

Organised in partnership with the European Bank for Reconstruction and Development (EBRD)

**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 Vlacic, 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 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