

International legal control of the greenhouse effect

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Concern about the greenhouse effect is rapidly growing in the international community of states. As a result, increasing attention is being given to international legal control(s) of the greenhouse effect. This paper reviews some of the possible means of control and seeks to determine the suitability of each.

The first part examines the scientific nature of the greenhouse effect and a number of the major social, political and economic problems associated with it. Part II reviews the manner in which international law has traditionally attempted to control international environmental pollution. The principle of state responsibility for the breach of an international obligation and traditional treaty regimes are considered. Part III reviews two emerging methods of international legal control: the first is termed the resource management approach - it seeks to control the exploitation of the atmosphere to enable continued shared use; the second is the global environmental treaty - there is growing evidence that this type of solution might be acceptable to states, but as yet there is little indication of the form or content of such a treaty regime.

This paper is based on material presented to a seminar for the Energy and Natural Resources Law Association, on 31 May 1989. Since the time of writing, New Zealand has proposed, at a meeting of the United Nations General Assembly, a "Charter" for the world environment. This proposal was partly made in response to the view that traditional international legal instruments are inadequate responses to global environmental issues.

I BACKGROUND

A What is the "Greenhouse Effect"?

The greenhouse effect is the name given to the phenomenon of global climate warming.

Above the earth's stratosphere, there is a blanket of gases. This blanket has existed for millions of years. It insulates the earth against heat loss, which enables the earth's bio-systems to flourish. Due to mankind's activity on earth certain gases, the greenhouse gases, are being emitted from the earth's surface and accumulating around the existing blanket of gases causing the blanket to thicken. As a result, infra-red radiation

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from the earth's surface is prevented from escaping. The consequence is an increase in earth's atmospheric temperatures.

The greenhouse effect is primarily caused by emission and accumulation of the greenhouse gases: methane, nitrogen oxide, chlorofluorocarbons¹ and carbon dioxide. Carbon dioxide² is generally considered to be the major greenhouse gas, comprising up to 56% of the total amount of greenhouse gases.³ As CO₂ is recognised as the major greenhouse gas, this paper will focus on CO₂ as the primary cause of the greenhouse effect.

The most commonly cited sources of CO₂ are the burning of fossil fuels (eg coal, wood and oil) and deforestation. Scientists have confirmed evidence that the level of CO₂ in the atmosphere has dramatically increased since the Industrial Revolution. This has been attributed to increased use of fossil fuels for energy by industrialised and industrialising-states and the felling of large portions of the earth's forests.

B Predicted Physical Effects

What level of global climate warming might we expect? What physical consequences might we expect? To date there is scientific opinion which claims that gradual climatic warming of 0.5°C has occurred and the sea level has risen about 12 cm since the middle of last century.⁴ It is predicted that present CO₂ levels in the atmosphere will double by the year 2030 on the basis of continued fossil fuel consumption and deforestation rates. This doubling will lead, in time, to temperature increases of between 1.5°C to 4.5°C. Many of the projected physical consequences are based on these predictions. For example, increased temperatures of between 1.5°C and 4.5°C are likely to cause a global sea level rise of approximately 30 cms to 1.5 m and major changes in the world's weather patterns. More rain and, as a result, increased risk of flooding is expected at high latitudes. Less rain, together with a resultant increased risk of drought, is expected at low latitudes. As wind patterns change storms are expected to increase in frequency and magnitude at certain latitudes.⁵

C Problems

Problems associated with the greenhouse effect will be categorised here under the headings "scientific" and "social/political/economic".

1 Scientific Problems

The basic problem is the lack of certainty. Scientists agree that there has been a substantial increase in levels of CO₂ in the atmosphere, but there is no agreement as to:

¹ Chlorofluorocarbons ("CFCs") are considered to be the most efficient greenhouse gas.

² Referred to as "CO₂".

³ Phil Jones, Climate Research Unit, University of East Anglia (3 April 1989).

⁴ "Developing Policies for Responding to Climatic Change" (April 1988) WCIP-1 WMO/TD - No 255, 26 para 4.3 ("Villach Report").

⁵ See generally the Villach Report, above n 4.

(a) the exact cause(s) of this increase; (b) increases in climatic temperatures; (c) the causes of increased climatic temperatures (if any); (d) projected increases in CO₂ emissions; and (e) likely physical effects as a result of increased climatic temperatures. The lack of agreement on these points is, in part, attributable to two important factors. The first is the delay between the time when CO₂ is emitted and the time when the physical effects of global climate warming are experienced. The greenhouse effect is pollution of a gradual and cumulative nature. It may be 100 years before the consequences of today's CO₂ emissions are felt.⁶ The second factor is that because of the complexity and volume of research required, it may be 10 to 20 years before there is conclusive scientific evidence of the existence and causes of the greenhouse effect.

Where does this scientific uncertainty leave us? Having taken the uncertainties into account the Villach Report⁷ concluded that: "it is now generally agreed that if the present trends of greenhouse gas (GHG) emissions continue during the next hundred years, a rise of global mean temperature could occur that is larger than any experienced in human history".⁸ Although science can not yet conclusively prove that the greenhouse effect is occurring, at least one scientist is prepared to comment that he is "... reasonably confident ..." of its existence.⁹ Uncertainties aside, it seems clear that failure to take positive action would be the most hazardous reaction. If we wait for physical consequences to manifest themselves, it may be too late to save the earth's environment.

2 *Social/Political/Economic*

Problems arising in this category are largely due to the fact that the greenhouse effect is caused by the burning of fossil fuels, the world's major source of energy.

(a) *Conflict of interests between developing and developed states:* Developing states may view attempts to control the greenhouse effect by regulating use of fossil fuels or deforestation, as a restraint upon their right to develop. As a consequence they may well be resistant to legal control whereas developed states, recognising the global effects of the problem, will be anxious to include developing states in a global regime of control. Undoubtedly, developed states will be reluctant to make sacrifices, if those sacrifices are of little effect. Equally, developing states will be unwilling to make sacrifices now or in the future unless developed states take the lead.¹⁰

⁶ The Villach Report predicts that "current atmospheric levels of GHG's [greenhouse gases] may already have committed the world to an additional 0.5°C of warming, and an additional 10-30 cm of sea level rise over the next fifty years, even if the atmospheric composition were stabilised immediately". See above n 4, 26 para 4.3.

⁷ See above n 4.

⁸ See above n 4, 1 (iii).

⁹ See above n 3.

¹⁰ It is often commented that countries, which may benefit from climate change, will also resist international efforts to control the greenhouse effect. The Villach Report warns: "The significance of the difference in regional effects should not, however, be allowed to detract from the emphasis on the problem as a whole and the response of the international

(b) *Sovereign attitudes*: The concept of sovereignty recognizes that states may use resources, within their own territorial boundaries, in any manner they choose without interference from other states. Legal control of the greenhouse effect may well conflict with this sovereign right by attempting to regulate a state's use of fossil fuels, its forests and the atmosphere above its territory. Brazil has recently reacted to international attempts to sanction further felling of the Amazon rainforests as "environmental imperialism".¹¹

(c) *Energy needs*: As the world's population expands, the world's need for energy increases. Energy demands by developed states may be stabilizing but it is predicted that the needs of developing states will require the production of increasing amounts of energy.

(d) *Costs*: The potential costs of increasing efficient use of fossil fuels, finding substitutes and making the required transitions are likely to be enormous. How many states can afford to take those measures and bear the costs? How will developed states bear the cost of assisting developing states?

(e) *Politics*: At present both national and international politics are beginning to recognise the seriousness of the greenhouse effect. As a consequence moves are being made to deal with the problem. But politics tends to reflect only the most immediate problems in society. The political impetus to solve the greenhouse effect may well falter as a consequence of the time lag between emissions and physical effects and the potential fluctuations in physical effects. For example, ten years of cool weather may well test political motivation to deal with the problem.

D A Unique Problem?

The world faces a number of international environmental threats - depletion of the ozone layer, acid rain, nuclear disaster. Is the greenhouse effect a unique problem? It is probably most comparable with the problem of ozone depletion. Both are non-source specific in that there is a huge number of contributors, although a hand-full of developed states are the primary contributors. The effects of both are global in scope. However, the greenhouse effect is unique in two respects. First, the source of the problem is critical to the world's energy production and land use patterns. Secondly, the phenomenon is surrounded by a high level of scientific uncertainty.

community as a whole facing it. Still less should it encourage any attempts to divide countries or regions into "winners" or "losers". This is not a "zero sum" game. Unless action is taken, it could be a negative sum game of highly uncertain propositions." See above n 4, 35 para 5.1.

¹¹ Brazil's President Jose Sarney has said other "... countries were trying to control Brazilian territory under the pretext of protecting the environment. Responsibility over our environment belongs to us In many parts of the world, under the pretext of defending the environment, they are trying to interfere in our internal problems, wanting to create a tutelage over our territory". *The Evening Post*, Wellington, New Zealand, 6 March 1989.

II TRADITIONAL INTERNATIONAL LEGAL CONTROL

A *Customary International Law*

Under customary international law, the orthodox approach to international environmental pollution is to apply the rules of state responsibility.¹² This approach is "orthodox" in that it is common to the most frequently cited disputes involving international environmental pollution. As only a few international environmental disputes have been reported between states,¹³ there are still many uncertainties surrounding the use of the principles of state responsibility. Some of these uncertainties raise particular problems in the context of the greenhouse effect. Before considering these problems, the general rules of state responsibility will be reviewed below.

1 *State Responsibility*

State responsibility arises when:

- (a) conduct consisting of an action or omission is *attributable to a state* under international law; and
- (b) that conduct constitutes a breach of an *international obligation* of that state.¹⁴

Putting aside, for the moment, the question of attribution¹⁵, at customary international law does an international obligation exist in respect of environmental pollution? It seems to be generally accepted that such an international obligation does exist. It is often phrased in this way: "...the international obligation is to prevent environmental harm within the territory of another state".¹⁶

¹² See generally on state responsibility: I Brownlie *Principles of Public International Law* (3 ed, Clarendon Press, Oxford, 1979) 431; and I Brownlie "A Survey of International Customary Rules of Environmental Protection" (1973) 13 Nat Res J 179.

¹³ *Trail Smelter* Arbitral Tribunal (1941) (United States v Canada) 3 R Int'l Arb Awards 1905; *Nuclear Tests* Case ICJ Reports (1974) 253; The *Lac Lanoux* Arbitration (1957) (Spain v France) 12 R Int'l Arb Awards 281; and at the diplomatic level: The Japanese Fisherman Case US TIAS 3160; M Whiteman "1958 United States Pacific Nuclear Tests" (1965) 4 Digest of International Law 587.

¹⁴ ILC Report to the General Assembly ii Yb Int'l Comm'n 179, UN Doc A/9010/Rev 1 (1973) (emphasis added). A number of commentators add "injury" or "damage" as a third requirement

¹⁵ See below para (b)(i).

¹⁶ B D Smith *State Responsibility and the Marine Environment* (Clarendon Press, Oxford, 1988) 67; see generally, 72-80. This obligation has been expressed in a number of other ways, eg: (i) "... no nation may permit activities on its soil which will cause harm to another nation." H J Taubenfeld "The Atmosphere: Change, Politics and World Law" (1980/81) 10 Den J Int'l L & Pol'y 469, 480; (ii) "... states are under an obligation not to allow pollution, that might reasonably be prevented, to damage foreign nations." S

Evidence of the existence of this principle is gleaned from arbitral decisions,¹⁷ the *Corfu Channel* case,¹⁸ and state practice in the form of diplomatic cases,¹⁹ treaties,²⁰ the Declaration of the United Nations Conference on the Human Environment and various resolutions of international organisations.²¹ For present purposes, it will suffice to mention two cases which are considered the locus classicus of international environmental law. The first is the arbitral decision in the *Trail Smelter* case.²² In resolving a dispute between Canada and the United States regarding damage to United States territory caused by fumes from a smelter in Canada, the tribunal said:²³

Under the principles of international law ... no state has the right to use or permit the use of its territory in such a manner as to cause injury by fumes to the territory of another ... when the cause is of serious consequence and the injury is established by clear and convincing evidence.

The second case is the *Corfu Channel*, decided by the ICJ.²⁴ The facts did not involve environmental pollution. The United Kingdom brought an action against Albania in respect of damage caused to British ships exercising their right of passage through an international strait.²⁵ Albania was held liable, partly on the principle that it is: "...every State's obligation not to allow knowingly its territory to be used contrary to the rights of other States."²⁶

These two cases are the most commonly relied upon precedents for the existence of an international legal obligation to prevent environmental harm within the territory of another state. But how is this obligation applied, in practice, to the activities of states?

Williams "Public International Law Governing Transboundary Pollution (1983) 13 U Queens LJ 112, 125; (iii) "... the obligation of each state not to allow nationals of other states to suffer pollution damage that might reasonably be prevented ..." J Barros and D M Johnston *The International Law of Pollution* (The Free Press, New York, 1974) 69.

¹⁷ *Trail Smelter* see above n 13; *Lac Lanoux* see above n 13.

¹⁸ *The Corfu Channel Case (Merits)* (United Kingdom v Albania) (1949) ICJ 4 (International Court of Justice shall be referred to as the "ICJ").

¹⁹ The Japanese Fisherman Case and the 1958 United States Pacific Nuclear Tests, see above n 13.

²⁰ Eg: United Nations Convention on the Law of the Sea (1982) 21 ILM 1261; Nuclear Test Ban Treaty 480 UNTS 43.

²¹ The Declaration of the United Nations Conference on the Human Environment (1972) 11 ILM 1416 ("Stockholm Declaration"). A multitude of General Assembly Resolutions, treaties and conventions refer to the Stockholm Declaration; eg Resolutions 2996 (GA Resol 2996 (XXVII) 15 Dec 1972), Resolution 3129 (GA Resol 3129 (XXXVII) 13 Dec 1973, UN World Charter for Nature ((1983) 22 ILM 455), Article 30 United Nations Charter of Economic Rights and Duties of States (GA Resol 3281 (XXIX) 29 UN GAOR Supp (no 31) at 52).

²² See above n 13.

²³ See above n 13, 965.

²⁴ See above n 18.

²⁵ Brownlie, see above n 12, 442.

²⁶ See above n 18, 22.

In particular, what legal and practical problems arise in the context of an international environmental problem such as the greenhouse effect? These questions can be considered by taking the hypothetical case of State A bringing an action against State B, for damage to State A's territory caused by the greenhouse effect. State A would probably also attempt to bring an action in respect of damage caused to a area of common interest eg: the atmosphere. To be successful in this claim State A would have to establish that the "atmosphere" was one of the global commons, with a status similar to that of the high seas and outer space.²⁷ This type of action raises a multitude of additional issues, and will not be dealt with in this paper. In the context of the hypothetical case posed, the following problems might arise:

(a) *Forum*: In what forum should State A pursue its claim? A number of procedures or forums exists, eg: diplomatic negotiations, commission of inquiry, arbitration before the Permanent Court of Arbitration, adjudication before the ICJ. The decision as to forum will depend on the will of the parties involved as no truly compulsory method exists to obtain a resolution or judgment regarding a claim for state responsibility.²⁸ The problem for State A is that it may not find State B or any other state responsive to its claims.

(b) *Who will State A make a claim against?*: This general question raises two subsidiary questions:

- (i) Is the conduct, which causes the damage, *attributable* to the defendant state? In other words, should the function of industrial and domestic activity be attributable to a state? This is an important issue in respect of the greenhouse effect as the source of the pollution is primarily in the private hands of industrial and domestic energy users. At international law there is precedent for attributing the activities of one or a certain number of commercial entities to a state.²⁹ However, attribution of the activities of all domestic and commercial entities to the state is quite a distinct proposition.³⁰

²⁷ Australia and New Zealand pursued this type of claim in the *Nuclear Test* cases. Both claimed that nuclear tests would violate the shared rights of states to be free from nuclear fall out and to exercise the freedoms of the high seas. *Nuclear Test Cases* [1978] ICJ Pleadings, (Australia v France) vol i 14, (New Zealand v France) vol ii 8.

²⁸ For example, the jurisdiction of the ICJ operates only upon the consent of states; Article 36 Statute of the International Court of Justice.

²⁹ On this point BD Smith states: "When the state elects to act in a central role in a commercial enterprise, through organisation, ownership, capitalization, receipt of profits, administration and similar involvements, that action dictates that the entity be treated, at least for the purposes of international attribution, as a 'public' representative of the state." See above n 16, 30.

³⁰ Professor R Q Quentin-Baxter has identified a connection between a state's obligation and its authority over private conduct: "[T]here was a wide measure of agreement among legal writers of all persuasions that activities of which a State had knowledge, or which fell within its *regulatory capacity*, could properly be attributed to that State. There was virtually no tendency, either in literature or in State practice, to seek escape from obligations of that kind merely because the cause of harm lay within private hands." ILC

- (ii) Can a claim be brought against more than one state? This raises the issue of multiple state responsibility. This issue is particularly relevant in respect of the greenhouse effect as it is caused by the aggregate polluting activity of all the world's states albeit in varying and fluctuating degrees.³¹ According to Brownlie, "The principles relating to joint responsibility of states are as yet indistinct ...".³²

(c) *A rule of customary international law?*: Although the majority of jurists are of the opinion that the obligation to prevent harm is a rule of customary international law, there is still some room to argue the contrary. This is particularly so in light of specific criticisms of the precedents.³³ It is quite conceivable that a claim by State A would be potentially faced with argument as to the existence of the obligation as a rule of customary international law. This inquiry would also raise the vexed issue of objective state responsibility versus state responsibility as a consequence of fault (ie: in the form of culpa or dolus).³⁴ The implications for State A are that if the objective approach is accepted then the defendant state would incur liability for the result of its conduct, whereas, if the fault approach were accepted then there would be an issue as to the applicable standard of care and whether that standard had been breached.

(d) *Causation*: The difficulty of proving causation is a good illustration of an inherent limitation in applying principles of state responsibility to the greenhouse effect. Essentially, State A would have to prove:

- (i) that the defendant state's CO₂ emissions were a cause of the greenhouse effect; and
- (ii) that the damage suffered was caused by the greenhouse effect.

At present it may well be impossible to prove these causal connections. First, there is not yet conclusive agreement as to the causes of the greenhouse effect. The extent of the contribution made by CO₂ is not yet certain. Secondly, a concomitant problem would be to **prove** that a portion of the greenhouse effect is

Summary Records of 33rd Session i Yb Int'l L Comm'n 222 UN Doc A/CN4/Ser A (1981) (emphasis added). But see also Brownlie, above n 12.

³¹ Rotty has estimated that in 1974 the United States, the Soviet Union, Eastern Europe and Western Europe were responsible for 70 per cent of all CO₂ emissions; R Rotty and GT Marland "Constraints on Carbon Dioxide Production from Fossil Fuel Use (May 1980) (Institute for Energy Analysis, Oak Ridge). On multiple state responsibility, see generally BD Smith, above n 16, 44.

³² Brownlie, see above n 12, 456.

³³ J Downey "International Pollution: The Struggle between States and Scholars over Customary Environmental Norms: The Hazy View after Chernobyl and Basil" (1987) 12 S Ill U L J 247.

³⁴ For a discussion on this issue, see generally Brownlie, above n 12, 436 to 443.

attributable to the defendant state's activities. Thirdly, establishing that damage was a direct result of the greenhouse effect is difficult when there is little scientific agreement as to these effects, eg: a change in weather patterns could be due to a number of factors.³⁵

(e) *Reparation*: The optimum forms of reparation would probably be injunction and/or compensation for damage and economic loss. There is precedent for the granting of injunctions and compensation for economic loss but, these forms of reparation are not completely free from uncertainty.³⁶ For example, must a state have suffered damage before it can get an injunction to prevent further damage?³⁷ Or is injunctive relief available in circumstances of a "threat" of damage?

(f) *Enforcement*: No assured mechanism for enforcement currently exists at international law. Compliance is dependent upon the will of the state concerned. In the future, developing states may become the primary contributors of CO₂; will these states be able to pay for damage caused?

2 A Solution?

From the above it is clear that several legal issues are raised by the prospect of an action for state responsibility as a consequence of damage caused by the greenhouse effect. Brownlie states:³⁸

It is well known that a characteristic of pollution of the atmosphere ... is the gradual and dispersed nature of the processes of degradation. Cumulative processes involve problems of identifying tort-feasors, of establishing evidence of causation and remoteness of damage. It is doubtful if changes in the law can circumvent such problems; they are inherent in the liability approach to environmental protection. The problems certainly indicate the major limitations of this approach.

In general terms, state responsibility raises other concerns which indicate that it is an unsuitable approach to control of the greenhouse effect. First, it is not a preventative solution. It is merely a response to damage. Secondly, it is arguable whether state responsibility extends to damage done beyond any state's territory. If the atmosphere could be categorised as one of the earth's commons, would there be state responsibility for damage to that common?³⁹

³⁵ For example, the recurring phenomenon known as El Nino and La Nina.

³⁶ Injunctive relief was granted in *Trail Smelter*, see above n 13. The Japanese Government claimed compensation for economic loss in the 1958 United States Nuclear Test case, see above n 13. See Brownlie, above n 12, 182.

³⁷ This was the situation in *Trial Smelter*, see above n 13.

³⁸ See above n 12, 182, 183.

³⁹ A fundamental issue here is that of legal standing to bring an action.

B Treaty: A Piecemeal Approach

As more and more evidence is compiled correlating the various sources of pollution it is more likely that States will begin to realise the futility of combating pollution hazards by a series of *ad hoc* solutions. The problems of transnational pollution are far too extensive and inter-related to treat them as a series of particular hazards to be solved by a series of specialised solutions.⁴⁰

Treaties, both bilateral and multilateral, have been used for many years, as a legal technique for controlling international environmental pollution of various kinds. To date there are in excess of 300 such treaties.

There are three general characteristics which the majority of these treaties share to varying extents. First, they are usually pollutant specific. Secondly, they are a response to damage, rather than preventative. Thirdly, they are often only regional in scope. Each of these characteristics will be considered, by reference to specific treaties. The object of this analysis is to illustrate that a treaty which has these general characteristics would not be a suitable means of international legal control of the greenhouse effect.

1 Pollutant Specific

The majority of environmental treaties in existence today arose in response to hard scientific evidence of environmental damage, due to the presence of a pollutant or a group of related pollutants. The response was to attempt to control the *particular pollutants* which were the cause of the *specific damage*. A very recent example is the Montreal Protocol on Substances that Deplete the Ozone Layer.⁴¹ In response to virtually unequivocal scientific evidence that CFCs and halons were destroying the earth's ozone layer, a call was made for a treaty to limit consumption and production of these chemicals.⁴² The Protocol seeks to limit production and consumption of CFCs and halons, by parties, to 50% of 1986 levels, as at July 1, 1998.⁴³ In an attempt to bring about global reduction in production, the Protocol imposes various import and export restrictions upon parties. The Protocol does not address the problem of ozone depletion in any wider terms than control of the specific damaging pollutants.⁴⁴

⁴⁰ H L Dickstein "International Law and the Environment: Evolving Concepts" (1972) Yb World Affairs 245, 258.

⁴¹ Montreal Protocol on Substances that Deplete the Ozone Layer, reprinted in (1987) 26 ILM 1550, (the "Protocol").

⁴² See below nn 73 and 70, but see also below n 54.

⁴³ See above n 41, art 2(4). There have been recent calls to increase the limits. Most recently this has been discussed at the international "Saving the Ozone Layer" conference (London, March 1989) and at the Helsinki conference (May 1989), where a declaration was made seeking the end of the century as the latest date for a total phase out of CFCs and halons.

⁴⁴ CFCs and halons are at present the only ozone depleting substances controlled under the Protocol. New substances can be added by amendment to Annex A.

Another example of a pollutant specific treaty is the Convention on the Protection of the Rhine against Pollution by Chlorides.⁴⁵ Upon evidence of damage to the Rhine as a consequence of high chloride levels, the parties⁴⁶ agreed to enter into a convention to control emission of chloride ions. Article 2(1) specifies that the discharge of chloride ions released into the Rhine is to be reduced by at least 60 kgs annual average. This objective is to be achieved mainly in French territory. The other parties are to take measures in their own territories to prevent any increase in the amount of chloride ions discharged. Again, this Convention merely addresses pollution of a river by one type of pollutant.⁴⁷

Many other examples exist of this piecemeal approach to international environmental pollution. As mankind's activities increase and as the effects of this activity are increasingly manifested in damage to the environment, treaties are entered into in an attempt to protect specific environments at risk. Generally, the various pollutants which pose a threat to a specific environment are treated in isolation from one another. For example, in the context of the marine environment, there are four separate treaties in respect of marine oil pollution,⁴⁸ one treaty in respect of nuclear pollution⁴⁹ and a variety of treaties in respect of the dumping of wastes.⁵⁰ Only recently, within the context of the Law of the Sea Convention⁵¹, has there been an attempt to protect the marine environment from all sources of pollution.⁵²

2 *A Response to Damage*

Many treaties are, in two respects, merely a response to damage: (i) they exist as a result of past proven environmental damage; and (ii) their provisions are often activated only after damage has occurred. The Protocol is a recent example of a response to

⁴⁵ Convention of the Protection of the Rhine Against Pollution by Chlorides reprinted in (1977) 16 ILM 265.

⁴⁶ France, Germany, Luxembourg, Netherlands and Switzerland.

⁴⁷ There is still conflict between the parties of this Convention. In the words of G Handl "The conflict among the riparian states over the reduction of the chloride pollution of the Rhine is a deplorable example of a lack of international co-operation for the protection of the environment": G Handl "The Environment: International Rights and Responsibilities" (1980) *Am Soc'y Int'l Law Proc* 223.

⁴⁸ International Convention for the Prevention of Pollution of the Sea by Oil (1954) 327 UNT S 3 (amended in 1962 and 1969); International Convention Relating to Intervention of the High Seas in Cases of Oil Pollution Damage (1969) 9 ILM 45; Convention on the Establishment of an International Fund for Compensation for Oil Pollution Damage (1972) 11 ILM 284; International Convention of Civil Liability for Oil Pollution Damage (1970) 9 ILM 45.

⁴⁹ Brussels Convention on the Liability of Operators of Nuclear Ships (1963) 57 AJIL 268.

⁵⁰ Eg: Convention on Prevention of Marine Pollution by Dumping of Wastes and Other Matter reprinted in (1972) ILM 1294.

⁵¹ United Nations Convention on the Law of the Sea reprinted in (1982) 21 ILM 1261.

⁵² See above n 51, arts 192-196.

damage in the first sense.⁵³ Its success was and still is dependent upon acceptance by states of scientific evidence of ozone depletion.⁵⁴

The International Convention on Civil Liability for Oil Pollution Damage⁵⁵ is an example of a treaty which is a response to damage, in the second sense. Its provisions are only activated after damage has occurred. The treaty incorporates a procedure for allocating financial liability as a result of damage due to a major oil spillage. It provides that the owner of a ship is liable for any oil pollution damage caused within the territorial boundaries of a contracting state. A further example of this type of response to damage is the Brussels Convention on the Liability of Operators of Nuclear Ships.⁵⁶ Pursuant to Article 3, the operator of a nuclear ship is liable for damage caused by the escape of ionising material from its ship. This is so even if fault can be proven against other parties.

It is contended that a treaty to control the greenhouse effect, which is a response to damage in the two senses outlined above, is an unsuitable solution. First, from scientific reports it appears to be imperative that effective action be taken prior to unequivocal evidence of global climate warming and resultant damage. There is no clear estimate yet of how long we will have to wait for this evidence.⁵⁷ But there is growing concern that, if we delay taking preventative action, the resultant damage might well be irreparable.

Secondly, the greenhouse effect requires a preventive response, not only because of the nature of the damage predicted, but also because of the causes. Whilst states might accept liability for ultrahazardous activities, such as those involving nuclear energy, they are less likely to accept liability in respect of an activity essential to their industrial economies. It is submitted that states would be more receptive to a treaty regime which assists them to prevent pollution than one which merely imposes liability upon them should they not comply with its regime. CO₂ is the by-product of essential energy production. It is not the by-product of a high risk activity.

Thirdly, the imposition of penalties arguably does little to change attitudes. Ultimately, the only successful solution will be one which states are prepared to accept.

⁵³ In Dickstein's opinion, the International Convention for the Prevention of Pollution of the Sea by Oil is the only convention to deal with prevention of major marine pollution, prior to its occurrence, see above n 40, 255. Compare with B Blegen's "International Co-operation in Protection of Atmospheric Ozone: The Montreal Protocol on Substances that Deplete the Ozone Layer" (1988) 16 Den J Int'l L & Pol'y 413, 424-425. Presumably Blegen is referring to damage caused as a result of ozone depletion. Damage to the ozone layer itself has already occurred.

⁵⁴ A group of American scientists has recently challenged the authenticity of research into ozone depletion over the Antarctic. See *The Dominion*, Wellington, New Zealand, 13 June 1989.

⁵⁵ See above n 48.

⁵⁶ See above n 49.

⁵⁷ For example, some commentators estimate that conclusive scientific evidence of the greenhouse effect may be available in 10-20 years. It has been suggested that the earth may not experience substantial damage for some 100 years.

It is submitted that they are more likely to accept a solution whereby the international community jointly proposes, prepares and executes a co-operative plan of action to prevent future pollution. In the words of one writer:⁵⁸

Multiple and fluctuating changes in the environment call for dynamic environmental quality objectives rather than a static set of quality standards The large number of variables involved, the probability of future change in atmospheric conditions without man's interference, and the need for affirmative action make co-operative management a necessity. Maximum utilization with minimum damage to the environment can be secured effectively only through joint planning.

3 *Regional in Scope*

Many treaties take a regional approach to international pollution. Pollution is treated as being isolated to a particular region of the earth. States within that region, prepared to try and control that pollution, will then enter into treaty regimes. For example, the Convention on the Protection of the Environment⁵⁹ provides a framework for compensatory relief for persons injured by transboundary air or water nuisances. The only parties to the convention are Denmark, Finland, Norway and Sweden, yet the type of pollution identified is certainly common to all Europe. In practice, probably only the Nordic countries of Europe could reach agreement. However, the point must still be that transboundary pollution in Europe is not satisfactorily dealt with by treaty.

It is possible that a treaty would seek to control the greenhouse effect by regulating the activities of only today's major contributors of CO₂.⁶⁰ This might be an acceptable solution in respect of pollutants easily traceable to one or two sources.⁶¹ It is not a satisfactory solution when a pollutant, such as CO₂, is emitted by all the world's states. Further, such a regional approach would amount only to a short term measure because the identity of the major contributors of CO₂ will probably change over the next 30-40 years.⁶²

It has been suggested by one commentator⁶³ that the Protocol is the first truly global approach to an environmental problem as it has been addressed by countries from a variety of ideological and economic backgrounds. It is submitted that this comment is

⁵⁸ L G Lee "International Legal Aspects of Pollution of the Atmosphere" (1971) 21 U Toronto L J 203, 205.

⁵⁹ The Convention on the Protection of the Environment reprinted (1974) 13 ILM 591 (referred to as the Nordic Convention). In comparison the Convention on Long-Range Transboundary Air Pollution, reprinted (1979) 18 ILM 1442, is not as regional as the Nordic Convention. A far greater number of states are party to it. However, its provisions are considerably weaker.

⁶⁰ See above n 31.

⁶¹ See above n 45.

⁶² Rotty predicts that by the year 2025, CO₂ combination patterns will have changed. Developing countries will be responsible for a far larger proportion of CO₂ emissions. See above n 31.

⁶³ J Bruneo *Acid Rain and Ozone Layer Depletion: International Law and Regulation* (Dobbs Ferry, NY, Transnational Publishers, Inc, 1988).

rather optimistic in view of the fact that, as at March 1989, there were still only some 33 signatories.

4 *A Suitable Solution?*

Is this piecemeal approach a suitable means of controlling the greenhouse effect (eg: by way of a treaty regime to control CO₂ emissions)? It is submitted that it is both unsuitable and undesirable. The greenhouse effect is too extensive a problem. It is symptomatic of mankind's exploitative attitude toward the earth's environment as a whole. This is an attitude which has, to date, ignored the inter-dependence of the activities of the world's states and the inter-relationship of the systems which make up the earth's biosphere. Two factors are becoming clear. First, as a result of this attitude, environmental damage of a global nature is occurring to systems which are essential to the whole of the earth's survival. Mankind can change the earth's climates. Secondly, the greenhouse effect could be just one of many potential global environmental disasters of which we are not yet aware and which are a result of continued exploitation. These factors perhaps indicate that we have entered a new era of environmental pollution. This new era demands that we address not only the activity (ie: emission of CO₂) but, more importantly, the exploitative attitude behind the activity.

III NEW APPROACHES TO INTERNATIONAL LEGAL CONTROL

A *Resource Management Approach*

The resource management approach starts from the premise that there are, primarily, two natural resources relevant to the greenhouse effect. They are the atmosphere and fossil fuels.⁶⁴ It recognises that, as the atmosphere is a global resource its use must be shared by all the world's states. To facilitate shared use its exploitation must be controlled. The emphasis is upon states co-operating in exploitation decisions. As a result, controlled exploitation will protect the atmosphere and preserve it for shared use. This resource management approach is reviewed below.

1 *The Atmosphere*

States are currently dumping vast amounts of CO₂ (a pollutant) into the atmosphere, thereby detrimentally affecting its quality. This dumping amounts to free use of the resource by states. The costs of using this resource are not internalized by the user states. The resource management approach demands that use of this resource is managed in order to preserve its quality. In this context management means controlling the amount of CO₂ emitted into the atmosphere. The basic nature of the problem is, at this level, one of pollution control.

⁶⁴ See generally E Brown Weiss "A Resource Management Approach to Carbon Dioxide During the Century of Transition" (1980/81) 10 Den J Int'l L & Pol'y 487.

2 *Fossil Fuels*

Fossil fuels are the world's primary energy resource. Their use is fundamental to economic development by industrialization. The world's reserves of fossil fuels are limited. As a result, in the short term, use will have to become more efficient and, in the long term, states will be faced with transition from fossil fuel to non-fossil fuel economies. Consequently, states must manage their fossil fuel resources during this period of transition which is estimated to be between 50 and 100 years. In this context management means control of fossil fuel use to limit CO₂ emission, in order to control climate change during the period of transition. During the transitional period states will have time to develop new methods of energy generation, new techniques for limiting CO₂ emission (eg: CO₂ storing, recycling etc) and methods of adaptation to climate change. The basic nature of the problem, at this level, is one of energy management. Together, management of both the atmosphere and fossil fuels has been termed a CO₂ transition strategy.⁶⁵ This strategy views management of the use of fossil fuels, and resultant CO₂ emissions, as a relatively short term requirement.

3 *Implementation*

How is it proposed that the "CO₂ transition strategy" be implemented? The suggestion is that the strategy be implemented at two levels, national and international.

(a) *National Strategies:* At the national level it is suggested that the following be introduced by regulation:

- (i) environmental impact reports for new projects;
- (ii) industry incentives to encourage research into limiting CO₂ emission from fossil fuels (eg: CO₂ recycling, storing and carbon cleaning) and alternative energy sources;
- (iii) limitations on coal production, export and use;
- (iv) use of renewable energy resources which are environmentally sound;
- (v) emission control (by regulation or tax incentive);
- (vi) conservation of energy resources;
- (vii) controls on deforestation.

(b) *International Strategies:* At the international level it is far more difficult to control conduct than it is at the national level. Sovereign states are reluctant to accept external control over their sovereign rights. In an attempt to address this problem, the suggestion is that states act co-operatively to control CO₂ emission. Specifically, it is envisaged that those states which contribute most to CO₂ emission enter into a multilateral treaty.⁶⁶ However, it is crucial that other states eventually become parties to a treaty, as it is predicted that by the year 2025, CO₂ contribution patterns will have changed.⁶⁷

⁶⁵ See above n 64.

⁶⁶ See above n 64.

⁶⁷ See above n 62.

The focus of the international regime would be on emission control. It is suggested that this be achieved by formulating "... acceptable limits [of emission control] which would be determined scientifically to be linked with given levels of temperature increases ...".⁶⁸ It is envisaged that states create a forum at which they agree to an international ambient standard. Emission limitations, designed to meet the ambient standard, could then be implemented at national levels.⁶⁹

4 *A Suitable Solution?*

It is submitted that there are a number of quite serious problems with this suggested regime.

(a) *Science*: First, and foremost, the scientific data, upon which an ambient standard for CO₂ could be linked to acceptable temperature increases, as yet does not exist. There seems to be an agreement that this data will be obtained in time. How much time is there? What are acceptable levels of temperature increase? Could states reach agreement on an international ambient standard?

(b) *Agreement*: Recent international attempts to control ozone depletion are illustrative of the problems. At first glance, the international community appears to be moving rapidly toward agreement to ban CFCs and halons. In reality this movement has not been as rapid as at first appears. Initial calls for bans began in the early 1970s.⁷⁰ The Protocol came into force some 15 years later and is yet to be ratified by the majority of the world's states.⁷¹ How much time do we have to reach agreement on CO₂ ambient standards before irreparable damage occurs?⁷²

⁶⁸ See above n 64, 502.

⁶⁹ The US Clean Air Act is an example of this type of approach to emission control. The federal government establishes national ambient air quality standards for pollutants listed in the Act. States then formulate emission standards, which specify quantitative limits on the amount of pollutants which may be released.

⁷⁰ A theory on ozone depletion, in 1974, initiated scientific and legal activities in various countries. M Molina and F S R Rowland "Stratospheric Sink for Chlorofluoromethanes: Chlorine Atom Catalysed Destruction Ozone" (1974) 249 *Nature* 810. The ozone hole over Antarctica was first discovered by a British scientist, the late Professor Sir Gordon Dobson.

⁷¹ The Protocol came into force on 1 January 1989. As at 31 August 1989, 46 states had signed the Protocol and 42 had ratified (43 including the European Community). Signatory states account for 86% of global CFC consumption (information supplied by the Ministry of External Relations and Trade). Agreement as to the extent of the ban eg: 50% or 85% (of 1986 levels) or a total ban, does not yet exist. The Saving the Ozone Layer Conference held in London (March 1989) advocated an 85% ban.

⁷² Global warming could occur more rapidly than initially predicted if the process known as "biogenic feedback" occurs. This process occurs when increased atmospheric temperatures trigger the emission of deposits of natural gases presently trapped in the soil and ocean. CO₂ in the atmosphere could double, 10 to 15 years earlier than initially predicted. See *The Dominion*, Wellington, New Zealand, 31 May 1989.

The possibility of obtaining such an agreement is even more remote when the essential differences between ozone depletion and the greenhouse effect are considered. Both can currently be viewed as being caused by emissions by a small number of developed states. However, the cause of the greenhouse effect, the production and use of fossil fuels, is at the heart of economic development. The economic costs of reducing use and finding substitutes for fossil fuels is likely to be enormous, whereas substitutes for CFCs are relatively easy to develop at acceptable costs. More importantly, the effect of CFC emissions on the ozone layer have been rapid and dramatic. Recent scientific data has propelled current international initiatives.⁷³ As previously mentioned the effects of CO₂ emission are likely to be more gradual and subject to oscillation. It may be many years before the effects manifest themselves with sufficient certainty for states to be convinced that CO₂ ambient standards are required. Again, how long can we wait? Irreparable damage could be done before action is taken.

(c) *Allocation*: Could states agree on the allocation of emission limits as between themselves? How would these limitations be translated at a national level? It is submitted that, at an international level, allocation would be too political an issue to be achievable. For example, should developing states be parties to the treaty, their claim to a right to develop would have to be balanced against the activity of developed states' existing industries.

(d) *Parties*: As already mentioned,⁷⁴ future emissions by developing states will have to be addressed. If a limited number of states agree today to restrict their CO₂ emissions, what assurance do they have that developing states will, in the future, do the same?

(e) *Costs*: The relative costs of emission control will vary between developed and developing states. Developed states have the technology to address emission control without substantially affecting economic growth. Do developing countries have this ability?

5 *Precedents*

Aspects of the proposed treaty regime, considered above, are not without precedent.⁷⁵ The various precedents considered below demonstrate a co-operative element similar to that suggested as part of the international strategy for the greenhouse effect. Some are also illustrative of attempts to set standards, at an international level, which are then implemented at the national level.

(a) *International Michigan - Ontario Air Pollution Board*: The International Joint Commission was established by the Boundary Waters Treaty of 1909, between

⁷³ In particular the discovery of the ozone hole over Antarctic by the British Antarctic Expedition in 1985.

⁷⁴ See accompanying text, para 316.

⁷⁵ Eg: US Clean Air Act, see above n 69.

Canada and the United States.⁷⁶ Its initial function was to oversee water quality protection along the US/Canadian boundary. Transboundary water pollution problems could be referred to the IJC by either government. It could investigate and make recommendations and "... supervise compliance with water quality standards it finds to be in order."⁷⁷ In the early 1970s it undertook to mitigate air pollution problems between Michigan and Ontario. The IJC established the International Michigan-Ontario Air Pollution Board for this purpose. The function of this board is to "... co-ordinate the implementation of air pollution control programs including setting a minimum basis for emission standards".⁷⁸

(b) *Convention on the Protection of the Rhine Against Chemical Pollution:*⁷⁹ Under this Convention parties⁸⁰ agree to eliminate or reduce the discharge of specified pollutants.⁸¹ The International Commission for the Protection of the Rhine Against Pollution⁸² establishes "concentration limits".⁸³ States are obliged to set emission standards which do not exceed these concentration limits.⁸⁴ The ICP also co-ordinates implementation.⁸⁵

(c) *Convention on Long Range Transboundary Air Pollution:*⁸⁶ This Convention provides an example of an established international body, called the Executive Body, whose task is to implement and develop⁸⁷ means of reducing and preventing air pollution.⁸⁸ At present its usefulness as an example is limited. The 35 signatories are all members of the United Nations Economic Commission for Europe. Developing countries are not members. Further the Convention does not impose abatement standards. It is primarily concerned with duties to consult, exchange information and co-operate in research.

(d) *The Vienna Convention for the Protection of the Ozone Layer*⁸⁹ and the *Protocol*: The Vienna Convention and the Protocol are perhaps the most recent examples of a resource management approach to international environmental

⁷⁶ Treaty with Great Britain Relating to Boundary Waters between the United States and Canada, 11 January, 1909, 36 Stat 2448, TS N548 (the "IJC").

⁷⁷ V P Nanda "The Establishment of International Standards for Transnational Environmental Injury" (1975) 60 Iowa L R 1089, 1106.

⁷⁸ See above n 64, 496.

⁷⁹ Convention on the Protection of the Rhine Against Chemical Pollution, reprinted in (1977) 16 ILM 242.

⁸⁰ France, Germany, Luxembourg, Netherlands and Switzerland.

⁸¹ See above n 79 art 1 (a) and (b).

⁸² International Commission for the Protection of the Rhine Against Pollution (the "ICP").

⁸³ See above n 79, arts 3 and 5.

⁸⁴ See above n 79.

⁸⁵ See above n 79, art 5.

⁸⁶ Convention on Long Range Transboundary Air Pollution, reprinted in (1979) 18 ILM 1442.

⁸⁷ See above n 59, art 10.

⁸⁸ See above n 59, art 2.

⁸⁹ Vienna Convention for the Protection of the Ozone Layer, reprinted in (1987) 26 ILM 1516 (the "Vienna Convention").

pollution. In this instance the resource is the world's ozone layer. The Vienna Convention provides a global framework designed to protect the world's ozone layer. Recognising the need for continuing research and observation of the ozone layer, it provides a framework for future co-operation and for the implementation for specific obligations. The Protocol is the means by which parties have, to date, implemented a number of specific obligations as to production and consumption of CFCs and halons.⁹⁰ The Protocol can, in turn, be amended or extended, enabling parties to regulate future threats to the ozone layer.⁹¹ It is the element of co-operation, the capacity to extend provisions to regulate future threats, and the recognition of the ozone layer as a global resource which characterise the Vienna Convention and Protocol as a resource management approach.

B Global Environmental Treaty

A global environmental treaty might take many different forms. For example, it could be a very general instrument which formulates only broad legal norms to govern the behaviour of states. Alternatively, such a treaty might include detail as to standards of behaviour, liability, procedural obligations, enforcement and supporting institutions. As yet there is no consistent opinion as to the form, content or underlying legal principles of a global environmental treaty. But there is clearly a growing concern that, in light of global environmental threats such as the greenhouse effect, such a treaty is needed. In the words of the former Deputy Prime Minister, Geoffrey Palmer:⁹²

[T]he international institutions that we have [are not and] the state of our international law is not adequate for dealing with the threats to the environment that confront us. The threats which come from climate change and the greenhouse effect are even more serious in their potential implications than the threat to the ozone layer We need a charter for the environment that all nations can agree with that is enforceable at international law and which the International Court of Justice can have a role in.

There are two primary differences between a global environmental treaty, and the treaties discussed earlier. First, the starting point is quite different. The greenhouse effect is an example of a global threat, which requires truly global solutions. Global solutions mean, not only the participation of all states, but also a change in attitude toward the whole of the earth's environment. This new attitude recognises that we must preserve and protect the earth's environment for the good of all mankind. The starting point of traditional treaty regimes is with the pollutant(s) in question. They primarily seek to control the emission of specific pollutant(s). As regards the resource management approach, the starting point is with the resource (eg: atmosphere or ozone

⁹⁰ See above n 41. Each party computes its own 1986 production and consumption level of CFCs and halons. It is up to the parties, at the national level, to achieve the specified limits.

⁹¹ For example, additional substances, considered to be ozone depleting, can be added by amending Annex A. At present only CFCs and halons are listed.

⁹² Deputy Prime Minister's Press Conference with New Zealand Press: Tuesday 7 March 1989.

layer), the exploitation of which must be controlled to enable shared use of it.⁹³ The second difference is concomitant with the first. A global environmental treaty is not limited in its scope to combating the greenhouse effect. Such a treaty acknowledges that, if current exploitative attitudes towards the environment continue, the greenhouse effect may be only one of many potential global environmental threats.

1 *Calls for a Global Environmental Treaty*

The movement towards a global environmental treaty is a relatively new one. There is growing evidence that this movement is quickly gaining acceptance by states. This evidence consists of a number of declarations, resolutions and comments by world leaders.

(a) *Stockholm Declaration of 1972*:⁹⁴ Principles 1, 2 and 3 were perhaps the origin of succeeding calls for a global environmental treaty.

Principle 1: Man has the fundamental right to freedom, equality and adequate conditions of life, in an environment of a quality that permits a life of dignity and well-being, and he bears a solemn responsibility to protect and improve the environment for present and future generations.

Principle 2: The national resources of the earth including air, water, land, flora and fauna and especially representative samples of natural ecosystems must be safeguarded for the benefit of present and future generations through careful planning or management, as appropriate.

Principle 3: The capacity of the earth to produce vital renewable resources must be maintained and, wherever practicable, restored or improved.

(b) *The Environmental Perspective to the Year 2000 and Beyond*:⁹⁵ This United Nations resolution considered a "...global convention on protection and enhancement of the environment..." to be a desirable result of a "...progressive emergence of general environmental norms and principles and the codification of existing agreements...".

(c) *Protection of the Global Climate for Present and Future Generations of Mankind*:⁹⁶ Having recognised that climate change is a "...common concern of mankind..." this resolution determined that "...necessary and timely action should be taken to deal with climate changes within a global framework...".

⁹³ For example, the Protocol seeks to control emission of CFCs and halons by imposing limitations on production and consumption. See above n 90.

⁹⁴ Declaration of the United Nations Conference on the Human Environment (1972), reprinted in (1972) 11 ILM 1416.

⁹⁵ The Environmental Perspective to the Year 2000 and Beyond: Gen Ass Res 42/186 (adopted 11 December 1987) printed in UN Publication GA 7612 (13 January 1988) "Resolutions and Decisions adopted by the General Assembly during the first part of its 42nd session, 15 September to 21 December 1987".

⁹⁶ Protection of Global Climate for Present and Future Generations of Mankind: GAOR A/43/53.

(d) *Our Common Future*:⁹⁷ The World Commission on Environment and Development was prepared to be slightly more detailed in its call. It considered that there was a need for a new charter to guide state behaviour:⁹⁸

It [a charter] would provide a basis for, and be subsequently expanded into a Convention, setting out the sovereign rights and reciprocal responsibilities of all states on environmental protection and sustainable development. The charter should prescribe new norms for state and interstate behaviour needed to maintain livelihoods and life on our shared planet, including basic norms for prior notification, consultation and assessment of activities likely to have an impact on neighbouring states or global commons ... Although a few such norms have evolved in some bilateral and regional arrangements, the lack of wider agreement on such basic rules of interstate behaviour undermines both the sovereignty and economic development potential of each and all states.

To conclude, the World Commission on Environment and Development recommended that the General Assembly commit itself to preparing a universal declaration and later a convention on environmental protection and sustainable development.

(e) *The USSR Call*: The Foreign Minister, Edward Shevardnadze, recently called for a treaty that would make mandatory international conduct for protection of the environment. He said:⁹⁹

It would seem that if the decisions of [the 1992 UN Conference on the Environment] were given a mandatory legal status, in the form perhaps of a global framework convention, it would be possible to ensure strict compliance by all States with the rules of an environmentally sound world community.

2 *A Recent Example: The Hague Declaration*

The Hague Declaration¹⁰⁰ is an interesting example of a recent attempt to combat the greenhouse effect, within a global regime for the protection of the atmosphere. The Declaration did not cast its net as wide as the *whole of the world's environment*. But, in the words of the former Deputy Prime Minister, Geoffrey Palmer, in his address to the Hague Conference: "A global charter for the environment should be our objective and The Hague Declaration is the first step".¹⁰¹

The primary objective of the Declaration is to initiate the establishment of a new institutional authority, within the framework of the United Nations. This new

⁹⁷ The World Commission on Environment and Development *Our Common Future* (Oxford University Press, New York, 1987).

⁹⁸ See above n 97, 332.

⁹⁹ *The Dominion*, Wellington, New Zealand, 23 May 1989.

¹⁰⁰ Declaration of The Hague, 11 March 1989 (the "Declaration").

¹⁰¹ Address by Deputy Prime Minister, Rt Hon Geoffrey Palmer to the Summit on the Protection of the Global Atmosphere, The Hague, 11 March 1989.

institution "... in the context of the preservation of the earth's atmosphere, shall be responsible for combating any further global warming of the atmosphere ...".¹⁰²

The succeeding paragraphs of the Declaration provide detail as to how this new institution is to discharge its responsibilities. In summary:

- (a) It is to develop instruments, and define standards, to guarantee protection of the atmosphere, and monitor compliance with those standards;
- (b) Its decisions need not be made by unanimous agreement but shall be subject to control by the International Court of Justice.

The principles stated in the Declaration are general. They do not give direction as to the content of the "... framework conventions or other instruments necessary to establish institutional authority and to implement the other principles stated ... to protect the atmosphere and to counter climate change, particularly global warming".¹⁰³

This is probably due to the fact that the Declaration was the product of only a few days' discussion between the 24 countries participating.¹⁰⁴ Agreement as to such detail would not have been possible. The participants envisaged that this more detailed work would take place within, and in close co-ordination with, UN agencies.¹⁰⁵

The preamble of the Declaration uses expansive language. It recognises that global problems require global solutions and suggests that such solutions involve:¹⁰⁶

...not only the fundamental duty to preserve the eco-system, but also the right to live in dignity in a viable global environment, and the consequent duty of the community of nations vis-à-vis present and future generations to do all that can be done to preserve the quality of the atmosphere.

It is likely that any legal instrument(s) required to give effect to the principles of the Declaration will use similar language.

The success of the Declaration, in achieving its objectives, will depend largely on the efforts of its signatories and upon the attitude of the international community. If press reports at the time of the conference are accurate, success may be doubtful. Critics have dismissed the Declaration's objectives as "utopian dreams".¹⁰⁷ Britain refused to attend on the basis that there are already enough institutions able to deal with the problem. Belgium was insulted at not being invited to attend and the USA and the

¹⁰² See above n 100.

¹⁰³ See above n 100.

¹⁰⁴ Major states not party to the Declaration are the USA, USSR, United Kingdom, China and East Germany.

¹⁰⁵ See above n 100.

¹⁰⁶ See above n 100.

¹⁰⁷ "Squabbling spoils meeting to form pollution watchdog" *The Times*, London, 11 March 1989.

Soviet Union were excluded to avoid "super power rivalry".¹⁰⁸ Such conflicts must raise grave concerns as to the international community's ability to move into a "new stage of international co-operation",¹⁰⁹ in time to avert serious global environmental damage.

IV CONCLUSION

Might a global environmental treaty be a suitable international legal solution to the greenhouse effect? It is submitted that the notion of a global environmental treaty is, in a number of respects, superior to the other approaches considered. This is primarily because it seeks to provide a global solution.

First, such a treaty contemplates that all the world's states will be parties and thereby recognises the interdependence of mankind's activities. As a consequence, the treaty will have to deal with the interests of developing states. This may not be an impossible task. The Protocol recognises the special requirements of developing states by entitling them to delay compliance with substantive provisions of the Protocol.¹¹⁰ Developing states are also permitted to increase production of CFCs and halons, for up to 10 years following the entry into force of the Protocol, in order to enhance their economic development.¹¹¹ The Hague Declaration dealt with the issue in these terms:¹¹²

The principle that countries to which decisions taken to protect the atmosphere should prove to be an *abnormal* or *special burden*, in view, inter alia, of the level of their development and actual responsibility for the deterioration of the atmosphere, shall receive *fair* and *equitable* assistance to *compensate* them for bearing such burden. To this end mechanisms will be developed.

Secondly, by approaching the problem from the perspective of an imperative requirement that all states preserve and protect the world's environment, the problem of the attitude behind exploitation of the environment is being addressed. In this sense it may well prove to be a truly preventive solution. Without a change in attitude, the environment will continue to be at risk.

Thirdly, by attempting to protect the whole of the world's environment, the regime recognises the interdependence of the world's biosystems. Environmental pollution is now occurring on a new scale, the consequences can be global, and the extent and variety of threats, as yet, undefined.

Trite though it may be, the success of a global environmental treaty is dependent upon the conscience of the world's states. It will always be possible to find objections justifying non-participation or non-compliance.

¹⁰⁸ See above n 107.

¹⁰⁹ See above n 107.

¹¹⁰ See above n 41, at 5 (1).

¹¹¹ See above n 41, at 5 (1).

¹¹² See above n 100, principle (d) (emphasis added). Query the meaning of the words emphasised.

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