**HCFC PHASE-OUT MANAGEMENT PLAN STAGE-I**
**SERVICING SECTOR**

HCFC Phase-out Management Plan (HPMP) Stage-I comprises of a combination of interventions such as technology conversions, policies and regulations, technical assistance, training, awareness, coordination and monitoring in selected HCFC consuming sectors, to be implemented for the period from 2012 to 2015, to enable compliance with the 2013 and 2015 control targets for consumption of HCFCs (Annex-C, Group-I substances).

The HPMP Stage-I is being implemented under the direct supervision of the Ozone Cell, Ministry of Environment and Forests (MoEF), Government of India. The Government of India has assigned the implementation responsibilities to the implementing agencies, UNDP has been designated as lead implementing agency for HPMP Stage-I. The Servicing Sector is being implemented by GIZ-Proklima as the lead implementing agency along with UNEP as the cooperating implementing agency for the implementation of the HPMP Stage-I.

HCFCs are classified as controlled substances under Annex-C Group-I of the Montreal Protocol and to be phased out as per the accelerated schedule of the Montreal Protocol. The phase-out schedule for Article-5 countries is the freeze in 2013 at the base-line level (an average of 2009 and 2010) for production and consumption respectively and subsequently, 10% reduction of the baseline in 2015, 35% reduction in 2020, 67.5% in 2025 and complete phase-out in 2030 while allowing for servicing and annual average of 2.5% during the period 2030-2040.

HCFCs are the widely used in India in various sectors including Foam, Refrigeration and Air-Conditioning (RAC) manufacturing sector, RAC servicing sector etc. The Servicing Sector has a significant consumption of HCFCs, namely, HCFC-22, HCFC-123 due to large and increasing population of RAC equipment in the country.

The refrigerant consumption in the Servicing Sector not only depends on the installed base of RAC equipment, but also on product quality and the quality of servicing during product life cycle. The quality of servicing depends on knowledge and skill levels of technicians, appropriate equipment and tools etc. The total number of enterprises in the Servicing Sector is about 37,000 and the total number of technicians is about 115,000.

The servicing practices need to be improved not only for reducing the refrigerant requirement in servicing, but also for proper and efficient functioning of the RAC equipment. During servicing, recovery of refrigerant is not a common practice, especially in developing countries. The refrigerant is often simply vented out and after repair the equipment is recharged with the virgin refrigerant. There is also a practice to top up the RAC equipment with the refrigerant without proper leak detection and repair. There could be potentially significant savings in refrigerant use if proper recovery of refrigerant and good servicing practices are implemented.

The Servicing Sector Plan under HPMP Stage-I is focussing on training programs for servicing technicians on good servicing practices across the country. It is also proposed to focus on the existing reclamation centres with institutional users as these could adopt policy, reclamation and reuse of refrigerants. Promotion of recovery and reclamation in the private sector will also be tried on a pilot basis with the existing reclamation centres.

The implementation of Servicing Sector Plan under HPMP Stage-I would reduce consumption of HCFCs in the servicing sector to meet the compliance targets of 2013 (freeze) and 2015 (10% reduction) in line with the accelerated phase-out schedule of the Montreal Protocol