Pune Declaration on Low Global Warming Potential and Energy Efficient Alternatives to HCFCs in India

Indian and foreign experts in refrigeration, air conditioning, and environmental protection, having met in Pune, India on the 5th March 2014,

Mindful that high GWP alternatives to HCFCs are contributing to global warming,

Mindful that India is an emerging economy and a developing country that is undergoing rapid growth in its air-conditioning (AC) and refrigeration sectors,

Mindful that universities, NGOs, and companies in Pune, India are at the forefront of many next-generation technologies, such as improved ammonia refrigeration and AC, secondary-loop automobile AC, transport refrigeration, and more,

Cognizant that in some sectors Indian companies will need adequate time before the HCFC-22 phase-out if they are to avoid HFC-410a, HFC-404a, and HFC-134a and safely implement energy efficient low-GWP alternatives,

Reaffirming the importance of alternatives to HCFCs that are safe, cost-effective, technically proven, energy efficient, and safe for the environment,

Recalling Indian industry's historic global leadership in the transition away from CFCs and other ozone depleting substances,

Emphasizing the importance of capacity building, training, financial, technical, and other assistance for India to transition to environment-friendly alternatives to HCFCS,

Hereby:

- 1. *Note* with appreciation the efforts of the Government of India, industry, academics, refrigeration and air conditioning associations, and civil society in the successful phase-out of CFCs and most other ODSs and its ongoing efforts to select low-GWP alternatives in implementing its HCFC Phase-out Management Plan;
- 2. **Volunteer** to participate in the development of standards appropriate to India for flammable and toxic refrigerants;
- 3. *Volunteer* to participate with , government, professional societies and other technical experts to develop low-GWP alternative refrigerants and technologies that are appropriate for the Indian context;
- 4. *Invite* Indian industry, government, professional societies, and other technical experts to develop a national certification program for refrigeration and AC service technicians and other refrigeration and AC professionals/consultants;
- 5. *Urge* Indian industry to submit for national and international funding project proposals for demonstration and awareness projects, including ammonia and other natural refrigerant based room AC
- 6. **Support** adoption of low-GWP and energy efficient refrigerants in India that would help improve cost-effectiveness for the consumer at micro level and the country at the macro level;
- 7. *Urge* the ASHRAE -Pune Chapter, TERRE, and other willing organizations, to continue dialogue with RAMA, BEE and the Ozone Cell of the Government of India to emphasize the importance of energy efficiency and mitigating the climate change impact of refrigeration and AC;
- 8. *Support* the organization of meetings and other opportunities for stakeholders to identify strategies to address unresolved issues, such as disposal of f-gases, TEWI/LCCP for the alternatives, and the need for mandatory certification for technicians/professionals, and other challenges;
- 9. Support widened TEAP/RTOC mandate to assess energy efficient, low GWP refrigerants.

PARTICIPATING ORGANIZATIONS

TERRE Policy Centre

Institute for Governance & Sustainable Development

ASHRAE Pune Chapter

Mahratta Chamber of Commerce, Industries and Agriculture

College of Engineering Pune

Flora Institute of Technology, Pune

GIZ - Proklima

Centre for Science & Environment

TATA Motors Limited

Subros

Pranav Vikas Group

Honeywell

Daikin

Voltas

ACR Project Consultants Private Limited

TESSOL Thermal Energy Solutions