

IIR Working Party

Mitigation of Direct Emissions of Greenhouse Gases in Refrigeration

Working Party of Commissions B1, B2, D1, D2, E1 and E2

TERMS OF REFERENCE

Background

The IIR has been particularly active with regards to the global warming issue in the field of refrigeration, air conditioning and heat pumps and has attended most of the Conferences of Parties to the UN Framework Convention on Climate Change. Statements and Informatory Notes presented at these events by the IIR have highlighted the level and impact of direct and indirect emissions from refrigeration systems^{1,2}. Mitigation of emissions of greenhouse gases (GHGs) is and will increasingly become an issue of paramount importance. It will drive the development of new equipment and the running of it, particularly in those countries that have ratified the Kyoto Protocol.

Trans-national legislation such as the European Ozone Regulation (EC 2073/2000) and the F Gas Regulation (EC Regulation 842/2006) are driving improvements in the handling and reporting of the use of refrigerants. Individual countries have implemented additional legislation to restrict the use of HCFC and HFC refrigerants and promote alternatives. Initiatives to enhance the skills of refrigeration and air conditioning craftsperson and to increase the awareness of the impact of direct refrigerant emissions are also driving changes in attitudes, design and maintenance practices.

The role of the IIR with respect to the global warming issue is to promote environmentally friendly, safe, energy efficient and cost effective design, operation and end-of-life management of refrigerating systems and heat pumps. It is well placed to act as a forum for the collection, collation and dissemination of information relating to the direct emission of GHGs from refrigeration systems and their mitigation. Decision makers and refrigeration stakeholders could benefit from well-balanced information and recommendations on this issue.

Objectives

- To exchange views on mitigation of direct emissions of greenhouse gases in refrigeration
- To collect information on legislation, mitigation measures, initiatives, training schemes and best practice methods adopted by individual countries to reduce direct emissions of GHG refrigerants
- To collate and reference such information and to disseminate it amongst members of the Working Party
- To make appropriate information on mitigation of refrigerant emissions available to IIR members
- To support and promote international collaboration and initiatives to reduce leakage of refrigerants
- To collate such information as is available on the impact of the F Gas Regulations
- To prepare statements, position papers and Informatory Notes on behalf of the Scientific Council
- To represent the IIR at events dealing with global warming

Membership

- Commission and private and corporate members of the IIR
- Experts whose knowledge of the subject will benefit the Working Party

¹ F. Billiard. IIR statement to the 6th Session of the Conference of the Parties UNFCCC, The Hague, The Netherlands, 20 November 2000

² D. Coulomb. IIR statement to the UN Climate Change Conference (COP14 and CMP4) Poznan, Poland, 1-12 December 2008

Membership of the Working Party should be multi-national and open to private members or representatives of corporate members of the IIR.

Commissions Involved

The Working Party is under the jurisdiction of Commissions B1, B2, D1, D2, E1 and E2

Chairperson, Vice-Chairperson and Secretary

- Chairperson: Per Lundqvist
- Vice-Chairperson: Professor Graeme Maidment
- Secretariat: provided by the International Refrigeration Committee of the Institute of Refrigeration, David Cowan
- Other persons involved: Judith Evans, Delegate of the UK in the IIR, Issa Chaer, PhD supervisor (South Bank University, London)

Meetings

The Working Party shall hold at least one meeting per year.

Minutes shall be taken at each meeting and posted on the IIR web page of the Working Party.

Sources of Information

- Journal publications, Conference proceedings
- UNEP-TOC report, IPCC emission scenarios
- National and EU documents and strategies, etc

Deliverables

- Consolidated listings and references for relevant information on refrigerant emissions, emissions reductions, mitigation measures, practical guidance and training initiatives
- One statement, position paper and/or Informatory Note
- A workshop with publication of proceedings in CD-ROM form
- Periodically updated web page of the IIR

Timescales

- Project start: March 2010
- First WP meeting Stockholm June 2010 (during conference on **Sustainable Refrigeration and Heat Pump Technology** or **2nd IIR Workshop on Refrigerant Charge Reduction in Refrigerating Systems**)
- Second WP meeting Opatija, Croatia Oct 2010 (conference on **International Congress on Energy and the Environment 2010 + Heat Transfer in Components & Systems for Sustainable Energy Technologies**)
- Workshop at Prague, Czech (Republic) Aug 2011 (**23rd IIR International Congress of Refrigeration: Refrigeration for Sustainable Development**)