

You are invited:
**DISTRICT COOLING – FOR SUSTAINABLE
ENERGY EFFICIENT ODS PHASE-OUT**

Date: 6 April 2016

When: 13:30 – 15:00

Where: Room 17, Level -1,
Centre International de
Conférences Genève (CICG)

- District Cooling distributes cooling energy from a central source for air-conditioning in a district. It is an alternative with more efficiency and sustainability for economic and urban development.
- The side event aims to provide an update on different CCAC-supported district cooling project activities, impact of district cooling on environment and an overall perspective on policy, business model and technical aspects to facilitate adoption of district cooling.

Light lunch will be served before the side event.

Programme:

	Introduction - Mr. Jacques Van Engel, Director, Montreal Protocol and Chemicals Unit, UNDP
13:30 – 13:40	Importance of District Cooling in Article-5 context District cooling and linkages with low carbon growth in the Maldives – Mr. Mauman Abdul Rasheed, National Ozone Unit, Government of the Maldives
	District cooling – sustainable solution to ODS phase-out and low carbon growth Mr. Husamuddin Ahmadzai - Swedish Environmental Protection Agency
13:40 - 14:00	Feasibility of District Cooling in Maldives: Assessment, Technology and Business model – Mr. Pär Dalin, DEVCCO
14:00 - 14:15	Experience of District Cooling implementation in Latin America and the Caribbean - UNDP/DEVCCO
14:15 - 14:35	Panel discussion: Policies and other supportive measures to promote district cooling in Article-5 countries - 4 country representatives
14:35 - 14:50	Q&A
14:50- 14:55	Concluding remarks - Canada/USA (CCAC HFC Initiative Lead Partner)
14:55 - 15:00	Closing remarks – Ms. Denise Sioson, CCAC Secretariat

Background

All currently manufactured air-conditioners work on the principle of the vapor compression cycle with refrigerants in a closed loop. HCFCs, traditionally used as the preferred refrigerants in air-conditioners over the past few decades, need to be phased-out. The current alternatives include HFCs and Hydrocarbons. While HFCs are not seen as a sustainable solution, there are safety issues surrounding hydrocarbons. Not-in-kind alternatives, which include vapor absorption systems, deep seawater cooling systems, tidal and other cooling systems in a district cooling configuration, do not use conventional refrigerants such as HCFCs, HFCs and HCs. The multitude of energy sources use in not-in-kind alternatives yields potentially more energy efficiency and lower carbon footprint. With the right business model and technology, district cooling could become an environmentally sustainable and economically viable option.

A Feasibility Study for District Cooling on the island of Male, the Maldives, was carried out by UNDP with funding from the Climate and Clean Air Coalition to Reduce Short-Lived Climate Pollutants (CCAC) to study cost and financing options available for implementation of climate-friendly district cooling technology. This side event will present the results of the study and explore ways of replicability in other low-volume-consuming countries.

The Maldives: The Maldives, an archipelago of 1,190 coral islands, located in the Indian Ocean, will impose a ban on HCFC based equipment by May 2016. The absence of commercial availability of zero-GWP, low-GWP, safe and energy-efficient refrigerants is nonetheless a great concern.

The feasibility study looks at the approach, methodology, technology options, business model and infrastructure development related to replacing the existing HFC/HCFC based air-conditioners in the capital Male with a not-in-kind district cooling technology, towards contributing to Maldives' national goals of low GHG emissions development and ODS phase-out by 2020.

Latin America and the Caribbean: With funding from the Multilateral Fund for the implementation of the Montreal Protocol, UNDP is participating in two initiatives on district cooling in Latin America. In the Dominican Republic, UNDP is conducting a feasibility study for the establishment of district cooling in Punta Cana which includes several hotels, a shopping mall and an international airport. In Colombia, UNDP and the National Ozone Unit provided technical assistance for establishment of a district cooling project which is currently under construction, and will include several public buildings. This is led by Empresas Publicas de Medellin (EPM) and the National Ozone Unit.

DEVCCO: DEVCCO is a private company specialised in project development and services in district energy industry. The company is the operating branch of CCO Holding AB, who carried out the feasibility of the district cooling in the Maldives.