

NATIONAL INTEREST ANALYSIS: CATEGORY 1 TREATY

With attachment on consultation

Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer

(Kigali, 15 October 2016)

[2017] ATNIA 14

[2017] ATNIF 15

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SUMMARY PAGE

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Nature and timing of proposed treaty action

1. The proposed treaty action is the acceptance of the Amendment to the *Montreal Protocol on Substances that Deplete the Ozone Layer*, done at Montreal on 16 September 1987 (the Montreal Protocol) that was adopted by the Parties to the Montreal Protocol at the Twenty-Eighth Meeting of the Parties in Kigali, Rwanda on 15 October 2016 (the Kigali Amendment).
2. The proposed treaty action (deposit of Australia's instrument of acceptance) would be taken in late 2017 following consideration by the Joint Standing Committee on Treaties (JSCOT), passage of amendments to relevant domestic legislation, and approval by the Executive Council.
3. The Kigali Amendment will enter into force on 1 January 2019, provided that at least twenty instruments of ratification, acceptance or approval of the Kigali Amendment have been deposited by Parties to the Montreal Protocol. If this condition is not fulfilled by that date, it will enter into force on the ninetieth day following the date on which it has been fulfilled.
4. The changes to the trade provisions in Article 4 of the Protocol will enter into force on 1 January 2033, provided at least seventy instruments of ratification, acceptance or approval of the Kigali Amendment have been deposited by States or regional economic integration organisations that are Parties to the Montreal Protocol. If this condition is not fulfilled by that date, it will enter into force on the ninetieth day following the date on which it has been fulfilled.
5. After entry into force of the Kigali Amendment, it will enter into force for any other Party to the Protocol on the ninetieth day following the date of deposit of its instrument of ratification, acceptance or approval.
6. Australia does not propose to apply provisionally any part of the Kigali Amendment (as permitted by Article V) prior to it entering into force for Australia.
7. Australia is a Party to the Montreal Protocol - a protocol to the *Vienna Convention for the Protection of the Ozone Layer* (the Vienna Convention) - and has accepted all six previous amendments.

Overview and national interest summary

8. The Montreal Protocol mandates the phase-out of scheduled ozone depleting substances on a differentiated basis for developed and developing countries. The last major class of ozone depleting substances (hydrochlorofluorocarbons or HCFCs) are currently being phased out.
9. The Kigali Amendment will mandate the global phase-down of hydrofluorocarbons (HFCs) which are not ozone depleting but high global warming potential alternatives to ozone depleting substances. This was agreed on the basis that HFCs modify the ozone layer by their strong effect on climate (in accordance with Article 2(1) of the Vienna Convention) and that HFCs are used in the same sectors by the same industries as many ozone depleting substances and can therefore utilise the existing Montreal Protocol infrastructure.
 - a. The phase-down baseline for most developed countries (including Australia) is based on HFC consumption (imports plus production) in 2011-2013. The phase-down will commence in 2019 and conclude in 2036 with 15% of the baseline still available for hard-to-transition uses from 2036 onwards (see Article 2J(1)). A small group of developed countries (primarily Eastern European countries) have slightly later obligations to meet their national circumstances (see Article 2J(2)).
 - b. The phase-down baseline for most developing countries, including China, is based on HFC consumption (imports plus production) in 2020-2022. The phase-down will commence in 2024 and conclude in 2045 with 20% of the baseline still available for hard to transition uses from 2045 onwards. A small group of developing countries (primarily Middle Eastern countries and India) have slightly later obligations to meet their national circumstances (see Article 5(8) *qua*).
10. The treaty action is in the national interest as it reinforces Australia's commitment to the international protection of the ozone layer and climate system, provides a level playing field for countries and companies taking action to reduce reliance on HFCs, provides long term certainty for companies to invest in new and innovative alternative technologies and enables Australian businesses to continue to trade in HFCs as the phase-down continues.
11. As a net technology importer, Australia stands to benefit from a global approach to reducing the production and use of HFCs which will encourage the development, commercialisation, and distribution of newer, more environmentally friendly technologies.

Reasons for Australia to take the proposed action

12. Ozone depleting substances and HFCs are used mainly in the refrigeration and air conditioning sectors, with some use in the foam blowing, fire protection, solvents and aerosol sectors. HFCs are not ozone depleting, but are replacements for ozone depleting substances and have high global warming potentials. HFC emissions also fall (and will remain) within the scope of the United Nations Framework Convention on Climate

Change and the Kyoto Protocol.

13. Acceptance of the Kigali Amendment advantages Australia in a number of ways:
 - a. The Government has already committed to phase-down the import of HFCs from 1 January 2018 and reach 85 per cent from 2036 (noting that Australia does not produce HFCs). Amendments to existing legislation have been introduced into Parliament which are intended to implement this commitment. These legislative amendments will also implement Australia's obligations under the Kigali Amendment.
 - b. Acceptance will allow Australia to maintain its leadership role in relation to the Montreal Protocol. Australia was an early ratifier of the Montreal Protocol and continues to exert a high degree of influence in Montreal Protocol forums. Early acceptance of the Kigali Amendment would cement and enhance this leadership role, and also allow Australia to play a role in its implementation and related policy negotiations.
 - c. Collective global action is the most effective means of protecting Australia from the effects of ozone depletion and climate change. Acceptance underscores Australia's commitment to international action and working with others to achieve global and national objectives.
 - d. Acceptance will support Australia's commitment to achieving its 2030 emissions reduction target under the United Nations Framework Convention on Climate Change through reducing use and emissions of HFCs, which are a small but increasing component of Australia's emissions profile. Prompt acceptance will demonstrate Australia's continued commitment to the ambitious implementation of the Paris Agreement.
 - e. Australian importers and users of refrigeration and air conditioning technologies have supported the concept of a gradual phase-down of HFC imports for a number of years. They consider this approach as one that provides long term certainty and which creates an environment that allows for innovation and introduction of new technologies with sufficient lead time to establish domestic arrangements.
 - f. The Kigali Amendment contains non-Party trade provisions, which will not permit Parties to the Amendment to trade with non-Parties from 2033 onwards (provided at least 70 instruments of ratification, acceptance or approval of the Amendment have been deposited by Parties to the Montreal Protocol). While this is a long lead time, Australian industry will need to access HFCs for those essential or hard-to-transition sectors from well before 2033. There is a high likelihood that Australia's major trading partners will also ratify or accept the amendment well before 2033.

Obligations

14. Obligations under the Kigali Amendment for most developed countries (including Australia) are:
 - a. (Article 2 J(1)): To phase down the consumption (imports and production) of HFCs:
 - i. 2019 – reduction of 10% from baseline
 - ii. 2024 – reduction of 40% from baseline
 - iii. 2029 – reduction of 70% from baseline
 - iv. 2034 – reduction of 80% from baseline
 - v. 2036 onwards – reduction of 85% from baseline.
 - b. (Article 2J(1)) The HFC baseline for developed countries is calculated using the average consumption of HFCs in the years 2011, 2012 and 2013 plus 15% of the hydrochlorofluorocarbon (HCFC) baseline to account for transition to HFCs from HCFCs.
 - c. (Article 2J(6)) Those Parties that produce HFC-23 emissions from the production of HCFC-22 and HFCs shall avoid those emissions by destroying the waste HFC-23 to the extent possible. This is not applicable to Australia as there is no HCFC-22 or HFC production in Australia.
 - d. (Annex F) The Kigali Amendment creates a list of 18 HFCs subject to the phase-down obligations and other controls under the Montreal Protocol, with one HFC by-product (HFC-23) subject to emission controls.
 - e. A number of existing articles under the Montreal Protocol are also extended to cover HFCs:
 - i. Amendments to Article 3 of the Montreal Protocol create obligations for calculation of control levels for HFCs listed in Annex F.
 - ii. Amendments to Article 4 require Parties to ban the import (Article 4(1) *sept*) and export (Article 4(2) *sept*) of the controlled substances in Annex F from any State not Party to the Protocol, once those provisions enter into force.
 - iii. Amendments to Article 4B require Parties to establish and implement a system for licensing the import and export of new, used, recycled and reclaimed HFCs in Annex F.
 - iv. Amendments to Article 7 create obligations for the reporting of:
 1. production, imports and exports data on HFCs under Annex F for the years 2011 to 2013;
 2. statistical data on annual production, and amounts used for feedstocks, amounts destroyed by approved technologies, and imports from and exports to Parties and non-Parties, from the year in which the Amendment enters into force onwards; and
 3. statistical data on annual emissions of HCF-23 per facility.

- v. Amendments to Article 10 extend the financial mechanism providing financial and technical co-operation to developing countries to enable compliance with control measures relating to HFCs (see [section on Costs](#)).

Implementation

15. During 2014 to 2016, the Department of the Environment and Energy undertook a review of the Ozone Protection and Synthetic Greenhouse Gas program with the objectives of reducing emissions of ozone depleting substances and synthetic greenhouse gases in line with international efforts as well as identifying opportunities to streamline its operation.
16. In May 2016 the Australian Government decided on a range of measures to improve the efficiency and effectiveness of the Ozone Protection and Synthetic Greenhouse Gas program. The measures will further reduce emissions of ozone depleting substances and synthetic greenhouse gases and reduce business costs. The key emission reduction measure agreed was an 85 percent phase-down of HFC imports, commencing on 1 January 2018 and reaching 85 per cent in 2036.
17. Provisions already in place under the *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989 (OPSGMA)*, and those changes recently introduced into Parliament to implement a phase-down of HFC imports, are also intended to implement the Kigali Amendment.

The HFC phase-down

18. The Government has already committed to an 85 per cent phase-down of HFC imports by 2036, which is consistent with the Kigali Amendment and is supported by domestic industry stakeholders. The legislative amendments introduced into Parliament propose that Australia will reduce its imports every two years to reach the 85 per cent target in 2036. This approach is consistent with that taken for the HCFC phase-out.

Baseline calculation and starting point

19. Under the Kigali Amendment, Australia's baseline calculation would be 10.7 megatonnes carbon dioxide equivalent. The Government and industry have agreed Australia can commence at a lower starting point (8.0 megatonnes carbon dioxide equivalent) than that set by the Kigali Amendment reflecting current HFC use, but will align with the Kigali Amendment 85% reduction obligation in 2036. Australian industry has agreed that the starting point of 8.0 megatonnes carbon dioxide equivalent is consistent with current annual use.

The list of HFCs

20. The list of 18 HFCs agreed under the Kigali Amendment is one less than the list of 19 HFCs envisaged originally by the Parties to the Montreal Protocol that proposed the amendment. HFC-161 was removed as it has a very low global warming potential (GWP) of 12 compared to carbon dioxide (GWP of 1) and was developed as an

alternative to high GWP HFCs. It is proposed that Australia's list reflect the Montreal Protocol's list and list 18 HFCs for phase-down.

Licensing of HFC imports and exports

21. HFC importers and exporters are already licensed under the *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989*. Acceptance of the Kigali Amendment would not change this situation, except that importers would need to have an annual quota to import.
22. It is proposed that the total quota will be initially split at 90 per cent for existing importers and 10 per cent open to all applicants. The intent of the quota split is to recognise established participants and competitive fairness for established and potential stakeholders. Industry stakeholders have indicated this is a fair way to recognise existing importers and permit new entrants. The quota system will be implemented by regulation.

Reporting of HFC data

23. Acceptance of the Kigali Amendment will not impose further reporting obligations on importers and exporters as they already report sufficient data to the Department of the Environment and Energy to meet Montreal Protocol requirements. The Department of the Environment and Energy would use this data to meet annual Montreal Protocol reporting requirements.

Trade provisions

24. The Kigali Amendment follows the usual Montreal Protocol procedure of imposing bans on trade of controlled substances between Parties and non-Parties after a certain time. In relation to HFCs, the earliest that the ban on trade between Parties and non-Parties will come into force is 2033. This means that Australia would need to be a Party before 2033 to be able to continue importing HFCs from our trading partners. This long time frame is expected to give ample time for all countries to ratify or accept the Agreement. The *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989* already provides for control of trade between Parties and non-Parties to the Montreal Protocol. The ban on trade with non-Parties after 2033 is proposed to be implemented through the changes to this legislation recently introduced into Parliament. The proposed legislative amendments provide that licence conditions banning trade with non-Parties will come into force after 2033.

The Financial Mechanism

25. The Kigali Amendment extends the existing financial mechanism (the Multilateral Fund) to HFCs. The financial mechanism provides funding through the Multilateral Fund to developing countries to assist them to meet Montreal Protocol control measures. In turn donor countries (including Australia) will need to provide sufficient additional funding to the Multilateral Fund to assist developing countries to meet their HFC obligations (see [section](#) on Costs).

Regulatory Impact

26. The Office of Best Practice Regulation has confirmed that the Regulation Impact Statement prepared for the review of the Ozone Protection and Synthetic Greenhouse Gas program in 2016 covers the same subject matter as the Kigali Amendment and that a new Regulation Impact Statement is not required.

Costs

27. As a developed country, Australia pays annual contributions to the Multilateral Fund (the financial mechanism of the Montreal Protocol) to assist developing countries meet their current Montreal Protocol obligations. These annual contributions are based on the United Nations scale of contributions and are sourced from the Department of Foreign Affairs and Trade's Overseas Development Aid budget. Replenishment of the Multilateral Fund is negotiated through the Montreal Protocol every three years based on a technical assessment of the compliance requirements in the three years. In the past Australia's contributions have varied between \$A3-5 million per year, depending on compliance requirements and the prevailing exchange rate.
28. Implementation of the Kigali Amendment will result in additional contributions to the Multilateral Fund being required to assist developing countries phase-down their consumption of HFCs. The exact amount will only be determined every three years following replenishment negotiations, but it is estimated that total additional contributions would be around \$145 million over 30 years. This funding will be sourced as per the current contributions.
29. Apart from contributions to the Multilateral Fund, the financial implications to the Australian Government of acceptance are negligible, given the Government's prior decision to proceed with a domestic HFC phase-down.
 - a) A cost-benefit analysis undertaken for the Australia's HFC phase-down has indicated that the transitional and administrative costs to the Australian Government between 2016 and 2030 are around \$2.5 million (at net present value).
 - b) Transitional and administrative costs to industry between 2016 and 2030 are estimated at less than \$1 million (at net present value), although increased costs to industry of gas, maintenance and capital costs are estimated at between \$30-84 million for the same period.
30. The cost benefit analysis concluded that the overall benefit to cost ratio for the HFC phase-down was around 1.1 – 1.2, taking into account the carbon and energy savings.

Future Treaty Action

31. Any future amendments to the Montreal Protocol, including to the Kigali Amendment, can be made in accordance with Article 9 of the Vienna Convention. In accordance with Article 9, any Party can submit a proposed amendment, which is required to be communicated to the Parties at least six months in advance of the Meeting of Parties of the Montreal Protocol. The Parties shall make all efforts to reach an agreement on a proposed amendment by consensus, or failing that, an amendment can be adopted by a

two-thirds majority vote of Parties present and voting. Amendments will enter into force for a Party that has accepted or ratified it on the ninetieth day after the agreed number of parties have deposited instruments of acceptance or ratification. All amendments to the Montreal Protocol have so far been adopted by consensus.

32. Any future amendments to the Montreal Protocol would be subject to Australia's domestic treaty-making requirements, including tabling in Parliament, consideration by the Joint Standing Committee on Treaties and approval by the Executive Council.
33. No reservations may be made to the Montreal Protocol in accordance with its Article 18.

Withdrawal or denunciation

34. Under Article 19 of the Montreal Protocol a Party may withdraw from the Montreal Protocol by giving written notification to the United Nations Secretary-General any time after four years from assuming certain obligations following the entry into force of the Montreal Protocol for that Party. Withdrawal takes place one year after the receipt of the notification by the UN Secretary-General. Australian withdrawal would be subject to the Australian domestic treaty process.

Contact details

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Environment Standards Division
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ATTACHMENT ON CONSULTATION

Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer

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Domestic consultation on previous proposals to phase-down HFCs through the Montreal Protocol

35. Proposals by Parties to the Montreal Protocol to phase-down HFCs through the Montreal Protocol have been put forward every year since 2009, and every year the Government has consulted domestic stakeholders (industry, non-government organisations, State and Territory governments) on Australia's position on the proposed amendment. In later years, State and Territory governments were informed of the proposed amendments through the Standing Committee on Treaties. All industry and non-government organisations have been supportive of an HFC phase down being agreed under the Montreal Protocol as a means to provide long term stability and a global platform for innovation. During the course of the final negotiations in October 2016, industry was consulted on technical details during the course of the negotiation. No comments were received from State and Territory governments.

Consultation on amendments to the Act to introduce an HFC phase-down

36. Stakeholders were consulted extensively during the review of the Ozone Protection and Synthetic Greenhouse Gas program in 2014 and 2015, including options to reduce emissions of ozone depleting substances and synthetic greenhouse gases. This included calls for submissions, advice from an industry technical working group and public release of an options paper for further comment (which received 57 responses). In addition, the then Minister for the Environment chaired a high level consultation meeting for stakeholders prior to the Government taking the final decision to proceed with the HFC phase-down.
37. There was widespread support for a domestic, legislated phase-down of HFCs, and one that was more ambitious than proposed international obligations. Of the 38 submissions received in response to the options paper, 30 of them specifically supported an HFC phase-down and none opposed a phase-down approach.
 - a. The 30 submissions which supported an HFC phase-down included 12 from leading industry associations, 14 from individual companies, 2 from non-government organisations and 2 from other organisations.

Consultation on Acceptance of the Kigali Amendment

38. Additional consultation with industry, non-government organisations, and State and Territory governments was undertaken in February 2017 specifically on the question of Acceptance of the Kigali Amendment.

- a. The only substantive comment received from State and Territory governments was from Queensland which supported ratification, noting that the transitional process seems appropriate to reduce impact on industry.
- b. Additional comments were received from four industry associations (Refrigerants Australia, the Australian Refrigerated Equipment Manufacturers Association or AREMA, the Air Conditioning and Mechanical Contractors' Association or AMCA and the Automotive Air conditioning, Electrical and Cooling Technicians of Australasia or VASA) which confirmed long held industry support for acceptance of the Kigali Amendment.
 - i. Refrigerants Australia, representing 95% of the supply chain of refrigerants in Australia, indicated strong support for ratification as a means to deliver a positive environmental outcome along with long term certainty on the rules enabling investment decisions to be made with confidence.
 - ii. AREMA, representing 30 refrigeration manufacturers and importers in Australia, strongly supports ratification of the Kigali Amendment as it will allow companies to select alternative technologies and at lowest cost.
 - iii. AMCA, representing companies working in the commercial and industrial air conditioning and mechanical services sector, supports the Government's acceptance of the Kigali Amendment to the Montreal Protocol which will provide certainty to industry while delivering the desired reductions in greenhouse gas emissions.
 - iv. VASA, representing the mobile air conditioning industry, continues to support global efforts to reduce reliance on, and the use of, those refrigerants which have potential to cause environmental harm, in particular, refrigerants with high global warming potential. Therefore VASA supports the adoption of the Kigali Amendment to the Montreal Protocol.
- c. No comments were received from non-government organisations.