

Urban Transitions Mission's Knowledge-Exchange Program
Renewable Energy for Cities

Module II: Buildings Energy Performance

Session 3: Heat pumps

Dates: 8 May, 2024 **Time:** 13:30- 15:00 (CEST)

Register: [here](#)

Overview of the Program

The program will focus on **renewable energy technologies and their applications in cities** over February 14 - June 19, 2024.

The overall program consists of three modules, each covered by three sessions (90 minutes/session) for a total of nine (virtual) sessions. Please find below the agenda of the session 1 of Module I, followed by the overview of the topics for each session.

Each session will start with a presentation introducing the topics and key aspects around it, followed by a discussion on a case study to be shared, and questions and answers (Q&A) session. A detailed agenda will be provided well ahead of each session, together with key questions for participants to prepare for the discussion and get the most out of the training.

This knowledge-exchange program aims to be as much interactive and practical as possible. We therefore encourage UTM cities to share in advance their experiences, perspectives, interesting use cases. If you would like to share your interesting project as a case study to be presented and discussed at a relevant session, please don't hesitate to contact UTM as soon as possible. We also welcome UTM cities to share questions in advance around the topics to be covered in a given session.

These exchanges are dedicated to urban energy planners and urban planning officials, as well as experts from local energy agencies and municipally owned companies that support the city in their energy transition. Please let us know which experts you intend to engage. The exchange will be accessible upon registration – please find [here](#) the link to register.

If you have any question or suggestions, please reach out to UTM Team via utm@globalcovenantofmayors.org and copy y.chen@irena.org

Agenda

13:30 CEST	Welcome – <i>Miriam Badino, Urban Transitions Mission coordinator</i>
13:35 CEST	<p>Introduction to the session – <i>Yong Chen, Program Officer (Lead) for Sustainable Urban Energy, IRENA</i></p> <ul style="list-style-type: none"> • Overview of the use of heat pumps in buildings • Technologies and opportunities for cities
13:55 CEST	<p>Harnessing Heat Pumps for Building Heating and Cooling in Sustainable Cities. Challenges and opportunities – <i>Juan Pablo Jimenez Navarro, Senior Energy Analyst, IRENA</i></p> <ul style="list-style-type: none"> • Heat Pumps for Building Heating and Cooling. • Challenges and opportunities
14:10 CEST	<p>Case Study – Aarhus experience – <i>Søren Winther Lundby, Energy & Climate Consultant, City of Aarhus, Denmark</i></p> <ul style="list-style-type: none"> • upcoming green heating plan, including heat pumps and renewable energy • CHP district heating system • experiences and challenges <p><i>Q&A on this case study</i></p>
14:25 CEST	<p>Q&A and discussion – <i>All participants moderated by Yong Chen, IRENA</i></p> <ul style="list-style-type: none"> • What are the opportunities for my city to use heat pumps and renewable energy in buildings? • What are barriers to scale up the implementation of such type of projects?
14:55 CEST	Wrap up and next steps – <i>Miriam Badino, Urban Transitions Mission</i>
15:00 CEST	End

Complete programme of the Knowledge-Exchange Program Renewable Energy for Cities

Module I: Distributed renewable power generation systems

- Session 1: Understanding distributed electric power generation systems in the context of urban energy transition (14 February)
- Session 2: Focus on Solar Photovoltaics (PV) (21 February)
- Session 3: Other renewable power technologies for cities (28 February)

Recordings of past sessions are available in the UTMC energy group <https://utmc.app/group-energy>

Module II: Buildings energy performance

- Session 1: [Building energy efficiency](#) (10 April)
- Session 2: [Renewable energy for heating in buildings](#) (~~17 April~~ **24 April**)
- Session 3: [Heat pumps](#) (~~24 April~~ **8 May**)

Module III: Sustainable mobility in urban environment

- Session 1: [Mobility VS transportation](#) (5 June)
- Session 2: [Electric vehicles \(eV\) and charging infrastructure](#) (12 June)
- Session 3: [Other low-carbon transportation options](#) (19 June)

The International Renewable Energy Agency (IRENA) is an intergovernmental organisation, comprising 168 Member States and the European Union, that supports countries in their transition to a sustainable energy future. IRENA serves as a centre of excellence; a repository of policy, technology, resource and financial knowledge; and the principal platform for international co-operation on renewable energy. IRENA promotes the widespread adoption and sustainable use of all forms of renewable energy, including bioenergy, geothermal, hydropower, ocean, solar and wind energy, in the pursuit of a global energy transition that delivers sustainable development, energy access, energy security and low-carbon economic growth and prosperity. www.irena.org
