

Global Governance of Climate Change Through an International Regime

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Climate change is largely attributed to the rise in greenhouse gases (GHGs) because of increased economic activities (e.g. manufacturing) propelled by globalization. Degrees of exposure to the effects of climate change vary, but all continents are affected. The impact transcends boundaries and generations. The seriousness of this environmental problem has made it a political issue, begging for solutions at the international level and the cooperation of every country. From holding conferences and agenda setting, the international regime on climate change has advanced to devising international legal instruments and creating institutions or organizations tasked to manage the problem. To weather the challenges that could undermine its effectiveness, the regime should first and foremost be able to increase its capacity to implement agreements and ensure compliance of participating countries. Toward this end, the regime should be democratic, transparent and accountable for its activities to be legitimate in the eyes of governments, industry and the broader civil society.

Those engaged in the study of globalization have commonly concentrated on the proliferation of the market economy and the growing economic interdependence of countries worldwide through the increasing quantity and variety of transactions in goods and services and of capital flows across state borders. Environmental politics has rarely been considered in the study of the dynamics of globalization, but often taken up in the realm of geopolitics.

However, the increased economic output brought about by globalization appears to cause the diminution of the global natural resource base, and has upset the regenerative system of the earth by the negative externalities derived from the activities that propel globalization (e.g. manufacturing). Global warming is considered one of these externalities, and protest movements against globalization have attributed it to the multinational corporations engaged in marketing the fossil fuels that exacerbate the concentration of greenhouse gases (GHGs) in the atmosphere.¹

Global climate change, largely believed to be the effect of the rise of GHGs in the atmosphere chiefly brought about by anthropogenic (man

made) causes, has recently been the focus of a number of study in politics and sociology, primarily for its potential impact on societies. As suggested by the Intergovernmental Panel on Climate Change (IPCC), it is estimated that the average global temperature will increase from 1°C to 3.5°C over the next century.² Some experts and scientists argue that it is not the change in the global climatic system itself which is startling about global climate change but the several hazard effects that it may trigger. Scientists predict that long term climate changes and extremes in temperature, wind, pressure, precipitation and humidity will result in increased number of severe storms, floods and droughts. It could also result in the rise of sea level leading to erosion and at worst tsunami.³ The seriousness of the possible effects of climate change and its likely impact on humanity have made this environmental issue a political one.

Bringing the Climate Change Issue on the International Agenda

Actually, there is no agreement yet among scientists on the extent and intensity of the possible effects of global climate change.⁴ There are still debates whether there are changes in the global climate system at all. With the uncertainties on the effects and occurrence of climate change, how then did it get on the international agenda?

Bodansky noted that climate change did not emerge as a *political* issue until the last decade.⁵ Although as early as 1979, there were already efforts to attract participation by policy makers in the First World Climate Conference, the undertaking proved unsuccessful the same in 1985, when a major workshop on climate change was held in Villach, Austria.⁶ It was in the late 1980s, when the "US Congress was holding frequent hearings on global warming, that the issue was raised and discussed in the UN General Assembly (UNGA), and international meetings such as the 1988 Toronto Conference, the 1989 Hague and Noordwijk Conferences, and the 1990 Second World Climate Conference attracted numerous ministers and even some heads of government."⁷ Further, it was also in the late 1980s when the concerns of scientists and environmental lobbyists coincided with anomalous climatic events and exceptionally warm weather.⁸ This opened the opportunity for policy action on the issue of climate change. But there are those who assume that it was the scientific assessment reports of the IPCC ascertaining the reality of global climate change that became the principal vehicle for agenda formation at the international level among the policy makers. The

IPCC reports played a crucial role in monitoring the state of scientific knowledge concerning climate change and bringing it in a policy-relevant fashion that became the groundwork for the preparatory documents for negotiations by the UN Environment Programme (UNEP) and the World Meteorological Organization (WMO).

Having been formally included in the international agenda, the climate change problem now demands a solution at the international level. Hence, from holding conferences and agenda setting, the international regime on climate change began to develop – advancing to the stages of devising international legal instruments and to creating institutions or organizations tasked to manage the global climate change problem.

The Inevitability of an International Regime in Addressing the Climate Change Problem

Is there a real need for an international response to climate change? Is an international regime on climate change essential in abating the possible catastrophic effects of the phenomenon?

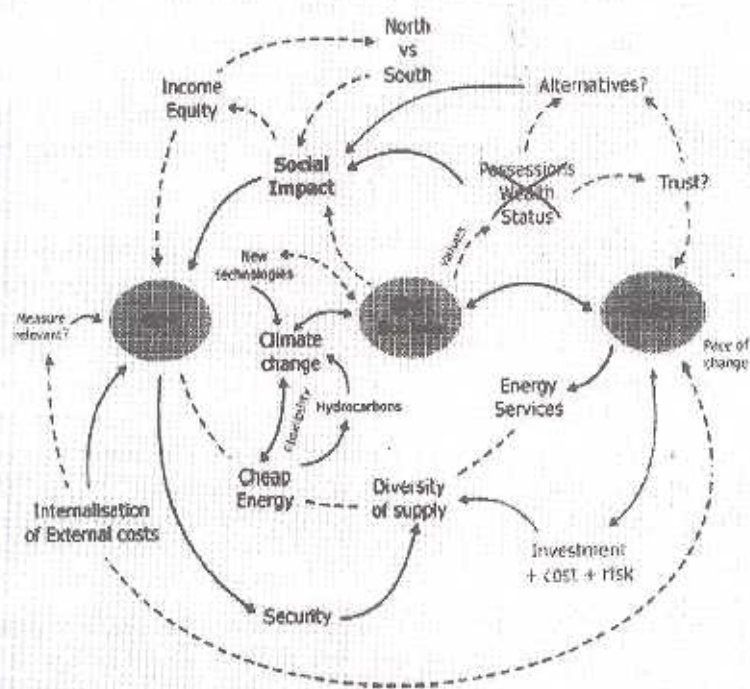
Although there are unequal degrees of exposure of populations to the impact of climate change, *all* continents, including *all* their inhabitants, are affected by it. *It transcends boundaries and generations.* This is based on the fact that life and its ecological support systems are interconnected. Benedick noted that “modern scientific discoveries are revealing that localized activities can have global consequences and that dangers can be slow and perhaps barely perceptible in their development, yet with long-term and virtually irreversible effects”.⁹ For example, an industrialized country such as Canada may be emitting more anthropogenic GHGs in the atmosphere than the developing countries in the Pacific, but the sea level rise due to climate change would primarily submerge villages in these countries situated on broad, flat coastal plains which are economically dependent on agriculture. Effects may be disastrous even to those countries which are not one of the major contributors to rising level of anthropogenic GHGs.

The effects of climate change are not merely ecological. Its projected impact on human activities could be severe, and thus, can significantly

alter lifestyles and economies. Massive migration, as a consequence of rise in sea level, would entail reconsideration and adjustments on the existing policies of host countries. Shifts in the utilization of energy sources could modify or even revolutionize our present technology. Clearly, "global climate change is a problem of interaction between nature and society".¹⁰

Some experts from government, industry, think tanks and non-governmental organizations (NGOs) from North America and Europe made an illustration of the interrelations of economic growth and impact of climate change, which supports the claim of Kondratyev that global climate change is a problem of interaction between the natural environment and society.

Figure 1 Interdependencies of economic growth and environmental impact



Source: Workshop report on *Building a Low Carbon Future: The role of governments, businesses and NGOs* (June 2001)

Some might even contend that an international regime on climate change would be unnecessary. Given the fact that the industrialized countries are historically responsible for the current level of concentration of anthropogenic GHGs, logically, as others might argue, these countries should be the ones to act upon this problem. While it is true that developing countries, with 80 percent of the world's population, emit only 36 percent of the carbon, at an average of about 0.5 tons per capita compared to the 3.7 and 2.0 tons per capita respective averages for industrialized countries and economies in transition, it is estimated that the aggregate emissions of developing countries will overtake the rest in about 20 years.¹¹ Hence, *all are responsible for this problem of climate change*. All countries, therefore, should undertake the essential steps in dealing with this problem through a collective international response.

The proponents and adherents of Neoliberal Institutionalism maintain that in circumstances that require international cooperation, international institutions could play an important role in facilitating collaborative action. Whereas realists are skeptical of the international institutions in initiating and establishing cooperation among states, neoliberals are confident that cooperation can be instituted by global institutions through appropriate structures and instruments that will govern or manage the relationships among the participants.

Perhaps, the position of neoliberals that international institutions (or what others refer to as international regimes¹²) are vital in bringing about cooperation among states should not be disputed upon. For liberals, shared interests (such as resolving environmental problems) form the basis for "collaborative and cooperative social action", not only at the domestic but at the international level as well. In assessing the appropriateness of creating an international regime in addressing the climate change problem, it is perhaps more important to know the specific advantages of international collective action through elaborate political and legal arrangements.

To better understand the significance of a concerted action of states at the international level in dealing with global climate change, it is essential to specify the particular tasks of the international climate change regime and describe how the international climate change regime act to promote collaborative action among state and other important actors.

In general and in more fundamental terms, the international climate change regime is expected to:

- build a shared understanding among the policy makers of the challenges of reducing GHG emissions;
- build a shared understanding of the different roles of the actors involved; and
- look further for new ideas for policies or initiatives that could deliver change.¹³

The international climate change regime has two components: 1) the international structures or organizations and 2) the international legal instruments on climate change.

The first component is composed of four major structures/organizations¹⁴ namely: 1) the Conference of Parties (CoP) which serves as a venue for making the decisions necessary to promote the effective implementation of the Convention on climate change; 2) the Secretariat which is tasked to compile and transmit reports submitted to it, to facilitate assistance to the CoP in preparing and communicating information, and to serve as the interface for coordination of all agencies (such as the Global Environmental Facility [GEF]) involved in implementation; 3) the subsidiary bodies which provide scientific and technological advice to the CoP based on scientific research, monitoring and integrated assessment models on climate change, and give policy recommendations for effective implementation of the negotiated emission reduction schemes; and 4) other specialized and subsidiary organizations of the United Nations such as the World Meteorological Organization (WMO), the United Nations Environment Programme (UNEP) and the GEF. Thus, basically, the first component of the regime provides the bureaucratic machinery, including the physical and logistical facilities, to facilitate formulation of policies and providing network of interactions by gathering policy makers and stakeholders in conferences and conventions. This arrangement provides the venue to express the positions and concerns of these policy makers and stakeholders. Moreover, information on climate change, whether scientific or policy related, is properly managed by these organizations for its provision, validation and dissemination to the policy makers and stakeholders. In addition, the organizations also manage and allocate resources among the participating countries, which may be financial or otherwise, for operational and

redistributive purposes such as technology transfer. They also ensure the effective implementation of the agreements arrived at by the policy makers and stakeholders, as well as guaranteeing the compliance to these agreements.

The second component of the international regime on climate change includes the UN Framework Convention on Climate Change (UNFCCC or FCCC) and the Kyoto Protocol. They are the legal instruments that determine what is appropriate, legitimate and proper in approaching the problem, and therefore, they define or specify the obligations, self-restraints and rights of states in mitigating the effects of climate change. The FCCC, which became an international law on March 21, 1994, has the following ultimate objective:

Stabilization of greenhouse gas concentrations 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 that food production is not threatened and to enable economic development to proceed in a sustainable manner.¹⁵

It is also important to note the four main principles¹⁶ where the FCCC is based upon:

- i) *Equity* – the global climate and the atmosphere belong equally to every human being.
- ii) *Precautionary action* – all climate science is based on estimates with associated uncertainties.
- iii) *Efficiency* – policies and measures to deal with climate change should be cost-effective so as to ensure global benefits at the lowest possible cost.
- iv) *Sustainable Development* – the exact meaning of this principle is still disputed, but it is commonly defined as *development which meets the needs of the present without compromising the ability of future generations to meet their own needs.*

Looking at its objective and the principles which serve as its basis, the FCCC appears to be a grand instrument. However, most scholars assert that the FCCC takes a relatively soft approach – it simply “establishes an infrastructure of institutions and legal mechanisms,

intended to create a long-term process to address the climate change problem, rather than impose strict obligations".¹⁷

At the first CoP in Berlin in 1995, the participants determined that the specific commitments in the FCCC for Annex 1 Parties were not "adequate". The Kyoto Protocol, which was adopted in December 1997 at the CoP 3, proposes stronger and more detailed commitments (quantified emission limitation and reduction commitment period) for participating countries in the reduction of the GHGs emissions. Further, it aims to promote modifications on policies and other reforms on specific economic activities such as energy utilization and agriculture. However, it is not yet feasible to evaluate its success since the Protocol has not entered into full force and effect up to this time.

Hence, how does the international climate change regime act to promote collaborative action?

The international climate regime, therefore, tries to foster collaborative action on the climate change problem by *regulating state behavior* through the international legal instruments, in particular the FCCC and the Protocol, and defining their appropriate courses of action. Implementation of the provisions set forth in these instruments and the compliance thereof to the agreements are administered and ensured by a number of international structures/organizations.

Challenges to the Effective Regime Implementation on Climate Change

Ideally, an international regime should be able to perform efficiently to bring about cooperation among states in addressing a global problem or concern such as the global climate change. In reality, however, there are flaws in the international climate change regime that make it difficult for the regime to perform its functions effectively and hinder the easy achievement of its goals.

The most fundamental problem is compliance of the participant states to the international agreements. There are a number of states that are unwilling or simply hesitant to conform with the emission standards in the absence of sanctions against non-compliance. There are practically no mechanisms in the FCCC or even in the Protocol that will compel or oblige the participating states to adhere to their commitments. Like in

most international legal instruments, it is difficult to stipulate provisions on sanctions against states that do not abide with the agreements as this could be interpreted by some states as threats to their sovereignty. Thus, some scholars refer to the FCCC as a "law without teeth".

The FCCC was rushed into completion in time for signature at the UN Conference on Environment and Development (UNCED) held in Rio de Janeiro in 1992. The provisions, therefore, of the FCCC appears to be more of general policy statements than a law. The FCCC as well as the Protocol are saddled with ambiguities. Consequently, as many have observed, the obligations are imprecise, and as a result, leave countries confused in interpreting these observed international agreements. There have been remarks that the drafters left undecided many rules, guidelines and procedures that will be necessary to fully understand the nature of obligations of each Party, and how decision-makers would take actions to enforce the obligations stipulated in the agreements.

Other countries are timid in complying with the emission limitation standards set forth in the FCCC and Protocol due to the uncertainties in the outcome of their action. Although the IPCC Scientific Assessment Reports have already established that there is indeed a rise in the GHGs level of concentration in the atmosphere, there are scientists and groups that claim that the targets agreed upon in Kyoto will not save the global climate. The critics declare that the targets are "environmentally inadequate and represent a political deal rather than an equitable solution to climate change" given the following estimates and projections:¹⁸

- Even if Parties achieved their targets fully, this would only slow the projected rise in global temperatures by a fraction of a °C - not enough to really halt climate change.
- The levels of carbon dioxide (CO₂) in the atmosphere, projected to be up 8 percent above 1990 levels by 2010, will only be about 0.4 percent lower if all the Kyoto targets are met.

This kind of projections makes some countries reluctant to comply with the international legal instruments on climate change because of the possibility that the preferred and expected outcomes will not be met.

Further, it should be considered that countries have different levels of capacity to respond to the problems. There are states that are willing to conform to the international system of addressing the climate change problem but fail to do so because their capacity to respond may be inadequate, particularly the developing countries. This is the explanation for some of the developing countries' insistence that industrialized countries or the North bear more of the obligations in abating the climate change problem, since the latter are historically responsible on the present level of GHG concentration in the atmosphere. They demand more resource transfers from the industrialized countries – both financial and technological, with lesser obligations on their part. There are conflicting interpretations of equity in assuming responsibility in the climate change problem due to the various levels of capacity of countries to respond to the problem.

Other states view that international structures and rules constrain and oppress states or groups of states by limiting their ability to have equal opportunities. Some states, especially the developing ones, are unwilling to give their commitments concerning the global climate change problem because they fear that this could limit their development aspirations. They are insufficiently informed of the substantial advances, in economic and social terms, that policy actions and programs on climate change may achieve. This position which maintains that international regimes, such as the climate change regime, can also be traced to the principle of state sovereignty. One of the first principles of international law is that state sovereignty involves control over natural resources. Further, the territorial form of the state and the principle of territoriality involve a claim of ownership over natural resources. "Ownership" in this sense, is interpreted not as "stewardship" but as "dominion" of the state, which avers that natural resources are there to be exploited for gain by the state. This attitude of states is in complete disregard of the transnational nature of climate change and in opposition to the maxim *sic utere tuo ut alienum non laedas* – one must not use his own as not to do injury to another.

The climatic system is undoubtedly complex, so is the climate change politics. Climate change politics is not purely interaction among states at the international level. It certainly involves other factors. In practice, the whole process of policy formulation and decision making at

the international level concerning the climate change problem is structured by patterns of perception and expectations at the domestic level that are shaped by social judgments and political biases. Even if the international climate change regime has very minimal flaws, some states may still be unwilling to be subjected to the regime. They may be constrained by the perceptions and sentiments of the several significant groups in opposition to that agreed upon by the policy makers and stakeholders at the international level. Or they may be constrained by their existing domestic policies that is in conflict with the international standards, where reforms or modifications can entail huge costs if they comply with the international legal instruments on climate change.

Meeting the Challenges

After assessing the impediments to the effective implementation of the climate change regime, it is essential to specify the means by which the regime may be properly managed.

The first thing that needs to be achieved is to increase the capacity of the regime to implement agreements and ensure compliance by the participating countries. Brack and Hyvarenin posit that a global environmental governance structure, such as the international climate change regime, "needs to possess legitimacy in the eyes of governments, industry and broader 'civil society'. It needs to be democratic, transparent and accountable for its activities".¹⁹ They further suggested the following:

- equitable representation and decision-making processes that do not discriminate against developing countries or other groups of countries;
- effective mechanisms that enable contributions by non-governmental actors; and
- transparent decision-making processes, including access to information.²⁰

Moreover, there should be greater efforts on the part of international organizations, particularly the subsidiary bodies on scientific and technical advice on climate change, to state sufficient and clear information on the effects of this problem. Specifically, they need to respond to the following concerns: 1) the presence of persistent scientific uncertainties, including

a pervasive and continuing ignorance about the timing, severity and regional distribution of effects of climate change; 2) a wide separation both in time and in space between those who benefit from industrial activity, and those who must absorb the damages; and 3) a protracted lag of unknown duration between the time at which a response strategy is implemented and expected observation of salutary effects.²¹ Through a better understanding of the possibilities and outcomes of certain actions, as well as the risks involved for compliance or non-compliance to the international legal instruments on climate change, states would be more willing to take radical policy decisions and actions on this issue. Consequently, defects in the international legal instruments would be remedied as states take strides to be more revolutionary in tackling the issue on climate change, setting aside the old values and principles such as national sovereignty.

According to Brack and Hyvarenin, "virtually by definition, developing countries and transition economies lack the capacity to implement environmental protection strategies as effectively as do industrialized countries".²² Thus, there should be transfers of financial resources and technology as well as capacity-building assistance to developing countries. Nevertheless, they emphasized that "an effective global environmental governance system needs to do more than ensure transfers of financial resources and technology and adequate capacity-building. It needs to be based on and implement principles of international equity, or 'fairness', which take into account:

- the historical responsibility of industrialized countries for global pollution levels;
- the development priorities of developing countries; and
- the need to match assistance to developing countries with the worsening trends of environmental degradation."²³

Lastly, states should increase their capacity in complying with the stipulations of the international legal instruments on climate change by formulating national policies in accordance with the FCCC and the Protocol. States should have the capacity to enlist the cooperation and support of the different sectors of their societies.

Conclusion

Realists and neo-realists are particularly critical of the plausibility of bringing states together in addressing specific global problems through cooperation such as climate change. Neorealists contend that states would not cooperate with each other, given their conflicting interests. Further, regimes may be manipulated (i.e., policies are deliberately established by *dominant actors*).

However, in the case of the climate change regime, it is apparent that it would be able to bring nations together at the international level into collaborative action due to their common interest (to abate the climate change problem), as claimed by the neoliberal institutionalists. Unlike other issues, the transnational nature of the problem and its possible effects require international action. Further, the international regime on climate change regime may be characterized differently from other regimes – there is no hegemon, no single actor or specific dominant group of states which possesses the resources or power sufficient to influence policy outcomes unilaterally. It is possible for states to cooperate in this area considering that they have the same objective of averting the fundamental problem of climate change (principle of common aversion), although they may hold opposing positions on minor ones. Additionally, there are no permanent alliances among the participant states in the international climate change regime. Group memberships in alliances are fluctuating.²⁴

Environmental problems with the same nature as climate change undeniably had to be addressed at the international level. However, all units of analysis should contribute in solving this problem. Every unit of analysis has a significant role in the effective implementation of the international climate change regime. This assertion, nonetheless, does not affirm the argument that the state has lost its significance in the resolution of environmental problems such as climate change. Although efforts have to be consolidated at the international level, states still have the primary responsibility in the implementation of the terms of the regime, and therefore, still remain vital in addressing this environmental challenge. As noted by Ramakrishna and Young,

Whatever the terms of an international climate regime, primary responsibility for their implementation will reside with national

governments. Not only do international organizations lack the resources to tackle the problem of implementing the substantive provisions of a climate regime, they also do not possess the authority needed to regulate or channel the behavior of the myriad of individuals and organizations operating in domestic arenas.²⁵ ❁

Endnotes

- 1 Christopher Dickey, "The Politics of Apocalypse", *Newsweek*, July 23, 2001, p. 43.
- 2 Robert W. Hahn, *The Economics and Politics of Climate Change* (Washington, D.C.: American Enterprise Institute (AEI) Press, 1998), p. 3.
- 3 For more discussions on the effects of global climate change, refer to Kevin T. Pickering and Lewis A. Owen, *An Introduction to Global Environmental Issues* (London: Routledge, 1994); Thomas W. Giambelluca and Ann Henderson-Sellers, eds. *Climate Change: Developing Southern Hemisphere Perspectives* (West Sussex, England: John Wiley & Sons, Ltd., 1996); and Stephen H. Schneider, *Global Warming* (San Francisco, CA: Sierra Club Books, 1989).
- 4 Fred Guteri, "The Truth about Global Warming", *Newsweek*, July 23, 2001, p. 38.
- 5 Daniel Bodansky, "The History and Legal Structure of the Global Climate Change Regime" in *PKI Report No. 21: International Relations and Global Climate Change*, ed. Ruth N. Anshen (Potsdam, Denmark: Potsdam Institute for Climate Impact Research, 1996), p. 12.
- 6 *Ibid.*
- 7 *Ibid.*
- 8 D.G. Victor and J.E. Salt, "From Rio to Berlin: Managing Climate Change" in *Climate Change: Developing Southern Hemisphere Perspectives*, eds. Thomas W. Giambelluca and Ann Henderson-Sellers (West Sussex, England: John Wiley & Sons, Ltd., 1996), p. 398.
- 9 Quoted by Steven Yearly, *Sociology, Environmentalism, Globalization* (London: Sage Publication, Ltd., 1996), p. 36.
- 10 K. Ya. Kondratyev, *Multi-dimensional Global Change* (West Sussex, England: John Wiley and Sons, Ltd. And Praxis Publishing, Ltd., 1998) p.269.
- 11 Tariq Banuri and Erika Spanger-Sieghfried, "Equity: The Key to Successful Climate Change Regime," *Bridges Between Trade and Sustainable Development* 4 (October 2000): 1.
- 12 Bodansky quoting Krasner, elucidated on the term international regimes, within the context of international institutionalism: "The resurgence of international institutionalism became most prominent under the label of 'international regimes' which have been most commonly defined as 'sets of implicit or explicit principles, norms, rules, and decision-making procedures around which actors' expectations converge in a given areas of international relations'". PKI Report No. 21, p. 35.
- 13 Part of the objectives for conducting a multi-sectoral workshop/facilitated discussion meeting entitled *Building a Low Carbon Future* held in June 2001 jointly organized by the Royal Institute of International Affairs (RIIA), the World Resources Institute (WRI), and the World Business Council on Sustainable Development (WBCSD). Christiaan Vrolijk, Workshop Report on Building a Low Carbon Future: The role of governments, businesses and NGOs (Uxbridge, UK: Royal Institute of International Affairs (RIIA), the World Resources Institute (WRI), and the World Business Council on Sustainable Development (WBCSD), 2001), p. 1.

14. For a more extensive discussions on the role of the international organizations involved in climate change and their dynamics, refer to Kilaparti Ramakrishna and Oran R. Young, "International Organizations in a Warming World" in *Confronting Climate Change*, ed. Irving M. Mintzer, (Cambridge: Cambridge University Press, 1992), pp.253-264.
15. UN Framework Convention on Climate Change, Article 2.
16. "The Politics of Climate Change", Friends of the Earth Climate Change International Briefing, September 2000, p. 2.
17. FKI Report No.21, p. 24.
18. "The Politics of Climate Change", p. 4.
19. Jyri Hyvarinen and Duncan Brack, *Global Environmental Institutions: Analysis and options for change* (London; Royal Institute of International Affairs, 2000)p. 20.
20. *Ibid.*
21. Ramakrishna, p. 269.
22. Hyvarinen and Brack, p. 20
23. *Ibid.*
24. Although Parties are distinguished as Annex I (industrialized and transition countries) and Non-Annex I (developing countries), there exists informal groupings which have volatile memberships. For more extensive discussions on the dynamics of relationship among these groups refer to J.D. Werksman, Procedural and Institutional Aspects of the Emerging Climate Change Regime: Improvised Procedures and Impoverished Rules? (_____, November 1999) pp.7-10.
25. Ramakrishna, p. 260.

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