

Summary of ECCC Revised Proposed HFC Regulatory Measures

On March 23, Environment and Climate Change Canada (ECCC) issued its latest revision to its proposed regulatory measures on HFCs.

The Alliance has already submitted comments to the agency on its earlier draft proposal, the notice of intent to regulate and the subsequent addendum, in addition to attending ECCC's February 2015 stakeholder meeting in Gatineau.

The agency now seeks stakeholder feedback on:

- the feasibility and impact of the proposed approach;
- the advantages and disadvantages of the proposed approach, including environmental and economic considerations; and
- details on any barriers which could affect compliance, such as, specific codes, standards, training, etc.

ECCC will accept comments on this revised proposal no later than April 29, 2016 via:

Regular mail:	E-mail:
Manager Ozone Layer Protection and Export Controls Chemical Production Division Environment and Climate Change Canada Place Vincent Massey 351 Blvd St-Joseph, 11 th Floor Gatineau, Quebec, K1A 0H3 Fax: 819-938-4218	ec.gestionhalocarbures-halocarbonsmanagement.ec@canada.ca Please type “ Consultations on Regulatory Measures for HFCs ” in the subject line

After April 29, the proposed regulations will be published in Part I of the Canada Gazette (analogous to the Federal Register in the US), likely in late 2016 or early 2017 (known as “Gazette I”) after which it is anticipated there will be an additional 75-day public comment period on the proposal. No in-person stakeholder consultation meeting is expected during that or the current comment period. ECCC has noted that typically one year follows before a rule goes into effect, with the legal minimum period being 6 months from the date of publication in the Canada Gazette. The final version of the regulatory measures will be published in the Canada Gazette (“Gazette II”).

ECCC is attempting to “align,” but not harmonize with the current and most recent US EPA SNAP change of listing status rules. Compared to SNAP which controls by compound and end use, ECCC is proposing to control by sector groupings, GWP and a phase-down mechanism. The agency has stated that it is attempting to respond to industry's preference that the agency should ensure that competition and a level playing field between US and Canadian markets are preserved, rather than having the Canadian government choose winners and losers. It should be

noted that ECCC has a different authority than the US EPA, which does allow the agency to implement measures such as a phase-down. The following are the key elements of the proposed measures:

Consumption Phasedown

In line with the stated position of the Alliance, ECCC is proposing to implement a phase-down of bulk HFC imports, whether alone or in a mixture, consistent with the reduction schedule in the North American amendment proposal (to phase-down HFCs under the Montreal Protocol). As there is no HFC production in Canada, ECCC does not anticipate implementing a production component of the phase-down.

Consumption baseline:

$$\begin{aligned}
 & 100\% \text{ of average HFC consumption from 2011-2013} \\
 + & \frac{75\% \text{ of average HCFC consumption from 2011-2013}}{18.27 \text{ Million Tonnes CO}_2 \text{ equivalent for Canada}}
 \end{aligned}$$

HFC consumption allowances would be distributed pro-rata based on a company’s average consumption in the years 2014 and 2015. These years were originally proposed by ECCC as 2011-2013. HFC consumption allowances would not be distributed by sector to provide flexibility in transitioning where possible.

ECCC will move forward with its phase-down with or without an HFC phase-down amendment under the Montreal Protocol, although a Protocol amendment would affect the structure of Canada’s phase-down.

Potential Steps for HFC Reduction Consumption Schedule

Year	Reduction	Consumption Baseline
2019	90%	16.44 Million Tonnes CO ₂ eq
2024	65%	11.88 Million Tonnes CO ₂ eq
2030	30%	5.48 Million Tonnes CO ₂ eq
2036	15%	2.74 Million Tonnes CO ₂ eq

ECCC seeks to complement a phase-down with the following sector controls:

Aerosols

Starting January 1, 2018¹, the controls would prohibit the manufacture and import of aerosol products that contain:

- 10kg or less of any HFC with a GWP > 150; or
- 10kg or less of a blend that contains any HFC where that blend has a GWP > 150.

¹ Should the regulatory measures come into force later than 2018, these measures would enter into force at the time the regulatory measures take effect.

The prohibition does not prevent the use and sale of aerosol products manufactured or imported before the date of prohibition. ECCC proposes exemptions for a number of uses, including MDIs, and proposes a criteria for assessing future applications for an essential purpose:

- the product is necessary for health and safety or is critical for the good functioning of society, and
- there are no technically and economically feasible alternatives.

Foams

Rigid foam products:

Starting January 1, 2019, it would be prohibited to import and manufacture **“one component spray foam products”** that contain:

- any HFC with a GWP > 150; or
- a blend that contains any HFC where that blend has a GWP > 150.

Starting January 1, 2021, it would be prohibited to import and manufacture **“two component spray foam products”** that contain:

- any HFC with a GWP > 150; or
- a blend that contains any HFC where that blend has a GWP > 150.

Starting January 1, 2021, it would be prohibited to import and manufacture **“all other rigid foam products”** that contain:

- any HFC with a GWP > 150; or
- a blend that contains any HFC where that blend has a GWP > 150.

Other foam products:

Starting January 1, 2019, it would be prohibited to import and manufacture **“other foam products”** that contain:

- any HFC with a GWP > 150; or
- a blend that contains any HFC where that blend has a GWP > 150.

ECCC proposes a criteria for assessing applications for an essential purpose exemption:

- the product is necessary for health and safety or is critical for the good functioning of society, and
- there are no technically and economically feasible alternatives.

Motor vehicle air-conditioning

Starting with the 2021 model year, the controls would prohibit the manufacture and import of automobiles that contain or are designed to contain:

- any HFC with a GWP > 150; or
- a blend that contains any HFC where that blend has a GWP > 150.

ECCC borrows the definition of “*automobile*” from Canada’s light duty trucks emissions standards, as any four-wheeled self-propelled vehicle that is designed for use on highways and that has a gross vehicle weight rating of less than 4 536 kg (10,000 pounds), except:

- (a) a vehicle manufactured in different stages by two or more manufacturers, if no intermediate or final-stage manufacturer of that vehicle manufactures more than 10,000 multistage vehicles per year; and
- (b) a work truck

Exemptions:

- Specialized vehicles, such as armored vehicles.
- The manufacture and import of automobiles that contain or are designed to contain certain HFCs destined for export would also be allowed.
- The prohibition does not prevent the use and sale of automobiles manufactured or imported with model years of 2020 or before.
- The import, use and sale of bulk HFCs, whether alone or in a mixture, for the purpose of servicing of air-conditioning systems in automobiles with a model year that is before the prohibited model year would be allowed.

ECCC proposes a criteria for assessing applications for an essential purpose exemption:

- the product is necessary for health and safety or is critical for the good functioning of society, and
- there are no technically and economically feasible alternatives.

Refrigeration and stationary air-conditioning

Stand-alone medium temperature commercial refrigeration systems

Starting January 1, 2020, the controls would prohibit the manufacture and import of stand-alone medium temperature commercial refrigeration systems that contain or are designed to contain:

- any HFC refrigerant with a GWP > 650; or
- a refrigerant blend that contains any HFC where that blend has a GWP > 650.

The prohibition does not prevent the use and sale of stand-alone medium temperature systems manufactured or imported before January 1, 2020. The import, use and sale of bulk HFCs, whether alone or in a blend, would be allowed for the purpose of servicing stand-alone medium temperature systems manufactured or imported before January 1, 2020.

Stand-alone low temperature commercial refrigeration systems

Starting January 1, 2020, the controls would prohibit the manufacture and import of stand-alone low temperature commercial refrigeration systems that contain or are designed to contain:

- any HFC refrigerant with a GWP > 1500; or
- a refrigerant blend that contains any HFC where that blend has a GWP > 1500.

The prohibition does not prevent the use and sale of stand-alone low temperature systems manufactured or imported before January 1, 2020. The import, use and sale of bulk HFCs, whether alone or in a blend, would be allowed for the purpose of servicing stand-alone low temperature systems manufactured or imported before January 1, 2020.

Centralized refrigeration systems

Starting January 1, 2020, the controls would prohibit the manufacture and import of centralized refrigeration systems that contain or are designed to contain:

- any HFC refrigerant with a GWP > 1500; or
- a refrigerant blend that contains any HFC where that blend has a GWP > 1500.

The prohibition does not prevent the use and sale of centralized refrigeration systems manufactured or imported before January 1, 2020. The import, use and sale of bulk HFCs, whether alone or in a blend, would be allowed for the purpose of servicing centralized refrigeration systems manufactured or imported before January 1, 2020.

Chillers

Starting January 1, 2025, the controls would prohibit the manufacture and import of chillers that contain or are designed to contain:

- any HFC refrigerant with a GWP > 700; or
- a refrigerant blend that contains any HFC where that blend has a GWP > 700.

The prohibition does not prevent the use and sale of chillers manufactured or imported before January 1, 2025. The import, use and sale of bulk HFCs, whether alone or in a blend, would be allowed for the purpose of servicing chillers manufactured or imported before January 1, 2025.

Domestic Refrigeration System

Starting January 1, 2025, the controls would prohibit the manufacture and import of domestic refrigeration systems that contain or are designed to contain:

- any HFC refrigerant with a GWP > 150; or
- a refrigerant blend that contains any HFC where that blend has a GWP > 150.

The prohibition does not prevent the use and sale of domestic refrigeration systems manufactured or imported before January 1, 2025. The import, use and sale of bulk HFCs, whether alone or in a blend, would be allowed for the purpose of servicing domestic refrigeration systems manufactured or imported before January 1, 2025.

Mobile refrigeration systems

Starting January 1, 2025, the controls would prohibit the manufacture and import of mobile refrigeration systems that contain or are designed to contain:

- any HFC refrigerant with a GWP > 2200; or
- a refrigerant blend that contains any HFC where that blend has a GWP > 2200.

The prohibition does not prevent the use and sale of mobile refrigeration systems manufactured or imported before January 1, 2025. The import, use and sale of bulk HFCs, whether alone or in a blend, would be allowed for the purpose of servicing mobile refrigeration systems manufactured or imported before January 1, 2025.

ECCC proposes a criteria for assessing applications for an essential purpose exemption for all RAC systems:

- the product is necessary for health and safety or is critical for the good functioning of society, and
- there are no technically and economically feasible alternatives.