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**18th Meeting of the Parties to the Montreal Protocol (MOP 18)
New Delhi, India, October 30 – November 3, 2006**

**United Nations Climate Change Conference (COP12 – COP/MOP 2)
Nairobi, Kenya, November 6-17, 2006**

***Statement given by Didier Coulomb,
Director of the International Institute of Refrigeration***

Mr. President, Dear Delegates,

Refrigeration is at the core of two major threats to the environment: ozone depletion and global warming. Both these causes of concern have led to two different protocols, the Montreal and Kyoto protocols, and both should be treated with greater international coordination; both are related, and what is done to alleviate the one has repercussions on the other, for better or for worse.

Refrigeration impacts on both these phenomena in two ways:

- Refrigeration uses refrigerants, some of which have a negative effect on the atmosphere, if the equipment is not sufficiently tight or if the refrigerants are not properly recovered when disposal of the equipment takes place:
 - CFCs and, to a certain extent, HCFCs, contribute to the depletion of stratospheric ozone;
 - CFCs, HCFCs and HFCs are potent greenhouse gases which cause global warming.However, natural refrigerants, (ammonia, CO₂, hydrocarbons) that are gradually replacing them in many refrigeration units, do not have a significant impact on the environment.
- Refrigeration technologies are very energy-consuming, thus directly contributing to the emission of large amounts of CO₂. When including air conditioning, they account for about 15% of worldwide electricity use. Energy efficiency, which varies according to units and refrigerants used, is therefore an essential element to take into consideration.

On the other hand, it is undeniable that refrigeration plays a positive role in sustainable development, thanks to its many applications in many social and economic sectors.

- Refrigeration and air conditioning are already indispensable to human life, due to the essential part they play in food and health-related issues, but they are to become even more indispensable, as is shown by the increasing demand for air conditioning, caused by global warming.
- Besides, refrigeration technology is necessary for the implementation of many future energy sources: the liquefaction of natural gas and hydrogen or thermonuclear fusion in particular, not to mention the liquefaction of CO₂, in view of its capture and storage.

In order to face increasing demand, while reducing its impact on the climate, stakeholders in the refrigeration field, and the IIR in particular, are leading many actions:

- increasing research into refrigerants, in particular natural refrigerants;
- reducing refrigerant emissions thanks to better containment, reinforcing the monitoring of tightness, developing systems using less fluids;
- reducing the energy consumption of the units, with a view to bringing the figures down by a third before 2020;
- developing novel environmentally-friendly refrigeration technologies (magnetic refrigeration, solar-powered units in developing countries...).

The International Institute of Refrigeration (IIR) is an intergovernmental organization. It brings together 61 developed and developing countries and countries with transition economies, which represent 80% of the global population. The IIR's mission is to promote and disseminate knowledge of refrigeration technology and all its applications. Thanks to the international scope of its network of experts, the IIR contributed to the success of the Montreal Protocol and is actively committed to the mitigation of global warming. A lot is still to be done for both these issues and the IIR invites all countries to join it in its task.