

## Cold Chain Link to Food Security and Climate Mitigation – ASHRAE Participates in UNEP Seminar

AHMEDABAD – The Cold Chain sector is playing a crucial role in managing the world's food systems from production to consumption or “from Farm to Fork”. Absent or inefficient cold chain processes immediately contribute to food loss in different segments of cold chain operations.

On December 8, ASHRAE participated in a technical seminar “Sustainable Cold Chain – Towards Food Security and Climate Mitigation” at the REFCOLD Exposition in Ahmedabad (India).

The Cold Chain is the series of actions and equipment applied to maintain a product within a specified low-temperature range from harvest/production to consumption, including farming/fishing, food processing, cold storage, transportation, food services, and domestic uses, as well as specialized products like medicinal products and vaccines.

Food loss and waste is also a huge contributor to Greenhouse Gas (GHGs) emissions where it can be ranked the third largest GHGs emitter if being considered as a country. The global fight against climate change cannot take place without a reduction in food loss and waste.

The seminar, jointly organized by OzonAction branch of the United Nations Environment Programme (UNEP), International Institute of Refrigeration (IIR), ISHRAE, the National Center for Cold Chain Development (NCCD), the Cool Coalition, and the Ozone Secretariat, shed light on challenges, opportunities, and examples of how to consider sustainable cold chain solutions from institutional, technical, and applied technology perspectives.

Harshal Surange, Director and CEO of ACR Project Consultants Pvt Ltd., and Refrigeration Chair of ASHRAE’s Subregions 1 and 2 Region at Large, spoke about what is needed to make a sustainable cold chain.

Surange explained how there are several keys to achieving sustainable design and operation of refrigeration plants. Some of them include Proper Location, Efficient Envelope Design, Optimal Refrigeration and Thermal Insulation, Effective Use of Natural Resources, and Sustainable Concepts in Operations. ASHRAE’s Guide for Sustainable Refrigerated Facilities and Refrigeration Systems helps designers and operators achieve sustainable operation. Surange led a discussion about the methods presented in the guide that can be used to evaluate the sustainability of design and operational decisions.