



# Danish Model for ownerships in the district heating sector Denmark

### **Responsible partners**

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#### Model description

Denmark has a long tradition for consumer-owned companies. It started in the middle of the 18<sup>th</sup> century in the agricultural sector and has since evolved to include among others power companies and district heating companies.

It is also interesting to note that in mid-1980 purely political initiative was taken to change the power production structure in Denmark.

Previously, there was a highly centralized structure with relatively few but large power plants. This was desired amended so that a part of the electricity production should be made on local plants connected to district heating plants.

Therefore, in the latter half of 1980 and first half of the nineties there were built around 415 decentralized plants associated to district heating. Some of them are rather small with a few hundred consumers

Thus obtained, that the production became decentralized, it secured a co-production between heat and electricity - and that the companies and the new plants were direct consumer-owned - just the "Danish cooperative model".

And what does it mean that a district heating company and a CHP plant is consumer-owned? First and foremost, it means that the consumer is the owner.

It also means that a consumer-owned company is not making money for investors and that means there is no pressure from investors to generate profits. This fact, however, could lead to the risk that the effectiveness of the consumer-owned plants is not in top-class.

In this case the authorities are inside via a special law for heat supply companies to verify that all heat prices are reasonable and a profit from one year shall be included in the price of heating for the coming year to a possible reduction of price. All district heating prices in Denmark are published in a special website.

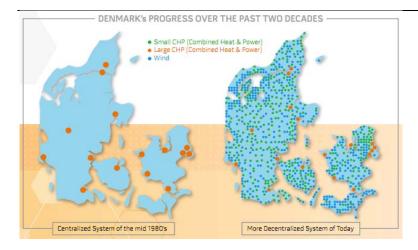
What kind of influence do the consumers/owners have? There will be at least one general meeting a year, where all consumers have the right to vote and elect board members and auditor for the coming year.

Similarly, the general assembly approves the accounting for the previous year and the investment plans for the coming years. The latter is interesting because the consumers have been very likely to accept relatively large investments to include new solar and storage technologies. Typically, a process in which a district heating company wants to be engaged with a new technology – for example large scale solar - starts with briefing-meetings for the consumers. Here they will be informed about the technology and economy and on how the board sees the future introduction of new technology. Such meetings are very important to ensure that the consumers feel an ownership of the new technologies.

However, the final decision to invest in new production technologies is usually taken in a general meeting.







In addition there may be mentioned, that the general meeting elects the board the chairman and vice chairman, and it is the board that sovereign appoints the director for the company. In connection with the massive expansion of large-scale-solar in combination with district heating in Denmark it can be seen that the consumer-owned model has ensured rapid and courageous decision-making processes in relation to the large investments in new technologies.

Strengths	It ensures local participation of future investments and a local ownership of new technologies - e.g. the Danish district heating companies' investments in large-scale solar thermal installations. It ensures rapid decision-making processes with- out unnecessary bureaucracy.
Weaknesses	Risk that the effectiveness of the consumer-owned plants is not in top-class. In this case the authorities are inside via a special law for heat supply companies to verify, that all heat prices are reasonable and a profit from one year shall be included in the price of heating for the coming year to a possible reduction of price.
Opportunities	Quick decisions based on local needs.
Threats	Very different perceptions of which investments are good and which are bad, depending entirely on the perception of each board and general meeting.
Improvements/recommendations/lessons learned	It is important to have quick decision-making power, especially for smaller communities con- cerned and the decentralized structures: Local in- fluence in decision-making.

#### Swot analysis





## Replication potential of the model

The model is replicable, given the following conditions:

- Changed ownership and decision-making processes for companies
- Ability to develop and pursue long-term strategies
- Pronounced decision-making power
- Local control and ownership of the introduction of new technologies

## Links to web site and/or documents for more detailed information

http://www.ens.dk/en-us/Sider/forside.aspx