

**BEIJING AMENDMENT TO THE MONTREAL PROTOCOL ON  
SUBSTANCES THAT DEplete THE OZONE LAYER,  
DONE AT BEIJING IN NOVEMBER 1999  
[1999] ATSD 4728**

**Documents tabled on 8 February 2005:**

**National Interest Analysis [2005] ATNIA 02**

**With attachment on consultation**

**Text of the Proposed Treaty Action**

**Regulation Impact Statement**

***Background Information:***

**Current status list**

## NATIONAL INTEREST ANALYSIS: CATEGORY 1 TREATY

### SUMMARY PAGE

#### **Beijing Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer, done at Beijing in November 1999 [1999] ATSD 4728**

##### **Nature and Timing of Proposed Treaty Action**

1. The amendment agreed at the eleventh Meeting of the Parties (the Beijing Amendment) is the fourth amendment to the *Montreal Protocol on Substances that Deplete the Ozone Layer*, done at Montreal on 16 September 1987 - [1989] ATS 18. The Amendment entered into force generally on 25 February 2002.
2. It is proposed that Australia deposit its instrument of acceptance of the Beijing Amendment by August 2005. The Amendment will enter into force for Australia on the 90th day after the deposit of its instrument of acceptance. Australia needs to accept the amendment by the seventeenth Meeting of the Parties in November 2005 to ensure continued trade in hydrochlorofluorocarbons (HCFCs) with other Parties to the Protocol.
3. The eleventh Meeting of the Parties to the Montreal Protocol on Substances that Deplete the Ozone Layer also agreed to an adjustment to the Protocol<sup>1</sup>. The 1999 Beijing Adjustment became automatically binding on Australia from 28 July 2000.

##### **Overview and National Interest Summary**

5. The objective of the Montreal Protocol is to protect human health and the environment against the adverse effects resulting from the depletion of the ozone layer. The Montreal Protocol achieves this objective by controlling the production and consumption of ozone depleting substances.
6. The Beijing Amendment sets out a series of control measures for a newly identified ozone-depleting substance, bromochloromethane (BCM); an internationally binding cap on the manufacture of hydrochlorofluorocarbons (HCFCs); restrictions on trade in HCFCs with non-Parties; and mandatory annual reporting to the Protocol Secretariat on volumes of methyl bromide used for quarantine and pre-shipment purposes.
7. The Australian Government is committed to protecting people and the environment from the impacts associated with ozone depletion. Australia, because of its geography and climate is particularly affected by ozone depletion. The Government has therefore implemented extensive programs to phase out Australia's consumption of ozone depleting substances in accordance with, and sometimes in advance of, its international obligations.
8. As ozone depletion is a global environmental issue, unilateral action is unlikely to result in successful outcomes. Consequently, multilateral action is considered essential to ensure an effective response.
9. Acceptance of the Beijing Amendment would: ensure that Australia has access to the supplies of HCFCs necessary for Australian industries to support its planned phase out of these substances; enhance Australia's capacity to influence international efforts to address ozone depletion; and demonstrate Australia's commitment to supporting effective and balanced approaches to global co-operation on the environment.

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<sup>1</sup> Article 2 of the Montreal Protocol allows for Parties to make minor changes to already agreed levels of production or consumption of controlled substances. On the basis that these changes are based on scientific and technological information they do not require ratification and are automatically binding.

## **Reasons for Australia to Take the Proposed Treaty Action**

10. The ozone layer exists in the upper atmosphere between approximately 15 and 50 kilometres in altitude. The ozone layer blocks out most of the sun's UV-B radiation, and all of the sun's UV-C radiation. Ozone depleting substances (ODS) in the stratosphere catalytically destroy ozone molecules, thereby increasing the levels of UV radiation reaching the surface of the planet. The main adverse effects of increased UV radiation include increased risk of: sunburn and different types of skin cancer; damage to the immune system; damage to the eyes eg cataracts; damage to aquatic, terrestrial and ocean ecosystems; and damage to agricultural crops and forests.

11. As ozone depletion is recognised as a global environmental issue, unilateral action by Australia will not result in successful outcomes. This is the case because Australia accounts for less than 1 percent of global ODS emissions. Even if Australia were to dramatically curb domestic emissions of ODS, this would do little to offset the effects of any global erosion in support for ozone protection measures. Consequently, multilateral action is considered essential to promote the recovery of the ozone layer.

12. Article 1 of the Beijing Amendment amends the Montreal Protocol to restrict trade in HCFCs with countries that have not ratified, accepted or acceded to the Beijing Amendment. Once these provisions come into effect, they will prohibit any country that has already ratified the Beijing Amendment from trading in HCFCs with Australia, until such time as Australia accepts the Amendment.

13. HCFCs were developed as less potent alternatives to chlorofluorocarbons (CFCs). Although HCFCs do still deplete the ozone layer, their potential to do so is generally much less. The ozone depleting potential of HCFCs is typically between 1% and 10% of the potential of CFC-12 (one of the most commonly used CFCs prior to its phase out). Australia does not manufacture HCFCs and is fully dependant on imports to meet domestic demand.

14. HCFCs are used in Australia in a wide range of industries. Most importantly, they are used as refrigerants, foam-blowing agents and in fire protection systems. Access to these substances is therefore critical to Australian industry. The majority of Australia's HCFC trading partners have either ratified the Beijing Amendment, or indicated that they intend to do so in the near future. Australia's acceptance of this Amendment would ensure that Australia is able to meet domestic demand for these substances, through maintaining trade with States that have already ratified. Australian action to accept this latest amendment would demonstrate its ongoing commitment to international efforts to address ozone depletion.

15. Acceptance of the Beijing Amendment is consistent with the Commonwealth's commitment to Ecologically Sustainable Development. Acceptance would contribute to three core objectives of the Commonwealth's National Strategy for Ecologically Sustainable Development. These are:

- a. to enhance individual and community well being and welfare by following a path of economic development that safeguards the welfare of future generations;
- b. to provide for equity within and between generations; and
- c. to protect biological diversity and maintain essential ecological processes and life support systems.

16. Acceptance of the Beijing Amendment is a cost effective way of working towards these objectives and is essential to protecting the wellbeing and welfare of current and future generations. Acceptance of the Amendment is also critical in protecting biodiversity and maintaining essential ecological processes. Increased UV radiation resulting from ozone depletion has the potential to seriously disrupt natural ecosystems.

## **Obligations**

17. The Beijing Amendment builds upon Australia's existing obligations under the Montreal Protocol. Obligations under the Amendment will impact upon three ozone depleting substances, HCFCs, bromochloromethane (BCM) and methyl bromide.
18. Item C of Article 1 of the Beijing Amendment creates restrictions on the amount of HCFCs that each country may produce. This item limits HCFC production to the average of:
- a. the sum of 1989 HCFC consumption levels and 2.8% of 1989 CFC consumption levels; and
  - b. the sum of 1989 HCFC production levels and 2.8% of 1989 CFC production levels.

Under the Montreal Protocol, "consumption" is defined to mean "production plus imports minus exports of controlled substances".

19. Items F and G of Article 1 of the Beijing Amendment amend Article 4 of the Montreal Protocol to implement trade controls on HCFCs. These provisions would require Australia to trade in HCFCs only with other developed countries that have also ratified the Beijing Amendment. From 2016, when control measures on HCFCs commence for countries operating under Article 5 of the Montreal Protocol (developing countries), Australia must not trade in HCFCs with countries that have not ratified the Beijing Amendment.

20. Item D of Article 1 of the Beijing Amendment creates a new Article 2I to the Protocol. This Article implements restrictions on the production and consumption of a newly identified ozone depleting substances, BCM. Article 2I provides that from 1 January 2002, production and consumption of BCM must not exceed zero.

21. Article 2I does permit production and consumption of BCM in circumstances where the Parties consider a particular use to be essential. Under the Montreal Protocol a 'use' can qualify as essential only if it is necessary for health or safety, or is critical for the functioning of society, and there are no available technically and economically feasible alternatives that are acceptable from the standpoint of environment and health.

22. Items F and G of Article 1 of the Beijing Amendment amend Article 4 of the Montreal Protocol to implement trade controls on BCM. These provisions require Australia to only trade in BCM for essential uses with other countries that have also ratified the Beijing Amendment.

23. Item O of Article 1 of the Beijing Amendment amends paragraph 3 of Article 7 of the Montreal Protocol. This amendment requires Australia to report to Montreal Protocol Secretariat on the amount of methyl bromide that it uses each year for quarantine and pre shipment applications.

## **Implementation**

24. Implementation of the Beijing Amendment would be the responsibility of the Department of the Environment and Heritage. The Department of the Environment and Heritage would have responsibility for overall co-ordination of the Commonwealth's actions to meet the obligations of the Amendment.

25. Implementation of all of Australia's obligations under the Beijing Amendment has already occurred with legislative changes to the *Ozone Protection and Synthetic Gas Management Act 1989* in December 2003.

26. The Department of the Environment and Heritage has liaised with the Australian Customs Service to make the necessary amendments to the *Customs (Prohibited Imports) Regulations 1956* and the *Customs (Prohibited Exports) Regulations 1958*.

27. Australia's obligations to report to the Secretariat the amount of methyl bromide that it uses annually for quarantine and pre-shipment applications can be implemented administratively. Australia already voluntarily reports this information to the Secretariat each year.

### **Costs**

28. As a consequence of accepting the Beijing Amendment, Australia's existing financial commitments supporting the Secretariat to the *Vienna Convention for the Protection of the Ozone Layer* and the *Montreal Protocol* will not increase.

29. Whilst some additional costs might be imposed upon the Commonwealth in administering any future licences for the import and export of BCM, it is expected that these would be recovered through licence application fees.

30. There might also be a consequent financial implication for companies that wish to import significant quantities of BCM, associated with the Commonwealth's costs in administering the licensing system that monitors the import, export and manufacture of ozone depleting substances. To date Australia has imported only very small quantities (approximately one kilogram per annum) of BCM for laboratory and analytical uses. If appropriate the application fee for a licence in these circumstances can be waived in accordance with existing regulations under the *Ozone Protection and Synthetic Greenhouse Gas Management Act 1989*.

### **Regulation Impact Statement**

31. The Department of the Environment and Heritage has prepared a Regulation Impact Statement (attached) that outlines the impacts on business of a decision to accept the Beijing Amendment. The Regulation Impact Statement has been assessed as adequate by the Office of Regulation Review.

### **Future Treaty Action**

32. The Montreal Protocol has been amended by the Parties on four occasions. Three of these amendments have added new substances to the lists of substances controlled by the Montreal Protocol. Where a new substance is shown to pose a significant threat to the ozone layer, the Montreal Protocol may be amended to include measures on the production and consumption of that substance.

33. Any future amendments or additions, of this or any other kind, to the Montreal Protocol will constitute a separate treaty action and be subject to the usual domestic treaty making process including the tabling of a National Interest Analysis.

### **Withdrawal or Denunciation**

34. Under Article 19 of the Montreal Protocol a Party may withdraw from the Montreal Protocol (including the Beijing Amendment) by giving written notification to the UN Secretary-General any time after four years from 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**

Ozone and Synthetic Gas Team  
Policy Coordination and Environment Protection Division  
Department of the Environment and Heritage.

## **Beijing Amendment to the Montreal Protocol on Substances that Deplete the Ozone Layer, done at Beijing in November 1999 [1999] ATSD 4728**

### **CONSULTATION**

1. Australia has had considerable ongoing consultation with government, industry and interest groups concerning the negotiation of the *Montreal Protocol on Substances that Deplete the Ozone Layer* and its subsequent amendments.
2. Various Commonwealth agencies (the Department of Foreign Affairs and Trade, the Attorney-General's Department, the Department of Agriculture, Food and Fisheries, Department of Health and Ageing) and State and Territory Governments have also been consulted concerning the negotiation and progress of the Montreal Protocol.
3. Implementation of Australia's obligations under the Beijing Amendment has already occurred with legislative Amendment of the *Ozone Protection and Synthetic Gas Management Act 1989* in December 2003. A comprehensive consultation process was undertaken regarding the proposed amendments, commencing in 2001 and including all State and Territory Governments, industry, affected Commonwealth Departments and the community. All parties consulted either supported, or did not register any objection to, acceptance of the Beijing Amendment.
4. The major distributors of BCM - Merck Pty Ltd, Sigma Aldrich and Selby Biolab - all indicated that they would not be significantly disadvantaged by acceptance.
5. The University of Melbourne, whose views were taken to represent the position of other research organizations around Australia, indicated that while acceptance would remove a minor but occasionally very important weapon from the chemist's armoury, alternatives were available to cover most contingencies. When no alternatives could be found, scope for these organizations to apply for an essential uses licence, represented an acceptable avenue for dealing with the restrictions which acceptance would impose.
6. The Australian Pharmaceutical Manufacturers Association (APMA), representing the interests of most domestic pharmaceutical companies, registered no objection to acceptance.
7. At the time of the legislative amendments, in 2003, the Australian Fluorocarbon Council (AFC), which represents the interests of all HCFC import licence holders, indicated that it was not opposed to Australian acceptance the Beijing Amendment.
8. In December 2004 the Department of Environment and Heritage met with the Australian Fluorocarbon Council (AFC) to discuss the implications of Australia not accepting the Beijing Amendment prior to the 17<sup>th</sup> Meeting of Parties in November 2005.
9. AFC indicated strong support for acceptance of the Beijing Amendment at this time. AFC supports acceptance as an appropriate action for the Australian Government given its established role in global ozone protection and the limited costs associated with acceptance. AFC believes that non-acceptance, resulting in a loss of access to supply of HCFCs to manage the phase out program, would cause massive disruption to the Australian economy and impose commensurate costs on the Australian community. AFC also believe this would bring the existing Australian HCFC phase out program, recognised as one of the best in the world, into disrepute.

### Table: Status of Ratification

The table below shows the status of Ratification, Accession, or Approval of the agreements on the protection of the stratospheric ozone layer.

*Information provided by the Depositary, the United Nations Office of Legal Affairs, New York as of 4 October, 2004.*

	Signature	Signature	Ratification*	Ratification*	Ratification*	Ratification*	Ratification*	Ratification*
Country	Vienna Convention	Montreal Protocol	Vienna Convention	Montreal Protocol	London Amendment	Copenhagen Amendment	Montreal Amendment	Beijing Amendment
Afghanistan			17.6.2004(Ac)	17.6.2004(Ac)	17.6.2004(Ac)	17.6.2004(Ac)	17.6.2004(Ac)	17.6.2004(Ac)
Albania			8.10.1999(Ac)	8.10.1999(Ac)				
Angola			17.5.2000(Ac)	17.5.2000(Ac)				
Algeria			20.10.1992(Ac)	20.10.1992(Ac)	20.10.1992(Ac)	31.5.2000(R)		
Antigua and Barbuda			3.12.1992(Ac)	3.12.1992(Ac)	23.2.1993(Ac)	19.7.1993(Ac)	10.2.2000(R)	
<a href="#">Argentina<sup>1</sup></a>	22.3.1985	29.6.1988	18.1.1990(R)	18.9.1990(R)	4.12.1992(R)	20.4.1995(Ac)	15.2.2001(R)	
Armenia			1.10.1999(Ac)	1.10.1999(Ac)	26.11.2003(Ac)	26.11.2003(Ac)		
Australia		8.6.1988	16.9.1987(Ac)	19.5.1989(R)	11.8.1992(At)	30.6.1994(At)	5.1.1999(At)	
Austria	16.9.1985	29.8.1988	19.8.1987(R)	3.5.1989(R)	11.12.1992(R)	19.9.1996(Ap)	7.8.2000(R)	23.9.2004(R)
Azerbaijan			12.6.1996(Ac)	12.6.1996(Ac)	12.6.1996(Ac)	12.6.1996(Ac)	28.9.2000(Ap)	
Bahamas			1.4.1993(Ac)	4.5.1993(Ac)	4.5.1993(Ac)	4.5.1993(Ac)		<a href="#">[back to top]</a>
<a href="#">Bahrain<sup>2</sup></a>			27.4.1990(Ac)	27.4.1990(Ac)	23.12.1992(At)	13.3.2001(R)	13.3.2001(R)	
Bangladesh			2.8.1990(Ac)	2.8.1990(Ac)	18.3.1994(R)	27.11.2000(At)	27.7.2001(At)	
Barbados			16.10.1992(Ac)	16.10.1992(Ac)	20.7.1994(At)	20.7.1994(At)	10.12.2002(Ac)	10.12.2002(Ac)
Belarus	22.3.1985	22.1.1988	20.6.1986(At)	31.10.1988(At)	10.6.1996(R)			
Belgium	22.3.1985	16.9.1987	17.10.1988(R)	30.12.1988(R)	5.10.1993(R)	7.8.1997(R)		
Belize			6.6.1997(Ac)	9.1.1998(Ac)	9.1.1998(Ac)	9.1.1998(Ac)		
Benin			1.7.1993(Ac)	1.7.1993(Ac)	21.6.2000(R)	21.6.2000(R)		
Bhutan			23.8.2004(Ac)	23.8.2004(Ac)	23.8.2004(Ac)	23.8.2004(Ac)	23.8.2004(Ac)	23.8.2004(Ac)
Bolivia			3.10.1994(Ac)	3.10.1994(Ac)	3.10.1994(Ac)	3.10.1994(Ac)	12.4.1999(Ac)	
Bosnia and Herzegovina			6.3.1992(Sc)	6.3.1992(Sc)	11.8.2003(Ac)	11.8.2003(Ac)	11.8.2003(Ac)	
Botswana			4.12.1991(Ac)	4.12.1991(Ac)	13.5.1997(Ac)	13.5.1997(Ac)		
Brazil			19.3.1990(Ac)	19.3.1990(Ac)	1.10.1992(At)	25.6.1997(R)	30.6.2004(R)	30.6.2004(R)
Brunei Darussalam			26.7.1990(Ac)	27.5.1993(Ac)				
Bulgaria			20.11.1990(Ac)	20.11.1990(Ac)	28.4.1999(R)	28.4.1999(R)	24.11.1999(R)	15.4.2002(R)
Burkina Faso	12.12.1985	14.9.1988	30.3.1989(R)	20.7.1989(R)	10.6.1994(R)	12.12.1995(R)	11.11.2002(R)	11.11.2002(R)
Burundi			6.1.1997(Ac)	6.1.1997(Ac)	18.10.2001(At)	18.10.2001(At)	18.10.2001(At)	18.10.2001(At)
Cambodia			27.06.2001(Ac)	27.06.2001(Ac)				<a href="#">[back to top]</a>
Cameroon			30.8.1989(Ac)	30.8.1989(Ac)	8.6.1992(At)	25.6.1996(At)		
Canada	22.3.1985	16.9.1987	4.6.1986(R)	30.6.1988(R)	5.7.1990(At)	16.3.1994(R)	27.3.1998(R)	9.2.2001(At)
Cape Verde			31.7.2001(Ac)	31.7.2001(Ac)	31.7.2001(Ac)	31.7.2001(Ac)	31.7.2001(Ac)	
Central African Republic			29.3.1993(Ac)	29.3.1993(Ac)				
Chad			18.5.1989(Ac)	7.6.1994(R)	30.5.2001(R)	30.5.2001(R)	30.5.2001(R)	
<a href="#">Chile<sup>3</sup></a>	22.3.1985	14.6.1988	6.3.1990(R)	26.3.1990(R)	9.4.1992(At)	14.1.1994(R)	17.6.1998(R)	3.5.2000(R)
<a href="#">China<sup>14, 17, 20, 21</sup></a>			11.9.1989(Ac)	14.6.1991(Ac)	14.6.1991(Ac)	22.4.2003(Ac)		
Colombia			16.7.1990(Ac)	6.12.1993(Ac)	6.12.1993(Ac)	5.8.1997(At)	16.6.2003(Ac)	
Comoros			31.10.1994(Ac)	31.10.1994(Ac)	31.10.1994(Ac)	2.12.2002(Ac)	2.12.2002(Ac)	2.12.2002(Ac)
Congo		15.9.1988	16.11.1994(Ac)	16.11.1994(Ac)	16.11.1994(R)	19.10.2001(Ac)	19.10.2001(Ac)	19.10.2001(Ac)
Congo, Democratic Republic of			30.11.1994(Ac)	30.11.1994(Ac)	30.11.1994(Ac)	30.11.1994(Ac)		<a href="#">[back to top]</a>
Cook Islands			22.12.2003(Ac)	22.12.2003(Ac)	22.12.2003(Ac)	22.12.2003(Ac)	22.12.2003(Ac)	22.12.2003(Ac)
Costa Rica			30.7.1991(Ac)	30.7.1991(Ac)	11.11.1998(R)	11.11.1998(R)		
Côte d'Ivoire			5.4.1993(Ac)	5.4.1993(Ac)	18.5.1994(R)	8.10.2003(R)		
Croatia			8.10.1991(Sc)	8.10.1991(Sc)	15.10.1993(R)	11.2.1997(R)	8.9.2000(R)	25.4.2002(R)
Cuba			14.7.1992(Ac)	14.7.1992(Ac)	19.10.1998(R)	19.10.1998(Ap)		



Cyprus			28.5.1992(Ac)	28.5.1992(Ac)	11.10.1994(At)	2.6.2003(At)	2.6.2003(At)	2.9.2004(R)
Czech Republic			1.1.1993(Sc)	1.1.1993(Sc)	18.12.1996(Ac)	18.12.1996(Ac)	5.11.1999(Ap)	9.5.2001(At)
Denmark <sup>12,13,22</sup>	22.3.1985	16.9.1987	29.9.1988(R)	16.12.1988(R)	20.12.1991(Ac)	21.12.1993(At)	24.9.2003(At)	24.9.2003(At)
Djibouti			30.7.1999(Ac)	30.7.1999(Ac)	30.7.1999(Ac)	30.7.1999(Ac)	30.7.1999(Ac)	
Dominica			31.3.1993(Ac)	31.3.1993(Ac)	31.3.1993(Ac)			
Dominican Republic			18.5.1993(Ac)	18.5.1993(Ac)	24.12.2001(Ac)	24.12.2001(Ac)		
Ecuador			10.4.1990(Ac)	30.4.1990(Ac)	23.2.1993(R)	24.11.1993(At)		<a href="#">[back to top]</a>
Egypt	22.3.1985	16.9.1987	9.5.1988(R)	2.8.1988(R)	13.1.1993(R)	28.6.1994(R)	20.7.2000(R)	
El Salvador			2.10.1992(Ac)	2.10.1992(Ac)	8.12.2000(Ac)	8.12.2000(Ac)	8.12.2000(Ac)	
Equatorial Guinea			17.8.1988(Ac)					
Estonia			17.10.1996(Ac)	17.10.1996(Ac)	12.4.1999(R)	12.4.1999(R)	11.4.2003(Ac)	22.12.2003(R)
Ethiopia			11.10.1994(Ac)	11.10.1994(Ac)				
European Community	22.3.1985	16.9.1987	17.10.1988(Ap)	16.12.1988(Ap)	20.12.1991(Ap)	20.11.1995(Ap)	17.11.2000(Ap)	25.3.2002(Ap)
Federated States of Micronesia			3.8.1994(Ac)	6.9.1995(Ac)	27.11.2001(Ac)	27.11.2001(Ac)	27.11.2001(Ac)	27.11.2001(Ac)
Fiji			23.10.1989(Ac)	23.10.1989(Ac)	9.12.1994(Ac)	17.5.2000(Ac)		
Finland	22.3.1985	16.9.1987	26.9.1986(R)	23.12.1988(R)	20.12.1991(Ac)	16.11.1993(At)	18.6.2001(At)	18.6.2001(At)
France	22.3.1985	16.9.1987	4.12.1987(Ap)	28.12.1988(Ap)	12.2.1992(Ap)	3.1.1996(Ap)	25.7.2003(Ap)	25.7.2003(Ap)
Gabon			9.2.1994(Ac)	9.2.1994(Ac)	4.12.2000(Ac)	4.12.2000(Ac)	4.12.2000(Ac)	4.12.2000(Ac)
Gambia			25.7.1990(Ac)	25.7.1990(Ac)	13.3.1995(R)			<a href="#">[back to top]</a>
Georgia			21.3.1996(Ac)	21.3.1996(Ac)	12.7.2000(Ac)	12.7.2000(Ac)	12.7.2000(Ac)	
Germany <sup>4</sup>	22.3.1985	16.9.1987	30.9.1988(R)	16.12.1988(R)	27.12.1991(R)	28.12.1993(R)	5.1.1999(R)	28.10.2002(R)
Ghana		16.9.1987	24.7.1989(Ac)	24.7.1989(R)	24.7.1992(R)	9.4.2001(R)		
Greece	22.3.1985	29.10.1987	29.12.1988(R)	29.12.1988(R)	11.5.1993(R)	30.1.1995(R)		
Grenada			31.3.1993(Ac)	31.3.1993(Ac)	7.12.1993(Ac)	20.5.1999(Ac)	20.5.1999(Ac)	12.1.2004(Ac)
Guatemala			11.9.1987(Ac)	7.11.1989(Ac)	21.1.2002(Ac)	21.1.2002(Ac)	21.1.2002(Ac)	21.1.2002(Ac)
Guinea			25.6.1992(Ac)	25.6.1992(Ac)	25.6.1992(Ac)			
Guinea Bissau			12.11.2002(Ac)	12.11.2002(Ac)	12.11.2002(Ac)	12.11.2002(Ac)	12.11.2002(Ac)	12.11.2002(Ac)
Guyana			12.8.1993(Ac)	12.8.1993(Ac)	23.7.1999(At)	23.7.1999(At)	23.7.1999(At)	
Haiti			29.3.2000(Ac)	29.3.2000(Ac)	29.3.2000(Ac)	29.3.2000(Ac)	29.3.2000(Ac)	
Honduras			14.10.1993(Ac)	14.10.1993(Ac)	24.1.2002(R)	24.1.2002(R)		
Hungary			4.5.1988(Ac)	20.4.1989(Ac)	9.11.1993(Ap)	17.5.1994(Ac)	26.7.1999(R)	23.4.2002(Ap)
Iceland			29.8.1989(Ac)	29.8.1989(Ac)	16.6.1993(Ac)	15.3.1994(R)	8.2.2000(R)	31.3.2004(R)
India			18.3.1991(Ac)	19.6.1992(Ac)	19.6.1992(Ac)	3.3.2003(Ac)	3.3.2003(Ac)	3.3.2003(Ac)
Indonesia		21.7.1988	26.6.1992(Ac)	26.6.1992(R)	26.6.1992(Ac)	10.12.1998(Ac)		
Iran, Islamic Republic of			3.10.1990(Ac)	3.10.1990(Ac)	4.8.1997(At)	4.8.1997(At)	17.10.2001(At)	
Ireland		15.9.1988	15.9.1988(Ac)	16.12.1988(R)	20.12.1991(At)	16.4.1996(At)		
Israel <sup>11</sup>		14.1.1988	30.6.1992(Ac)	30.6.1992(R)	30.6.1992(R)	5.4.1995(R)	28.5.2003(R)	15.4.2004(R)
Italy	22.3.1985	16.9.1987	19.9.1988(R)	16.12.1988(R)	21.2.1992(Ap)	4.1.1995(R)	1.5.2001(R)	22.10.2004(R)
Jamaica			31.3.1993(Ac)	31.3.1993(Ac)	31.3.1993(Ac)	6.11.1997(R)	24.9.2003(Ac)	24.9.2003(Ac)
Japan		16.9.1987	30.9.1988(Ac)	30.9.1988(At)	4.9.1991(At)	20.12.1994(At)	30.8.2002(At)	30.8.2002(At)
Jordan			31.5.1989(Ac)	31.5.1989(Ac)	12.11.1993(R)	30.6.1995(R)	3.2.1999(R)	1.2.2001(R)
Kazakhstan			26.8.1998(Ac)	26.8.1998(Ac)	26.7.2001(Ac)			
Kenya		16.9.1987	9.11.1988(Ac)	9.11.1988(R)	27.9.1994(R)	27.9.1994(R)	12.7.2000(R)	
Kiribati			7.1.1993(Ac)	7.1.1993(Ac)	9.8.2004(Ac)	9.8.2004(Ac)	9.8.2004(Ac)	9.8.2004(Ac)
Korea, Democratic People's Republic of			24.1.1995(Ac)	24.1.1995(Ac)	17.6.1999(Ac)	17.6.1999(Ac)	13.12.2001(Ac)	13.12.2001(Ac)
Korea, Republic of			27.2.1992(Ac)	27.2.1992(Ac)	10.12.1992(Ac)	2.12.1994(At)	19.8.1998(At)	9.1.2004(At)
Kuwait			23.11.1992(Ac)	23.11.1992(Ac)	22.7.1994(Ac)	22.7.1994(Ac)	13.6.2003(Ac)	
Kyrgyzstan			31.5.2000(Ac)	31.5.2000(Ac)	13.5.2003(R)	13.5.2003(R)	13.5.2003(R)	
Lao People's Democratic Republic			21.8.1998(Ac)	21.8.1998(Ac)				

Latvia			28.4.1995(Ac)	28.4.1995(Ac)	2.11.1998(At)	2.11.1998(At)	14.6.2002(At)	9.7.2004(At)
Lebanon			30.3.1993(Ac)	31.3.1993(Ac)	31.3.1993(Ac)	31.7.2000(Ac)	31.7.2000(Ac)	
Lesotho			25.3.1994(Ac)	25.3.1994(Ac)				
Liberia			15.1.1996(Ac)	15.1.1996(Ac)	15.1.1996(Ac)	15.1.1996(Ac)		
Libyan Arab Jamahiriya			11.7.1990(Ac)	11.7.1990(Ac)	12.7.2001(Ac)	24.9.2004(Ac)		
Liechtenstein			8.2.1989(Ac)	8.2.1989(Ac)	24.3.1994(R)	22.11.1996(Ac)	23.12.2003(Ac)	23.12.2003(Ac)
Lithuania			18.1.1995(Ac)	18.1.1995(Ac)	3.2.1998(R)	3.2.1998(R)	17.3.2004(At)	17.3.2004(At)
Luxembourg	17.4.1985	29.1.1988	17.10.1988(R)	17.10.1988(R)	20.5.1992(R)	9.5.1994(R)	8.2.1999(R)	22.1.2001(R)
Madagascar			7.11.1996(Ac)	7.11.1996(Ac)	16.1.2002(Ac)	16.1.2002(Ac)	16.1.2002(Ac)	16.1.2002(Ac)
Malawi			9.1.1991(Ac)	9.1.1991(Ac)	8.2.1994(At)	28.2.1994(Ac)		<a href="#">[back to top]</a>
Malaysia			29.8.1989(Ac)	29.8.1989(Ac)	16.6.1993(Ac)	5.8.1993(Ac)	26.10.2001(R)	26.10.2001(R)
Maldives		12.7.1988	26.4.1988(Ac)	16.5.1989(R)	31.7.1991(R)	27.9.2001(R)	27.9.2001(R)	3.9.2002(Ac)
Mali			28.10.1994(Ac)	28.10.1994(Ac)	28.10.1994(Ac)	7.3.2003(At)	7.3.2003(At)	25.3.2004(At)
Malta		15.9.1988	15.9.1988(Ac)	29.12.1988(R)	4.2.1994(Ap)	22.12.2003(At)	22.12.2003(At)	22.12.2003(At)
Marshall Islands			11.3.1993(Ac)	11.3.1993(Ac)	11.3.1993(Ac)	24.5.1993(Ac)	27.01.2003(Ac)	19.5.2004(Ac)
Mauritania			26.5.1994(Ac)	26.5.1994(Ac)				
Mauritius <sup>5</sup>			18.8.1992(Ac)	18.8.1992(Ac)	20.10.1992(Ac)	30.11.1993(R)	24.3.2003(At)	24.3.2003(At)
Mexico	1.4.1985	16.9.1987	14.9.1987(R)	31.3.1988(At)	11.10.1991(At)	16.9.1994(At)		
Moldova			24.10.1996(Ac)	24.10.1996(Ac)	25.6.2001(Ac)	25.6.2001(Ac)		
Monaco			12.3.1993(Ac)	12.3.1993(Ac)	12.3.1993(Ac)	15.6.1999(At)	26.7.2001(At)	3.4.2003(At)
Mongolia			7.3.1996(Ac)	7.3.1996(Ac)	7.3.1996(Ac)	7.3.1996(Ac)	28.3.2002(R)	
Morocco	7.2.1986	7.1.1988	28.12.1995(R)	28.12.1995(R)	28.12.1995(Ac)	28.12.1995(Ac)		
Mozambique			9.9.1994(Ac)	9.9.1994(Ac)	9.9.1994(Ac)	9.9.1994(Ac)		
Myanmar			24.11.1993(Ac)	24.11.1993(Ac)	24.11.1993(Ac)			
Namibia			20.9.1993(Ac)	20.9.1993(Ac)	6.11.1997(R)	28.7.2003(At)		<a href="#">[back to top]</a>
Nauru			12.11.2001(Ac)	12.11.2001(Ac)	10.9.2004(Ac)	10.9.2004(Ac)	10.9.2004(Ac)	10.9.2004(Ac)
Nepal			6.7.1994(Ac)	6.7.1994(Ac)	6.7.1994(Ac)			
Netherlands <sup>6</sup>	22.3.1985	16.9.1987	28.9.1988(Ac)	16.12.1988(At)	20.12.1991(At)	25.4.1994(Ac)	21.2.2000(At)	13.11.2001(At)
New Zealand <small>7 18,19 23,24</small>	21.3.1986	16.9.1987	2.6.1987(R)	21.7.1988(R)	1.10.1990(At)	4.6.1993(R)	3.6.1999(R)	8.6.2001(R)
Nicaragua			5.3.1993(Ac)	5.3.1993(Ac)	13.12.1999(R)	13.12.1999(R)		
Niger			9.10.1992(Ac)	9.10.1992(Ac)	11.1.1996(Ac)	8.10.1999(R)	8.10.1999(R)	
Nigeria			31.10.1988(Ac)	31.10.1988(Ac)	27.9.2001(R)	27.9.2001(R)	27.9.2001(R)	24.5.2004(R)
Niue			22.12.2003(Ac)	22.12.2003(Ac)	22.12.2003(Ac)	22.12.2003(Ac)	22.12.2003(Ac)	22.12.2003(Ac)
Norway	22.3.1985	16.9.1987	23.9.1986(R)	24.6.1988(R)	18.11.1991(R)	3.9.1993(R)	30.12.1998(R)	29.11.2001(R)
Oman			30.6.1999(Ac)	30.6.1999(Ac)	5.8.1999(Ac)	5.8.1999(Ac)		
Pakistan			18.12.1992(Ac)	18.12.1992(Ac)	18.12.1992(Ac)	17.2.1995(R)		
Palau			29.5.2001(Ac)	29.5.2001(Ac)	29.5.2001(Ac)	29.5.2001(Ac)	29.5.2001(Ac)	29.5.2001(Ac)
Panama		16.9.1987	13.2.1989(Ac)	3.3.1989(R)	10.2.1994(R)	4.10.1996(Ac)	5.3.1999(R)	5.12.2001(R)
Papua New Guinea			27.10.1992(Ac)	27.10.1992(Ac)	4.5.1993(Ac)	7.10.2003(Ac)		
Paraguay			3.12.1992(Ac)	3.12.1992(Ac)	3.12.1992(Ac)	27.4.2001(R)	27.4.2001(R)	
Peru	22.3.1985		7.4.1989(R)	31.3.1993(Ac)	31.3.1993(Ac)	7.6.1999(Ac)		
Philippines		14.9.1988	17.7.1991(Ac)	17.7.1991(R)	9.8.1993(R)	15.6.2001(R)		
Poland			13.7.1990(Ac)	13.7.1990(Ac)	2.10.1996(Ac)	2.10.1996(Ac)	6.12.1999(R)	
Portugal <sup>8, 16</sup>		16.9.1987	17.10.1988(Ac)	17.10.1988(R)	24.11.1992(R)	24.2.1998(R)	3.10.2003(R)	
Qatar			22.1.1996(Ac)	22.1.1996(Ac)	22.1.1996(Ac)	22.1.1996(Ac)		<a href="#">[back to top]</a>
Romania			27.1.1993(Ac)	27.1.1993(Ac)	27.1.1993(Ac)	28.11.2000(At)	21.5.2001(R)	
Russian Federation	22.3.1985	29.12.1987	18.6.1986(At)	10.11.1988(At)	13.1.1992(At)			
Rwanda			11.10.2001(Ac)	11.10.2001(Ac)	7.1.2004(Ac)	7.1.2004(Ac)	7.1.2004(Ac)	7.1.2004(Ac)
Saint Kitts and Nevis			10.8.1992(Ac)	10.8.1992(Ac)	8.7.1998(Ac)	8.7.1998(R)	25.2.1999(R)	
Saint Lucia			28.7.1993(Ac)	28.7.1993(Ac)	24.8.1999(Ac)	24.8.1999(Ac)	24.8.1999(Ac)	12.12.2001(R)
Saint Vincent and the Grenadines			2.12.1996(Ac)	2.12.1996(Ac)	2.12.1996(Ac)	2.12.1996(Ac)		
Sao Tome and Principe			19.11.2001(Ac)	19.11.2001(Ac)	19.11.2001(Ac)	19.11.2001(Ac)	19.11.2001(Ac)	19.11.2001(Ac)
Samoa			21.12.1992(Ac)	21.12.1992(Ac)	4.10.2001(At)	4.10.2001(At)	4.10.2001(At)	4.10.2001(At)

Saudi Arabia			1.3.1993(Ac)	1.3.1993 (Ac)	1.3.1993(Ac)	1.3.1993(Ac)		
Senegal		16.9.1987	19.3.1993(Ac)	6.5.1993(R)	6.5.1993(R)	12.8.1999(Ac)	12.8.1999(Ac)	8.10.2003(R)
Serbia and Montenegro			27.4.1992(Sc)	27.4.1992(Sc)				<a href="#">[back to top]</a>
Seychelles			6.1.1993(Ac)	6.1.1993(Ac)	6.1.1993(Ac)	27.5.1993(R)	26.8.2002(Ac)	26.8.2002(Ac)
Sierra Leone			29.8.2001(Ac)	29.8.2001(Ac)	29.8.2001(Ac)	29.8.2001(Ac)	29.8.2001(Ac)	29.8.2001(Ac)
Singapore			5.1.1989(Ac)	5.1.1989(Ac)	2.3.1993(Ac)	22.9.2000(Ac)	22.9.2000(Ac)	
Slovakia			28.5.1993(Sc)	28.5.1993(Sc)	15.4.1994(Ap)	8.1.1998(Ac)	3.11.1999(Ap)	22.5.2002(R)
Slovenia			6.7.1992(Sc)	6.7.1992(Sc)	8.12.1992(At)	13.11.1998(At)	15.11.1999(R)	23.01.2003(R)
Solomon Islands			17.6.1993(Ac)	17.6.1993(Ac)	17.8.1999(Ac)	17.8.1999(Ac)	17.8.1999(Ac)	
Somalia			1.8.2001(Ac)	1.8.2001(Ac)	1.8.2001(Ac)	1.8.2001(Ac)	1.8.2001(Ac)	1.8.2001(Ac)
South Africa			15.1.1990(Ac)	15.1.1990(Ac)	12.5.1992(Ac)	13.3.2001(Ac)		
Spain		21.7.1988	25.7.1988(Ac)	16.12.1988(R)	19.5.1992(At)	5.6.1995(At)	11.5.1999(At)	19.2.2002(At)
Sri Lanka			15.12.1989(Ac)	15.12.1989(Ac)	16.6.1993(Ac)	7.7.1997(Ac)	20.8.1999(Ac)	27.11.2002(Ac)
Sudan			29.1.1993(Ac)	29.1.1993(Ac)	2.1.2002(Ac)	2.1.2002(Ac)	18.5.2004(Ac)	18.5.2004(Ac)
Suriname			14.10.1997(Ac)	14.10.1997(Ac)				
Swaziland			10.11.1992(Ac)	10.11.1992(Ac)				
Sweden	22.3.1985	16.9.1987	26.11.1986(R)	29.6.1988(R)	2.8.1991(R)	9.8.1993(R)	12.7.1999(R)	28.3.2002(R)
Switzerland	22.3.1985	16.9.1987	17.12.1987(R)	28.12.1988(R)	16.9.1992(R)	16.9.1996(R)	28.8.2002(R)	28.8.2002(R)
Syrian Arab Republic			12.12.1989(Ac)	12.12.1989(Ac)	30.11.1999(Ac)	30.11.1999(Ac)	30.11.1999(Ac)	
Tajikistan			6.5.1996(Ac)	7.1.1998(Ac)	7.1.1998(Ac)			<a href="#">[back to top]</a>
Tanzania, United Republic of			7.4.1993(Ac)	16.4.1993(Ac)	16.4.1993(Ac)	6.12.2002(R)	6.12.2002(R)	6.12.2002(R)
Thailand		15.9.1988	7.7.1989(Ac)	7.7.1989(R)	25.6.1992(R)	1.12.1995(R)	23.6.2003(R)	
The Former Yugoslav Republic of Macedonia			10.3.1994(Sc)	10.3.1994(Sc)	9.11.1998(R)	9.11.1998(R)	31.8.1999(Ac)	23.5.2002(Ac)
Togo		16.9.1987	25.2.1991(Ac)	25.2.1991(R)	6.7.1998(At)	6.7.1998(At)	26.11.2001(At)	26.11.2001(At)
Tonga			29.7.1998(Ac)	29.7.1998(Ac)	26.11.2003(R)	26.11.2003(R)	26.11.2003(R)	26.11.2003(R)
Trinidad and Tobago			28.8.1989(Ac)	28.8.1989(Ac)	10.6.1999(R)	10.6.1999(R)	10.6.1999(R)	29.10.2003(R)
Tunisia			25.9.1989(Ac)	25.9.1989(Ac)	15.7.1993(Ac)	2.2.1995(Ac)	19.10.1999(R)	
Turkey			20.9.1991(Ac)	20.9.1991(Ac)	13.4.1995(R)	10.11.1995(R)	24.10.2003(R)	24.10.2003(R)
Turkmenistan			18.11.1993(Ac)	18.11.1993(Ac)	15.3.1994(Ac)			
Tuvalu			15.7.1993(Ac)	15.7.1993(Ac)	31.8.2000(At)	31.8.2000(At)	31.8.2000(At)	4.10.2004(At)
Uganda		15.9.1988	24.6.1988(Ac)	15.9.1988(R)	20.1.1994(R)	22.11.1999(Ac)	23.11.1999(Ac)	<a href="#">[back to top]</a>
Ukraine	22.3.1985	18.2.1988	18.6.1986(At)	20.9.1988(At)	6.2.1997(R)	4.4.2002(R)		
United Arab Emirates			22.12.1989(Ac)	22.12.1989(Ac)				
United Kingdom of Great Britain and Northern Ireland <sup>10,15</sup>	20.5.1985	16.9.1987	15.5.1987(R)	16.12.1988(R)	20.12.1991(R)	4.1.1995(R)	12.10.2001(R)	12.10.2001(R)
United States of America	22.3.1985	16.9.1987	27.8.1986(R)	21.4.1988(R)	18.12.1991(R)	2.3.1994(R)	1.10.2003(R)	1.10.2003(R)
Uruguay			27.2.1989(Ac)	8.1.1991(Ac)	16.11.1993(R)	3.7.1997(Ac)	16.2.2000 (Ac)	9.9.2003(Ac)
Uzbekistan			18.5.1993(Ac)	18.5.1993(Ac)	10.6.1998(Ac)	10.6.1998(Ac)		
Vanuatu			21.11.1994(Ac)	21.11.1994(Ac)	21.11.1994(At)	21.11.1994(At)		
Venezuela		16.9.1987	1.9.1988(Ac)	6.2.1989(R)	29.7.1993(R)	10.12.1997(R)	13.5.2002(R)	
Viet Nam			26.1.1994(Ac)	26.1.1994(Ac)	26.1.1994(Ac)	26.1.1994(Ac)		
Yemen			21.2.1996(Ac)	21.2.1996(Ac)	23.4.2001(Ac)	23.4.2001(Ac)	23.4.2001(Ac)	
Zambia			24.1.1990(Ac)	24.1.1990(Ac)	15.4.1994(R)			
Zimbabwe			3.11.1992(Ac)	3.11.1992(Ac)	3.6.1994(R)	3.6.1994(R)		
	Vienna Convention	Montreal Protocol	Vienna Convention	Montreal Protocol	London Amendment	Copenhagen Amendment	Montreal Amendment	Beijing Amendment
Total	28	46	189	188	175	164	120	83

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#### Notes

R: Ratification Ac: Accession At: Acceptance Ap: Approval Sc: Succession

\* Entry into force is after ninety days following the date of ratification/accession/acceptance/approval for