



**Australian Government**  
Department of the Environment and Energy

# HFC phase down and other changes to the OPSGG Program

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## Overview

1. HFC phase-down explained
2. Other changes to the Ozone Protection and Synthetic Greenhouse Gas (OPSGG) Management Program
  - Changes affecting importers
  - Changes to domestic end users
3. Future OPSGG Program changes



## Part 1: HFC Phase-down overview

- Why regulate HFCs?
- What is the HFC phase-down?
- How will the phase-down affect end users?

### Why control HFCs?

- Hydrofluorocarbons (HFCs) are synthetic greenhouse gases
- HFCs generally have a high global warming potential (GWP)
- Global modelling indicated a large increase in HFC use, particularly in developing countries, unless controlled



An ozone sonde being released at Davis station, Antarctica. (Photo: Barry Becker)

## Global HFC phase-down

- Global HFC phase-down under Montreal Protocol agreed in October 2016 (the Kigali Amendment)
- Australia fully supported the phase-down and played a key role in the agreement with the support of Australian industry
- Will reduce global emissions by 70 billion tonnes carbon dioxide equivalent (CO<sub>2</sub>e) in the period to 2050



## Global Ratification

- 20 Parties need to individually ratify the Kigali Amendment to bring it into force
- 22 parties have now ratified so the Kigali Amendment will start on 1 January 2019
- Australia ratified on 27 October 2017
- Control of trade with non-Parties will start in 2033

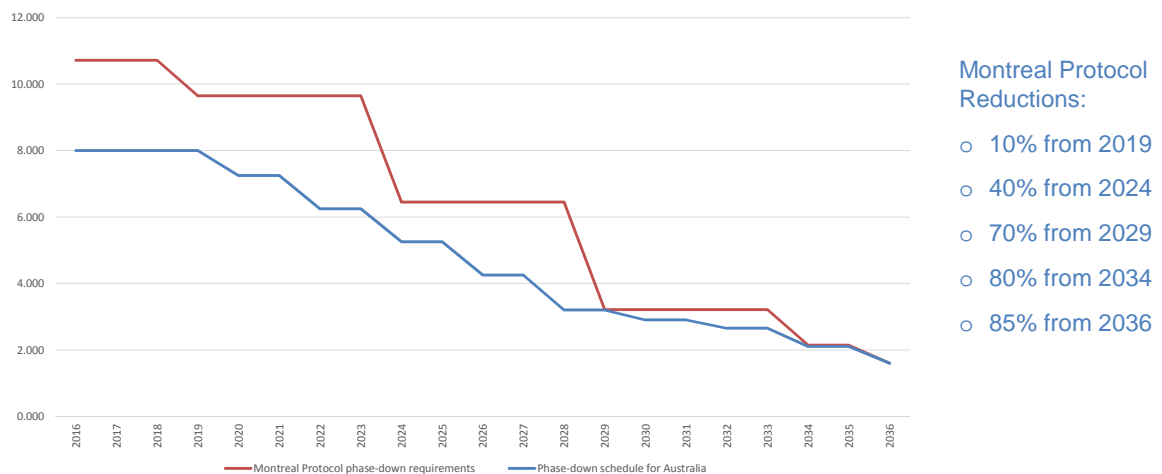


Australia's Ambassador to the UN, Gillian Bird (Left) featured with Australia's ratification to the Kigali amendment alongside the head of the UN treaties section.

## Australia's HFC phase-down?

- Australia's phase-down starts a year earlier and goes faster than global requirements.
- Gradual reduction of imports of bulk HFCs into Australia
- Starts from 1 January 2018
  - Import limit of 8.0 megatonnes CO<sub>2</sub>e
- Reaches 1.6 megatonnes CO<sub>2</sub>e in 2036
- More regular, smaller steps than global steps

## HFC phase-down schedule



## HFC phase-down schedule

Quota allocation period	Year	New phase-down schedule for Australia (megatonnes CO <sub>2</sub> e)	Montreal Protocol phase-down schedule (megatonnes CO <sub>2</sub> e)
1	2018	8.000	10.718
	2019	8.000	9.646
2	2020	7.250	9.646
	2021	7.250	9.646
3	2022	6.250	9.646
	2023	6.250	9.646
4	2024	5.250	6.431
	2025	5.250	6.431
5	2026	4.250	6.431
	2027	4.250	6.431
6	2028	3.200	6.431
	2029	3.200	3.215
7	2030	2.900	3.215
	2031	2.900	3.215
8	2032	2.650	3.215
	2033	2.650	3.215
9	2034	2.100	2.143
	2035	2.100	2.143
10 and onwards	2036 and onwards	1.607	1.607

## How will the phase-down work?

- Phase-down to be managed through a gradually reducing allocated quota on bulk imports
- Quota will be divided between a 'grandfathered' system and a 'non-grandfathered' system
- Initial quota for 2018-2019
  - 90% allocated to importers of HFCs and HCFCs between 2009 and 2014
  - 10% open to all applicants

LICENCEE NAME	LICENCE EXPIRY DATE
<b>CONTROLLED SUBSTANCE LICENCE for synthetic greenhouse gases (SSG)</b>	
ABB AUSTRALIA PTY LIMITED	31-Dec-17
ACTROL PARTS PTY LTD	31-Dec-19
ACTRON ENGINEERING PTY LTD	31-Dec-19
A-GAS (AUSTRALIA) PTY LIMITED	31-Dec-19
AIR LIQUIDE AUSTRALIA LIMITED	31-Dec-19
AIREFRIG AUSTRALIA PTY LTD	31-Dec-19
ALSTON FOOD AUSTRALIA LIMITED	31-Dec-17
ATOMIC CAPITAL AUSTRALIA PTY LIMITED	31-Dec-19
AUTOMOTIVE IMPORTS PROPRIETARY LIMITED	31-Dec-19
AUT SERVICES PTY LIMITED	31-Dec-19
BEUER REF AUSTRALIA PTY LTD	31-Dec-19
BLUONE PTY LTD	31-Dec-19
BOC LIMITED	31-Dec-19
BOSTIK AUSTRALIA PTY LTD	31-Dec-19
CAC Gas & Instrumentation Pty. Ltd. as the Trustee for CAC Gas and Instrumentation Unit Trust	31-Dec-17
CONOCOPHILLIPS (89-12) PTY LTD	31-Dec-17
COREGAS PTY LTD	31-Dec-19
DEPARTMENT OF ECONOMIC DEVELOPMENT JOBS TRANSPORT AND RESOURCES	31-Dec-17
GREENCHEM INDUSTRIES PTY LTD.	31-Dec-19
HALTON INTERNATIONAL PTY. LTD.	31-Dec-17
HEATCRAFT AUSTRALIA PTY LTD	31-Dec-19
HIGHGATE INDUSTRIES WHOLESALE PTY LTD	31-Dec-19
HONEYWELL POLYMERS (AUSTRALIA) PTY LIMITED	31-Dec-19
IXOM OPERATIONS PTY LTD	31-Dec-19
KIDDE AUSTRALIA PTY LTD	31-Dec-19
MINNISA GROUP CO. LTD	31-Dec-19
P D BULBECK PTY LTD	31-Dec-19
PACIFIC URETHANES PTY LTD	31-Dec-19
POWER RENTAL OP CO AUSTRALIA LLC	31-Dec-17
QEG PTY LIMITED	31-Dec-17
QUEENSLAND ELECTRICITY TRANSMISSION CORPORATION LIMITED	31-Dec-17
READYGAS AUSTRALIA PTY LTD	31-Dec-19
REBAR INTERNATIONAL (AUST) PTY LTD	31-Dec-19
RECCO PTY LTD	31-Dec-19
SCITEK AUSTRALIA PTY LTD	31-Dec-17
SHELL AUSTRALIA PTY LTD	31-Dec-17
STABARST INTERNATIONAL PTY. LTD.	31-Dec-19
SUPAGAS PTY LTD as The Trustee for A F T UNIT TRUST	31-Dec-19
SYDNEY WHEEL REPAIRS & TYRES PTY LTD	31-Dec-17
TYTHREE PTY LIMITED	31-Dec-19
THE CHEMOURS COMPANY (AUSTRALIA) PTY LTD	31-Dec-19
TJH2B ANALYTICAL SERVICES PTY LTD	31-Dec-17
WILHELMSEN SHIPS SERVICE PTY LIMITED	31-Dec-19

## What is covered by the phase-down?

- Applies to bulk gas imports only
  - HFC in equipment is accounted for in the country of manufacture
- Now have provision for bans on import of new equipment
  - Bans could be introduced if alternatives are not being introduced into the Australian market at the expected rate, or if demand for bulk HFC looks to be outstripping supply

Table 2: HFCs covered in the phase-down

HFC-23	HFC-32	HFC-41	HFC-125	HFC-134
HFC-134a	HFC-143	HFC-143a	HFC-152	HFC-152a
HFC-227ea	HFC-236cb	HFC-236ea	HFC-236fa	HFC-245ca
HFC-245fa	HFC-365mfc	HFC-43-10mee		

## What does this mean for equipment users?

- As an owner of existing HFC equipment:
  - You **will not** have to replace existing equipment
  - You **will not** have to retrofit existing equipment
  - You should consider alternative technologies when existing equipment needs replacing



## Alternative technologies?

- New equipment uses a range of alternative gases including:
  - Non-SGG alternatives which include 'natural' refrigerants such as:
    - ammonia;
    - carbon dioxide; and
    - hydrocarbons.
  - Lower GWP HFCs such as R32
  - Hydrofluoro-olefins (HFOs)

## Safety

- New or alternative gases may have different chemical properties and can be flammable, toxic or both.
- Manufacturers have designed equipment to manage safety risks.
- Equipment is safe to use when handled by those who are trained appropriately.
- The Australian Standards for refrigeration safety and design provide guidance on how to manage safety and environmental risks.

## What does it mean for Australia?

- Pace of introduction of alternative technology will increase
- Provides for long term investment certainty
- Increases the range of products available
- Provides for long term planning



## Part 2: Other changes to the OPSGG Program

- Other changes have been made to reduce emissions and improve program efficiency.
- These changes target:
  - The addition and removal of substances controlled under OPSGGM Act;
  - Low volume import exemptions;
  - Fees;
  - Reporting; and
  - Licensing.



## Changes to regulated substances

- Addition of two substances to scheduled substances list as they are now controlled internationally:
  - Nitrogen Trifluoride (NF<sub>3</sub>)
  - Perfluorocarbon-9-1-18 (PFC-9-1-18)
- Removal of HFC-161 from scheduled substance list as not subject to phase-down under the Kigali Amendment

### Schedule 1—Scheduled substances

#### Part XII—Nitrogen trifluoride

Nitrogen trifluoride	
Item	Substance
1	Nitrogen trifluoride (NF <sub>3</sub> )

#### Part X—PFCs

PFCs	
Item	Substance
8	C10F18 (PFC-9-1-18)

#### Part IX—HFCs

Substance
<del>CH<sub>3</sub>CH<sub>2</sub>F (HFC-161)</del>

## Low volume import exemptions

- Exemptions from licensing and levy requirements apply to some products
- New SGG low volume import exemption for pre-charged equipment
- Changes to the HCFC exemption:
  - From 1 January 2018 import of RAC equipment under the exemption is banned unless importing replacement parts for existing RAC equipment
  - From 1 January 2020 the HCFC exemption will cease and import of all pre-charged equipment containing HCFC is banned unless:
    - eligible for a personal/household goods exemption; or
    - importing replacement parts and deemed eligible for an equipment licence.



## Import levy fee changes


- Changes to fees include:
  - Waiver for low levy threshold under \$330 in 6 month period
  - No more penalty interest for overdue levy fees



## Reporting requirements

The following changes have been made to import reporting requirements:

- Shift from quarterly to 6 monthly reporting
- No longer a need to submit nil reports



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Ozone Licensing and Reporting System (OLARS)

Ozone home
Forms
Contact us

For security reasons, reporting forms are set to re-set every 60 minutes. Please ensure you lodge your report within this period, as you will not be able to save the data and continue completing your report later.

**Quarterly Report - Licence Details**

Licence Number <sup>1\*</sup>

Licence Holder Name <sup>2\*</sup>

Form Completion: 5%

<sup>\*</sup> Mandatory field

<sup>1</sup> Licence Number = The licence number can be found on your current licence instrument. It will commence with the letters EQPL followed by eight numbers.

<sup>2</sup> Licence Holder Name = As it appears on the licence instrument.

## Licensing changes

- Affecting importers:
  - Importers will be able to renew import licences starting from 1 January 2018
    - fees and eligibility tests will still apply
- Affecting technicians:
  - RAC and fire protection end-use licence periods will be extended from 2 to 3 years
  - Licences can be renewed instead of requiring users to reapply each time

Apply for a  
new Licence

APPLY NOW >

Renew your  
Licence

RENEW NOW >

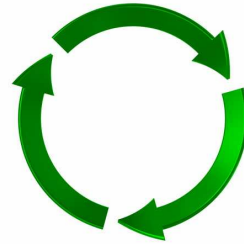
## Part 3: What Next?

### Progressing the remaining agreed measures:

- Consistency - update references; remove redundant provisions
- Equipment maintenance - education and awareness for equipment owners
- Compliance and enforcement -
  - remove inconsistencies in civil and criminal penalties for end-use activities
  - apply penalties for false representations under the fire protection scheme
  - expand infringement notice powers to the RAC and fire schemes
- Regulatory Powers (Standard Provisions) Act 2014 - strengthen investigation powers, new penalties and the sharing/publication of compliance actions

## Equipment maintenance

- We will be developing an awareness program to increase the level of preventative maintenance
- Preventative maintenance can:
  - reduce business operating costs
  - reduce refrigerant leaks
  - reduce energy use and related greenhouse gas emissions



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**Questions?**

**More information at:**

**<http://www.environment.gov.au/protection/ozone>**