WHO WE ARE...

• International association for district heating and cooling and network of professionals
• Headquarters in Brussels, Belgium
• 100 members from more than 30 countries
• National DHC associations, utilities, manufacturers, universities, research institutes and consultancies
  o Advocacy & Representation
  o Research & Innovation

www.euroheat.org
NO ENERGY TRANSITION WITHOUT HEATING AND COOLING

Heating & Cooling represents 50% of the EU total annual energy consumption.

Heating & hot water, in EU households, account for 79% of total final energy use.
Initiate and take part in research, development and demonstration

Share info on EU funding opportunities and facilitate project consortium building

Offer education and training activities for young professionals
The TEMPO – Temperature Optimisation for Low Temperature District Heating across Europe – project develops technical innovations that enables district heating networks to operate at lower temperatures.

**Six technological innovations** that contribute to minimizing the temperature in networks

1. A supervision ICT platform for detection and diagnosis of faults in district heating substations
2. Visualization tools for expert and non-expert users
3. Smart district heating network controller,
4. Innovative piping system
5. Optimization of the building installation
6. Decentralised buffers

**DEMO SITES**

**Windsbach (Germany)** – new rural low temperature district heating network

**Brescia (Italy)** – Existing high temperature district heating network

**Funded by the European Union’s H2020 Programme under grant agreement 768936.**

- **October 2017 – March 2022**
- **10 Partners**
- **6 European Countries**
COOL DH is a Danish/Swedish collaboration

- A Horizon 2020 project with 11 partners
- 2 demonstration sites: Høje-Taastrup and Lund
- Project period from Oct. 2017-Sept. 2021

This project has received funding from European Union’s Horizon 2020 research and innovation programme under grant agreement No 767799
Why is COOL DH cool?

• Because COOL DH is a project that aims to find ways to:
  • Use low grade heat sources, cooling and surplus heat for heating of energy efficient buildings (both existing and new buildings)
  • by optimizing low temperature district heating solutions, and
  • Integrate renewable energy produced locally with district heating
  • And because:
  • We demonstrate the full systems with all needed components suitable for (ultra-)low temperature District Heating
  • We innovate a catalogue of new solutions
A European framework for LTDH

NO SPECIFIC EUROPEAN POLICY FRAMEWORK FOR LTDH

BUT

EU GREEN DEAL

FUNDING R&D

SUPPORTING POLICY
European Green Deal

- Achieving Climate Neutrality
- Sustainable Transport
- Biodiversity Strategy for 2030
- A new Circular Economy Action Plan
- Transition to a Circular Economy
- Preserving Europe’s natural capital
- A zero pollution Europe
- Farm to Fork
- The transformation of agriculture and rural areas
- Towards a modernised and simplified CAP
- Leave no one behind (Just Transition)
- Financing the transition
- Clean, Reliable and Affordable energy
- Review Energy Legislation
- European Framework for gas
- Taxation directive
- Revising 2030 Climate targets
- Extending ETS
- Climate Pact
- Climate Law
- Carbon Border Tax
- Strategy on the sustainable use of chemicals
- Clean Air and Water Action Plans
- Farm to Fork Strategy
- Vision for Inclusive Rural Areas
- Africa Europe agenda
- CAP reform proposal
- European Investment Bank as European Climate Bank
- Sustainable Europe Investment Plan
- Green Financing Strategy
- Mainstreaming climate transition and sustainability in the MFF
- Just Transition Instrument, including the Just Transition Fund
- Mainstreaming the Just Transition in the MFF
The European Green Deal has brought a new wave of policy initiatives which has a direct impact on our sector.
The DHC sector has a pivotal role to play in turning the European Green Deal’s ambition to make Europe the world’s first climate neutral continent a reality.

Modern low-temperature district heating systems should be promoted, as they can connect local demand with renewable and waste energy sources, as well as the wider electric and gas grid in order to optimise supply and demand across energy carriers. (EU 2030 target strategy)

There is a need to accelerate investment in smart, highly-efficient, renewables-based district heating and cooling networks (EU Energy System Integration strategy)

Advanced district heating and cooling systems with large potential for renewables and waste-heat recovery. (EU Renovation Wave initiative)
“YOU NEED THE FUTURE TO GET THE PRESENT”
Most relevant funding sources in the MFF 2021-27 for DHC sector

- **RESEARCH**
  - HORIZON EUROPE
  - PARTNERSHIPS
  - LIFE

- **DEMONSTRATION**
  - INNOVATION FUND

- **DEPLOYMENT**
  - CEF – CONNECTING EUROPE FACILITY
  - MODERNISATION FUND
  - COHESION FUNDING

- **EIB FINANCIAL INSTRUMENTS**
- **INVEST EU**
- **JUST TRANSITION MECHANISM**

**MEMBER STATES FUNDING**
Recovery and Resilience Facility – National Plans

**How does it work?**

- **Member states** submit draft recovery and resilience plans from 15 October 2020
- **European Commission** discusses plans with each member state
- **Commission assesses plans** and transmits to Parliament and Council
- **Council can suspend adoption or payments** in case of significant non-compliance
- **Council of EU** assesses and adopts plans based on the Commission proposal
- **Payments** to member states begin. Pre-financing up to 10% of grants and 10% of loans
- **Commission reports on implementation** to Parliament and Council every year
- **Member states report on progress** twice a year within the European Semester
- **Independent evaluations** in 2023 and, ex post, by 2029

**Negotiations ongoing**

€672.5 billion in grants and loans to support EU countries

**How will the money be used?**

Funds disbursed to member states are based on national recovery and resilience plans, which include reforms and public investment projects. Plans must:

- **align with EU priorities**
  - boost growth, job creation and economic & social resilience
- **support the green transition**
  - at least 37% of resources contribute climate action and environmental sustainability
- **reflect country-specific challenges**
  - in line with European Semester country-specific recommendations
- **foster digital transformation**
  - at least 20% of resources contribute to the EU's digital transition
Recovery and Resilience Facility

1. Article 14(1): “These plans shall set out the reform and investment agenda of the Member State concerned for the subsequent four years. Recovery and resilience plans [...] comprise measures for the implementation of reforms and public investment projects [...]”

Examples of investments

When designing their investments in relation to the twin transitions, Member States can take inspiration from the below examples.

Box: Non-exhaustive examples of typical reforms and investments linked to the green and digital transitions

Green transition:

- Renovation wave of residential buildings, social and affordable housing, private or public buildings (with a focus on schools and hospitals), modernisation of district heating systems and land restoration.
- Decarbonisation of industry, investments in energy efficiency in the industry sector and SMEs, supporting innovation, competitiveness of their value chains and reform programmes.
- Development of renewable energy capacities (including infrastructure) and other clean energy technologies (including renewable hydrogen and support to the uptake of these technologies, notably by SMEs), efficient district heating and cooling systems, power, fostering energy efficiency and carbon neutrality of industry, resilient smart grid and storage infrastructure.
Recovery and Resilience Facility

• District Heating is considered as a good investment example in EC’s guidance documents for MSs

• MSs are drafting their National Recovery Plans

Examples of investments
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Component example: ‘Power up’

reach X GW by 20XX, the production of renewable hydrogen to reach X tonnes per year by 20XX, the installation of X km of hydrogen transport pipelines and X GWh of storage capacity by 20XX.

3) Energy security and integration of renewables generation: This component will also increase the energy security of the country and of the EU as a whole by decreasing the country’s import dependency of fossil-fuel based energy from X% in 20XX to X% in 20XX. Additionally, the component will contribute to increasing the flexibility of the market by incentivising energy storage and avoid X MW of otherwise needed infrastructure.

Examples of reforms and/or investments:

* Reforms:
  - Facilitating the use of renewable energy and waste heat in district heating networks.
  - Accelerating permitting of new renewables installations, including simplified procedures for repowering.

* Investments:
  - Supporting the development of district heating networks based on renewable energy and waste heat (COF0G 04.30).
  - Supporting the development of electrolysers and their connection to upstream renewable electricity production facilities to supply renewable hydrogen to industry (COF0G 04.30 and 04.40).

**Estimated cost of the component:** EUR XX million, of which EUR XX million (X%) are covered by RFF.
• **EU Taxonomy Regulation.** The EU Taxonomy initiative creates a classification system for sustainable economic activities (‘taxonomy’)

• Lowering the temperature in DH networks is considered as an eligible activity

• Need for a harmonisation of the national fiscal frameworks at European level in order to foster leverage of private investment in LTDH and surplus heat use

• Example: Sweden compared to Denmark
THANK YOU - Questions?

Head over to www.euroheat.org and find out more about our activities.

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