

BACKGROUND OF HPMP STAGE 2

The Hydrochlorofluorocarbons (HCFC) Phase-Out Management Plan or HPMP Stage-1 was approved at the 65th Ex-Com meeting in November 2011 for the implementation of Montreal Protocol to facilitate Malaysia's compliance with the 2013 and 2015 control targets for Annex-C, Group-1 Substances (HCFCs). Through HPMP Stage 1, Malaysia successfully manage to reduce HCFC consumption to 463.40 ODP tonne/year in 2015.

In continuing Malaysia's obligation to Montreal Protocol, HPMP Stage 2 was approved at the 77th Executive Committee of Montreal Protocol meeting in December 2016.

OBJECTIVE OF HPMP STAGE 2

Malaysia's HPMP Stage 2 is a continuation from HPMP Stage 1 of the Ozone Depleting Substances (ODS) phase out programme. The HPMP aims to phase out HCFCs from the industrial and service sectors by implementing a combination of interventions such as technology transfer investments, policies and regulations, technical assistance, training and capacity building, awareness and education as well as monitoring and management in the selected HCFC consuming sectors.

WHAT IS HCFC AND WHY DO WE NEED TO PHASE-OUT?

HCFCs have ozone depleting potentials (ODP) that are harmful to the ozone layer. In addition, HCFCs have high global warming potentials groups - up to 2000 times that of carbon dioxide. By supporting the replacement or avoidance of HCFCs in developing countries. Malaysia will contribute to the protection of both the stratospheric ozone layer and the global climate system.

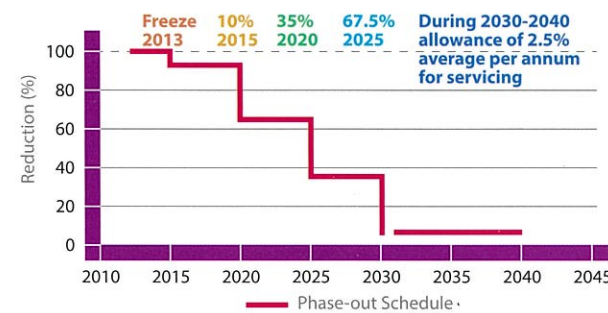
MALAYSIA'S HCFC CONSUMPTION BASELINE

Substance	Consumption (ODP *Tonnes)		
	2009	2010	Baseline
Annex-C Group-1 Substances (HCFC) under the Montreal Protocol	494.2	537.5	515.8

HCFC PHASE OUT SCHEDULE FOR MALAYSIA

Baseline	Average of 2009 & 2010 Consumption (imports)
Freeze by	2013
10% reduction by	2015
35% reduction by	2020
67.5% reduction by	2025
97.5% phase-out by	2030 (while allowing an annual average of 2.5% strictly for servicing during the period 2030-2040)

MONTREAL PROTOCOL'S HCFC PHASE-OUT SCHEDULE FOR MALAYSIA



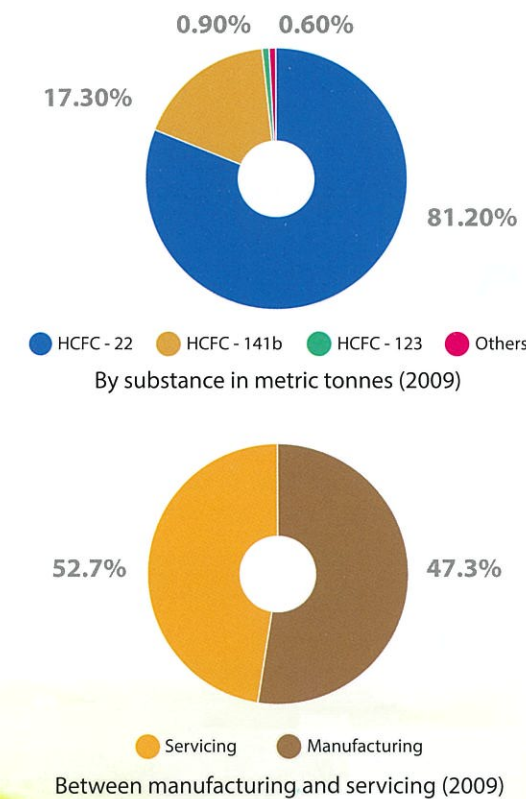
HPMP STAGE-2 TARGETS

Target	Maximum Consumption Level (ODP Tonnes)
From 01 Jan 2013	515.8
From 01 Jan 2015	464.2
From 01 Jan 2020	335.24
From 01 Jan 2022	294.63

HCFC - MALAYSIA SCENARIO

There is no production of HCFCs in Malaysia. The entire domestic demand is met through import from other countries. Import of HCFCs are regulated in Malaysia. The main HCFCs imported are HCFC-141b, HCFC-22 and HCFC-123.

MALAYSIA'S HCFC CONSUMPTION



HCFC - USER SECTOR

1. Air-conditioning
2. Refrigeration consisting of
 - Domestic
 - Commercial
 - Industrial
3. Foam manufactures
4. Fire fighting
5. Solvents

WHO ARE THE PRIMARY TARGETS

1. HCFC Importers
2. Foam Manufactures
3. System Houses for 'polyol' manufacturing
4. Air Conditioning & Refrigeration Servicing Sectors
5. Air Conditioning & Refrigeration Manufacturing Sectors

WHAT IS PLANNED UNDER HPMP STAGE II

REGULATORY ACTIONS

- Ban on the use, import and export of HCFC-22 in RAC manufacturing by 1 January 2020.
- Ban on the export of HCFC-141b contained in pre-blended polyols 31 December 2018.
- Ban on the import and use of HCFC-141b contained in pre-blended polyols except for by 1 January 2022.

MANAGEMENT, COORDINATIONS AND MONITORING

- Support for policies and regulations.
- Implementation of supervision, management, coordination and monitoring.
- Awareness and communication targeted at key stakeholders.

