Acknowledgements

- National Ozone Unit, Jamaica
- National Environment and Planning Agency
- Jane Gartshore, Cool Concerns Ltd
Overview

- Phase-out Programme
- Local Legislation
- Projects implemented
- Institutional Framework
- CFC Phase – Out Targets
- CFC Quota System
- HPMP Survey
- Jamaica’s HPMP
- Projects implemented under HPMP
Phase Out Programme

- As part of its obligations the Jamaican government made a commitment to Phase out CFCs by 2006.
  - Local Legislations
  - Refrigerant Management Plan (RMP)
  - Terminal Phase-out Management Plan
  - Phase-out of Halon and Methyl Bromide
Local Legislations

- The Trade (Prohibition of Importation)(Equipment Containing CFCs) Order, 1998
  - Legislation banning the importation of equipment containing CFCs and halon, March 1998
  - A ban on motor vehicles using CFCs in ac units, April 1999
  - Amended to include heavy duty vehicles and marine vessels.
Country’s Programme

- The Trade (Restriction on Importation)(CFCs) Order July 1999
  - Restrict the consumption of CFCs at average 1995 to 1997 levels.
  - Amended in 2002 to facilitate a quota system from July 1999 to December 2005,
Country’s Programme

- The Trade (Prohibition of Importation)(Halon) Order, 2002
  - Ban the importation of virgin Halon, July 15, 2002
- Duty Concessions
  - Duty Waivers on equipment used for retrofits
- Labelling Standard
  - Equipment containing or manufactured using ozone depleting substances
Projects Implemented

- **Jamaica Refrigerant Management Plan (RMP)**
  - A recovery/recycling project for Jamaica’s Mobile Air-conditioning Sector (March 1999, USEPA and UNDP)

- **Training Programme on “Good Practice in Refrigeration”**
  - Environment Canada and UNEP

- **Training of Custom Officers in the Monitoring of Imports and Exports of ODS**, Environment Canada and UNEP

Slide 8 of 27
Projects Implemented

- Terminal Phase-out Management Plan, (TPMP)
- Incentives programme for commercial and industrial sectors
- Recovery Recycling and Training Programme
- Develop a code of Good Practice
- Distribution of recovery/recycling equipment
Projects Implemented

- Halon Bank Management Plan for the Caribbean Region, (Environment Canada and UNEP)
  - Freeze consumption of halon at 1995 – 1997 average levels
  - Stop the importation of virgin halons
- Methyl Bromide Phase out Project (Environment Canada)
  - Freeze consumption of methyl bromide at 1995 – 1998 average levels
  - Methyl Bromide was regulated under the Pesticides Act 1975
Institutional Framework

Current arrangement of responsibilities

Flow of information
Administrative relation
Phase – Out Targets

- National Annual Consumption under the Quota System
  - July 1999 to June, 2000: 96 metric tonnes
  - July 2000 to June, 2001: 80 metric tonnes
  - July 2001 to June, 2002: 64 metric tonnes
  - July 2002 to June, 2003: 48 metric tonnes
  - July 2003 to June, 2004: 32 metric tonnes
  - July 2004 to June, 2005: 16 metric tonnes
  - July 2005 to December, 2005: 0 metric tonnes or unused portion of the 4.2 metric tonnes held in abeyance for emergency purposes from the year 2004 to June 2005
  - January 2006: Total Phase out
Quota System

- The following individuals and companies were authorized to trade in restricted CFCs
  - Arel Limited 7.3%
  - Quality distributors and manufacturers Ltd. 7.3%
  - Tropical air conditioning and refrigeration Co. Ltd. 16.6%
  - Appliance traders Ltd 7.3%
  - General refrigeration and spares Ltd. 7.3%
  - JAMALCO 6.5%
Quota System

- Edjo Ltd. 7.3%
- Horatio Brown Ltd. 7.3%
- Geddes Refrigeration Ltd. 16.6%
- B. J. Hanna and son Ltd. 16.6%
- Windalco 7.3%
- CAC 2000 7.3%
Int’l Legislation – Developed Countries and Jamaica

Slide 16 of 27
Int’l Legislation – Developed Countries and Jamaica

- Jamaica HCFC (2009/2010)
- MP HCFC
- EU HCFC

- 90%
- 65%
- 32.5%
- 2.5%

2011 2013 2015 2020 2030 2040
HPMP Survey

- Foams Industry
- R & AC Equipment Manufacturers
- Aerosols Manufacturers
- Service Agencies
- Technicians
- Refrigerants Importers
- Refrigerants Equipment Importers
- Equipment Stock Survey;
- Large Equipment
### Average imports of refrigerants and blends for 2009 and 2010

<table>
<thead>
<tr>
<th>Refrigerants and Blends</th>
<th>Average Imports 2009/2010, kg</th>
<th>Average Imports 2009/2010, mt.</th>
<th>% of Imports</th>
</tr>
</thead>
<tbody>
<tr>
<td>R-22</td>
<td>199,497.45</td>
<td>199.47</td>
<td>77.23</td>
</tr>
<tr>
<td>R-409a</td>
<td>9,418.0</td>
<td>9.41</td>
<td>3.64</td>
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<tr>
<td>R-408a</td>
<td>10,651.0</td>
<td>10.65</td>
<td>4.12</td>
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<tr>
<td>R-406a</td>
<td>176.80</td>
<td>0.176</td>
<td>0.068</td>
</tr>
<tr>
<td>R-123</td>
<td>4,550.0</td>
<td>4.55</td>
<td>1.76</td>
</tr>
<tr>
<td>R141b</td>
<td>34,000.0</td>
<td>34.0</td>
<td>13.16</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>258,293.25</strong></td>
<td><strong>258.29</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>
## Jamaica’s HPMP

### Phase-out targets

<table>
<thead>
<tr>
<th>Dates</th>
<th>% Reduction</th>
<th>Actual Imports (mt)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2013</td>
<td>-</td>
<td>268.24</td>
</tr>
<tr>
<td>2015</td>
<td>10</td>
<td>241.41</td>
</tr>
<tr>
<td>2020</td>
<td>35</td>
<td>174.35</td>
</tr>
<tr>
<td>2025</td>
<td>67.5</td>
<td>87.18</td>
</tr>
<tr>
<td>2030</td>
<td>97.5</td>
<td>6.7</td>
</tr>
<tr>
<td>2040</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>
Jamaica’s HPMP

- To achieve the targets the following actions are required
  - Local Legislations
  - Quota system
  - Labelling Standards
  - Stakeholders Consultation
  - Training of Stakeholders
Proposed Legislation

- On the Prohibition of Importation of Equipment Containing HCFCs
- On Restriction on Importation of HCFC
- Procedure for export of HCFC

- “prohibition” is an edict or order that forbid the action
- “restriction” is to put a limit on an action
HPMP Quota System

- List of companies and percent of total quota allocated

<table>
<thead>
<tr>
<th>Company</th>
<th>% Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appliance Traders Ltd.</td>
<td>6.9</td>
</tr>
<tr>
<td>Arel Ltd.</td>
<td>7.0</td>
</tr>
<tr>
<td>Jamaica Public Service Ltd.</td>
<td>0.7</td>
</tr>
<tr>
<td>CAC 2000 Ltd.</td>
<td>5.3</td>
</tr>
<tr>
<td>Caribbean Coolers Ltd.</td>
<td>17.7</td>
</tr>
<tr>
<td>Donald Witter Ltd.</td>
<td>15.6</td>
</tr>
<tr>
<td>IGL Ltd.</td>
<td>7.9</td>
</tr>
</tbody>
</table>
## HPMP Quota System

- List of companies and percent of total quota allocated (continue)

<table>
<thead>
<tr>
<th>Company</th>
<th>% Allocation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Modern Refrigeration Ltd.</td>
<td>9.9</td>
</tr>
<tr>
<td>Quality Distributors &amp; Manufacturing Co. Ltd.</td>
<td>6.6</td>
</tr>
<tr>
<td>Comfort Systems Ltd.</td>
<td>6.3</td>
</tr>
<tr>
<td>Tropical A/C &amp; Refrigeration Co. Ltd.</td>
<td>5.6</td>
</tr>
<tr>
<td>Abeyance</td>
<td>10.5</td>
</tr>
</tbody>
</table>

Slide 24 of 27
Labelling Standards

- Intend to label equipment:
  - containing HCFC
  - retrofitted from HCFC and issue retrofit certificate
  - recovery cylinders
Guidelines

- Handling of HCFC refrigerant
- Transporting of HCFC refrigerant
- Storage of HCFC refrigerant
End