

Perspective of the European Commission (funding, policy framework)

Webinar on Decarbonization of District Heating Systems in the 2021-2027 Period

22.01.2025

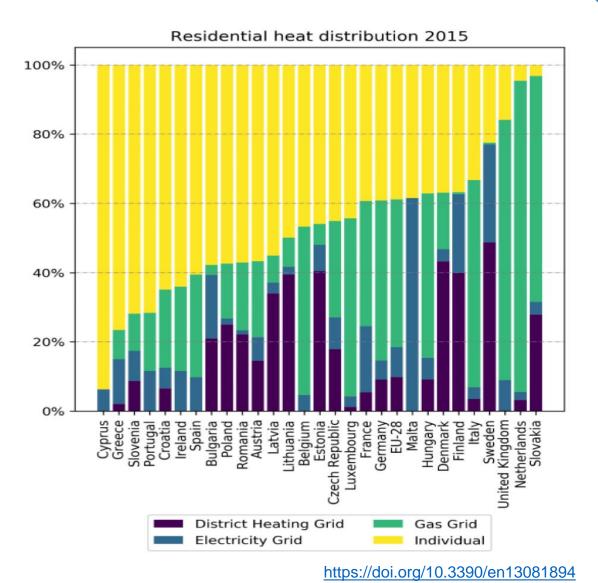
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District heating in Europe

- Around 17'000 systems with 67 million citizens using district heating
- Supplies 11..12% of energy consumed in European Union for space heating and hot water in residential and services sector / ca 450 TWh

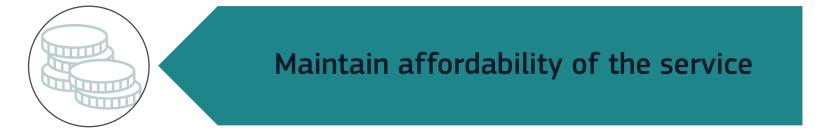
(total final energy consumption in EU 10'500 TWh)

• Significantly different importance for individual Member States



Sectoral key challenges





Facilitate system integration to maximise energy efficiency in the energy system



Policy framework for district heating

- Energy Efficiency Directive (EU) 2023/1791
 - Planning in heating and cooling sector
 - Definition of Efficient District Heating
- Renewable Energy Directive (EU) 2018/2001
 - Indicative subtarget for renewables in district heating sector (+2.2%)
 - Third Party Access to DH networks
 - Coordination framework to facilitate use of waste heat



https://op.europa.eu/s/z1FX

Default definition of Efficient District Heating: Article 26(1)

- Progressive evolution of efficient district heating definition in view of the sector decarbonisation in 2050
- Based on energy supply mix
- Not obligatory for DH operation, but district heating systems must be efficient after receiving public support

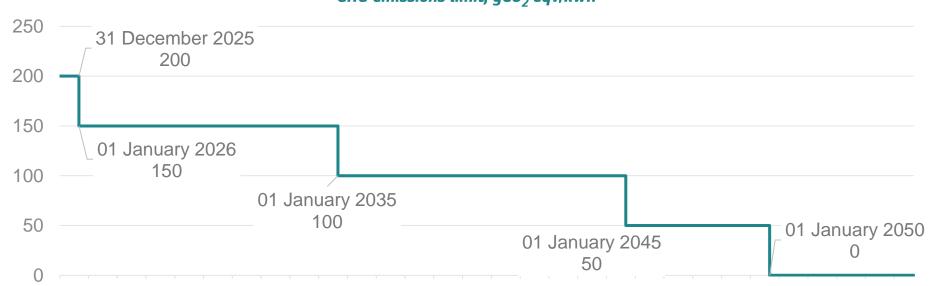


WH - waste heat; HE CHP - high-efficiency cogeneration



Alternative definition of Efficient District Heating: Article 26(2)

Sustainability performance criteria based on the maximum amount of greenhouse gas emissions from the district heating per unit of heat delivered to the customers



GHG emissions limit, gCO₂ eqv/kWh

Definition of Efficient District Heating: exclusion of fossil fuels: Article 26(4)

Two additional criterions when new supply units are added, or existing installations are refurbished:

- no increase in the use of fossil fuels other than natural gas in existing heat sources
 - compared to the annual consumption averaged over the previous three calendar years of full operation before refurbishment
- any new heat sources in the system do not use fossil fuels, except natural gas, if built or substantially refurbished until 2030





EED Article 26 Recommendation

- 1. Explains, where and how the renewable energy / waste heat and cold / (high-efficiency) cogeneration input should be calculated in a DHC system
- 2. Presents the methodology to determine GHG emissions per unit of heat or cold delivered to customers
- **3**. Describes a methodology to determine whether the refurbishment is substantial or not
- 4. Explains the approach to implement rules on fossil fuel exclusion in substantially refurbished and new DHC systems



District heating: funding in EU policy instruments

- 1. Multiannual Financial Framework (MFF)
- 2. EU Emissions Trading System Directive
- **3**. Recovery and Resilience Plans
- 4. EU Taxonomy
- 5. EU funding programmes (Horizon Europe, LIFE, The Just Transition Fund, The Public Sector Loan Facility, the Modernisation Fund, the Innovation Fund, ...)

More information in the report "Financial instruments and models for heating and cooling" by Investors Dialogue on Energy (2024): <u>https://op.europa.eu/s/z1EG</u>



Thank you!



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