





UrbanShift webinar August 2023

Organized by ICLEI

Title: Energy Exchanges: Urban cooling

Date: August 22, 2023

Time: 10:00 - 11:00 CEST / 13:30 - 14:30 IST / 15:00 - 16:00 WIB / 16:00 - 17:00 CST

Platform: Zoom

Languages: English, Bahasa Indonesia, Mandarin Chinese

Target audience: Local and regional governments (UrbanShift and non-UrbanShift cities worldwide), professionals working on energy efficiency in cities

Background:

Electricity use for space cooling in buildings, specifically in Asia, has grown rapidly over recent decades. In some countries in the ASEAN (Association of Southeast Asian Nations) the demand on energy for cooling has increased up to seven times since 1990. Though household ownership of cooling equipment is relatively low, continued economic development and population growth across the region, combined with an increase in extreme heat events, the demand for home cooling equipment is projected to increase in the coming decades¹. About 44 % of the world's population is living in a hot climate, with only 12 % owning an air conditioning system (AC)². The increase in demand for cooling systems will be witnessed mainly in urban areas due to the increased income-generation of city dwellers (in comparison to residents of rural areas) and the fact that the ambient air temperature is also significantly higher in cities due to the Urban Heat Island (UHI) effect.

Policy action supporting the deployment of more efficient air conditioners, along with other energy efficiency measures, such as the use of efficient fans and building envelope efficiency improvements, can help drastically reduce the projected space cooling energy use. Minimum energy performance standards, labeling programmes and incentives form the foundation for progress on efficient, sustainable and affordable cooling options. Buildings in Asia account for a higher percentage of GHG emissions than the worldwide average, making energy efficient and passive building design strategies³ an important part of the discussion⁴. Local governments are in the position to implement policy and regulatory tools and provide incentives to help support the transition to more energy efficient buildings that reduce the demand on cooling using innovative low-carbon technologies.

This webinar is being organized in collaboration with ICLEI Energy Exchanges: A technical webinar series for the local energy transition.

⁴ https://www.reutersevents.com/sustainability/asia-battles-get-grips-urban-heat-island-effect



¹ Roadmap Towards Sustainable and Energy-Efficient Space Cooling in ASEAN, IEA.

² <u>Roetzel et. al. Impact of building design and occupancy on office comfort and energy performance in different climates, 2013</u>

³Passive design strategies refer to a set of design approaches that focus on utilizing the natural environment to provide heating, cooling, ventilation, and lighting to a building. The aim of passive design strategies is to create a comfortable and energy-efficient indoor environment while minimizing the use of mechanical systems and reducing the building's energy consumption.



BAN Cities for People and Planet



Speakers:

- Lily Riahi, Coordinator Cool Coalition at UN Environment Programme (TBC)
- Melanie Slade, Senior Programme Manager, Energy Efficiency in Emerging Economies at International Energy Agency (TBC)
- Tanmay Tathgat, Director Environmental Design Solutions (TBC)
- Ms. Fen Li, Chief Engineer of Shenzhen Institute of Building Research, Deputy Secretary-General of Eco- city Research Committee of Chinese Society For Urban Studies (GEF-6 City)

Run of show:

5 min	Welcome and introduction Housekeeping rules	Karishma Asarpota, Officer Sustainable Energy, ICLEI WS
7 min	Setting the scene: Presentation by UNEP Cool Coalition	Lily Riahi, Coordinator - Cool Coalition at UN Environment Programme
25 min	 Discussion Suggested highlights: IEA Roadmap towards Sustainable and Energy-Efficient Space Cooling in ASEAN Passive building design strategies (Environmental Design Solutions) Local government-led actions (China) 	 Moderated by Rohit Sen, Head of Sustainable Energy, ICLEI WS Panelists: Melanie Slade, Senior Programme Manager, Energy Efficiency in Emerging Economies at International Energy Agency Tanmay Tathagat, Director Environmental Design Solutions, Delhi Fen Li, Chief Engineer of Shenzhen Institute of Building Research, Deputy Secretary-General of Eco- city Research Committee of Chinese Society For Urban Studies
5 min	Takeaways from discussion + Sustainable Energy support offer	Rohit Sen Head of Sustainable Energy, ICLEI WS
15 min	Q & A from audience	Moderated by Rohit Sen
3 min	Closing	Karishma Asarpota, Officer Sustainable Energy

