

CURRENT DEVELOPMENTS

PUBLIC INTERNATIONAL LAW

Edited by Colin Warbrick and Dominic McGoldrick*

- I. Global Warming and the Kyoto Protocol
- II. The International Criminal Tribunal for the Former Yugoslavia: the *Erdemović* Case

I. GLOBAL WARMING AND THE KYOTO PROTOCOL

THE Third Conference of the Parties to the United Nations Framework Convention on Climate Change (Climate Change Convention)¹ was held from 1 to 11 December 1997 at Kyoto, Japan. Significantly the States Parties to the Convention adopted a protocol (Kyoto Protocol)² on 11 December 1997 under which industrialised countries have agreed to reduce their collective emissions of six greenhouse gases³ by at least 5 per cent by 2008–2012. Ambassador Raul Estrada-Oyuela, who had chaired the Committee of the Whole established by the Conference to facilitate the negotiation of a Protocol text, expressed the view that: “This agreement will have a real impact on the problem of greenhouse gas emissions. Today should be remembered as the Day of the Atmosphere.”⁴ This note seeks to outline in brief the science of climate change, and international activity to combat global warming prior to the Kyoto conference. It then attempts to analyse the terms of the Kyoto Protocol and to draw some conclusions on its significance.

A. *The “Greenhouse Effect”*

The Intergovernmental Panel on Climate Change (IPCC) was established in 1988 by the World Meteorological Organisation and the United Nations Environment Programme (UNEP) to assess the scientific basis and impact of climate change. Its work is ongoing and has recently concluded that “the balance of evidence suggests that there is a discernible human influence on global climate”,⁵ and that an

* This section deals with recent developments in British practice, making some attempt to set the practice against the international and domestic context in which it takes place.

1. (1992) 31 I.L.M. 849. On the negotiations and text of the Climate Change Convention see D. Bodansky, “The United Nations Framework Convention on Climate Change: A Commentary” (1993) 18 Yale J.Int.L. 451–558. See also J. Barrett, “The Negotiation and Drafting of the Climate Change Convention”, in R. Churchill and D. Freestone (Eds), *International Law and Global Climate Change* (1991), pp.183–200.

2. Kyoto Protocol to the United Nations Framework Convention on Climate Change, UN Doc.FCCC/CP/1997/L.7/Add.1.

3. Carbon dioxide, methane, nitrous oxide, hydro fluorocarbons, per fluorocarbons and sulphur hexafluoride.

4. UN Environment Programme (UNEP) Press Release, 11 Dec. 1997.

5. UN Doc.FCCC/CP/1996/5/Add.1, p.8.

increase in global surface temperature of between 1 and 3.5 degrees Celsius by 2100 is expected in comparison with 1990 temperatures, a "rate of warming [which] would probably be greater than any seen in the last 10,000 years".⁶ Average sea levels are expected to rise by approximately 50 centimetres by 2100,⁷ affecting island and low-lying countries globally, including areas within Europe; the European Commission has indicated that such a rise:⁸

would affect large stretches of the Netherlands, certain marshlands in England, the length of the German North Sea coast, coastal areas on the Black Sea, around the Po flood plain in Italy and the tidal flats (the Wadden Sea) on the west coast of Jutland in Denmark.

In addition, an increase in the number of violent storms and floods is projected,⁹ and "climate zones (and thus ecosystems and agricultural zones) could shift towards the poles by 150–550 km in the mid-latitude regions. As a result, many ecosystems may decline or fragment, and individual species will become extinct."¹⁰

The so-called "greenhouse effect" is in part a quite natural phenomenon. Radiation emanating from the sun reaches the Earth's atmosphere and, with the exception of certain harmful ultra-violet radiation which is filtered out in the stratospheric ozone layer, eventually reaches the surface of the Earth. Some of this energy is reflected back from the Earth's surface to the Earth's atmosphere where it is trapped by so-called "greenhouse gases" and brings about a warming effect. Since the Industrial Revolution this natural process has been intensified as a consequence of certain human activities: atmospheric concentration of the main greenhouse gas, carbon dioxide, has increased by 30 per cent since 1750,¹¹ largely as a result of the burning of fossil fuels and forest clearance; methane and nitrous oxide concentrations have increased by 145 and 15 per cent respectively in the same period;¹² and, in addition, the use of hydro fluorocarbons, per fluorocarbons and sulphur hexafluoride, whilst thought not to be contributing to a large extent to the global warming effect at present, are thought likely to have such an impact "by the end of the 21st century"¹³ if emissions continue to increase. Whilst certain States, most notably members of the Organisation of Petroleum Exporting

6. *Idem*, p.9. Whilst scientists disagree on the precise extent of the global temperature rise, most do agree that a rise must be expected.

7. *Ibid.* See generally D. Freestone, "International Law and Sea Level Rise", in Churchill and Freestone, *op. cit. supra* n.1, at pp.109–126.

8. European Commission, "Newsletter from Ritt Bjerregaard, the EU's Commissioner for the Environment", Nov. 1997, p.1.

9. See generally on the greenhouse effect D. D. Kemp, *Global Environmental Issues* (1994), pp.144–172, J. Y. Houghton, *Global Warming: The Complete Briefing* (2nd edn, 1997), and D. M. Gates, *Climate Change and its Biological Consequences* (1993).

10. "Press Backgrounder" issued by Secretariat to the Climate Change Convention, 20 Nov. 1997, p.1. See M. Bowman, "Global Warming and the International Legal Protection of Wildlife", in Churchill and Freestone, *op. cit. supra* n.1, at pp.127–146.

11. UN Doc.FCCC/CP/1996/5/Add.1, p.7.

12. *Ibid.* Methane is released from the burning of fossil fuels, and is also produced as a consequence of change in land use to e.g. rice production, and from the gastric processes of ruminants. Nitrous oxide concentrations have been increased in the main as a result of greater use of agricultural fertilisers.

13. *Ibid.* Hydro fluorocarbons are frequently used as refrigerants, and coolants in air-conditioning systems. Per fluorocarbons are used primarily in aluminium smelters, and sulphur hexafluoride as an insulating medium in electric circuit breakers.

Countries (OPEC), have shown reluctance in accepting these IPCC findings, or see no reason to reduce emissions even if the findings are accurate,¹⁴ most States accept the Panel's general conclusions.¹⁵

B. International Action to Combat Global Warming Prior to the Kyoto Conference

1. Climate Change Convention

The IPCC's first scientific assessment report¹⁶ was published in 1990 and served to underline the need for the negotiation of a framework convention to combat global warming. In December 1990 the UN General Assembly established the Intergovernmental Negotiating Committee (INC) with a view to drafting a framework treaty for signature in June 1992 at the UN Conference on Environment and Development (UNCED) in Rio.¹⁷ The INC met five times between February 1991 and May 1992 and, after much hard bargaining,¹⁸ the Climate Change Convention was adopted on 9 May 1992 and opened for signature in June 1992. The treaty entered into force on 21 March 1994.¹⁹ As at 25 November 1997 there were 169 States parties including both the European Community²⁰ and the United Kingdom.²¹

The Community had favoured the introduction of timetabled emission reductions in the text of the treaty which would bind industrialised countries. Although receiving support from, *inter alia*, the Alliance of Small Island States (AOSIS) coalition,²² Australia, Canada and New Zealand, it became clear that it was politically unrealistic to include such substantive obligations in the face of opposition from the United States and OPEC countries, which felt that any introduction of specific emission reductions would be premature.²³ The treaty therefore

14. See S. Oberthur, "The Second Conference of the Parties" (1996) 26(5) Environmental Policy and Law 146–147. Whilst there remains some doubt as to the precise extent of the effect of global warming on the planet, the Climate Change Convention notes that "Parties should take precautionary measures to anticipate, prevent or minimize the causes of climate change and mitigate its adverse effects": Art.3(3). A "precautionary" approach endorses the adoption of measures to protect the environment from a potentially damaging activity prior to a causal link between such activity and subsequent damage to the environment being conclusively established. On the precautionary principle see D. Freestone and E. Hey (Eds), *The Precautionary Principle and International Law: The Challenges of Implementation* (1995).

15. Oberthur, *idem*, p.147. For a more detailed account of the growing international consensus on the impact of global warming since the 1960s see Bodansky, *op. cit. supra* n.1, at pp.458–471.

16. IPCC, *Climate Change: The IPCC Scientific Assessment* (1990). See also "IPCC First Assessment Report: Overview" (1991) 3(1) International Environmental Affairs 64–84.

17. UNGA Res.45/212 of 21 Dec. 1990.

18. See Bodansky, *op. cit. supra* n.1, at pp.474–491.

19. Entry into force took place 90 days after the 50th instrument of ratification as specified in Art.23 of the Climate Change Convention.

20. The EC signed the treaty on 13 June 1992 and ratified on 21 Dec. 1993.

21. The UK signed on 12 June 1992 and ratified the treaty on 8 Dec. 1993.

22. The coalition is made up of those countries thought to be particularly vulnerable to the effects of global warming.

23. Despite the lack of emission targets in the treaty, the EC in its instrument of approval noted that "the Community and its Member States reaffirm the objectives set out in the [EC]

established an "ultimate objective" to stabilise emissions at a level which would no longer interfere in a harmful way with the global climate, but without specifying emission reduction targets.²⁴ The Community and other like-minded States anticipated that a timetable of specific emission reductions could be agreed upon at some time in the future by the adoption of a protocol to the treaty when political will allowed.²⁵ Such an approach has been adopted successfully within legal regimes established to combat transboundary air pollution,²⁶ and reduce ozone-depleting substances.²⁷

Although the international community had taken a crucial first step to combat global warming by adopting the Climate Change Convention, it was clear to many States that further action was required. The treaty underlined that any such action would need to take into account certain principles²⁸ including States parties' "common but differentiated responsibilities".²⁹ Whilst all parties share certain common

Council conclusions of 29 October 1990, and in particular the objective of stabilization of CO₂ emissions by 2000 at 1990 level in the Community as a whole" (See Council Decision 94/69/EC of 15 Dec. 1993 (1994) O.J. L33/11, 7 Feb.).

24. Art.2 of the treaty noted: "The ultimate objective of this convention and any related legal instrument that the Conference of the Parties may adopt is to achieve... stabilisation of greenhouse gas concentration in the atmosphere at a level that would prevent dangerous anthropogenic interference with the climate system. Such a level should be achieved within a time frame sufficient to allow ecosystems to adapt naturally to climate change, to ensure food production is not threatened and to enable economic development to proceed in a sustainable manner."

25. Art.17 of the treaty notes that the Conference of the Parties "may, at any ordinary session, adopt protocols to the convention". The Conference of the Parties meets on an annual basis (Art.7(4)).

26. Convention on Long-Range Transboundary Air Pollution (1979) 18 I.L.M. 1442 (LRTAP); Protocol on the Reduction of Sulphur Emissions or Their Transboundary Fluxes by at least 30 Per Cent (1988) 27 I.L.M. 707; Protocol concerning the Control of Emissions of Nitrogen Oxides or Their Transboundary Fluxes (1989) 28 I.L.M. 212; Protocol concerning the Emissions of Volatile Organic Compounds or Their Fluxes (1992) 31 I.L.M. 568; and Protocol on Further Reduction of Sulphur Emissions (1994) 33 I.L.M. 1540. See A. Fraenkel, "Convention on Long-Range Transboundary Air Pollution: Meeting the Challenge of International Cooperation" (1989) 30 Harv.Int.L.J. 447-476, and R. R. Churchill, G. Kutting and L. M. Warren, "The 1994 UN ECE Sulphur Protocol" (1995) 7(2) J.E.L. 169-197.

27. Vienna Convention for the Protection of the Ozone Layer (1987) 26 I.L.M. 1529 (Ozone Convention); Montreal Protocol on Substances that Deplete the Ozone Layer (1987) 26 I.L.M. 1550. See P. M. Lawrence, "International Legal Protection for Protection of the Ozone Layer" (1990) 2(1) J.E.L. 17-51, E. P. Barratt-Brown, "Building a Monitoring and Compliance Regime Under the Montreal Protocol" (1991) 16 Yale J.Int.L. 519-570, J. E. Mintz, "Progress Toward a Healthy Sky: An Assessment of the London Amendments to the Montreal Protocol on Substances that Deplete the Ozone Layer" (1991) 16 Yale J.Int.L. 571-582, and D. L. Downie, "Road Map or False Trail? Evaluating the Precedence of the Ozone Regime as a Model and Strategy for Global Climate Change" (1995) 7(4) International Environmental Affairs 321-345. See also R. Benedick, *Ozone Diplomacy* (1991) and S. Oberthur, "Montreal Protocol: 10 Years After" (1997) 27(6) Environmental Policy and Law 432-440.

28. Art.3 of the Climate Change Convention.

29. "The Parties should protect the climate system for the benefit of present and future generations of human kind, on the basis of equity and in accordance with their common but differentiated responsibilities and respective capacities. Accordingly, the developed country parties should take the lead in combating climate change and the adverse effects thereof" (Art.3(1), emphasis added). On the perceived obligation on the present generation to take

responsibilities in the context of global warming, commitments contained in the treaty underlined the particular onus placed on the developed countries in Annex I (OECD members and the Central and Eastern European States), bearing in mind that the:³⁰

largest share of historical and current global emissions of greenhouse gases has originated in developed countries, that per capita emissions in developing countries are still relatively low and that the share of global emissions originating in developing countries will grow to meet their social and development needs.

Whilst all parties are, *inter alia*, obliged to prepare national inventories of greenhouse gases,³¹ to implement national programmes to reduce global warming,³² to co-operate in preparing for adaptation to the impacts of climate change,³³ and to promote scientific research,³⁴ Annex I parties (including the United Kingdom and the European Community) have certain different responsibilities from developing States and, as such, are subject to more onerous obligations. In particular Articles 4(2)a and 4(2)b oblige developed States to adopt national policies which "will demonstrate that developed countries are taking the lead in modifying longer-term trends in anthropogenic emissions consistent with the objective of the convention",³⁵ and to provide detailed reports on such policies "with the aim of returning individually or jointly to their 1990 levels . . . of carbon dioxide and other greenhouse gases not controlled by the Montreal Protocol".³⁶

effective action to protect the global atmosphere from serious harm for the benefit of future generations see C. Redgwell, "Intergenerational Equity and Global Warming", in Churchill and Freestone, *op. cit. supra* n.1, at pp.41–56.

30. Preamble, Climate Change Convention. Other obligations owed by developed countries rather than by all parties include responsibility for financing technology transfer to developing States (Art.4(3) and (5)), and to provide financial resources to enable developing States to fulfil their reporting requirements (Art.4(3)). These financial obligations apply to those States in Annex II (Annex I parties apart from the Central and Eastern European Countries).

31. Climate Change Convention, Art.4(1)a.

32. *Idem*, Art.4(1)b.

33. *Idem*, Art.4(1)e.

34. *Idem*, Art.4(1)g.

35. *Idem*, Art.4(2)a.

36. *Idem*, Art.4(2)b. P. Sands, *Principles of International Environmental Law* (1995), p.277, has noted: "This is clearly something other than a provision requiring a mandatory return to a specified earlier level by a specified date."

Council Decision 94/69/EC (*supra* n.23) *inter alia* noted: "The European Economic Community and its Member States declare that the commitment to limit anthropogenic emissions set out in Article 4(2) of the Convention will be fulfilled in the Community as a whole through action by the Community and its Member States, within the respective competence of each." The Climate Change Convention is an example of a "mixed agreement" where competence is shared between the EC and its member States and, as such, negotiation and implementation of the treaty require joint action by both the EC and the member States. No attempt was made in the decision to draw the line between the EC's and individual member States' competence. On the treaty-making competence of the EC see D. McGoldrick, *International Relations of the EU* (1997), I. Macleod, I. D. Hendry and S. Hyett, *The External Relations of the European Communities* (1996), N. A. Neuwahl, "Joint Participation in International Treaties and the Exercise of Power by the EEC and its Member States: Mixed Agreements" (1991) 28 C.M.L.Rev. 717–740. Specifically on EC participation in environmental treaties see Nollkaemper, "The EC and International Environmental Cooperation—Legal Aspects of External Community Powers" (1987) 2 *Legal Issues in European Integration* 55–91.

2. *The Berlin Mandate*

Article 4(2)d of the Climate Change Convention provided for a review of the adequacy of both Articles 4(2)a and 4(2)b at the First Conference of the Parties. The inclusion of this review clause has played a catalytic role in the eventual adoption of the Kyoto Protocol. The INC reconvened after UNCED as part of the review, and met six times before the First Conference was held in Berlin from 28 March to 7 April 1995.³⁷ At the INC's meeting in February 1995 it became clear that, whilst AOSIS and OECD countries were of the opinion that the obligations in Articles 4(2)a and 4(2)b were inadequate to fulfil the objectives of the treaty, there was opposition from the Russian Federation and OPEC countries to the adoption of a protocol detailing more rigorous commitments.³⁸ It was also apparent that a split had arisen within the OECD group between those that accepted that any new commitments should bind only developed countries, and those States, including Australia, Canada, Japan, New Zealand and the United States, which also wished to see the wealthier developing countries adopt new commitments. The adoption of such commitments was strongly opposed by developing countries.³⁹

The lack of consensus within the INC underlined that the adoption of a protocol at Berlin was not feasible. However, after much debate and argument, the Conference of the Parties did adopt the so-called "Berlin Mandate",⁴⁰ in which it was acknowledged that the provisions of Articles 4(2)a and 4(2)b were inadequate. States parties therefore agreed:

to begin a process to enable it to take appropriate action for the period beyond 2000, including the strengthening of the commitments of the Parties included in Annex I to the Convention (Annex I Parties) in Article 4, paragraph 2(a) and 2(b), through the adoption of a protocol or another legal instrument.

Whereas the Berlin Mandate acknowledged that "the global nature of climate change calls for the widest possible cooperation by all countries and their participation in an effective and appropriate international response",⁴¹ it acknowledged that the process would "not introduce any new commitments for Parties not included in Annex I".⁴² The process was to begin without delay and be conducted as a matter of urgency.⁴³ The Ad Hoc Group on the Berlin Mandate (AGBM) was established to conduct the process with a view to reporting to the 1996 Second Conference of the Parties⁴⁴ on progress made, and to conclude its work in 1997. In

The Montreal Protocol (*supra* n.27) controls certain gases such as chlorofluorocarbons which not only have ozone-depleting characteristics but also contribute to the greenhouse effect (footnote added).

37. On the Berlin Conference see S. Oberthur and H. Ott, "The First Conference of the Parties" (1995) 25(4)(5) *Environmental Policy and Law* 144-156, and J. L. Morgan (1995) 6 *YB.Int.Env.L.* 225-230.

38. Oberthur and Ott, *idem*, p.145.

39. *Ibid.* See further on such opposition *infra* nn.83-86 and accompanying text.

40. Decision 1/CP.1 (UN Doc.FCCC/CP/1995/7/Add.1).

41. *Idem*, para.1(e).

42. *Idem*, para.2(b).

43. *Idem*, para.6.

44. The Second Conference of the Parties was held in Geneva from 8-19 July 1996. A

adopting the Berlin Mandate the international community had acknowledged the urgent need to make progress on adopting further commitments to address the climate changes issue.

3. *The Kyoto Protocol*

Although the AGBM met on eight occasions between August 1995 and October 1997, there was a lack of consensus on much of the detail of a protocol by the time the Kyoto Conference convened on 1 December 1997.⁴⁵ However, issues concerning “joint implementation”,⁴⁶ “emissions trading”⁴⁷ and the establishing of specific emission targets were resolved during the course of the Conference, allowing the final plenary session to adopt the Kyoto Protocol on 11 December 1997. The Protocol addresses the following eight issues.

(a) *Implementation of policies and measures by industrialised countries.* In achieving the greenhouse gas emissions reductions specified in the Protocol⁴⁸ Annex I parties will implement and/or elaborate policies and measures, such as energy efficiency programmes,⁴⁹ measures to protect carbon sinks and reservoirs,⁵⁰ afforestation and reforestation activities,⁵¹ sustainable forms of agriculture,⁵² the promotion of research and development of technology limiting carbon dioxide emissions,⁵³ and programmes that will reduce greenhouse gas emissions in the transport sector.⁵⁴ In so doing Annex I parties will co-operate with one another to enhance the overall effectiveness of such policies,⁵⁵ and take into account the effect of such policies on those States particularly vulnerable from the effects of global warming such as AOSIS and OPEC countries.⁵⁶

In contrast to the rather general commitments contained in the Climate Change Convention relating to policies,⁵⁷ it is noticeable that the Protocol underlines the need for specific policies including reference to energy efficiency programmes.

draft protocol had not been drawn up at this stage, and debate underlined the lack of consensus on the approach to be taken in any such protocol. In particular the US argued that new commitments by developing countries were required which the Group of 77 representing developing States strongly opposed. There was also no agreement on whether a timetable for emissions reductions should be adopted under the process or whether an overall objective was all that was required. See generally Oberthur, *op. cit. supra* n.14, at pp.197–198.

45. See the Report of the Eighth Meeting of the AGBM, UN Doc.FCCC/AGBM/1997/8.

46. See *infra* nn.80–82 and 87–96 with accompanying text.

47. See *infra* nn.97–100 and accompanying text.

48. See *infra* nn.59–71 and accompanying text.

49. Kyoto Protocol, Art.2(1)(a)i.

50. *Idem.* Art.2(1)(a)ii. Trees and plants are examples of carbon “sinks”, and the oceans of carbon “reservoirs”. The process of photosynthesis in trees and plants removes carbon from the atmosphere. The oceans are a store of carbon.

51. *Ibid.*

52. *Idem.* Art.2(1)(a)iii.

53. *Idem.* Art.2(1)(a)iv.

54. *Idem.* Art.2(1)(a)vii.

55. *Idem.* Art.2(1)b.

56. *Idem.* Art.2(3).

57. See Art.4(1) and (2)a of the Climate Change Convention.

Such a proposal was rejected by OPEC countries in negotiations leading to the adoption of the Climate Change Convention.⁵⁸ Reference to specific rather than general policies in the Protocol had been supported by the European Community.

(b) *Emission reductions.* Reduction commitments have been established for developed countries to be met by the period 2008–2012 representing a total reduction of greenhouse gas emissions from industrialised countries of at least 5 per cent when compared to their 1990 emission levels.⁵⁹ The commitment period stretches over five years and is intended to provide greater flexibility for States parties than a single target year. This flexibility applies in particular to those countries with annual emission levels of a highly variable nature.

Emission reductions attributable to afforestation and reforestation projects since 1990 will be taken into account in the emissions reduction equation, in addition to emission reductions initiated by action in the energy, industrial, agricultural and waste sectors.⁶⁰ Emission reductions cover six greenhouse gases.⁶¹ Individual States' commitments to reductions are differentiated with a view to meeting the 5 per cent overall target; the European Community and all its member States are committed to 8 per cent reductions, the United States to 7 per cent and Japan and Canada to 6 per cent. New Zealand, the Russian Federation and Ukraine will stabilise emissions at 1990 levels, whilst some States negotiated an actual increase in emissions.⁶²

Once the Protocol has entered into force,⁶³ Annex I parties must submit an annual inventory of emissions to the Convention Secretariat,⁶⁴ enabling expert review teams to provide a full assessment of such parties' compliance with the

58. Bodansky, *op. cit. supra* n.1, at p.509.

59. If all targets are met the actual reduction will amount to 5.2%. Countries in Annex I "undergoing the process of transition to a market economy" (Central and Eastern European States) may use a base year other than 1990 if already agreed by the Conference of Parties to the Convention, or subsequently agreed by the Conference of the Parties to the Protocol. In 1996 the Conference of the Parties agreed that e.g. Romania may use 1989 and Poland 1988 as their respective base years (UN Doc.FCCC/CP/1996/L.13). Such flexibility is envisaged under Art.4(6) of the Convention bearing in mind particular economic and social difficulties experienced in these countries. The Protocol specifically allows for a certain degree of further flexibility to such States in the implementation of their commitments (Art.3(6)).

60. Art.3(3) and (7) of the Protocol. Any increase in emissions due to deforestation since 1990 will also be taken into account in the equation.

61. The gases are noted in Annex A to the Protocol (also noted *supra* n.3). Any developed country may use 1995 as its base year for hydro fluorocarbons, per fluorocarbons and sulphur hexafluoride if they wish (Art.3(8)).

62. E.g. Australia may increase emissions by 8% and Norway by 1%. Each of the industrialised countries' targets is noted in Annex B to the Protocol.

63. The Protocol will enter into force 90 days after "not less than 55 Parties to the [Climate Change] Convention, incorporating Parties included in Annex 1 which accounted in total for at least 55% of the total carbon dioxide emissions for 1990 of the Parties included in Annex I" have ratified (Art.24 of the Protocol).

64. *Idem*, Art.7(1). The Secretariat is located in Bonn, Germany. Its postal address is PO Box 260 124, D–53153, Bonn, Germany.

Protocol.⁶⁵ These expert assessments will be reviewed by the Conference of the Parties serving as the meeting of the parties to the Protocol⁶⁶ which will adopt decisions on implementation.⁶⁷

Bearing in mind the importance of the review of Articles 4(2)a and 4(2)b of the Climate Change Convention which led to the adoption of the Berlin Mandate and the Protocol itself, it is significant that the Protocol includes a review clause which requires the Conference to the Parties to the Protocol to undertake a general review of the Protocol at its second session⁶⁸ and subsequently to review obligations at regular intervals.⁶⁹ Specifically on the issue of emissions, the Conference of the Parties to the Protocol must begin to give consideration to the adoption of further reductions by the end of 2006.⁷⁰ The Protocol makes reference to the period 2008–2012 as being the *first* commitment period, Article 3(9) indicating that further commitments to emission reductions by industrialised countries “shall be established”.⁷¹

(c) *The “EC Bubble”: joint action by the EC member States.* Annex I parties may agree to take joint action to fulfil their emission reduction targets. For instance, if two Annex I parties, State A and State B, decide to act jointly, and have notified the Secretariat to that effect, they will be deemed to have fulfilled their emission reduction obligations if State A’s and State B’s joint emissions do not exceed the level of emissions assigned to both States under the Protocol.⁷² Any agreement between the two countries must indicate the emission level attributed to each State concerned.⁷³

These provisions are of particular relevance to the European Community and have been referred to as the “EC Bubble”. The Community has indicated that its member States will take advantage of this ability to burden-share. In January 1998 the United Kingdom assumed the EC Presidency for a period of six months and the Environment Minister, Michael Meacher, described the sharing out of the Community’s emissions quota as a priority during such time.⁷⁴ This burden-

65. *Idem*, Art.8(1).

66. *Idem*, Art.8(5). When the Conference of the Parties meets as the meeting of Parties to the Protocol, those States that are party to the Convention but not to the Protocol may participate but only as non-voting observers (*idem*, Art.13(1) and (2)). Parties to the Protocol will meet annually (Art.13(6)) to review the implementation of the Protocol (Art.13(4)).

67. *Idem*, Art.8(6). On the future introduction of a non-compliance system *see infra* nn.101–102 and accompanying text.

68. The Conference of the Parties to the Protocol will be held annually as soon as the Protocol has entered into force. It will be convened in conjunction with the Conference of the Parties to the Convention (Art.13(6)).

69. Art.9(2).

70. *Ibid.*

71. Art.3(9) of the Protocol.

72. *Idem*, Art.4(1) and (2).

73. *Idem*, Art.4(1). If State A and State B failed to meet their joint target level of emissions, each State would be legally responsible for its own emission levels as established in the joint agreement (Art.4(5)).

74. Department of the Environment, Press Release, 18 Dec. 1997. The UK government has reaffirmed its election manifesto commitment to a 20% cut in carbon dioxide emissions (see ENDS Report No.266 (1997), p.4) to be delivered by “greater energy efficiency, renewable forms of power generation and an integrated transport policy” (Department of

sharing process will allow the wealthier member States to accept much of the burden of reaching the overall EC target. Each member State's contributions to the EC overall target must be notified to the Secretariat on ratification⁷⁵ and therefore neither the Community nor its member States will be in a position to ratify until the Council of Ministers has come to an agreement on these allocations. The "burden-share" agreement will remain in force for the first commitment period (2008–2012), and if the Community fails to reduce greenhouse gases by 8 per cent by 2008–2012, any member State which fails to meet its allocated target under the "bubble" agreement and the Community itself will be held legally responsible for such failure.⁷⁶

In March 1997 the EC Council of Ministers had indicated that its negotiating position at Kyoto would be to advocate a 15 per cent reduction in *three* gases (carbon dioxide, nitrous oxide and methane) by 2010.⁷⁷ When putting forward the proposed 15 per cent reduction, the Council of Ministers indicated that, if this negotiating position was adopted at the conclusion of the Kyoto meeting as the Community's contribution to the Protocol, the four poorest EC member States (Greece, Spain, Portugal and Ireland) would be allowed to increase emissions whilst Germany, Austria and Denmark would reduce emissions by 25 per cent. France would stabilise emissions and the United Kingdom would reduce by 10 per cent. The actual EC reduction of 8 per cent agreed at Kyoto in *six* gases is in fact equivalent to approximately a 13 per cent reduction if based on just the three gases referred to by the Council of Ministers in the March 1997 negotiating position.⁷⁸ It is therefore anticipated that emission quotas of a similar nature will be allocated to respective member States post-Kyoto. Prior to Kyoto the European Commission had indicated that its negotiating position was one that included targets which are "technically and economically feasible" and could be brought about by, *inter alia*, the introduction of fiscal measures, fuel economy labelling and a commitment on behalf of the automobile industry to reduce carbon dioxide emissions from cars.⁷⁹

Environment, Press Release, 11 Dec. 1997). The government's ability to bring about this level of reduction has been questioned; see Socialist Environment and Resources Association, *Policies to Reduce UK Carbon Dioxide Emissions by 20%* (1997) and ENDS Report No.269 (1997), p.6. See also *Independent*, 1 Oct. 1997, p.11. It is anticipated that the UK government will adopt a revised climate change strategy in 1998 to take account of the commitments undertaken at Kyoto.

75. Art.4(2) of the Protocol.

76. *Idem*, Art.4(6).

77. See ENDS Report No.266 (1997), pp.47–48.

78. European Commission Press Release IP/97/1106, 11 Dec. 1997.

79. See European Commission, "Climate Change—The EC Approach for Kyoto" issued on 1 Oct. 1997; see also Commission Press Release IP/97/829, 1 Oct. 1997. Carbon dioxide accounts for almost 80% of EC greenhouse gas emissions. The EC indicated in 1995 that its carbon dioxide emissions "could grow overall between 5 and 8 per cent in the remaining years of this decade [compared to 1990 levels]" if appropriate action was not taken; see UN Doc.FCCC/CP/1995/Inf.4/Corr.1. See also *Independent*, 20 May 1996, p.6 on the EC's inability to date to reduce carbon dioxide emissions. The EC's climate change strategy post-UNCED has been severely undermined by its failure to adopt an EC-wide carbon tax. This failure was due mainly to the reluctance of the UK to agree to the imposition of any type of EC-wide environmental taxation. The European Commission has subsequently encouraged member States to take their own domestic action to introduce carbon taxes; see ENDS Report No.244 (1995), p.39. The carbon tax was the linchpin of the Community's strategy

(d) *Joint implementation by industrialised countries (Annex I parties)*. Annex I countries are able to acquire "emission reduction units" from participation in joint projects with other Annex I parties which reduce emissions or enhance natural carbon sinks.⁸⁰ Such reduction units can be used to contribute to their emission reduction targets under the Protocol. The United States was a strong advocate of this system as it introduces greater flexibility into the process of making emission cuts. It is important to stress that any such joint implementation must supplement domestic action to reduce greenhouse gases, and that therefore an Annex I country would not be able to depend solely on joint action taken in another industrialised country.⁸¹ Nevertheless, this type of joint implementation may be open to abuse until the extent to which a State can utilise this option rather than take domestic action is addressed, and verification and reporting requirements are established. The adoption of guidelines is envisaged at the first meeting of the Conference of the Parties to the Protocol.⁸²

(e) *Commitments by all parties to the Protocol*. It is important to stress that the Protocol introduces no new commitments for developing States and is therefore in line with the Berlin Mandate. However, Article 10 of the Protocol reaffirms existing commitments in the Climate Change Convention⁸³ on the part of both Annex I and non-Annex I parties. As such it includes the obligation periodically to update national inventories of greenhouse gases, to formulate and implement national programmes to reduce the effects of climate change, to co-operate on scientific and technical research, and to develop education and training programmes. In addition, the Protocol reaffirms the existing commitment on parties to co-operate in the transfer of environmentally friendly technology to developing States;⁸⁴ many developing countries had stressed the critical importance of the transfer of

post-UNCED; see European Commission, "A Community Strategy to Limit Carbon Dioxide Emissions and to Improve Energy Efficiency" COM(92)246 final, 1 June 1992. Other aspects of the strategy include the ALTENER programme to promote the development of renewable energy sources, the establishing of a carbon dioxide monitoring system, and SAVE (Specific Action for Vigorous Energy Efficiency).

80. Art.6 of the Protocol. On joint implementation see O. Kuik, P. Peters and N. Schrijver, *Joint Implementation to Curb Climate Change* (1994).

81. *Idem*, Art.6(1)d.

82. *Idem*, Art.6(2).

83. Art.4(1) of the Climate Change Convention; see *supra* nn.31-34 and accompanying text.

84. *Idem*, Art.4(1)c and (5); Art.10(c) of the Protocol. Pursuant to a decision at the First Conference of the Parties (UN Doc.FCCC/CP/1995/7/Add.1) the issue of technology transfer will be reviewed at each subsequent Conference of the Parties. The Second Conference of the Parties requested the Secretariat to establish a round table on transfer of technology, which met at Kyoto on 9 Dec. 1997. It underlined the important role of the private sector, which largely owns the intellectual property in environmentally sound technology. It also underlined the importance of multinational funding agencies (Global Environmental Facility, the International Finance Corporation and the World Bank) in "avoiding the failure of technology transfer projects" due to "high incremental costs"; see UN Doc.FCCC/CP/1997/CRP.5, p.3. Art.4(5) of the Climate Change Convention places an obligation on Annex II States (Annex I parties apart from those Central and Eastern European States undergoing transition to a market economy) to finance the transfer of technology to developing countries.

environmentally sound technology from Annex I parties on preferential terms to the Third World.⁸⁵

Several Annex I parties, including Australia, Canada, Japan and the United States, strongly supported a proposal by New Zealand that reference to a process to establish new commitments in the form of emission limitation objectives on the part of the wealthier developing States should be included in the Protocol. The proposal noted that any emission limitation objectives adopted in this process would not have been applicable in the 2008–2012 commitment period. This proposal was rejected by developing countries as being contrary to the spirit of the Berlin Mandate and capable of hindering social and economic development in the Third World. Developing countries have long taken the view that they should not be made either to take on commitments to reduce emissions to a specified level within a given time frame or to begin a process which could lead to the adoption of such commitments, until the developed world has taken effective action to reduce greenhouse gas emissions. The New Zealand proposal was dropped and, as such, no new commitments on the part of non-Annex I parties are included in the Protocol.⁸⁶

(f) *The Clean Development Mechanism (CDM)*. The concept of joint implementation by a developed country and a developing country⁸⁷ is endorsed through this new mechanism. The advantage in joint implementation of this nature is that projects to reduce greenhouse gases in developing countries are often cheaper to finance than in Annex I States. The CDM has a dual purpose in that it enables developing countries to operate projects which result in emission reductions and thus to contribute to the objective of the Convention, and also allows Annex I countries which finance such projects through the CDM to use emission reductions attributable to such projects to reduce their own emissions totals.⁸⁸ The private sector will be encouraged to participate in such projects.⁸⁹ Only those projects in which all parties participate voluntarily, which produce long-term benefits to mitigate climate changes, and which result in reduction of emissions over and above that which would otherwise occur, will be deemed to be projects capable of verification under the CDM.

The introduction of the CDM was supported by the G77 group of developing

85. Earth Negotiations Bulletin (13 Dec. 1997), Vol.12, No.76, p.10. Art.11 of the Climate Change Convention provides for a financial mechanism. The Global Environmental Facility operates this mechanism on an interim basis under a Memorandum of Understanding with the Conference of the Parties; see UN Doc.FCCC/CP/1996/9. The Facility has provided for the transfer of technology in projects such as an “efficient industrial boilers project in China, the solar thermal-electric project in India, and the renewable energy small power project in Indonesia”; see UN Doc.FCCC/CP/1996/8. The Protocol reaffirms Annex II States’ commitment to funding such technology transfer and the cost incurred by developing countries in providing updated national inventories of greenhouse gases (Art.11 of the Protocol).

86. See Earth Negotiations Bulletin, *idem*, pp.34–35.

87. On this type of joint implementation see J. K. Parikh, “Joint Implementation and North–South Cooperation for Climate Change” (1995) 7(1) *International Environmental Affairs* 22–41.

88. Art.12(3) of the Protocol.

89. *Idem*, Art.12(9).

States⁹⁰ despite long-standing fears that this type of joint implementation between Annex I parties and developing States would allow rich developed States to finance projects in the Third World, gain credit for doing so, and reduce the need on the part of Annex I parties involved in such projects to take action at a domestic level.⁹¹ The Protocol seeks to allay this fear by stressing that Annex I parties may gain credit through CDM projects, but that such projects will only contribute to “part” of their emission reduction targets.⁹²

An executive board will supervise the CDM, and the Conference of the Parties to the Protocol must establish procedures to ensure appropriate verification of projects.⁹³ Emission reductions from such jointly implemented projects in the period 2000–2008 can be used by Annex I countries to contribute to their own emission reduction targets under the Protocol.⁹⁴

In 1995 the First Conference of the Parties initiated a pilot phase for activities implemented jointly⁹⁵ which is to be reviewed no later than the end of 1999. During the pilot phase a developed country will not be able to gain credit for any project supported by it. The pilot phase will reach its conclusion at the end of 1999, therefore allowing Annex I countries from 2000 onwards to gain credit towards fulfilling their emissions reductions under the Protocol by either continuing support for projects which commenced under the pilot phase, or by promoting new projects introduced under the CDM.

If detailed guidelines are introduced which provide for verification of jointly implemented projects, and Annex I countries undertake such projects in addition to formulating and implementing domestic projects to limit greenhouse gases, the introduction of the CDM is to be welcomed as a way in which financial investment from the North can bring about the transfer of environmentally sound technology and contribute to the global reduction of harmful emissions.

The precise manner in which the CDM will operate must now be discussed. It is certainly envisaged that it will be financed by contributions from developed countries. A procedure to audit and verify project activities is to be negotiated and finalised at the first meeting of the Conference of the Parties to the Protocol.⁹⁶

(g) *Emissions trading.* The Protocol endorses the establishing of an emissions trading system which will allow developed countries to buy and sell emission credits.⁹⁷ If, for instance, Canada was in danger of exceeding its emission quota under the Protocol, it would have the option of purchasing some or all of the unused quota of another industrialised country. Canada would then be able to use this emission credit to increase its total allowable emissions under the Protocol.⁹⁸

90. Earth Negotiations Bulletin, *supra* n.85, at p.13.

91. See T. Goldman and S. A. Hajost (1993) 3 Y.B.I.L. 143.

92. Art.12(3)b of the Protocol.

93. *Idem*, Art.8.

94. *Idem*, Arts.12(10) and 3(12).

95. Decision 5/CP.1 in UN Doc.FCCC/CP/1995/7/Add.1. By June 1996 the Secretariat had received notification of 13 ongoing projects and 17 planned projects under the pilot phase; see UN Doc.FCCC/CP/1996/14/p.5.

96. Art.12(7) of the Protocol.

97. *Idem*, Art.16bis notes: “The Parties included in Annex B may participate in emissions trading for the purposes of fulfilling their commitment under Article 3 of the Protocol.”

98. *Idem*, Art.3(10).

The details of this emissions trading system must be defined by the Conference of the Parties to the Protocol. There is no precise indication in the text of the Protocol as to when the system will be operational although it is clear that guiding principles and mechanisms to establish verification will need to be negotiated in the short term, and that the emissions trading system will be operational in the first commitment period. Any emissions trading must be in addition to action taken domestically to bring about emission limitation.

Studies in recent years have advocated the introduction of some sort of tradeable permit system for *all* parties to the Climate Change Convention which would allow the purchasing of permits by those States in excess of their emission quotas.⁹⁹ It is to be stressed that the system of emissions trading endorsed by the Protocol is limited to the buying and selling of credits among industrialised countries which are party to the Protocol and, as such, have bound themselves to limiting emissions of greenhouse gases with a view to ensuring emissions are collectively reduced by at least 5 per cent by 2008–2012. Whilst the adoption of an emissions trading system among only developed States adds flexibility to the manner in which such States comply with their emission targets, the United States remains a supporter of a system which includes both developed and developing countries. However, many developing States, including India and China, had expressed strong reservations to an emissions trading system which allowed developed States to purchase credits from Third World countries as they feared that developed countries would rely on this procedure, rather than take action at a domestic level to reduce emissions.¹⁰⁰ The introduction of any emissions trading system applicable to both developing and developed States would have necessitated the adoption of general emission quotas for all countries and not just for industrialised countries; this is unacceptable to developing countries at the present time.

(h) *Non-compliance procedure.* The first Conference of the Parties to the Protocol will establish an “appropriate and effective” non-compliance procedure and, in doing so, draw up an “indicative list of consequences, taking into account the cause, type, degree and frequency of non-compliance”.¹⁰¹ It is important to note that if the non-compliance mechanism provides for the possible imposition of binding penalties on parties, the introduction of such a mechanism can be made only by formally amending the Protocol and not simply by decision of the Conference of the Parties to the Protocol. It is therefore possible for a party which objects to the implementation of binding penalties to signify such disapproval by failing to ratify the amendment to the Protocol, in which case the amendment would not apply as far as that party is concerned.¹⁰²

99. See United Nations, *Controlling Carbon Dioxide Emissions: the Tradeable Permit System* (1995), p.17, which indicates such purchasing and selling of permits “is the basis on which any international commodity market works. Those who have more than they want sell to those with deficits, at a profit.” On tradeable permits see also P. Bohm, *An Analytical Approach to Evaluating the National Net Costs of a Global System of Tradeable Carbon Emission Entitlements: With Special Emphasis on the Effects on Different Country Categories* (1994).

100. Earth Negotiations Bulletin, *supra* n.85, at pp.15–17.

101. Art.17 of the Protocol.

102. *Idem*, Art.19. Any amendment to the Protocol will be made by consensus if at all possible. If no consensus is reached, it will be adopted “by a three-fourths majority vote of

C. Some Conclusions

The adoption of the Kyoto Protocol must be regarded as a highly significant step in the elaboration of an effective legal regime to combat global warming, as the Protocol has succeeded in introducing legally binding emission targets for developed States. A key to this success was the flexibility offered to Annex I parties in achieving their respective emission targets by the endorsement of the principles of joint implementation and emissions trading within the Protocol. Without this flexibility it is highly unlikely that developed States such as the United States, Canada and Japan would have agreed to make commitments to reduce emissions.

The European Community proved to be a powerful driving force behind moves to establish meaningful emission reductions by Annex I countries. Commissioner Ritt Bjerregaard noted that the Community had "managed to pull the US and Japan up from very low targets for reductions in greenhouse gas emissions ... to more credible targets with safeguards to help to ensure that reported reductions in emissions are genuine".¹⁰³ Effective action must now be taken by the Community to implement its own reduction commitments if it is to retain its credibility internationally.

Parties must now ratify the Protocol. At the time of writing a shadow has been cast over the perceived success of the Kyoto Conference in that there is a real danger that the US Senate will not agree to US ratification in the absence of new commitments in the Protocol by the wealthier developing countries. As the largest emitter of carbon dioxide¹⁰⁴ a failure by the United States to ratify would severely undermine the effectiveness of the Protocol.

There is no doubt that the richer developing countries will need to commit themselves to specific emission reduction timetables in the future. The European Community has noted:¹⁰⁵

Both greenhouse emissions and the economic capability to limit or reduce greenhouse gas emissions vary enormously among developing countries. It is important, therefore, that the more developed among the developing countries gradually assume bigger responsibilities when their development justifies it. There is no room for free riders on this issue.

It is the responsibility of Annex I parties to encourage countries such as China and India to agree to specific emission targets by facilitating the transfer of environ-

the Parties present and voting at the meeting" (Art.19(3)). The amendment will become binding on those parties which deposit instruments of acceptance "on the ninetieth day after the date of receipt by the Depositary of an instrument of acceptance by at least three-fourths of the Parties to this Protocol"; Art.19(4). The Depositary of the Protocol is the UN Secretary-General: Art.22.

On the issue of non-compliance, see J. Heister, E. Mohr, F. Stahler, P. Stoll and R. Wolf- rum, "Strategies to Enforce Compliance with an International Carbon Dioxide Treaty" (1997) 9(1) *International Environmental Affairs* 22-53. At Kyoto the US proposed a system which would penalise a State exceeding its initial emission targets by reducing any subsequent emissions quota for that country by the amount it had over-emitted in the initial commitment period: see *Earth Negotiations Bulletin*, *supra* n.85, at pp.31-32.

103. European Commission, *op. cit. supra* n.78.

104. The US is responsible for approximately 23% of global emissions. By contrast Japan is responsible for 5%, Germany for almost 4% and the UK for 3%; see *Independent*, 7 June 1997, p.8.

105. European Commission, *op. cit. supra* n.79, at p.22.

mentally friendly technology. Joint implementation between developed countries and the Third World will also contribute to the reduction of emissions from developing States.

The Kyoto Protocol has introduced a flexible system under which it is to be hoped that further commitments will be introduced in the future and, as such, is another important step in the bid to reduce the potentially devastating impact of climate change. However, much work still needs to be done to encourage developing countries to accept new commitments, and to convince Annex I parties that further emission reduction commitments must be made beyond the Protocol's first commitment period. In addition, the emissions trading system and joint implementation under the CDM must be meticulously defined to ensure that developed States need not only to support emission reduction projects in the Third World but also to take meaningful action at a domestic level to reduce greenhouse gases.

PETER G. G. DAVIES*

II. THE INTERNATIONAL CRIMINAL TRIBUNAL FOR THE FORMER YUGOSLAVIA: THE *ERDEMOVIĆ* CASE

A. Introduction

On 29 November 1996 Trial Chamber I of the International Criminal Tribunal for the Former Yugoslavia¹ ("the ICTY") handed down its sentence in the case of Dražen Erdemović.² This was a decision of historic significance for a variety of reasons, the most obvious being that it was the first sentence passed by an international war crimes tribunal, applying international law, since the International Military Tribunals which sat at Nuremberg and Tokyo between 1945 and 1948; it was also the first time³ a truly international tribunal has concluded the trial of a minor war criminal, as opposed to a senior military commander or political leader. In addition, it was the first sentence handed down by the ICTY,⁴ which has been

* Director of the Centre for Environmental Law, University of Nottingham.

1. For the background to the Tribunal, which was created by UN Security Council Res. 827(1993), see O'Brien, "The International Tribunal for Violations of International Humanitarian Law in the Former Yugoslavia" (1993) 87 A.J.I.L. 639, and Warbrick, "International Criminal Law" in *Current Developments: Public International Law* (1995) 44 I.C.L.Q. 466, 468-472.

2. Trial Chamber I: sentencing judgment in *The Prosecutor v. Dražen Erdemović* (Case No.IT-96-22-T, 29 Nov. 1996) (hereafter "sentencing judgment"). The Trial Chamber was composed of Judge Jorda, presiding, with Judges Odio Benito and Riad.

3. Erdemović was not, however, the first person to be arraigned before the ICTY: that dubious distinction belongs to Dušan Tadić, a former guard at the Bosnian Serb detention camp at Omarska, who was initially indicted on 13 Feb. 1995 (after which the German authorities, who had arrested him to begin with, deferred proceedings against him in accordance with Art.9(2) of the ICTY Statute and transferred him to the custody of the ICTY in The Hague), arraigned on 26 Apr. 1995 and sentenced to 20 years' imprisonment on 7 May 1997. For a full chronology of proceedings in the *Tadić* case, see ICTY Press Release CC/PIO/190-E, 7 May 1997. (See also *infra* n.25.)

4. The Appeals Chamber of the ICTY has also given us a decision on the interlocutory appeal on jurisdiction in *The Prosecutor v. Dušan Tadić* (Case No.IT-94-1-AR72, 2 Oct.