Energy Solutions for Cities of the Future:
Facilitating the Integration of Low-Temperature Renewable Energy Sources into District Energy Systems

Capacity building workshop
5-6 December 2019
50th International HVAC&R Congress
Sava Center, Belgrade

5 December afternoon

14.00 -19.00

14:10 - 14:30 Welcoming remarks:
- Miloš Banjac, Ministry of Mining and Energy, Serbia
- Luca Angelino, International Renewable Energy Agency (IRENA)
- Bojan Bogdanovic, European Bank for Reconstruction and Development (EBRD)

14:30 – 16:00 Panel I: Strategic heating and cooling planning
- Developing an effective strategic heating/cooling plan: What key success factors? Nis Bertelsen, Aalborg University
  Q&A
- How can geothermal resource assessment and mapping influence decision-making for district heating: Experience from Hungary and the Danube Region, Annamaria Nador, Mining and Geological Survey of Hungary

Moderator: Luca Angelino, IRENA

16:00-16:30 Coffee Break

16:30-17:00 Panel II: Improving the enabling frameworks for the integration of renewable and excess heat sources in district heating and cooling
- Lessons learned and perspectives from the industry, Paul Voss, Euroheat & Power
17:00-19:00  Panel III: From conventional to efficient and renewable-based district heating

- Technical challenges and solutions for the integration of low-grade heat sources into existing networks and buildings, Jakob Zinck Thellufsen, Aalborg University

- Case study from Belgrade, UN Environment:
  o City of Belgrade: District Energy Action Plan
  o Solar thermal potential in the City of Belgrade’s District Heating System
  o Prefeasibility study on interconnection within the District Heating System of the City of Belgrade

- Conversion to low temperature DH networks with increased utilisation of local solar thermal systems – Horizon 2020 project RELaTED, Ljubisa Vladic, Radmilo Savic, PUC Beogradske elektrane

Moderator: Bojan Bogdanovic, EBRD

6 December 2019

9:15-11:00  Panel IV: Enabling Framework Conditions, Financing and Business Models

- Renewable energy market analysis for South-East Europe, Focus on heating and cooling, Emanuele Bianco, IRENA

- Ownership structure, financing, and regulation: Experience and innovative approaches, Søren Roth Djørup, Aalborg University

- Challenges and solutions for financing renewable energy and efficient district energy systems, Gebrail, Greg, European Bank for Reconstruction and Development.

- Perspectives from the private sector, Eirikur Bragason, Arctic Green Energy Europe

Moderator: Luca Angelino, IRENA

11:00- 11:30 Coffee Break

11:30 – 13:45  Panel V: Technical challenges and solutions for the integration of renewable heat sources into new and existing district heating and cooling networks

- Technical challenges and solutions for integrating low-temperature geothermal energy resources: lessons learned from France and the
Pannonian Basin, Miklos Antics, GPC IP-Geofluid / European Geothermal Energy Council

- Technical challenges and innovative solutions for integrating solar thermal into district heating and cooling, Patrick Reiter, Solid GmbH

- IRENA Project Navigator: Technical Concept Guidelines for Renewable heating and cooling systems, Simon Benmarraze, IRENA

- Perspectives for district cooling in smart and sustainable energy systems, Jan Eric Thorsen, Oddgeir Gudmundsson, Market Brand, Danfoss

Moderator: Simon Benmarraze, IRENA

13:45 – 14:00  Closing Remarks: IRENA / EBRD

Lunch/ End of Second day