

Informal input to Dutch Heat Act

Office/department
GR

Date
29-07-2020

J no.
/RUN, NFM

Overall input

We have read the Collective Heat Supply Act (the act) with great interest. It is clear that considerable thought and effort has gone into this legislation. From a Danish perspective, the suggested act meets many of the demands of the unique Dutch circumstances in a comprehensive, thorough and ambitious way. There are many points that could inspire further thought for Denmark in the act, which again underlines the value of this knowledge exchange.

The act has many elements that we recognize as having proven beneficial in Denmark; in particular the active role of local authorities in defining heat plots and the subsequent planning of heat systems. Responsive public stakeholders in the heat infrastructure is a crucial component in ensuring that larger scale heat systems are possible. Danish experiences show that municipalities, due to their experiences in other utilities, are ideally suited to handle many of these responsibilities, as the skills and knowledge required are similar to those of other utilities.

Furthermore, the CO2 reduction framework in the act will help ensure a clear link between national political and strategic goals and on-the-ground heat planning.

Relevant Danish experiences

In the spirit of our knowledge exchange partnership, we would like to emphasise three central and difficult issues for district heating regarding ownership where the Danish experiences could provide some inspiration. The following sections should not be seen as comprehensive comments or suggestions, but rather some things to consider in the next steps of the process.

Evolving public interests in the energy sector

In the Danish experience, flexible strategic cooperation between the government and the energy sector has shown itself to be of utmost importance, since Denmark has been forced to 'course correct' a number of times over the last five decades in response to various circumstances.

For example, while the rapid transition from oil to coal/gas/surplus heat in the 1970s (as a response to severe security of supply problems during the oil crisis) was successful, the subsequent switches to gas/biomass and now to green/sustainable resources has relied on active cooperation with the heat industry.

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Having district heating companies that directly answer to consumers, and thereby primarily interested in lowering consumer costs has proven extremely beneficial for Denmark. This is because it establishes a high degree of alignment between the interests of district heating companies and the national government, which means that negotiations, consultations and long-term goals can be agreed on in open discussions.

Similarly, on a local scale, heat utility companies in Denmark have in many cases been active participants in projects with municipalities/other utilities that lie outside their own short-term interests; such as with cloud burst mitigation projects and waste sector integration. In these cases, the clear role of municipal governments, through municipally backed loan guarantees and/or ownership has enabled the public interest to take precedence. This dynamic is one of the central pillars of Danish heat planning.

Infrastructure is capital intensive

Since investment costs are such a large part of district heating prices, it has been of immense importance in Denmark to keep interest rates and investor risks as low as possible as these are reflected in lower consumer prices if incentives are aligned. The act has many sections that aim to deal with this issue, which should mitigate some of the investor risks. In Denmark, one of the central reasons that district heating has generally been much cheaper than individual solutions has been the availability of publically guaranteed loans, made available to/through municipalities. These have ensured low-risk finances to non-profit actors that could document projects with positive socioeconomic outcomes with low consumer cost. These guarantees had the important effect of allowing smaller companies to enter the market, and are extended to private companies as well as public entities.

Rapid deployment was achieved with public involvement and ownership

Denmark achieved a very rapid buildout of heating infrastructure after the oil crisis, although not as rapid as the Netherlands should be able to. As it is suggested in the Heat Act, municipalities in cooperation with the energy supply companies carried out the heat planning – although the Danish Energy Agency was directly involved. In the overwhelming majority of cases, this was done by non-profit companies; either municipally- or consumer owned.

According to Danish experiences, it is beneficial to have ‘integral companies’ that retain ultimate responsibility for the systems, with the option to delegate tasks to subcontractors. In general, the Danish experience has shown that a clear division of risks and tasks is vitally important, provided the structure allows for public entities with appropriate skillsets and interests are able to participate on even footing. This makes legal accountability clear, while ensuring that consumers and public interests do not have to deal with a multitude of organisations in the case of supply failures.



Ideas for further consideration

- Danish experience with 'Combined Heat and Power' is that it can be the backbone of the heat production. However, since it is much more complex than other residual heat sources due to its direct link with power production, some specific regulation might be needed.
- As mentioned above, one of the key methods that ensured a rapid buildout of heat networks in Denmark was publicly guaranteed loans. Since capital is currently remarkably cheap, this would be a worthwhile avenue to explore in order to bring a wide variety of actors to the market.
- Denmark has greatly benefitted from having legislation that allows municipalities to flexibly cooperate with district heating companies, during heat planning and beyond, by setting criteria that suit local conditions.
- In order to ensure as wide an array of potential investors in the heat market, an addendum that deals specifically with non-profit systems, those who would not wish to remove funds from the system, could be beneficial to accomplishing the overall goals of the heat law.
 - Non-profit companies would have consumer representatives on their boards and/or have consumer representation through the municipal board members – if the consumers are displeased with the leadership, it would be voted down and exchanged
- In Denmark we have a special independent court-like entity that handles disputes between actors in the energy sector. E.g. disputes over heat zones or municipal/ACM decisions. This might be an idea to avoid burdening the normal courts.
- Having consumers own the district heating components that are inside their property, could be a way to protect against mismanagement of components. However, the district heating companies should have an option to offer service contracts that guarantees access.