

Open public consultation - Questionnaire on the heating and cooling strategy

Fields marked with * are mandatory.

Introduction

About you

* Language of my contribution

- ☐ Bulgarian
- ☐ Croatian
- ☐ Czech
- ☐ Danish
- ☐ Dutch
- ☐ English
- ☐ Estonian
- ☐ Finnish
- ☐ French
- ☒ German
- ☐ Greek
- ☐ Hungarian
- ☐ Irish
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- ☐ Maltese
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- ☐ Portuguese

- ☐ Romanian
- ☐ Slovak
- ☐ Slovenian
- ☐ Spanish
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* I am giving my contribution as

- ☐ Academic/research institution
- ☒ Business association
- ☐ Company/business
- ☐ Consumer organisation
- ☐ EU citizen
- ☐ Environmental organisation
- ☐ Non-EU citizen
- ☐ Non-governmental organisation (NGO)
- ☐ Public authority
- ☐ Trade union
- ☐ Other

* First name

Raphael

* Surname

Schenkel

* Email (this won't be published)

r.schenkel@agfw.de

* Organisation name

255 character(s) maximum

AGFW | Der Energieeffizienzverband für Wärme, Kälte und KWK e. V.

* Organisation size

- ☐ Micro (1 to 9 employees)
- ☒ Small (10 to 49 employees)
- ☐ Medium (50 to 249 employees)
- ☐ Large (250 or more)

Transparency register number

Check if your organisation is on the transparency register. It's a voluntary database for organisations seeking to influence EU decision-making.

88403261302-20

* Country of origin

Please add your country of origin, or that of your organisation.

This list does not represent the official position of the European institutions with regard to the legal status or policy of the entities mentioned. It is a harmonisation of often divergent lists and practices.

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☐ Burundi	☐ Hong Kong	☐ Northern Mariana Islands	☐ Tonga
☐ Cambodia	☐ Hungary	☐ North Korea	☐ Trinidad and Tobago
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☐ Canada	☐ India	☐ Norway	☐ Türkiye
☐ Cape Verde	☐ Indonesia	☐ Oman	☐ Turkmenistan
☐ Cayman Islands	☐ Iran	☐ Pakistan	☐ Turks and Caicos Islands
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☐ Chad	☐ Ireland	☐ Palestine	☐ Uganda
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☐ Cocos (Keeling) Islands	☐ Japan	☐ Philippines	☐ United States Minor Outlying Islands
☐ Colombia	☐ Jersey	☐ Pitcairn Islands	☐ Uruguay
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☐ Cook Islands	☐ Kenya	☐ Puerto Rico	☐ Vanuatu
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☐ Croatia	☐ Kuwait	☐ Romania	☐ Vietnam
☐ Cuba	☐ Kyrgyzstan	☐ Russia	☐ Wallis and Futuna
☐ Curaçao	☐ Laos	☐ Rwanda	☐ Western Sahara
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- ☐ Lebanon
- ☐ Saint Helena
Ascension and
Tristan da Cunha
- ☐ Zambia
- ☐ Democratic
Republic of the
Congo
- ☐ Lesotho
- ☐ Saint Kitts and
Nevis
- ☐ Zimbabwe
- ☐ Denmark
- ☐ Liberia
- ☐ Saint Lucia

* Are you active (core business) in a field related to heating and cooling?

- ☐ Policy and advocacy
- ☐ Administration (planning, permitting, national or local administration)
- ☒ Energy utilities
- ☐ Finance
- ☐ Advisory services, energy service companies
- ☐ Energy communities or cooperatives
- ☐ NGO
- ☐ Manufacturing of heating and cooling appliances and systems
- ☐ Installation/sales or maintenance of heating and cooling appliances and systems
- ☐ Construction or building renovation
- ☐ Operators of district heating and cooling system
- ☐ Industry
- ☐ Operators of cogeneration plant
- ☐ Housing providers
- ☐ Data centres
- ☐ Other (please specify)
- ☐ Not active in this field

The Commission will publish all contributions to this public consultation. You can choose whether you would prefer to have your details published or to remain anonymous when your contribution is published. **For the purpose of transparency, the type of respondent (for example, 'business association', 'consumer association', 'EU citizen') country of origin, organisation name and size, and its transparency register number, are always published. Your e-mail address will never be published.** Opt in to select the privacy option that best suits you. Privacy options default based on the type of respondent selected

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The Commission will publish the responses to this public consultation. You can choose whether you would like your details to be made public or to remain anonymous.

☐ Anonymous

Only organisation details are published: The type of respondent that you responded to this consultation as, the name of the organisation on whose behalf you reply as well as its transparency number, its size, its country of origin and your contribution will be published as received. Your name will not be published. Please do not include any personal data in the contribution itself if you want to remain anonymous.

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Organisation details and respondent details are published: The type of respondent that you responded to this consultation as, the name of the organisation on whose behalf you reply as well as its transparency number, its size, its country of origin and your contribution will be published. Your name will also be published.

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Part A - Scope

* 1. How relevant is the Heating and Cooling Strategy to the following objectives?

Use drag&drop or the up/down buttons to change the order or accept the initial order.

⋮	Energy efficiency
⋮	Energy security
⋮	Decarbonisation
⋮	Competitiveness
⋮	Energy affordability
⋮	Sustainability and environmental protection
⋮	Addressing energy poverty
⋮	Fairness, consumer protection and empowerment
⋮	

Other (please specify)

100 character(s) maximum

2. How relevant for EU policy is the challenge of the growing cooling demand?

Rate from 1 (not relevant) to 5 (very relevant)

1) In buildings/space cooling	
2) In data centres	
3) In energy infrastructure	
4) In industry	
5) Other (please specify)	

Other (please specify)

200 character(s) maximum

A growing demand for cooling solutions overall, especially in urban areas, due to an increase of average temperatures in EU countries.

Please specify how, according to you, this challenge is relevant for EU policy.

500 character(s) maximum

A growing demand for cooling solutions, especially in urban areas, will increase the strain on electricity networks. A stronger policy and finance focus on district cooling can help make use of locally available cooling alternatives, while taking pressure away from electricity network. EU policy should also carefully align PFAS-restrictions with the availability of natural refrigerants for large scale heat pumps and district cooling.

Part B - Barriers

1. According to you, what are the key barriers to the **affordable decarbonisation of space heating?**

(please select up to 5 key barriers per building category)

	Residential - individual	Residential - collective	Non residential - public	Non residential - private
Regulatory complexity	☐	☐	☐	☐
Infrastructure-related barriers	☒	☒	☒	☒
Poor energy performance of buildings	☒	☒	☒	☒
High initial investment	☒	☒	☒	☒
High operational costs (eg electricity price)	☐	☐	☐	☐
High financing costs	☐	☐	☐	☐
Insufficient return on investment	☒	☒	☒	☒
Administrative/regulatory barriers	☐	☐	☐	☐
Length and complexity of installation	☐	☐	☐	☐
Technical barriers	☐	☐	☐	☐
Shortage of skilled professionals (planners, installers, etc.)	☐	☐	☐	☐
Long waiting time for installation	☐	☐	☐	☐
Lack of incentives for landlord and/or tenant in case of rental	☒	☒	☒	☒
Insufficient awareness, trust or unwillingness towards decarbonisation solutions	☐	☐	☐	☐
Lack of fit-for-purpose or easily available technologies	☐	☐	☐	☐

Other (please specify/develop)

200 character(s) maximum

Complexity and length of EU state aid procedures; insufficient ROI of investment for decarbonisation;

2. According to you, what are the key barriers to the **affordable decarbonisation of industrial process heat**?

(please select up to 5 key barriers for each temperature level)

	Industrial heat below 200 °C	Industrial heat between 200 °C and 500 °C	Industrial heat above 500 °C

Regulatory complexity	☐	☐	☐
Infrastructure-related barriers	☒	☐	☐
High capital cost	☒	☐	☐
High operational costs	☒	☐	☐
High financing costs	☐	☐	☐
Lack of access to clean energy contracts, including PPAs	☐	☐	☐
Length of permitting processes	☐	☐	☐
Lack of flexibility of industrial process	☐	☐	☐
Challenge to adapt or redesign industrial process to match renewable heat supply or electrification	☐	☐	☐
Impact on competitiveness vis-a-vis EU competitors	☐	☐	☐
Impact on competitiveness vis-a-vis international competitors	☐	☐	☐
Lack of technology adapted to specific needs	☐	☐	☐
Lack of operational standards adapted to specific needs	☐	☐	☐
Insufficient awareness, trust or unwillingness towards decarbonisation solutions	☒	☐	☐
Complexity and length of State aid procedures	☒	☐	☐

Other (please specify/develop)

200 character(s) maximum

*3. According to you, what are the key barriers to **affordable decarbonisation through efficient district heating and cooling in line with Article 26 EED?**

Maximum 5 selection(s)

- ☐ Regulatory complexity
- ☒ Infrastructure-related barriers
- ☐ Administrative barriers
- ☐ Technical barriers

- ☒ Skill-related barriers
- ☒ High initial investment
- ☐ High operational costs
- ☐ High financing costs
- ☒ Insufficient awareness or trust in solutions
- ☐ Lack of fit-for-purpose or easily available technologies
- ☐ Lack of available renewable resources
- ☐ Limits unnecessarily consumer choice
- ☒ Complexity and length of State aid procedures
- ☐ N/A

Other (please specify/develop)

200 character(s) maximum

Slow and inefficient permitting particularly for renewable heat sources; shortage of skilled professionals; high electricity costs for PtH-applications (taxes and grid charges);

4. According to you, what are the key barriers to **the deployment of thermal energy storage?**

(please select up to 5 key barriers for each sector of application)

	In industry	In district heating and cooling
Regulatory complexity	☐	☐
Infrastructure-related barriers	☐	☒
High initial investment	☐	☒
High operational costs	☐	☐
High financing costs	☐	☐
Administrative barriers	☐	☒
Technical barriers	☐	☒
Insufficient awareness or trust in solutions	☐	☐
Lack of fit-for-purpose or easily available technologies	☐	☐

Other (please specify/develop)

200 character(s) maximum

Lack of tariff/ market design to remunerate TES flexibility (peak shaving, curtailment); no prioritisation of grid access for flexibility assets (TES combined with large heat pump/ E-boiler)

5. According to you, what are the key barriers to **the recovery of waste (excess) heat?**

(please select up to 5 key barriers for each source of waste heat)

	Industrial waste heat	Waste heat from data centres	Waste heat from other cooling and refrigeration processes	Waste heat from public infrastructure/ services (e.g. wastewater treatment, subway)	Waste heat or cold in energy production (power plants, LNG regasification)
Regulatory complexity	☐	☐	☐	☐	☐
Infrastructure-related barriers (e.g. access to district heating)	☒	☒	☒	☒	☒
High initial investment	☒	☒	☒	☒	☒
High operational costs	☐	☐	☐	☐	☐
High financing costs	☐	☐	☐	☐	☐
Insufficient return on investment	☒	☒	☒	☒	☒
Administrative barriers	☐	☐	☐	☐	☐
Technical barriers	☐	☐	☐	☐	☐
Barriers related to skills	☐	☐	☐	☐	☐
Insufficient awareness or trust in solutions	☒	☒	☒	☒	☒
Lack of fit-for-purpose or easily available technologies	☐	☐	☐	☐	☐

Other (please specify/develop)

200 character(s) maximum

Specific problems for waste heat & DHC: Mismatch of contract horizon between heat source (3-5 years) and DHC provider (10-20 years); high investment costs for connection to DHC network.

Part C - Policy options

- * 1. According to you, what are the **priority EU policy framework options** to accelerate affordable decarbonisation of heating and cooling?

Maximum 3 selection(s)

- ☒ Implementation of the current EU regulatory framework
- ☒ Additional public financing
- ☐ Additional policy initiatives (non-regulatory) including guidance on implementation of existing legislation
- ☐ Simplification of current legislative framework (towards 2030)
- ☐ New legislative framework (towards 2040)
- ☐ N/A

Please specify or complement if needed

200 character(s) maximum

Fit-for-55 package sets targets and means to decarbonise the sector. Stability of this framework is key. DHC needs faster state aid procedures, higher public funding and de-risking tools.

2. Which regulatory or administrative barriers in the existing EU legislative framework need to be removed, and which incentives need to be strengthened or removed to accelerate affordable decarbonisation of heating and cooling and to simplify procedures?

500 character(s) maximum

Simplification of EU state aid rules and permitting for renewable heat and waste heat sources. Reform electricity taxation to prioritise PtE (large heat pumps & E-boilers) to use renewable electricity. Public de-risking tools for geothermal energy and waste heat. Reform EU-Taxonomy technical screening criteria to allow funding for high-efficiency CHP based on natural gas.

- * 3. According to you, what are the **priority energy system design options** to accelerate affordable decarbonisation of heating and cooling?

Maximum 3 selection(s)

- ☐ Integrated planning of electricity, gas and heat infrastructure at EU level (including decommissioning of the gas grid or transitioning to renewable gases)
- ☒ Integrated planning of electricity, gas and heat infrastructure at national level
- ☐ Mapping of heat sources and demand at national level
- ☐ Mapping of future cooling needs
- ☒ Integrated planning of electricity, gas and heat infrastructure at local level
- ☐ Stronger integration of cooling in urban planning
- ☐ Support (in the form of guidance/financial assistance/technical assistance) to the implementation of local heating and cooling plans in line with Article 25 EED
- ☐ Cooperation between electricity grid operators and efficient district heating and cooling systems
- ☐ Planned gas infrastructure decommissioning
- ☒ Promotion of efficient district heating and cooling
- ☐ Enabling waste heat recovery e.g. through sectoral programmes in data centres, supermarkets, large commercial buildings etc.
- ☐ N/A

Please specify or complement if needed

200 character(s) maximum

Efficient and integrated planning of electricity, gas & heat infrastructure on national & local level are central. Prioritise most efficient solution identified in local planning for public funding.

* 4. According to you, what are the **priority options related to innovation** to accelerate affordable decarbonisation of heating and cooling?

Maximum 3 selection(s)

- ☐ Incentives for manufacturers of clean heating and cooling appliances and systems
- ☐ Obligations on manufacturers of clean heating and cooling appliances and systems
- ☐ Incentives for installers of clean heating and cooling appliances and systems
- ☐ Obligations on installers of clean heating and cooling appliances and systems
- ☐ Promotion of long-term contracts (heat purchase agreements)
- ☒ Promotion of de-risking schemes for efficient district heating development

- ☐ Promotion of third-party services in efficient district heating and cooling or industry
- ☐ Promotion of model public-private partnerships for waste heat reuse in district heating
- ☐ Promotion of replacement schemes or social leasing for clean heating appliances
- ☐ Promotion of business models that integrate financing and increase installations of clean heating appliances
- ☐ Promotion of renewable energy communities
- ☒ Rewarding of non-fossil flexibility in electricity markets
- ☐ Support to manufacturing of clean heating and cooling technologies
- ☐ N/A

Please specify or complement if needed

200 character(s) maximum

Support to manufacturing of clean (district) heating and cooling technologies.

*5. According to you, what are the **priority options to ensure affordability, just transition and consumer empowerment** in the context of the decarbonisation of heating and cooling?

Maximum 3 selection(s)

- ☒ Financial incentives to cover upfront investment costs
- ☐ Innovative services offer (heat as a service, social leasing of heat pumps, energy performance contracts)
- ☐ Regulated heat tariffs in efficient district heating or clauses to protect vulnerable consumers from raising heat costs
- ☒ Early involvement in heating and cooling plans at local level and in decision-making in relation to collective heating and cooling
- ☐ Public awareness campaigns on the benefits of efficient, clean heating and cooling solutions
- ☐ Regulatory measures (e.g. minimum energy performance standards for heating and cooling systems)
- ☐ Promotion of one-stop shops
- ☐ N/A

Please specify or complement if needed

200 character(s) maximum

Local H&C plans are a great tool to inform consumers about available options. Public funding should prioritise the most efficient solution identified in local H&C plans to avoid inefficient spending.

*6. According to you, what are the **priority options for affordable and efficient space cooling?**

Maximum 3 selection(s)

- ☐ Awareness raising
- ☐ Reduction of the need for cooling (urban heat island effect), acting at urban level
- ☒ Better integration of cooling, including passive cooling, in urban planning
- ☐ Accelerated deployment of air conditioning and reversible heat pumps in priority buildings
- ☐ Stronger promotion of passive cooling (shading, ventilation etc) and hybrid cooling (passive plus active cooling) in buildings
- ☐ Permitting and administrative simplification
- ☒ Connecting cooling demand with cold sources (eg geocooling, waste cold, cold waters), including via district cooling
- ☐ Focus on vulnerable households
- ☐ Focus on public buildings
- ☐ Reinforcement of electricity infrastructure to better cope with increased power demand for cooling
- ☐ Development of demand-side flexibility services in cooling (good match of cooling demand and PV production peaks)
- ☐ Address barriers to cooling equipment in outdated building safety codes
- ☐ N/A

Please specify or complement if needed

200 character(s) maximum

A stronger focus on and funding for district cooling in densely populated urban areas. This also reduces the strain on the local electricity grid.

*7. According to you, what are the **priority options to accelerate the affordable deployment of geothermal energy ?**

Maximum 3 selection(s)

- ☐ Specific targets for geothermal
- ☐ Awareness raising
- ☐ Adaptation of mining codes
- ☐ Adaptation of water regulatory framework
- ☒ Permitting and administrative simplification
- ☒ Financial guarantees (de-risking)
- ☐ Policies to increase data availability
- ☐ Support to public acceptance
- ☐ N/A

Please specify or complement if needed

200 character(s) maximum

Faster and simplified permitting and licencing on national and local level are key.

8. According to you, what are the **priority options to accelerate the affordable deployment of solar thermal energy?*

Maximum 3 selection(s)

- ☐ Specific targets for solar thermal
- ☐ Awareness raising
- ☐ Adaptation of regulatory framework
- ☒ Permitting and administrative simplification
- ☒ Financial guarantees (de-risking)
- ☐ N/A

Please specify or complement if needed

200 character(s) maximum

A level playing field between solar PV and solar thermal in permitting at national and local level.

9. According to you, what are the **priority options to accelerate the affordable deployment of waste (excess) heat and cold recovery?*

Maximum 3 selection(s)

- ☐ Awareness raising
- ☐ Technical support

- ☐ Financial advice
- ☐ Targets for heat and cold recovery
- ☐ Adaptation of regulatory framework
- ☒ N/A

Please specify or complement if needed

200 character(s) maximum

Better funding possibilities to connect waste heat sources to heat networks; De-risking of waste heat projects.

Contact

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