

## ASHRAE/AIRAH JOINT RESOLUTION ON CLIMATE CHANGE

As concern grows worldwide on the impact of increasing emissions associated with energy use and its effect on global climate, leading organizations from the international building community note the following:

- The earth's climate system unequivocally has warmed and human activities have contributed to this
  warming as recognized by the Intergovernmental Panel on Climate Change (IPCC).<sup>1</sup>
- Buildings are significant contributors to the emissions associated with climate change. Energy use in residential, commercial and public buildings account for 35 percent of total global energy consumption<sup>2</sup> and about 30 percent of global greenhouse gas (GHG) emissions.<sup>3</sup>
- The IPCC estimated that around 30 percent of the global baseline CO<sub>2</sub> emissions in buildings projected for 2020 could be mitigated in a cost-effective way—at zero or even negative costs.<sup>4</sup>
- The Montreal Protocol has resulted in significant refrigerant use reductions, selection of lower global warming potential (GWP) alternatives, and a corresponding reduction in CO<sub>2</sub> equivalent emissions.<sup>5</sup>
- The G8 countries already have adopted a global climate change initiative focused on reducing the climate impact of buildings through building codes, development of net-zero energy buildings, and reducing emissions and energy use from existing buildings.<sup>6</sup>

The undersigned organizations resolve to:

- Support research and development activities designed to reduce buildings' energy use and greenhouse gas emissions
- Educate building owners, operators, users, designers, and constructors on the importance of building energy efficiency, corresponding climate change impact, and proper operations and maintenance measures
- Encourage the supply of renewable energy into buildings and building engineering systems when economically feasible
- Develop and implement sustainable building designs, materials, components, systems, and processes that minimize environmental impacts, including climate change, while maintaining indoor environmental quality
- Provide advice, information, and assistance to governments and other influential bodies on energy efficiency and climate change emissions in both new and existing buildings
- Encourage responsible refrigerant use, including emissions reduction strategies and technologies and encourage development of energy efficient refrigerants with low or zero global warming potential
- Support the development and implementation of standards, building codes, incentive programs, and voluntary initiatives aimed at reducing building environmental impacts
- Implement holistic and coordinated approaches to identifying and resolving environmental issues at all stages of a building's life cycle—from conception, design, and construction through operation, maintenance, refurbishment, and deconstruction

<sup>&</sup>lt;sup>1</sup> IPCC 2007. *The AR4 Synthesis Report: Summary for Policymakers*. http://www.ipcc.ch/pdf/assessment-report/ar4/syr/ar4\_syr\_spm.pdf. <sup>2</sup> IEA, *Energy Technology Perspectives: Scenarios & Strategies to 2050*. Fact Sheet, Buildings and Appliances. http://www.iea.org/textbase/papers/2006/buildings.pdf.

<sup>&</sup>lt;sup>3</sup> UNEP SBCI 2007, Assessment of Policy Instruments for Reducing Greenhouse Gas Emissions from Buildings. http://www.unepsbci.org/docs/openFile.asp?ID=AD127DD49740BC5D&fileName=SBCI\_CEU\_Policy\_Tool\_Report.pdf

<sup>&</sup>lt;sup>4</sup> IPCC 2007. *Mitigation*. Contribution of Working Group III to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change.

<sup>&</sup>lt;sup>5</sup> Guus J. M. Velders, et al., *The Importance of the Montreal Protocol in Protecting Climate*, 104 Proceedings of The National Academy of Sciences 4814 (2007)

<sup>&</sup>lt;sup>6</sup> IEA 2007. Energy Efficiency Policy Recommendations to the G8 2007 Summit, Heiligendamm. http://www.iea.org/G8/docs/final\_recommendations\_heiligendamm.pdf.