

**Revised Proposal on Banning the Import of Equipment using  
Hydrochlorofluorocarbons (HCFCs)**



Environmental Protection Department  
Hong Kong Special Administrative Region Government

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### **PURPOSE**

1. This paper sets out the Hong Kong Special Administrative Region Government (HKSAR)'s proposed regulatory control on the equipment using hydrochlorofluorocarbons (HCFCs) in Hong Kong for satisfying the obligations of the Montreal Protocol on Substances that Deplete the Ozone Layer (MP).

### **BACKGROUND**

2 All along, the HKSAR has unfailingly implemented the requirements of the MP, which aims to restore the ozone concentration in the stratosphere as soon as possible.

3. At present, the control of ozone depleting substances in HKSAR is exercised under the Ozone Layer Protection Ordinance (Cap. 403; OLPO) and its subsidiary regulations. The importation of HCFCs substances is controlled by a licence system and the level is capped by a quota system according to the MP's phasing out schedule.

4. In September 2007, the 19th Meeting of Parties to MP reached an agreement in Montreal on an amendment to accelerate the phase out of HCFCs. In line with the accelerated phase out schedule, we need to phase out 75% of the baseline level of HCFCs by 2010 instead of the original requirement of 65%. Then there would be a 90% reduction in 2015 and 100% reduction in 2020. Subject to the further decision of the Montreal Protocol in 2015, for 2020 to 2030, only 0.5% of HCFCs will be allowed to be used for servicing the refrigeration equipment existing before 2020. Please refer to Annex 1 for details.

5. The accelerated phase out requirement is depicted in the graph of Annex 2. For 2010, the ceiling for local consumption of HCFCs in Hong Kong will be changed from the previous 48.63 ODP-tonnes<sup>[1]</sup> to the revised 34.73 ODP-tonnes. With the current consumption of HCFCs of about 51 ODP-tonnes, there will be a shortage of over 16 ODP-tonnes of HCFCs (equivalent to about 300 tonnes of HCFC-22) in 2010.

6. To address the accelerated phasing out programme, there is a need to further reduce the

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<sup>[1]</sup> ODP-tonnes means the tonnage adjusted to the ozone depleting potentials (ODP) of the concerned HCFC. For example, for HCFC-22, as the ODP is 0.055, 1 tonne HCFC-22 equals to 0.055 ODP-tonne.

demand of HCFCs by banning the import of refrigeration, air conditioning and heat pump equipment using HCFCs as refrigerant in line with the practices adopted in other advanced countries. As the use of HCFCs includes also fire extinguishers, aerosol products, insulation panels, insulation boards, insulation pipe covers, for the sake of completeness, we consider that it would also be appropriate to include these into the proposal. It is noted that there are already non-HCFC alternatives to these products.

## **OVERSEAS PRACTICE**

### European Union

7. In member states of the European Union, the use of HCFCs in most new refrigeration and air conditioning systems was banned from 1 January 2001, although there is an exemption for systems with a cooling duty less than 100 kW until 1 July 2002 and for reversible air conditioning and heat pump systems until 1 January 2004. The use of virgin HCFCs for the maintenance of existing refrigerating and air conditioning systems will be banned from 1 January 2010. The use of all HCFCs (including recycled HCFCs) will be banned from 2015, although this date will be reviewed by 2008 and possibly brought forward depending on the availability of alternatives.

### Canada

8. By 1 January 2010, no HCFC-22 equipment will be allowed to be manufactured in or imported into Canada. Moreover, new HCFCs (including HCFC-123) equipment will not be allowed to be manufactured or imported in 2020.

### United States of America

9. In USA, production and importing of HCFC-142b and HCFC-22 for use in any new equipment, manufactured on or after 1 January 2010, will not be allowed.

## **THE PROPOSAL**

10. To join the international efforts in protecting the ozone layer, we propose to amend the Ozone Layer Protection (Products Containing Scheduled Substances) (Import Banning) Regulation (Cap. 403C) to ban the import of products using hydrochlorofluorocarbons (HCFC) according to the following schedule –

- (i) 1 January 2010: all products using HCFC-22, other than the window-type air conditioners;

- (ii) 1 January 2012: all products using HCFC-22;
- (iii) 1 January 2015: all products using HCFCs, other than HCFC-123; and
- (iv) 1 January 2020: all products using HCFCs.

11. We consider it appropriate to ban the import by the above proposed phases to allow a smooth transition and to ensure full compliance with the accelerated phase out schedule of the MP.

12. To ensure sufficient deterrent effect against contravention, a maximum penalty of HK\$ 1,000,000 and imprisonment not exceeding 2 years is proposed.

### **WAY FORWARD**

13. We are in the process of introducing legislative amendment to make these as statutory requirements under the Ozone Layer Protection Ordinance. Subject to the comments and results of the vetting by the Legislative Council, we would expect the enactment of the amendment regulation will be made in mid-2009.

- End -

**Comparison of existing and new commitments**

	Original Phasing Out Schedule	Accelerated Phasing Out Schedule Under the 2007 Montreal Adjustment
1996	Freeze at baseline level <sup>[1]</sup>	--
2004	35% reduction	--
2010	65% reduction	75% reduction
2015	90% reduction	90% reduction
2020	99.5% reduction by 2020 <sup>[2]</sup>	100% reduction <sup>[3]</sup>
2030	100% reduction	

<sup>[1]</sup> Baseline level equals to 2.8% of 1989 CFC levels plus 100% of 1989 HCFC levels, i.e., 138 ODP-tonnes for Hong Kong.

<sup>[2]</sup> Consumption shall be restricted to the servicing of refrigeration and air conditioning equipment existing at that date.

<sup>[3]</sup> May allow 0.5% for servicing in the period 2020–2030. Such need will be reviewed by the Meeting of Parties to Montreal Protocol in 2015.

Consumption of HCFCs in Hong Kong &  
Accelerated Phase Out Schedule  
香港的HCFCs消費量及加速淘汰時間表

