



**POLITECNICO**  
MILANO 1863



# **Transformation of Urban District Heating Systems – from Theory to Practice by International Experiences**

**21 April, 9.15-14 h**

**Andreola Central Hotel, Via Scarlatti 24, Milano, 21st April 2023**

This workshop aims to facilitate a practical exchange between Italian district heating market actors and the IEA DHC Annex TS5 working group. The aim of the working group is to develop practical methods and systems that are useful for the transformation of existing urban district heating systems to higher shares of renewable energies and waste heat. Examples of concrete results are: Data sheets for renewable generation technologies, methods for identifying potentials at local level, knowledge on decentralised integration of heat generators and recommendations for implementing successful transformation processes. Through the practical exchange, the knowledge and needs of the Italian district heating sector can be incorporated and results are made usable.

- 9.15      **Arrival and registration**
  
- 9.30      **Welcome and program of the day**  
            **Luigi Colombo, Politecnico di Milano**
  
- 9.40      **Framework of district heating in Italy**  
            **Lorenzo Spadoni, AIRU**
  
- 10.00     **Workshop Part I**

## **Practical international know-how and experiences for enhancing the district heating and cooling transformation to higher share of renewable energy sources**

Moderation **Thomas Pauschinger, AGFW, Germany**

Impulse contributions from IEA DHC Annex TS5 working group leaders:

**Michael Salzmann, AEE INTEC, Austria:** Lessons learnt from international DHC transformation processes

**Magda Komoszynska, PlanEnergi, Denmark:** Reliable technology and cost data for new RES DHC technologies

**Urban Persson, Univ. Halmstadt, Sweden:** Assessing RES potentials at local level

**Alice Denarie, Politecnico di Milano:** Integration of decentral RES heat generators and subnetworks

**Questions & answers**

- 11.00      **Coffee break**
- 11.20      **Workshop Part II**
- Decarbonization of district heating in Italy: challenges, drivers, programs and experiences**  
Moderation **Riccardo Battisti**, Ambiente Italia
- Fausto Rivero**, IREN Energia: Programs and experiences toward decarbonization in Piedmont by IREN  
**Luca Rigoni**, A2A Calore e Servizi: Green heating - more green heat with less CO<sub>2</sub> - the experience of A2A in Lombardy
- 12.20      **Round Table: What is needed to kick-off a district heating transformation wave?**  
Moderation **Paola Caputo**, Politecnico di Milano  
**Riccardo Battisti**, Ambiente Italia  
**Giuseppe Mandrone**, Università degli Studi di Torino  
**Antonio Panvini**, Comitato Termotecnico Italiano (CTI)  
**Thomas Pauschinger**, AGFW  
**Lorenzo Spadoni**, AIRU
- 13.00      **Networking and lunch**
- 14.00      **End of the workshop**

A simultaneous translation English to Italian and vice versa will be available.



This workshop is organized in cooperation with the “International Energy Agency Technology Collaboration Programme on District Heating and Cooling”