

Position Paper



Climate Change and Ozone Depletion The Role of Polyurethanes

Many people are concerned today about the possible impact of human activities on climatic change and depletion of the protective atmospheric ozone layer.

ISOPA focuses on both of these as part of its commitment to environmental protection.

1. Climate Change

Polyurethane Foams Save Energy

Polyurethanes are widely used as insulation foams to prevent heat transfer, thus saving energy.

Measurement of the energy required to produce polyurethane insulation foams shows that the pay back period – the length of time that it takes for the foams to save as much energy as it took to produce them – is typically only a few months to one or two years, depending on the application.

HFC Blowing Agents

Manufacturers use blowing agents to facilitate the production of foams.

The use of HFCs can also be beneficial since their lifetime contribution to energy saving through their responsible use helps to combat climate change. This is because the foams made with them have higher insulation values than those made with some other blowing agents.

ISOPA's Contribution to the European Climate Change Programme (ECCP)

ISOPA has represented the polyurethane industry through the development of the ECCP and contributed to the development of progressive policies. The Commission's Proposal for A Regulation (COM (2003) 492) has been published (8/2003).

2. Protecting the Ozone Layer

ISOPA's Contribution to the United Nations Montreal Protocol

ISOPA was originally established – in 1987 – as the response of polyurethane raw material producers in Europe to protecting the atmospheric ozone layer (which shields the surface of the planet from harmful radiation).

ISOPA led discussions with European institutions, such as the European Commission, Council of Ministers and the European Parliament. It was instrumental in developing and implementing legislation to phase out CFCs and HCFCs in the shortest possible time and ahead of most other areas of the world.

ISOPA, however, does not develop technologies. That is the task of member companies and their customers.

Major ISOPA Achievements

- **Signatory to a Voluntary Commitment with the European Commission in 1992 to reduce consumption of CFCs in the foam sector.**
- **Contributor to the debate which led to the European Regulation EC 3093/94 that achieved a phase-out date for CFCs of 1 January 1995 and a phase-out schedule for HFCs.**
- **Contributed to the debate which led up to the European Regulation EC 2037/2000 that will eliminate the use of HCFCs in foams by 1 January 2004.**

Contribution to Technical Adaptation Process

Representatives from ISOPA members have contributed to the development of several United Nations Environmental Programme – UNEP – Flexible and Rigid Foams Technical Options Reports:

- **1989 Michael J Cartmell (ICI, now Huntsman) and Max Mann (Bayer)**
- **1991 Eckehard Weigand (Bayer) and Mike Jeffs (ICI, now Huntsman Polyurethanes)**
- **1995, 1998 and 2002 Mike Jeffs, lead author on polyurethane rigid foams**

Other IPCC and TEAP Reports:

- **1999 HFC and PFC Task Force of the TEAP – Mike Jeffs, member of Task Force.**
- **IPCC/TEAP Special Report on Safeguarding the Ozone Layer and the Global Climate System – Mike Jeffs lead author**



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ISOPA is an affiliated organisation within the European Chemical Industry Council (Cefic)

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