

Decarbonizing Korea's Energy System with District Heating and Cooling

Tuesday, 5 December, 11:00 – 12:30

Purpose

Over the past decades, Korea's district heating and cooling has been marked as success, delivering impressive energy savings, while curbing air pollution and greenhouse gas emissions. Despite limited cost-effective mitigation options, Korea's district energy sector is gearing up for decarbonization to propel the nation towards achieving its greenhouse gas reduction targets. For the first time, the Korea District Heating Corporation and Sookmyung Women's University will present decarbonization scenarios for the district energy sector, based on results from the METER model. Furthermore, we will explore greenhouse gas reduction/removal strategies that can unlock the potential of unused energy and innovative CCUS in urban areas. In this session, we will discuss the role of district heating and cooling in reducing greenhouse gas emissions in power and heat generation, and building sectors with the quantitative mitigation pathways. We will demonstrate how Korea is working towards achieving its emissions reduction targets through the deployment of district energy systems using a range of technologies and low-carbon energy sources.

Detailed Program

Time	Program	Speaker
11:00 – 11:05 (5')	Welcoming remarks	Mr. Yong Ki Jeong (President, Korea District Heating Corporation)
11:05 – 11:10 (5')	Congratulatory remarks	Dr. Young Sook Yoo (Chairperson, Climate Change Center)
11:10 – 11:25 (15')	The role of DHC in achieving 2030 NDC target	Ms. Mi Yeon Kim (Team manager, Korea District Heating Corporation)
11:25 – 11:45 (20')	Decarbonization of district energy using unused heat	Prof. Seung Jick Yoo (Professor, Sookmyung Women's University)
11:45 – 12:00 (15')	CCUS application for combined heat and power plants in urban area	Dr. Hyeong Gyu Namgung (Senior Researcher, Korea District Heating Corporation)
12:00 – 12:20 (20')	GHG reduction scenario for district energy system – results from METER model *	Prof. Young Hwan Ahn (Professor, Sookmyung Women's University)

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Key Participants

- > **Mr. Yong Ki Jeong**, *President, Korea District Heating Corporation*
- > **Dr. Young Sook Yoo**, *Chairperson, Climate Change Center*
- > **Ms. Mi Yeon Kim**, *Team manager, Korea District Heating Corporation*
- > **Dr. Hyeong Gyu Namgung**, *Senior Researcher, Korea District Heating Corporation*
- > **Prof. Seung Jick Yoo**, *Professor, Sookmyung Women's University*
- > **Prof. Young Hwan Ahn**, *Professor, Sookmyung Women's University*

Organization

- > Korea District Heating Corporation
- > Sookmyung Women's University

Catering

- > Lunch Box will be provided.(TBD)

Contact Information

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