



ADH CR response to the public consultation on the draft Guidelines on State aid for climate, environmental protection and energy 2022

July 30th, 2021

Association for District Heating of the Czech Republic (ADH CR) welcomes the opportunity to comment on the draft Guidelines on State aid for climate, environmental protection and energy 2022 (“CEEAG”). The district heating infrastructure and heat production facilities are both crucial elements in delivering the European Green Deal targets. At the same time, national circumstances and conditions must be taken into account. Approximately 4 million people are connected to District Heating (“DH”) systems, of which 3.3 million people, approx. one third of the Czech Republic population use heat supplies from DH installations that are covered by the EU ETS. These are mostly concrete blocks of flats inhabited by middle- and low-income households at risk of energy poverty. DH plants also supply the tertiary sector, including small businesses and micro-enterprises.

In 2020, 55% of the DH heat supplied came from coal, 11% from renewable sources and waste heat, and 27% from natural gas in the Czech Republic. ADH CR supports coal exit in DH plants by 2030. However, the cost of this transformation is estimated at CZK 100 billion (EUR 4 billion) and it cannot be delivered without state aid. There is also a need to keep sufficient electricity production and provide ancillary services for the stability of the electricity grid with a growing share of electricity from intermittent sources and to keep acceptable heat prices for households. CEEAG enabling the DH sector transition from coal is crucial element in delivering these results.

In the National energy and climate plan, the Czech Republic already envisaged maximum use of available biomass and municipal waste as coal replacement in DH plants by 2030. However, these energy sources can at best replace only half of the DH heat production from coal. Until 2030, there is no alternative other than natural gas to replace the second half of DH heat production from coal. An alternative is decay of DH systems and direct use of natural gas in buildings. This would lead to deterioration of air quality in cities and other negative effects including escalation of energy poverty.

Based on the considerations mentioned above ADH CR submits following comments to CEEAG:

1. Section 1.3 Definitions, point (28), page 14

Suggested change:

(28) ‘district heating’ or ‘district cooling’ means district heating or district cooling as defined in Article 2, point (19), of Directive (EU) ~~2010/31~~ **2018/2001** of the European Parliament and of the Council;

Justification:

Directive (EU) 2018/2001 of the European Parliament and of the Council of 11 December 2018 on the promotion of the use of energy from renewable sources provides in article 2 point (19) more accurate definition of district heating which reflects that the thermal energy can come also from decentralized sources of production: ‘district heating’ or ‘district cooling’ means the distribution of thermal energy in the form of steam, hot water or chilled liquids, from central or decentralised sources of production through a network to multiple buildings or sites, for the use of space or process heating or cooling;

2. Section 1.3 Definitions, point (29), page 14

Suggested change:

(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;

Justification:

It should be clarified that also combined heat and power plants can be part of the district heating system. Original definition could be understood as referring to heat only plants.

3. Section 1.3 Definitions, point (35) (e), page 16

Suggested change:

(35) 'energy infrastructure' means any physical equipment or facility which is located within the Union or linking the Union to one or more third countries and falling under the following categories:

(e) infrastructure used for transmission or distribution of ~~heat/steam/cooling~~ **thermal energy in the form of steam, hot water or chilled liquids** from multiple producers/users, ~~based on use of zero/low carbon heat/steam or waste heat from industrial applications;~~

Justification:

The definition should be based on thermal energy which can be in various forms. In case of third-party access to the operator of the infrastructure, no limitation can be required regarding origin of heat. Since the Commission included gas infrastructure dedicated to transport of fossil fuel and electricity infrastructure which is also used for transportation of electricity from fossil fuels we do not see any reason for discrimination against district heating.

4. Section 1.3 Definitions, point (80) new, page 23

Suggested change:

New definition of 'waste heat or cold' should be added in new point (80) after current point (79):

(80) 'waste heat or cold' means waste heat or cold as defined in Article 2, point (9) of Directive (EU) 2018/2001 of the European Parliament and of the Council;

Current point (80) should be renumbered as (81).

Justification:

Definition of waste heat and cold is provided by Article 2, point (9) of Directive (EU) 2018/2001 of the European Parliament and of the Council:

'waste heat and cold' means unavoidable heat or cold generated as by-product in industrial or power generation installations, or in the tertiary sector, which would be dissipated unused in air or water without access to a district heating or cooling system, where a cogeneration process has been used or will be used or where cogeneration is not feasible;

As the term 'waste heat' is used in section 4.10 (see point 342) the definition should be added to avoid misunderstandings and provide clear distinction of 'waste heat' from waste.

5. Section 4.1.2 Scope and supported activities, point (77), page 36

Suggested change:

77. Indirect land-use change (ILUC) occurs when the cultivation of crops for biofuels, bioliquids and biomass fuels displaces production of crops for food and feed purposes. Such additional demand increases the pressure on land and can lead to the extension of agricultural land into areas with high-carbon stock, such as forests, wetlands and peatland, causing additional greenhouse gas emissions. This is why Directive (EU) 2018/2001 limits food and feed crops-based biofuels, bioliquids and biomass fuels **in transport**. The Commission considers that certain aid measures can aggravate indirect negative externalities. The Commission will therefore, in principle, consider that support for biofuels, bioliquids, biogas and biomass fuels **produced from food and feed crops and used in transport** exceeding the caps defining their eligibility for the calculation of the gross final consumption of energy from renewable sources in the Member State concerned in accordance with Article 26 of that Directive, do not produce positive effects which outweigh the negative effects of the measure. Furthermore, the Commission will verify whether Member States took into account in the design of their support mechanisms the need to avoid distortions on the raw material markets from biomass support, in particular for forest biomass.

Justification:

Article 26 of the Directive (EU) 2018/2001 applies only to biofuels, bioliquids and biomass fuels produced from food and feed crops and consumed in transport. Therefore, it should be clarified that paragraph 77 also applies only to biofuels, bioliquids and biomass fuels produced from food and feed crops and consumed in transport.

6. Section 4.1.3.5 Proportionality, point (89), page 40

Suggested change:

89. Aid **Operating aid** for reducing greenhouse gas emissions should in general be granted through a competitive bidding process as described in points 48 and 49 **in the case of electricity generation**.

Justification:

Competitive tendering should only apply to operating aid that can have more distortive effect on the market – see points (103) and (104). In the case of investment aid, it can be difficult to verify whether greenhouse gas emission reductions have actually been achieved, which can lead to false offers.

Furthermore, the amount of support should generally be provided through competitive tenders in the field of electricity support, as electricity is provided by the national and European interconnected electricity market. However, competitive tenders do not make sense in the case of heat and cold or gas projects, which are usually local projects, including cases of support for increasing the energy efficiency of production processes.

7. Section 4.1.3.5 Proportionality, point (92), page 40

Suggested change:

92. Exceptions from the requirement to allocate aid and determine the aid level through a competitive bidding process can be justified where evidence, including that gathered in the public consultation, is provided that one of the following applies:

...

(c) where level of aid granted to some installations affects price of input to other installations (e.g. electricity or heat produced from biomass).

Justification:

When supporting a facility using biomass, the most important parameter is the input price of biomass. Biomass resources are usually limited, so more facilities are being built, the demand for biomass is growing and so is its price. Aid granted to facilities built later in a competitive bidding process could distort the market for facilities built earlier.

8. Section 4.1.4 Avoidance of undue negative effects on competition and trade and balancing, point 99, page 42

Suggested change:

(99). To deliver positive environmental effects in relation to decarbonisation, the aid must not merely displace the emissions from one sector to another and must deliver overall greenhouse gas emissions reductions. ~~Short and long term interactions with any other relevant policies or measures, including the Union's ETS, should be considered.~~

Justification:

Market Stability Reserve (MSR) in the Union's ETS effectively eliminates effects of aid provided to installations in ETS on price of allowances. The Commission already suggested that MSR will be further strengthened in the framework of the Fit for 55 legislative package. There is therefore no need to take into account for example effects of aid provided to installations in ETS on market price of allowances. The term 'interactions with other relevant policies or measures' is vague and the first sentence captures the idea well. We therefore suggest that the second sentence is deleted.

9. Section 4.1 Aid for reduction and removal of greenhouse gas emissions including through support for renewable energy, point (107), page 43

Suggested change:

Point 107 should be deleted.

or changed as follows:

107. To avoid undermining the objective of the measure or other Union environmental protection objectives, incentives must not be provided for the generation of ~~energy~~ **electricity** that would displace less polluting ~~forms of energy~~ **generation of electricity**. For example, where cogeneration based on non-renewable sources is supported, ~~or where biomass is supported,~~ they must not receive

incentives to generate electricity or heat at times when this would mean zero-air-pollution renewable energy sources would be curtailed.

Justification:

The article has merits only in case of electricity which is difficult to be stored and used later and there is EU wide market. Other forms of energy typically enable energy storage which deals with the issue. In district heating systems also security of supply needs to be considered as these systems are typically small and not interconnected. As far as electricity is concerned the Guidelines should respect directly applicable Regulation (EU) 2019/943 of the European Parliament and of the Council on the internal market for electricity which sets in article 12 clear rules for dispatching of power-generating facilities. There is therefore nothing new the Guidelines could require and hence the most practicable solution would be to delete point 107. If this is not accepted, point 107 should at least be amended as suggested.

10. Section 4.1 Aid for reduction and removal of greenhouse gas emissions including through support for renewable energy, point (110), page 44

Suggested change:

110. Similarly, measures that incentivise new investments in energy or industrial production based on natural gas may reduce greenhouse gas emissions and other pollutants in the short term but aggravate negative environmental externalities in the longer term, compared to alternative investments. For investments in natural gas to be seen as having positive environmental effects, Member States must explain how they will ensure that the investment contributes to achieving the Union's 2030 climate target and 2050 climate neutrality target. In particular, the Member States should explain how a lock in of this gas-fired energy generation or gas-fired production equipment will be avoided. For example, this may include binding commitments by the beneficiary to implement decarbonisation technologies such as CCS/CCU or ~~substitute~~ **to ensure that** natural gas **can be substituted** by renewable or low carbon gas or to close the plant on a timeline consistent with the Union's climate targets⁶⁴.

Justification:

It is difficult for operator of the plant (aid beneficiary) to foresee when sufficient quantity of decarbonized gases will be available and possible to supply through gas network. In order to avoid lock-in effect aid beneficiary can commit to design the plant in the way that it can shift to low carbon gases such as hydrogen when these become available.

11. Section 4.10 Aid for district heating and cooling, point (341), page 84

Suggested change:

341. 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 storage plants~~, **thermal storage** or the distribution network or both.

Justification:

Section 4.10 should apply also to upgrades of district heating systems which do not fulfil definition of efficient district heating system as defined by Article 2 point (41) of Directive 2012/27. Thermal storage should be eligible for support as separate entity and not only as part of generation plant.

12. Section 4.10 Aid for district heating and cooling, point (342), page 84

Suggested change:

342. Such aid measures typically cover the construction or upgrade of the generation unit to use renewable energy, waste heat **or cold**, or highly-efficient cogeneration, ~~including~~ thermal storage **or power to heat** solutions, or the upgrade of the distribution network to reduce losses and increase efficiency, including through smart and digital solutions, **or the extension of the distribution network. Heating and cooling equipment within customers premises as referred to under point 117 can also be covered.**

Justification:

Heating or cooling storage and power to heat solutions should be eligible for support as separate entity and not only as part of generation plant. Waste heat or cold should be used to fit with the definition in Article 2, point (9) of Directive (EU) 2018/2001 (see also suggested new definition of waste heat or cold). Aid measures should cover not only upgrade but also extension of district heating and cooling networks. According to point 117 "Aid for heating or cooling equipment related to district heating systems is covered by Section 4.10." Point 342 should therefore cover also aid related to heating and cooling equipment within customers premises.

13. Section 4.10 Aid for district heating and cooling, point (343), page 84

Suggested change:

343. Where a Member State ~~invests in~~ **grants aid for** the upgrade of a district heating and cooling system ~~without meeting the standard of energy efficiency, which is not an efficient district heating and cooling as defined in Article 2 point (41) of Directive 2012/27,~~ it needs **to require aid beneficiary** to commit to start the works to reach that ~~standard~~ **status** within three years following the upgrade works **where appropriate.**

Justification:

It should be clarified that 'standard of energy efficiency' actually means definition of efficient district heating and cooling in Article 2 point (41) of Directive 2012/27. Definition of efficient district heating and cooling is based on sources from which heat is produced. When the distributor of heat operates only (part of) district heating network and does not own heat production plant he cannot be made responsible for fulfilment of commitment to reach the status of efficient district heating and cooling.

14. Section 4.10 Aid for district heating and cooling, point (344), page 84

Suggested change:

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 or upgrade** of energy efficient district heating and cooling systems. 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.

Justification:

The investment in expansion and upgrade of efficient district heating and cooling system should be also included and the term 'efficient district heating' defined in Article 2 point (41) of Directive 2012/27 should be used. Waste heat as defined by Article 2, point (9) of Directive (EU) 2018/2001 of the European Parliament and of the Council should be clearly distinguished from waste. Application of waste hierarchy does not make any sense in coincidence with waste heat. See also suggested definition of waste heat to be included in the Guidelines.

15. Section 4.10 Aid for district heating and cooling, point (347), page 85

Suggested change:

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~~ the 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 cold 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);~~
- ~~(d)~~ **(c)** there is a clear timeline involving firm commitments for transitioning away from the most polluting fossil fuels, compatible with the Union's 2030 climate target and the 2050 climate neutrality target.

Justification:

The support should be limited to distribution network but should cover also its extension. Condition b) should apply also to waste heat or cold or other climate-neutral sources. Original condition under c) is overridden by condition d). Increase in generation of energy from the most polluting fossil fuels is in practice highly unlikely and is more than compensated by commitment to transition away from the most polluting fuels. Condition c) thus adds mostly administrative burden without real effect for environment and should be deleted.

16. Section 4.10 Aid for district heating and cooling, point (348), page 85

Suggested change:

348. As regards the construction or upgrade of district heating generation installations, measures that incentivise new investments in energy based on natural gas may reduce greenhouse gas emissions in the short run but aggravate negative environmental externalities in the longer run,

compared to alternative investments. For those investments in natural gas to be seen as having positive environmental effects, Member States must explain how they will ensure that the investment contributes to achieving the Union's 2030 climate target and 2050 climate neutrality target and, in particular, how a lock-in of the gas-fired energy generation or gas-fired production equipment will be avoided. For example, this may include binding commitments by/from the beneficiary to implement CCS/CCU or ~~substitute~~ **ensure that** natural gas **can be substituted** by renewable or low carbon gas or to close the plant on a timeline consistent with the Union's climate targets.

Justification:

It is difficult for operator of the district heating plant (aid beneficiary) to foresee when sufficient quantity of decarbonized gases will be available and possible to supply through gas network. In order to avoid lock-in effect aid beneficiary can commit to design the plant in the way that it can shift to low carbon gases such as hydrogen when these become available.

17. Section 4.10 Aid for district heating and cooling, point (349), page 85

Suggested change:

349. **Section 3.3 does not apply to measures for construction or upgrade of district heating systems.** 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 national/regional strategies for decarbonisation of heating and cooling. Where the district heating system fulfils the definition of efficient district heating and cooling provided in Article 2 point (41) of Directive 2012/27 the Commission will typically assume that negative effects on competition are outweighed by positive environmental effects.**

Justification:

The case base case assessment of the balancing of the aid on local market may lead to uncertainty and in particular discourage national authorities from applying aid measures due to administrative burden. Aid for district heating and cooling should be generally considered compatible with internal market when it is compatible with national/regional strategy to decarbonize heating and cooling and the system fulfils definition of efficient district heating and cooling according Article 2 point (41) of Directive 2012/27 after the completion of the project.

Similarly as in case of aid for the reduction and removal of greenhouse gas emissions in section 4.1 application of section 3.3 should be excluded in case of measures for construction or upgrade of district heating. It should be noted that no significant harm to climate change mitigation objective was identified in Annex II of the Commission delegated regulation supplementing Regulation (EU) 2020/852.

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