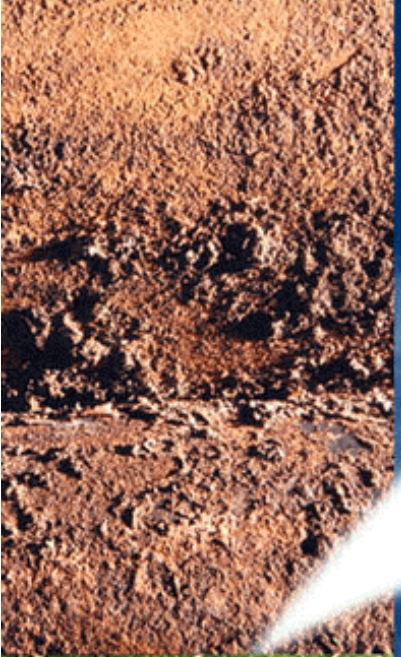

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Australia's Strategies for Managing Synthetic Greenhouse Gas Emissions from Mobile Air Conditioning

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Australian Greenhouse Office

AUSTRALIAN Greenhouse Office

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Overview of Australia's approach to synthetic greenhouse gases

Australia's approach includes:

• Overarching policy principles

• Tailored policy on industry by industry basis

Key elements in this approach include:

• builds on lessons learned from Australia's successful ozone protection program;

• continues close cooperation between industry and Government; and

• focuses on managing emissions through better training of technicians

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Overarching policy principles

- Responsible use
  - HFCs should be used only where cost-effective and needed for technical reliability, health and safety, or reducing overall emissions
- Emissions minimisation
  - take all practicable steps to reduce emissions through best practice life cycle management
- Effective monitoring and reporting
  - improve data on use and emissions to assist policy development, inventory compilation and projections analysis

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A new approach to managing synthetic greenhouse gases for the Montreal Protocol industries – including MACs

This "new approach" builds on Australia's successful record in ozone protection.

- National supply controls on ODS and HFCs
- National end-use regulation of ODS and HFCs
- Product Stewardship
- Assistance with industry transition to environmentally acceptable alternatives

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Supply controls on synthetic GHG

- A licence will be required for the import, export and manufacturer of HFCs and PFCs, which also includes a requirement to report on volumes of HFCs and PFCs imported, exported and manufactured;

- Sale of HFCs and PFCs will be restricted to companies who are registered or tradespeople who have the appropriate licence under the amended legislation; and

- There is no quota or phase out for HFCs or PFCs

- Ban on sale, purchase and use of non-refillable containers.

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National end-use regulation

- Existing State & Territory regulations replaced with a single national framework for the management of ODS and the synthetic greenhouse gases used as their replacements
- Establishment of mandatory licensing for tradespeople through industry boards
- Incorporating guidelines and standards in legislation
- Record keeping and reporting requirements

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Product stewardship

- Establishing clearly defined environmental responsibilities for the air-conditioning industry
- Measures already in place for bulk imports of HCFCs and will be extended to HFCs
- New arrangements will extend product stewardship to importers of pre-charged equipment containing HCFCS and HFCs
- The activities of Refrigerant Reclaim Australia are expected to be extended to include HFCs.

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Industry transition

- The Ozone Protection and Synthetic Greenhouse Gas Reserve will include both ODS and HFCs/PFCs

- It will fund:
  - Administering the act
  - Industry assistance
  - Emission reduction focus

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Government action prior to legislative changes - support to the refrigeration and air conditioning industry

- $3.56 million under Greenhouse Gas Abatement Program
- Program expected to abate approx. 3.5 Mt CO_2-e between 2008 and 2012
- establishment of voluntary training and certification program to improve environmental handling by refrigeration and air conditioning suppliers and technicians
- recovery, reclamation and destruction program for used HFCs

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Hydrocarbons are used to retrofit MACs in Australia

There is a significant controversy over the cooling performance, fuel efficiency and safety of hydrocarbons used in systems designed for non-flammable CFCs and HFCs.

Some HC suppliers, some environmental NGOs, and others contend that HCs are an environmentally friendly alternative that improves equipment performance

. . . whereas vehicle manufacturers, component suppliers, and others warn and that retrofits of HCs in MACs are unsafe for vehicle occupants and service technicians and that use can void warrantee.

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Hydrocarbons used as retrofits in MACs

As estimated by Greenchill (a body representing the hydrocarbon industry)

Year	1998/9	1999/0	2000/1	2001/2
Average HC Charge (kg)	0.17	0.16	0.15	0.14
HC MACs (thousands)	203	292	368	449

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By developing policy based on partnerships between industry and government, Australia has demonstrated it can deliver flexible and cost-effective abatement of synthetic gas emissions

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