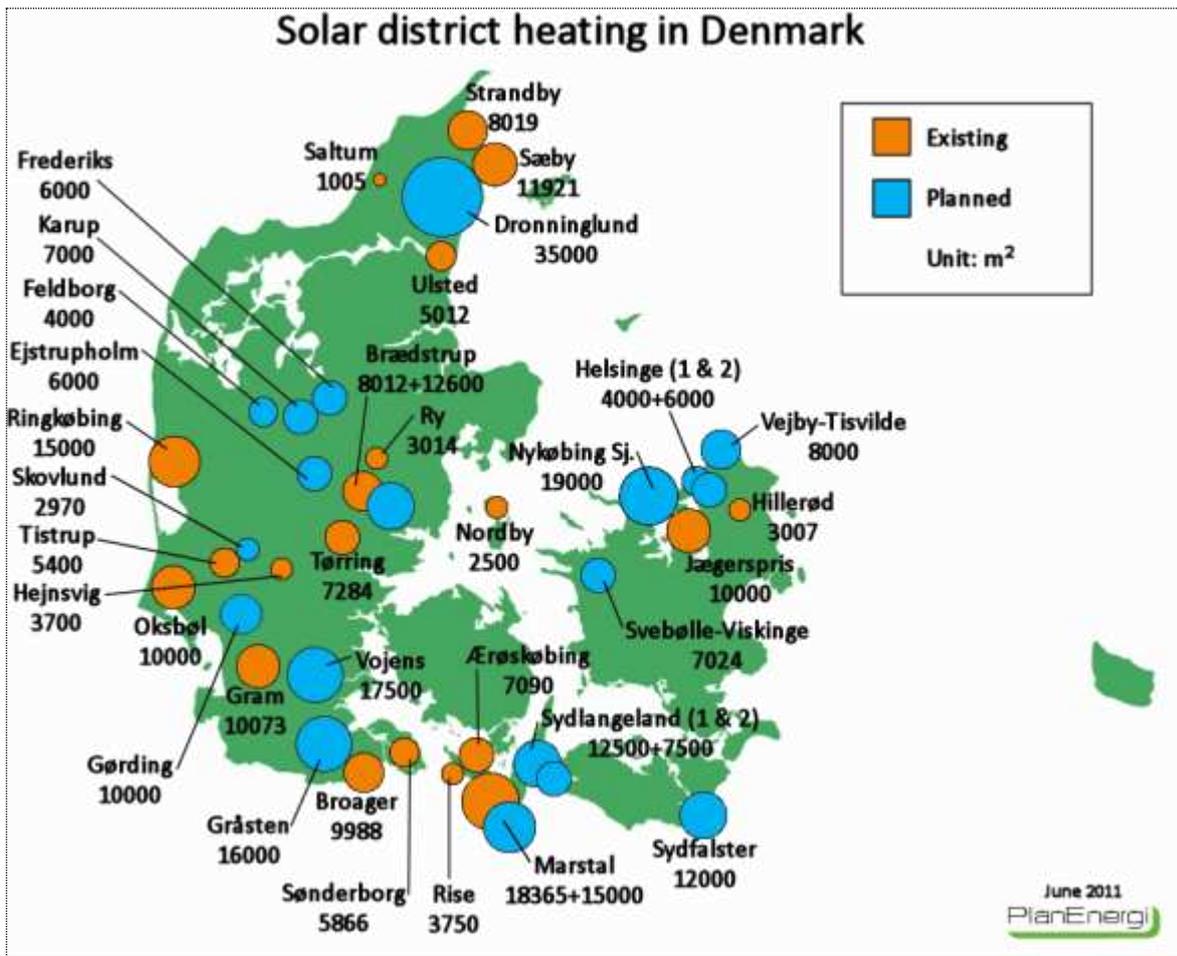
Since 1988, Denmark has been amongst the front-runners when it comes to using solar energy for district heating. But in the last five years the market has virtually exploded. Between 2006 and 2010 the installed capacity has increased 5-fold, from 30 to 150 MW<sub>th</sub>. Increased interest and rising numbers of solar district heating systems are also seen in other European countries, especially Austria and Germany.

The IEA Solar Heating and Cooling Programme is supporting this positive trend with a new international research project. Researcher from - so far - 7 countries are working on issues related to the collector fields, heat storage and system configuration. The overall aim is to further improve these systems, to improve their efficiency and to drive down cost. This could contribute to spreading the solar district heating boom to more countries.

*"In 2007 we published a 'Solar Thermal Strategy'," says Jens Windeleff of the Danish Energy Authority. "and we foresee that by 2050, solar could provide 40% of the energy needed to heat Denmark's buildings. Therefore, we work actively with the IEA SHC to further improve solar district heating."*

**Further information:** The IEA SHC project on "Large Solar Heating/Cooling Systems, Seasonal Storage, Heat Pumps" (Task 45) will continuously publish its results at <http://www.iea-shc.org/task45/>

**The map on the following page** shows existing and new solar district heating systems and their respective sizes in terms of square meters of solar collectors, courtesy of PlanEnergi.



### About the International Energy Agency's Solar Heating and Cooling Programme (IEA SHC):

- The Programme was established in 1977.
- Its objectives are co-operative research, development, demonstration and exchange of information regarding solar heating and cooling systems.
- 19 countries and the European Union are IEA SHC members.
- The research topics of the current 9 projects range from more general topics, such as "Solar resource assessment and forecasting", system research, such as "Large solar thermal systems" to material research, such as the use of "Polymeric materials for solar thermal applications."
- Additional information: [www.iea-shc.org](http://www.iea-shc.org)

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