Introduction of China HCFCs Phaseout Management Plan

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- Current Situation on ODS Convention Compliance
- China's Progress on ODS Convention Compliance
- Main Tasks in Next Phase
Situation on ODS Convention Compliance

**China:**
- Phased out 4 major ODS, MBr will be phased out in 2015
- China remain the largest party in HCFC production, consumption and exportation
- More difficulties on HCFC management due to its significant increase of raw material usage and export
- Regulations on ODS Management issued

**International:**
- Adjustment on Accelerated HCFCs Phase-out agreed in 2007
- ExCom focus on approval for Country’s HPMP and Demo Projects
- Require all parties to establish HCFC production and export/import licensing system to ensure compliance
China’s Progress on ODS Convention Compliance

**Current Situation:**
In 2010, China’s production on controlled usage of HCFC was 0.44 million tons, accounting for 78.5% of the global total; Including 0.3 million tons of domestic usage, about 48.8% of the global total. China faces a tough task on reaching compliance target.

**Compliance Target** (Baseline: average level between 2009 and 2010)

- Freeze the Production and usage in 2013
- Phase out 10% in 2015
- Phase out 35% in 2020
- Phase out 67.5% in 2025
- Phase out 97.5% in 2030
- Phase out 100% in 2040
# China’s Progress on ODS Convention Compliance

## Industries and sectors involved

<table>
<thead>
<tr>
<th>Industry</th>
<th>Companies</th>
<th>Consumption</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chemical Production</td>
<td>28 companies</td>
<td>0.7 Million tons</td>
</tr>
<tr>
<td>Air-conditioners</td>
<td>50 companies</td>
<td>70,000 tons</td>
</tr>
<tr>
<td>Industrial and Commercial Refrigeration</td>
<td>&gt;300 companies</td>
<td>&gt;40,000 tons</td>
</tr>
<tr>
<td>Refrigeration Service</td>
<td>&gt;10,000 companies</td>
<td>&gt;70,000 t</td>
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<tr>
<td>PU Foam</td>
<td>Thousands</td>
<td>50,000 tons</td>
</tr>
<tr>
<td>XPS Foam</td>
<td>Hundreds</td>
<td>40,000 tons</td>
</tr>
<tr>
<td>Solvent Sector</td>
<td>Hundreds</td>
<td>5,000 tons</td>
</tr>
</tbody>
</table>

Almost 150 billion USD output value of HCFC production and usage in major sectors, involving dozens of thousands of companies and millions of employees.
China’s Progress on ODS Convention Compliance


  In 2011, Excom approved China’s PU foam, XPS foam, Industrial and Commercial Refrigeration, Air-conditioners and Solvent sector HCFCs phase-out Management Plan (Phase 1), approved USD 270 Million.

- In Dec. 2011, Implementation on Accelerated HCFCs Phase-out management Plan was held in Shanghai, hence China’s Accelerated Phase-out HCFCs in Consumption Sector was officially initiated.

- In April 2013, the Multilateral Fund’s 69th Excom meeting approved USD 95 Million for production sector’s HCFC Phase-out Plan (Phase 1).
Main Tasks in Next Phase

Phase-out Tasks for each sector (Prior to 2015)

- **Phase-out HCFC 47,000 tons, 28 companies**
  - PU foam sector: reduce 18% of the baseline in 2015, about 15,000 tons HCFC-141b, involving almost 100 companies.
  - Air-conditioners: Convert about 40 companies’ 9 million production capacity, phase out 10,000 tons HCFC-22.
  - Commercial and Industrial Refrigeration: Convert about 50 companies' production line, phase out 8500 tons HCFCs.
  - XPS sector: Convert about 40 companies, phase out 10,000 tons HCFCs.
  - Solvent: convert about 10 companies, phase out 600 tons.

- Servicing sector: enforce equipments' repair, management and HCFCs' recovery and reuse, leakage rate drop 1-2 percentage, recovery rate increase 2-5% percentage.

- Launch outreach, training, standard revision, substitute technologies' R&D.
# Main Tasks in Next Phase

To strengthen construction and enforcement of policies and regulations

**Law:** China's Act on Air Pollution Prevention and Control

**Regulation:** Regulations on Administration of ODS (total consumption control, quota system)

**National industrial policy:** Guideline of Industrial Structure Adjustment

**Production management mechanism:** strict control on expansion or construction projects of HCFC production, production quota license system

**Import and export management system:** import and export quota license system

**Consumption control system:** strict control on construction of HCFC consuming equipment, quota license, industrial prohibition

**Soon to be established:** Notice on quota management of HCFC production and consumption
Major Substitute Technologies

- **PU**
  - HC
  - Water

- **XPS**
  - CO₂
  - HC

- **RAC**
  - R290
  - R410A

- **ICR**
  - R32
  - NH3/CO₂
  - R410A

- **Solvent**
  - HC-based
  - water
HPMP Phase-out Strategy

Control new HCFC project by Environmental Assessment System

HCFCs’ Total Control and Quota Management

Encourage substitute technologies’ development and application, revise relevant products standards

Conduct Demo Projects and Investment Projects by implementing Sector Plans

Strengthen Coordination between Central and local EPBs, Furthering Local EPB’s Capacity building

Strengthen outreach and training, encourage ODS recovery and reuse

HCFC Phase-out Strategy (Phase 1)
Act Ozone Friendly – Stay Sun Safe

Thank you!