

Danish District Heating Association response to the public consultation on the draft revised climate, energy and environmental aid guidelines

July 12, 2021

Danish District Heating Association (DDHA) welcomes the possibility to provide comments on the draft revised climate, energy and environmental guidelines. These revised rules are important to facilitate state aid towards the energy sources and solutions within the heating sector we need to implement the Green Deal.

We very much welcome the approach on district heating and cooling under section 4.10, which we consider an important recognition of both the potential of DHC to deliver on the Green Deal and the need for EU members states to ensure an appropriate level of investments in district heating and cooling.

While district heating in Denmark is a modern, mature sector, providing 61 % renewable heating to two thirds of homes, as well as the majority of buildings in the service and public sectors, full elimination of remaining fossil fuels in district heating, and also replacing the use of fossil fuels in individual heating currently outside district heating, requires investments in expansion of thermal networks and renewable heat sources. These guidelines on climate, energy and environmental aid should allow for Denmark to employ state aid to ensure the swift transformation of the important heating sector. Other members states, that might be in other stages of heating and cooling transformation, should also be allowed to employ states aid with an intensity appropriate with their challenges.

DDHA is an active member of Euroheat & Power, and has also contributed to the response of that organisation to the consultation. We stand fully behind the response of Euroheat and Power, and the comments below should be seen as supporting and supplementary.

General comments on 4.10 Aid for district heating or cooling

The draft rules are confirming the current approach by allowing aid for a) the development of new efficient district heating and cooling, b) the upgrade of existing district heating and cooling and c) for non-efficient networks to allow for their transition towards efficient district heating and cooling status.

It is important to note, that the transformation of a district heating system from non-efficient to efficient can be of a considerable scale and may take a decade or more. When fully eliminating of the steam based part of the district heating system in central Copenhagen, carried out by a well-financed and competent utility, it took more than a decade. While ensuring that non-efficient district heating systems receiving aid are in a transformation to become efficient, it is important to allow for complexity and long duration, including providing aid for independent parts of the system.

We appreciate that the confirmation of the funding gap approach to include heat generation will ensure that the intensity of the aid can be adapted to national/local situations and that it is fit for the purpose of developing sustainable heating solutions in our cities.

It is also important to give member states a broad scope of policy options to support the transformation of the heat market, so the text should clarify that operating aid for renewable heating are part of the options available to members States to address the competitive gap between sustainable solutions and fossil fuels.

Specific comments to the text of the guidelines

Definitions

(29) ‘district heating and cooling systems’, consisting of heat generation facilities (heating/cooling production plants **including combined heat and power plants**), the heating/cooling storage and distribution network (both ‘primary’- or transmission- and ‘secondary’ network of pipelines to supply heat to consumers). Reference to district heating is to be interpreted as district heating and/or cooling systems, depending on whether the networks supply heat or cooling jointly or separately;

CHP should specifically be included.

(33) Uses the term “energy-efficient district heating”, which is unknown.

The guidelines should refer to and use the definition of “efficient district heating” as used in Directive 2012/27 throughout.

(35), (e) “infrastructure used for transmission, ~~or~~ distribution **or storage** of heat/steam/cooling from multiple producers/users, ~~based on use of zero/low carbon heat/steam or waste heat from industrial applications~~”

Storage is part of infrastructure and indeed very instrumental in integrating fluctuating RE-energy in heating (sector integration). As aid for on-site storage in building may be aided (4.2.2, (b))), off-site (in district heating) storage should be treated equally. See also below on point 342.

The last sentence should be eliminated, as the terms “zero/low carbon” are undefined and “waste heat” may have many other sources than industry.

After (62) should be added a new (xx) “**waste heat and cold**” means waste heat and cold as defined in article 2 (9) of Directive 2018/2001;

While the definition in RED II is imperfect, one should uniformly apply across legislation.

Specific comments on 4.10 Aid for district heating or cooling

Point 340

“The construction, expansion or the upgrade of district heating and cooling systems can make a positive contribution to environmental protection by increasing the energy efficiency and sustainability of the supported system **and the buildings or sites it supplies with heat or cooling.**”

The systems are the means – energy efficiency and sustainability of buildings is the objective.

Point 341

We support following changes: “This Section applies to support for the construction or upgrade of **energy efficient** district heating and cooling systems. Supported investments can concern heating or cooling generation ~~and or thermal~~ storage plants or the distribution network or both.”

Aid should be able to be given to independent parts of a district heating systems.

Point 342

Such aid measures typically cover the construction or upgrade of the generation unit to use renewable energy, waste heat, or highly efficient cogeneration **or including** thermal storage solutions, **power-to-heat solutions** or the upgrade **or extension** of the distribution network to reduce losses and increase efficiency, including through smart

and digital solutions. **Heating and cooling equipment within customer premises referred to under point 117 can also be covered.**

District heating systems are quite diverse and do increasingly include a variety of new components facilitating the transition to efficient district heating or sector integration.

We also support, that additionally this point should also refer to “customer facilities” (and section 4.2) so that the connection of a building to a district heating and cooling system and the related technical installations within the building that allow the district heating and cooling system to perform optimally – and to reduce energy consumption – can be covered.

Point 343

We support the following changes: “Where a Member State ~~invests grants aid for in~~ the upgrade of a district heating and cooling system **which does not fulfill the definition of efficient DHC, as defined in Directive 2012/27 on energy efficiency without meeting the standard of energy efficiency**, it needs to **require the commitment of the operator** to start the works to reach that ~~status standard~~ within three years following the upgrade works **where appropriate.**”

The text should clarify that systems should fulfil the status of the efficient district heating and cooling definition as set out in Directive 2012/27 on energy efficiency – instead of referring to “energy efficiency standard”. The text should also refer to commitments made by the operator and checked by national authorities. As the operator may not own generation assets, a suitable policy framework should be put in place leading to the development of new heat sources aligned with 2030 and climate neutrality goals.

Point 344

“Sections 3.2.1.1. and 3.2.1.2. do not apply to aid to district heating or cooling. The Commission considers that State aid can contribute to addressing market failures by triggering the investment needed for the creation **expansion and upgrade of energy-efficient** district heating and cooling systems as well as investment into non-efficient systems with a view to gradually make them efficient. In addition, State aid for ~~energy-efficient~~ district heating and cooling systems using waste, ~~including waste heat~~, as input fuel can make a positive contribution to environmental protection, provided that they do not circumvent the waste hierarchy principle¹¹⁵. We agree with the reference to waste to energy and the conditioning of the aid for such projects on the respect of the waste hierarchy. “

General clarifications, including that when mentioning waste heat the text, it should refer to the definition of waste heat as set out in Directive 2018/2001 on renewable energy sources.

Point 347

“Section 3.2.2. does not apply to aid for district heating or cooling. The Commission considers that the upgrade or construction of district heating and cooling systems which rely on the most polluting fossil fuels such as coal, lignite, oil and diesel, have negative consequences on competition and trade which are unlikely to be offset unless the following cumulative conditions are fulfilled:

- (a) the support is limited to ~~the upgrade of~~ distribution network;
- (b) the distribution network is or becomes fit for the transport of heat or cooling generated from renewable energy sources, **waste heat or other climate-neutral sources**;
- (c) the investment does not result in increased generation of energy from the most polluting fossil fuels (for example, by connecting additional customers). **Any temporary increase in generation from the most**

polluting fuels must be part of and consistent with the overall decarbonisation commitment of the operator and related investment plan in line with the 2030 climate target and the 2050 climate-neutrality objective as referred to in (d);

- (d) *there is a clear timeline involving firm commitments from the beneficiary of the aid where appropriate for transitioning away from the most polluting fossil fuels, compatible with the Union's 2030 climate target and the 2050 climate neutrality target.*

We agree that throughout Europe, district heating operators are in the process of phasing out most polluting fuels where they are still being used and modernizing systems in line with national decisions to phase out these fuels. These fuels referred to under this point will also gradually drop out of the fuel mix as a result of the increasing price for CO2 allowances.

We support the changes here suggested, as they are meant to provide clarification for national authorities, that the operator can be supported in upgrading and expanding a network, even in cases where this could lead to a temporary and short term increase of production based on the most polluting fuels (i.e. to cover potential technical sequences before new fuels are being phased in) provided such developments are part of and consistent with the overall decarbonisation commitment of the operator and related investment plans are in line with the 2030 climate target and the 2050 climate-neutrality objective.

Point 349

"In analysing the impact of State aid for district heating and cooling systems on competition and in balancing it against the supported economic activity, the Commission will carry out a case-by-case assessment balancing the benefits of the project in terms of energy efficiency and sustainability against the negative effects on competition and in particular the possible negative impact on alternative technologies or providers of heating and cooling services and networks, taking into account regional/national strategies for the decarbonization of heating and cooling (comprehensive assessments under Directive on energy efficiency 2012/27). Where the district heating system fulfils the definition of Efficient DHC according to Directive 2012/27 the Commission will typically assume that negative effects on competition are outweighed by positive environmental effects."

Increased use of district heating and cooling have other benefits in addition to making building heating more energy efficient and sustainable. Member states should appreciate the benefits identified in national assessments and aid for district heating and cooling systems, in order to harvest these benefits, should be considered compatible when it is framed in an overall national/regional strategy to decarbonize the heating and cooling market and when the system - beneficiary of the aid – is on a clear trajectory to fulfil the definition of efficient DHC.

Combined with a renewed approach under GBER, such an approach would have the benefit of speeding up approval processes – and would remain in line with the general positive approach on aid for DHC throughout the draft - while ensuring full coherence with EU and national objectives.