



ICARHMA Messaging

Discussion Points Related to the Transition to Lower GWP Refrigerants

{Note to Council Members: The following are concepts suggested to the Council as candidate components of an ICARHMA statement that includes the messages ICARHMA members believe should be part of any discussion on refrigerants by its members, governments, and the general public.}

ICARHMA is a global organization comprised of nine (9) associations representing heating, ventilation, air conditioning, refrigeration, and water heating manufacturers in the Americas, Asia, Europe, and the South Pacific. It represents a total of more than 1,000 manufacturing companies, valued at US\$225 billion. These manufacturers build equipment that improves the lives of hundreds of millions of people around the world. ICARHMA's members are dedicated to the manufacturing of quality equipment that underscores their commitment to a better environment through technological advances. As part of their environmental stewardship ICARHMA member manufacturers have researched, developed, and manufactured more energy efficient equipment and environmentally friendly refrigerants while continuing to provide needed heating, ventilation, air conditioning and refrigeration.

ICARHMA's members, national governments, and the public are engaged in the important global discussion about the global warming potential impact of the refrigerants used in cooling, heating, and refrigeration equipment. This important discussion must include consideration of the points defined in this paper.

Key Points

The Importance of Refrigerants to Society

- Refrigerants are vital parts of daily living. They are vital for personal health, comfort, and well-being. They prolong perishable food and keep essential medicines safe. They save lives, and improve health, productivity and safety.

Industry is a Responsible Steward of the Environment

- The HVACR industry (the industry) understands the policy interest in reducing the use of high GWP refrigerants and is committed to extending its record of engineering solutions and continued consultation with policymakers to achieve technically feasible and economically justified solutions to energy efficiency and climate change challenges.

The Value of a Global Approach

- The HVACR industry is a global industry and the equipment it manufactures is used globally. Therefore, it stresses the necessity of a unified global approach to prevent a patchwork of national and regional regulations on refrigerant use. A global approach will reduce business uncertainty and increase economies of scale.

Industry Actions Leading the Transition

- The reality is that the global movement away from HCFCs and high GWP HFCs to the use of multiple lower GWP refrigerants will take time. During that period the industry will continue to:
 - Intensively research alternatives.
 - Engineer products that can use alternative refrigerants safely.
 - Develop the capacity to manufacture, distribute, and sell equipment required for the transition.

Factors to Consider in Choosing Appropriate Refrigerants

- During that transition - and after, the rational choice of alternative, lower GWP refrigerants should be based on a number of factors including: energy efficiency, safety, GWP, and cost.

Market Solutions

- Regulations should be simple, technology neutral, and designed to maximize market solutions to reach desired lower CO₂ equivalent emission targets, while encouraging the use of alternatives, and allowing the freedom to choose the most appropriate refrigerant for each application under consideration.

Responsible Use of all Refrigerants

- All refrigerants should be handled in ways to prevent any damage to health, safety, and the environment. The increased use of alternative refrigerants will introduce new health and safety challenges that need to be fully understood in the private and public sectors so they can be effectively managed.
- Assuring the safety of HVACR technicians, other industry personnel, and consumers is an exceptionally high priority for the HVACR industry.
- Refrigerant safety and health, and operational risks may include asphyxiation, corrosiveness, flammability, operating pressures, frostbite, and toxicity (chronic and acute). Every refrigerant poses different risks and requires specific handling procedures.
- The number one best practice to mitigate the risk of using different refrigerants is requiring refrigerants be handled only by qualified HVACR technicians.
- The proper use of refrigerants is essential and should be required. Situations should be avoided where the wrong refrigerant is used in the wrong application or in a system not designed for that refrigerant. Proper use of refrigerants will improve energy efficiency, promote climate friendly solutions, and ensure a safe and healthy environment for technicians and consumers.