



Open Seminar

Date: Tuesday, 14 June 2016
Time: 18:15 - 19:45
Location: Mechanical & Civil Engineering
Building, Room McE-G26
Birmingham University
Edgbaston Campus
Birmingham, B15 2TT
Admission: Free, to book a place, go to:
<https://goo.gl/16QPS5>
Inquiry: ashrae.ukml@gmail.com

Low Carbon District Heating: Centralised Heat Pump Systems

Dr Andy Pearson F.ASHRAE
Group Managing Director
Star Refrigeration

There has been a rapid and remarkable increase in discussion of industrial-sized heat pump systems for district heating in the UK over the last three years. Heat networks are not a new idea but they have traditionally been seen as a very “un-British” way of delivering domestic heating. The realisation that our carbon reduction targets cannot be met without some drastic changes to the way we live our lives has changed all that. Centralised heat pump systems, drawing heat from rivers and lakes and transferring it to a distribution network for delivery to homes, offices, hospitals, universities and retail, are now proven in many other European and North American cities and are well suited to the UK climate. DECC have completed a heat mapping exercise showing all the major sources of heat and correlating them to major demand centres.

There have been significant technical challenges to overcome along the way. Using one installation as a case study example, Dr Andy Pearson, ASHRAE Fellow and Group Managing Director of Star Refrigeration Ltd, will describe the concept, the difficulties faced and the ways in which they were overcome. The case study, in Drammen, Norway was one of the projects named by ASHRAE in their citation for Dr Pearson’s award of the ASHRAE Fellowship at the 2016 Winter meeting in Orlando this year.



Andy Pearson (Right) receives his plaque from
ASHRAE President David Underwood

Dr Andy Pearson

BSc/BEng, PhD, Chartered Engineer

Fellow of ASHRAE

Fellow of Institute of Refrigeration

Fellow of Institution of Mechanical Engineers

Fellow of Institution of Engineers and Shipbuilders in Scotland

Dr Pearson joined Star Refrigeration in 1986 and has worked in sales and design, including a period as Technical Director prior to his appointment as Managing Director of Star's Contracts Group in 1998. He was President of the Institute of Refrigeration (2010-13) and is currently chairman of the Institute of Refrigeration's Technical Committee. He has served two terms as a director of the International Institute of Ammonia Refrigeration and currently chairs the Refrigeration Safety Technical Committees for the British Standards Institute (BSI), which is attached to the European Committee for Standardisation (CEN) and the International Standards Organisation (ISO). He was a Chapter Lead Author for United Nations Environment Programme Refrigeration Technical Options Committee from 2006 to 2014.

With specialties including industrial refrigeration, air-conditioning and heat pumps, including chillers and process plant, his principal interests are in the design of more efficient refrigeration systems and troubleshooting of faulty, inefficient or unreliable equipment. He also has a wide experience of safety issues related to ammonia and carbon dioxide systems. He has provided technical support in expert witness cases and has given specialist advice in support of general consultancy.

Dr Pearson has spoken at conferences around the world, including the IIR Congresses in The Hague, Sydney, Washington DC, Beijing, Prague and Yokohama, and at seminars in The United States, Australia and South Africa. He is a regular contributor to industry journals and magazines, including a column published monthly in the ASHRAE Journal.

This seminar is being held in association with:

