

Creating Coherence in Global Environmental Governance:
Canada's 2002 Opportunity

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Paper prepared for a panel "Multilateral Environmental Agreements and Institutions: Making them Work in the Twenty-First Century World", at a conference on "Canada @ the World," sponsored by the Policy Research Secretariat, Westin Hotel, Ottawa, November 30-December 1, 2000. The author gratefully acknowledges the financial support of the SSHRC for the project on "Strengthening Canada's Environmental Community Through International Regime Reform (EnviReform) of which this paper is a part, the research assistance of Gina Stephens and Marilena Liguori, and the comments of Richard Ballhorn and Aaron Cosby. Revised Version: December 1, 2000.

Abstract

The international community has been generating multilateral environmental agreements at the bilateral, regional, plurilateral, and global level for well over a century, with a notable increase since the UNCED Rio conventions of 1992. Yet there is considerable doubt about the comprehensiveness, coherence and effectiveness of the cumulative assemblage, especially as Canada and its global partners confront such critical environmental challenges of the twenty-first century as fulfilling their climate change commitments, and forging new conventions on forests and freshwater. How can Canada best lead in making the galaxy of multilateral environmental agreements and their implementing international institutions more effective?

Canada has long been a successful pioneer in generating multilateral environmental agreements and institutions for the global community, and its legacy in doing so generates exceptional domestic unity and international respect. Yet Canada and its global partners face a new generation of challenges in making the growing galaxy of multilateral environmental agreements and institutions work in a twenty-first century world. Intensifying ecological interdependence calls for new environmental regimes, and ones that operate in a more co-equal, co-ordinated and coherent fashion with those dealing with specific media or issues and in interrelated areas such as trade, finance, and investment. The prospective “Rio plus ten” review and Canada’s hosting of the G8 Summit in the year 2002 provide an important opportunity for Canada to lead in the design and delivery of a more coherent and effective system of global environmental governance.

Introduction

As the tenth anniversary of the 1992 Rio United Nations Conference on Environment and Development (UNCED) approaches, the system of global environmental governance it created or catalyzed is increasingly inadequate to address the compounding ecological challenges the international community confronts. For despite the important achievements of Rio's landmark climate change and biodiversity conventions, its Agenda 21, its Declaration on Environment and Development, and subsequent conventions and conferences, there was a feeling even as Rio concluded that much had been left undone. That sense has spread through the 1990's. During this decade leading national governments have proven reluctant to rely on and provide resources to international environmental institutions, despite the increase and intersection of stresses to the integrated global ecosystem that arose as the intensifying dynamics of economic globalization unfolded. The result was a growing gap between the world's environmental governance capacity and its manifest ecological needs.

During the 1990's, the international community coped with this gap in two ways. The first was an incremental use of United Nations (UN)-based subject specific summits or conferences, and the crafting of issue specific convention – for high seas overfishing, desertification, and persistent organic pollutants (POPs) - to deal with individual, narrowly conceived media, pollutants, and problems. The second was to supplement these individual multilateral environmental agreements (MEAs) with islands of intense institutional development at the restricted regional level, most notably in North America through the regime established by the North American Free Trade Agreement (NAFTA) and its companion North American Agreement on Environmental Co-operation (NAAEC).

As the twenty first century opens, the international community has reached the limits of this approach. For individualized, isolated, ad hoc multilateral agreements, accompanied by pockets of integrated regional institutions for the privileged few, can no longer cope with environmental challenges that are becoming more intense, interconnected and fully global. The time has thus come to consider a more comprehensive, integrated and ambitious approach to generating global environmental governance for the twenty first century. The fact that fiscal surplus has now returned to many major industrialized governments, and that the 1997-9 global financial crisis has tempered the previous neoliberal consensus with a turn toward more socially sensitive, less market driven directions, provides a supportive climate for contemplating such advances.

This paper provides a preliminary consideration of a desirable international architecture for global environmental governance for the twenty first century and why and how Canada might bring such an architecture to life. It includes a particular focus on the intersection of environmental regimes with those for the trade, investment and finance regimes at the heart of the economic globalization process. It argues that the increasing, interconnected global environmental stresses generated by economic globalization requires a system and

centre of global environmental governance more comprehensive, coherent, capable and economically connected than is provided by the current system of individualized multilateral environmental agreements with a few robust regional organizations. Given its world leading environmental vulnerabilities and capabilities, Canada has both an incentive and an ability to pioneer this new generation of environmental governance, centered on a powerful new Global Environmental Organization (GEO) that both it and the international community need. Finally, it argues that the confluence of three high level international negotiating process – the new Group of Twenty (G20) finance ministers which Canada chairs for the coming year, the G7/G8 summit it hosts in the Year 2002, and the “Rio plus Ten” review taking place that year – offer exceptional near term opportunities for Canada to create the consensus that will bring the new GEO and environmental governance system based on it to life.

1. The Global Ecological Challenge: Increasing, Integrated, Global Ecological Stress

The challenge of creating effective global environmental governance begins with three central problems: the increasing stress on many of the world’s critical environmental resources; the interconnections among them revealed by unfolding scientific knowledge; and their growing global geographic nature. The current era of intensifying globalization is accelerating all three trends.

First a wealth of credible public and private sector “State of the Environment” reports focused at the global level reveal a global ecosystem under increasing stress both overall and in critical components (UNEP 2000, World Bank 2000). To be sure much uncertainty remains about the planet’s overall carrying capacity, sustainability thresholds in particular component ecosystems, the point at which irreversible dynamics are catalyzed and at which the loss of critical environmental resources can catalyze large-scale effects in ecosystems as a whole. Additionally, there is solid evidence of a reduction in pollution and increase in ecological capital in some domains and regions.

Yet amidst these uncertainties and offsetting forces, there is a wide range of areas where the global ecosystem is clearly under severe and increasing stress. The most acute include the depletion of the world fisheries, where 60% of marine fisheries are currently overexploited (Rogers 1995, Gummer 2000). They embrace forests, as “the world’s sylvan balance sheet still bleeds trees, owing to widespread deforestation in the tropics” (Victor and Ausubel 2000: 129). Indeed,. Each year 12 million hectares of forest cover, an area the size of Greece, are lost. One half of the world’s tropical forests have disappeared in the last 50 years. Further acute threats include those to coral reefs, depletion of freshwater supplies in key regions such as China, and the melting of polar ice.

Secondly, these increasing threat to individual ecological resources and regions are accompanied by growing scientific evidence of their interconnections in an ultimately

integrated global ecosystem. Even within the limited North American region, the old image created by migratory species such as the Monarch Butterflies and Gray Whales that traveled among Canada, the United States and Mexico is being altered by growing evidence of the pathways of the long range transport of air pollutants that suggest that production, transport and impact embraces a more extended geographic range. The presence of POP's banned in Canada in the Canadian Arctic, the image of the G7 leaders at their Tokyo Summit clustered beneath their umbrellas as the rains containing the radioactive residue rained upon them point to the same underlying ecological reality.

The interconnection are not only interregional but intermedia as well. The need to embrace all major sources and sinks (including oceans and forests) in a common approach to climate change is the leading example. Recent evidence of how the loss of coral reefs in the Caribbean may result in part from diseases carried by dust from desertifying Africa illustrate how both regions and media now come together in complex ways. The complex but tight interconnection among media and geographic regions strongly suggest that many problems are inherently global and holist.

Thirdly, this increasing stress on an integrated ecosystem is likely to have a growing global geographic impact, especially with the intensifying pace of economic globalization. As the Bruntland Commission recognized, increasing environmental stress from proliferating population growth and industrialization creates pollution and compounding natural resource depletion. These dynamics are now powerfully enhanced with the democratic-market revolution that is bringing so many emerging and transition economies, not only into improved environmental sensitivity and policies, but also into the rapid growth of the advanced industrial age. These growth trend intersect with a growing global populations projected to stabilize at 8-9 billion individuals by the year 2050. Already in developing countries, poor urban air and water quality can lead to GDP losses of up to 25%. The current pollution challenge to Hong Kong's economic future and the stress on Mainland China's water resources should it reach as similar level of development well illustrate the global trend.

2. The Inadequate Global Environmental Governance Response

In the face of this increasing, integrated, global ecological challenge, the international community offers an incomplete, unbalanced and inadequate international institutional response. To be sure, there have been impressive developments at the multilateral and global level over the past century and during the most recent decade in generating a vast array of legal agreements to govern many of the world's critical ecological resources. Similarly, there have been important innovations at the bilateral and regional level in creating the international institutional and organizational capacity. Yet at the global level, there is an acute shortage of an adequate international institutional system and organization with the capability to deal in a comprehensive, coherent and effective fashion

with a global ecosystem under threat in a globalizing age. This lack of adequate global environmental institutional capacity is highlighted by a brief review of recent major developments in generating global legal instruments, developing regional international institutional capability, and relying on the global environmental and economic organizations that currently exist.

A. Multilateral Environmental Agreements

The international community has had well over a century of experience in crafting multilateral environmental agreements to meet the perceived priorities of the time. Indeed, the creation of the world's intergovernmental environmental regime began in the 1870's and continued, with notable pauses and reversals during world war and depression, through the post World War Two years (Meyer 1997). Similarly, the emergence of multilateral environmental agreements with direct international economic implications, notable those with trade measures as implementing and enforcement devices, are also an inheritance of the nineteenth century, having begun in 1878 (Charnovitz 1996).¹ In both domains, the pattern indicates that the growth of such legal instruments is by no means a continuous or inevitable process, as seen most recently by the great decade-plus long pause following the Stockholm conference of 1972. Yet the most recent period, beginning with the Bruntland Commission report in the mid 1980's, through the Rio UNCED of 1992, has had a vibrant, and sustained legacy. The following table of the major multilateral conferences and conventions related to sustainable development shows the strength of the current trend, as leaders-level global summits and ministerial driven functional processes have combined to create a considerable edifice (Johnson 2001, Dodds 2000).

Major Global Summits and Conferences:

- The World Summit on Children (1990)
- The Conference on Environment and Development (Rio, 1992)
- The Conference on Human Rights (Vienna, 1994)
- Conference on Small island Developing States (Barbados 1994)
- The International Conference on Population and Development (Cairo, 1994)
- The World Summit for Social Development (Copenhagen, 1995)
- The World Conference on Women (Beijing, 1995)
- The Global Conference on Human Settlement (Istanbul, 1996)
- Food Summit (Vienna, 1996)
- UNGA Review Implementation of Agenda 21 (1997)
- UNGA Review of Cairo (1999)
- UNGA Review of Barbados Action Plan (1999)
- Millennium Summit (September 2000)

¹ There are now an estimated 175-200 multilateral environmental agreements, of which 20 have trade restricting provisions.

Major MEAs have been concluded in the last 15 years, including:

- The Vienna Convention for the Protection of the Ozone Layer (1985)
- The Montreal Protocol on Substances that Deplete the Ozone Layer (1987)
- The Basel Convention on the Transboundary Movement of Hazardous Waste (1989)
- The Framework Convention on Climate Change (1992)
- The Convention on Biological Diversity (1992)
- The Convention to Combat Desertification in Countries Experiencing Serious Drought and/or Desertification, Particularly in Africa (1994)
- The Kyoto Protocol on Climate Change (1997)
- The Cartagena Protocol on Biosafety (2000)

Yet even with this impressive accumulation of international law, major lacunae remain. The instruments developed in regard to the major domains of forests and water remain far short of full scale conventions. This is despite the fact that in the case of forests, the need for such a Rio-like convention was recognized more than a decade ago, when the G7 leaders committed themselves at their 1990 Houston summit to the creation of a global forestry convention by 1992.

Moreover, the existing repertoire suffers from three defects (Johnson 2001). The first is the need to go beyond the consensus on issues, identification of priorities, adoption of principles, assembly of coherent and extensive action plans, and articulation of strategies (including co-operation, technological and scientific transfers, capacity building, differentiated commitments, and the principle of equity between developed and developing countries) to the actual implementation required to give the substance of these agreements practical effect. The second is the need for much greater capacity, including new financial transfers, to accomplish this task² The third is a much more effective participation of non-governmental organizations (NGOs) and the private sector in this process. The need was recently underscored by the former Managing Director of the International Monetary Fund (IMF), Michel Camdessus who, in his farewell address to the United Nations Conference on Trade and Development (UNCTAD) X, proposed a major international effort to ensure actual effective implementation of the action plans that the United Nations conferences and summits of the 1990's generated (Camdessus 2000).

B. Regional Institutions

If the MEA's with global reach and relevance lack comprehensive coverage and the implementation capacity required to make many of them effective, the new generation of

² It was estimated at the time of Rio that a transfer of an additional US\$125 billion would be required to give its program effect.

regional environmental organizations bred in a few northern locales have not yet been extended to, or replicated in, much of the rest of the world. Indeed, as the experience of the United Nations Regional Commissions demonstrates, outside of Europe and now North America, there is little effective regional environmental institutional capacity at all.

Although in some respects the European Union remains the global leader in the development of effective regional environmental governance, the most relevant recent innovations have come in North America, with the 1994 creation of the Commission for Environmental Co-operation (CEC) as part of the new NAFTA regime.³ Although Canada and the United States had created a host of environmental agreements and institutions throughout the twentieth century, most notably the Boundary Waters Treaty and International Joint Commission (Spencer, Kirton and Nossal 1981), the CEC was a revolutionary creation in several respects (Rugman, Kirton and Soloway 1999, Kirton and Fernandez de Castro 1997). It was a regime that embraced as equals countries of the long developed north and still developing south. It recognized the existence of, and need to manage, the ecological interdependencies on a wide and disparate regional rather than merely transboundary scale. It understood the centrality of directly integrating them with the new regimes for trade and investment liberalization. And it created North America's first real regional organization to manage the process. It was one where, uniquely in the global community, the environmental body was stronger as an institution and organization than that which the trade-investment-finance community enjoyed.

Seven years after its creation, the performance of the CEC demonstrates both the promise and the limitations of the regional approach to environmental governance (Esty et al. 2000). Although a vigorous debate about the record still flourishes, it is becoming clear that despite difficult circumstances the CEC has, in its programs of stand-alone environmental co-operation, largely met the mandate it was given, if not the much larger expectations and potential that surrounded its creation. It and its NAFTA sister have been less successful in fulfilling the legal obligations, encoded in both the core NAFTA trade-investment treaty and the parallel NAAEC, to bring ecological considerations to bear on the trade and investment liberalization which NAFTA unleashed. Although the strong legal provisions of the initial texts and the attitude of the new Mexican government offer some grounds for optimism about the effective implementation and even deepening of the NAFTA environmental and trade-environment regime within North America, there are far fewer reasons to predict that it will broaden to embrace more countries, through the addition of new partners, the use of the NAFTA models by individual partners in outside arrangements, or the adoption of the NAFTA model by outsiders on their own.

³ A complete assessment of the regional approach from a Canadian perspective would include and examination of the important work of the recently created Arctic Council, although it remains less central than NAFTA-NAAEC to the trade-environmental issue from the perspective of Canada as a whole.

Seven years after its creation, there is no near term prospect of adding other members to the NAFTA-NAAEC regime and its institutions, even should the granting of free trade fast track authority to the US President eliminate the most immediate obstacle to moving the process forward. Despite the impressive extension of NAFTA-modeled and compatible environmental provisions in the Canada-Chile and US-Jordan bilateral free trade agreements, Mexico has done little to do likewise in the many subsequent bilateral free trade agreements it has signed (most consequentially with the EU). Among the other more plurilateral trade-related communities including both northern and southern countries and the US, Canada and Mexico as members, the Asia Pacific Economic Co-operation forum (APEC) has shown virtually no sign of adopting any of the NAFTA-NAAEC inheritance despite its obvious relevance and proposals to this effect (Rugman and Soloway 1997). Similarly, there have thus far been few advances in the Free Trade Agreement of the Americas (FTAA) process, despite a wealth of analytic suggestions about how a move forward could feasibly be made (Segger et al. 1999). Among outsiders, major countries of the hemisphere have in Mercosur followed a different approach.

C. Global Environmental Institutions

To what extent and why do the central institutions for environmental and economy-environment governance at the global level lack both the comprehensive organizational capacity and trade-related relevance of the regional institutions within North America? The easy answer is to see the former as merely a lagging governance system, destined to catch up to their long established, well developed global economic colleagues with a growing realization of the functional ecological needs of the global ecosystem and with the fading of such familiar inhibitors as the greater number and diversity of countries involved, the lesser visibility of transborder environmental problems, burden sharing and other collective action problems and the like. Yet both the underlying diagnosis and the implied prescription - strengthening the UN-centered system in lapidary like fashion - may be fundamentally misplaced.

i. Environmental Governance

In the field of environmental governance, the United Nations system does offer a wide array of institutional components engaged in global environmental governance, and a host of advantages as a platform to address the planet's twenty first century needs. The latter include an institutional nest which lowers transactions costs, a near universal membership that offers legitimacy and the capacity for grand geographic, functional, and burden sharing bargains. However it also contains some fundamental flaws that explain the systems' decidedly poor performance over the past 55 years.

The first is that at the very normative core of the entire system stands to this day a complete absence of any recognition of even the existence of the natural environment, let alone its relevance to other concerns or its value in its own right.⁴ Equally absent are generic principles, such as the precautionary principle, that have importance in the ecological domain. Moreover, the Charter simultaneously affirmed a wide range of values and principles whose realization (with the primary exception of human health), involve an increased stress on, or consumption of, unvalued ecological capital. Also consistent with the limited levels of scientific knowledge, industrialization and the pollution-resource depletion dynamic of the time, no part of the UN institution itself or the functional agencies it inherited or created were assigned, let alone dedicated to fulfilling, ecological responsibilities.⁵ Moreover in its key decision-making rules, beginning with the United Nations Security Council and the aggressor enemy state clauses, the UN system permanently entrenched provisions that gave what were to become the least environmentally sensitive principal powers - notably the Soviet Union-Russia and China - a predominant role, while confining what were to become more environmentally sensitive major powers - such as Germany and Canada, Italy and Japan - to a secondary rank. Such choices made it more difficult for the system to take up, as many bodies such as the World Resources Institute have suggested, the issues of environmental security, broadly defined in a swift, strong and sensitive way (Homer Dixon 1993).

With such an ideational and institutional foundation, environmental considerations were destined to remain a fragile and far lagging add on and afterthought to the far more powerful established core as the UN system evolved.⁶ The burst of activity at Stockholm in 1972 and such companion moves as the United Nations Convention on the Law of the Sea (UNCLOS), with its innovative incorporation of the custodianship principle in Article 234, were easily stalled and silenced during the new cold war and the neo-liberal revolution of the first half of the 1980's, until the Bruntland Commission Report of the mid 1980's revived the process.

The major institutional accomplishment of the Stockholm season, the United Nations Environmental Program (UNEP), was created as a mere program rather than a full fledged functional agency of the UN and given only a modest budget of US\$60 million per year at present.⁷ Its receives only 5% of its budget from the UN and its regular assessments,

⁴ This lacunae is particularly significant given the finding that proper principles and norms as well as strong scientific capacity are the critical causes of effectiveness for international environmental regimes (Haas, Keohane and Levy 1993). For a similar, more recent analysis, focused the need for updating existing institutions on forests and emphasizing the need for a vision and scientific monitoring capability and information see Victor and Ausubel (2000: 139-141).

⁵ Such a complete absence made it more difficult to act subsequently on suggestions, which flourished on the "Road to Rio 1992", such as converting the Trusteeship Council, that had lost its seminal purpose, into the central high level body in the UN system dedicated to environmental governance.

⁶ For example it was only in the year 2000 that the United Nations managed to create a Forum on Forests to provide a single place for dialogue among the array of institutions with a partial interest in facets of the field.

⁷ By way of comparison, the trilateral CEC has an annual budget of US\$9 million.

leaving it dependant on voluntary contributions, largely from seven donor countries, for the remaining 95%.⁸ It is headquartered in distant Nairobi, with often scarce electricity, water and personal safety, and far removed from the centres of power in Geneva, New York or Washington, and from the tiny convention specific Secretariats that emerged from Rio and were located in Bonn (Climate Change) and Montreal (Biodiversity) (Dodds 2000, Le Prestre 2001). With such fragmentation and fragility in both legal powers and organizational capacity, it is understandable that these and similar institutions have had difficulty in functioning as effective international environmental regimes (Bernauer 1995, Haas, Keohane and Levy 1993, Liftin 1997, Sprintz 1994).

Despite its very real accomplishments the Rio revolution of 1992 was highly limited as well. Normatively, it did relatively little to redress the 1945 Charter imbalance as the Rio Declaration on Environment and Development was far different than the genuine Earth Charter that many influential participants desired. Institutionally, its major legacy was a mid-level institutional add on - the United Nations Commission on Sustainable Development (UNCSD) - established as a functional body under the authority of the UN Economic and Social Council (ECOSOC). At UNCSD the representatives of the 53 states elected by the Council for up to three year terms meet once a year for two or three weeks (Dodds 2000). Equally limited in its authority and organizational stature is the Inter-Agency Committee on Sustainable Development (IACSD), established as a subsidiary body of the UN Administrative Committee on Coordination (ACC), chaired by an Undersecretary General and composed of senior level officials from nine members of the ACC.

ii. Environment-Economy Governance

In the field of environment-economy governance, a reliance on the existing UN-Bretton Woods centered system is even more problematic. This is especially evident when viewed against the moves toward equality and integration realized between the environmental community on the one hand, and the trade-investment-finance community on the other, in the 1994 regional North American regime.

In the trade field, the General Agreement on Tariffs and Trade (GATT) of 1947 did under Article 20 (b) and (g) include a limited environmental exception to the central trade liberalization disciplines it established. However the effort to institutionalize environmental considerations in the wake of Stockholm, through the establishment of a working party on trade and environment saw the GATT-based trade community strangle the nascent environmental intrusion in its cradle (Kirton and Richardson 1992). Despite

⁸ This “bake sale” approach to global environmental governance is seen elsewhere, as money must be raised to finance each negotiating session in most areas, and developed countries are asked to finance the travel and accommodation of delegations from the former Soviet Union, central and eastern Europe, and elsewhere.

some useful normative and institutional advances in the new and much stronger World Trade Organization (WTO) created in 1994, the same year as NAFTA, the impact in terms of dispute settlement outcomes, and the elaboration of rules or institutional processes has been widely acknowledged to have been exceedingly modest.

In the finance field, the International Monetary Fund (IMF) remains bereft of any real environmental awareness. This is true in its 1945 and subsequently amended Articles of Agreement but also in the institution itself. While it does lend in response to natural disasters such as floods and hurricanes, it does so on a reactive basis to a very limited array of classic environmental threats. Its ad hoc support programs during the global financial crisis of 1997-99, for such ecologically critical countries as Brazil, devoted no attention to environmental concerns amidst the vast array of quite detailed micro and structural conditions it imposed. And its new Poverty Reduction and Growth Facility (PRGF), which offers very cheap credit, is focused on health and primary education rather than to core environmental concerns.

In the field of foreign direct investment, the challenge is greater still. For here there is no central, well-accepted economic governance structure within which environmental values can be injected and towards which environmental concerns can be directed.⁹ Rather there is an amalgam of component regimes in UNCTAD, the Organization for Economic Co-operation and Development (OECD) and WTO codes where environmental considerations are effectively absent.

The failure of the OECD as a negotiating nest for a prospective Multilateral Agreement on Investment (MAI), within which environmental concerns were to be injected, raises the larger issue of the suitability of this institution as a basis on which to build stronger global environmental-economy governance. The OECD does offer several advantages, notably: a membership with considerable global diversity in geographic location and level of development, a consensus and analytic-scientifically oriented culture, a proven track record of environment-economy innovation, and an institutional structure that has from the 1961 start allowed for meaningful civil society participation. Yet the OECD remains at its core an economic institution, in which civil society representatives of the environmental community have no comparable place to that accorded their business and organized labour colleagues. Its tendency is to privilege the ideology of “economism”, as its seminal framework for assessing the environmental effects of trade shows.

3. Canada's Available Alternative Approaches

⁹ The “missing economic regime” problem, which has produced an “equality of nothing” but an inability to actively integrate, is even more pronounced in regard to the missing global governance centres for competition policy, electronic-economy regulation, and cultural diversity.

In the face of such obvious imbalances in the institutions for global environmental and environment-economy governance, what strategic approach should Canada pursue? The instinctive ideological reflex of accepting the inherited, broadly multilateral organizations and their regimes, while working for their slow and selective improvement is an inappropriate one. For as a principal global ecological and economic power (see below), Canada has a large repertoire of regime building approaches or foreign policy approaches it can pursue. In addition to the bilateral and regional institutional and multilateral agreement approaches discussed above, these include national closure, unilateralism, and market driven voluntary standardization¹⁰.

Strategies of national closure suffer from the fact that there are fewer opportunities for effective border defences in a globalizing age, notwithstanding national skills and investments in agricultural, hazardous waste and other inspections at the border. This is particularly true for a country with a vast array of open borders, located at the intersection of three major oceanic ecosystems, and containing a fragile Arctic environment. Moreover such nationalist strategies still face the challenge, in a federation where an estimated 70% of environmental responsibility lies within provincial jurisdiction and where federal-provincial co-operation is not always the norm, of securing consensus without the spur of international disciplines or processes. Canada's recent environmentally-related record under NAFTA's Chapter 11 investment dispute settlement provisions shows how intense such federal-provincial frictions can be, and how peculiar autarkically conceived and designed environmental policy in a protectionist nest can be (Kirton 2000).

Unilateralism has a larger, if still residual, relevance. While externally-directed unilateral responses might appear appropriate only for the world's strongest powers, they retain their relevance for a major power Canada in a globalizing age. Despite its avowed multilateral convictions, Canada has regularly practiced well-targeted, effective environment-economy unilateralism, as with the 1970 Arctic Waters Pollution Prevention Act, its actions before and during the spring of 1995 against overfishing on Canada's east coasts, and in its hints of trade restrictions to induce South Korea to reduce its fishing on Canada's east coast. A detailed examination of these cases indicates that they were driven primarily by ecological as opposed to territorial expansion or even trade protectionist motives. Partly as a result, such Canadian moves acquired widespread international legitimacy. Most importantly, they were effective, both in addressing the immediate environmental threat but above all in catalyzing the creation of long awaited multilateral provisions or conventions to protect major environmental domains. Both Article 234 of the United Nations Law of the Sea Treaty and the 1995 United Nations Convention on High Seas Overfishing and Straddling Stocks are eloquent testaments to the effectiveness of Canadian unilateralism as an

¹⁰ There remains scope for further bilateralism, especially through the conclusion of further free trade agreements with NAFTA-like environmental provisions embedded within. Promising partner are Japan and perhaps South Korea, along with several countries in the western hemisphere.

approach to environmental leadership. For this reason alone, unilateralism should remain a residual part of Canada's environmental regime-building repertoire.

Voluntary private sector driven standardization is an approach that has many attractions, especially in the face of the competing nationally and subfederal environmental and other standards that create uncertainty within a country and that can pose barriers to Canadian market access abroad (Rugman, Kirton and Soloway 1999). Canada has a respectable record in the strategic use of voluntary standardization for international regime building, most clearly in the case of the ISO 9000 quality and ISO 14000 environmental standards. Yet such standards can be slow to create as they are based on consensus and difficult to enforce. They can inhibit a vibrant regulatory race to the top as well as the much feared if seldom seen regulatory race to the bottom. They can face costly competing standards regimes, as Canada's forestry industry can attest. Nor do process standards of the ISO variety clearly and quickly deliver demonstrated improvement in environmental performance. Above all, they are always vulnerable to defection, leading some industries with experience with them to look, after their initial appeal, to have them entrenched in regulatory action by governments with authority and the full force of law.

There are thus good reasons, particularly from a Canadian perspective, to include as a central focus of twenty first century environmental governance, efforts to create at the fully global level a much more comprehensive, coherent and capable system.¹¹ The centrepiece of this architecture is the creation of a single new Global Environmental Organization (GEO), with a mandate and resources that match and interrelate with the pillars of the international economic system, notably the WTO and IMF.

Such an approach would start, after a successful POPS convention is within sight, to move away from a reliance on the issue specific conventionalism – the creation of agreements for a single class of pollutants or problems, in the tradition that Canada launched at Montreal with the ozone protocol.¹² It would move more aggressively to create the missing conventions for the major components of the core media, notably forestry, oceans, and freshwater. And it would design these in ways that are integrally linked to the existing Rio inheritance that begins with climate change and biodiversity.

¹¹ There is also an important place for expanded regionalism and transregional plurilateralism, through such processes and bodies as the Summits of the Americas/FTAA/OAS, APEC, a new transatlantic free trade agreement, NATO (with its initial Article 2, subsequent Committee on the Challenges of Modern Society (CCMS) and new interest in environmental security, the Organization for Security and Cooperation in Europe, the Commonwealth, and la francophonie,

¹² Such an approach suffers from what might be called "frequent flyer environmentalism" with national officials constantly flying to an endless succession of international meetings, leaving no-one to deal with national matters and making it difficult for their minister to know which of the many meetings are worthy of their own time and presence.

Based on the experience at Rio and in the ten years following, its institutional energies would turn away from efforts to create a stronger centre for global environmental governance within the existing UN institutions, whether through a transformed Trusteeship Council, an enhanced UNCSD or an expanded UNEP.¹³ Rather it would concentrate on creating a new and strong GEO.

Such a body, modeled on and linked to the WTO and IMF in the first instance, would have a comprehensive mandate, with strong ministerial and perhaps occasional leaders-level involvement. These features would allow it to make the trade offs necessary to secure package deals among a range of related areas, and the visibility and moral authority to make a scientific and information based approach to compliance sufficient. It would further have a governance structure, including functional representation grounded in ecological capability, that would help prevent one or two recalcitrant countries from delaying or preventing progress.¹⁴ It would further have a central responsibility and the requisite resources for the annual and ongoing co-ordination of those issues and media specific institutions which remained. It should serve as the centre of environmental monitoring and information, investigation (similar to the NAAEC's Article 13 provision), dispute settlement (using the NAAEC's Article 14-15 citizen submission process), and resources for capacity building and remediation (by assuming responsibility for a much enhanced Global Environmental Facility). For without a single, powerful authority centre and the robust resources to enforce such co-ordination, the many proposed half measures are unlikely to have much effect.

Nor should the GEO be narrowly conceived as an amalgam of just a few of the traditional global commons institutions (Esty 1998). For it is in the newer generation of Rio conventions and secretariats, and the additions to come that the central action will and should unfold.¹⁵ At the same time, the new body should be an essentially environmental one, rather than a sustainable development institution from the start. Yet as with the NAFTA-NAAEC regime at the regional level, it should have sufficient economic authority and resources to force an integration with the evolving and prospectively reformed trade and finance institutions and the economic capacity to deal with those bodies on an equal plane.¹⁶

¹³ It could, however, usefully seek to give stronger expression to environmental values within the charters and operations of all other UN functional agencies, with an appropriate monitoring of the results.

¹⁴ The defects of the existing approach of UN-based individualism is seen in the climate change negotiations and the failure of COPS-6, where the developing country position was delegated to the G77 who entrusted it in practice to Saudi Arabia and Nigeria, the two major oil exporters among the group. The major emerging economies such as Brazil and India remained unengaged.

¹⁵ There is value, as an interim step, in the existing move to have the secretariats or conferences of the parties of the major agreements conclude co-ordination agreements with those in cognate fields, and in amalgamating many similar agreements and bodies into media or problem specific nodes.

¹⁶ An useful intellectual starting point is to review the functions entrusted to the CEC by the NAAEC, identify those not being performed or being performed inadequately at the global level, and assessing where a consensus might lie to invest such functions in a new global body. Simultaneously, a similar review of

4. Canadian Vulnerabilities and Capabilities

In the creation of such a new architecture and institution, Canada has an appropriate leadership role to play. For Canada's environmental and economic vulnerabilities provide an incentive for such leadership, even as Canada's ecological and economic capabilities generate an adequate demand and capacity for influence.

Canada is particularly exposed and vulnerable to the full effect of these multifaceted, compounding problems. It long ago ceased to be a far off realm with geographic protection from its three oceans, leaving environmental assaults confined to transborder penetrations or extractions from the United States to the South. With the world's longest coastline, one of the world's largest preserves of freshwater and temperate forests, and as a key custodian of the world's Arctic ecosystem, Canada has an exceptional vulnerability to ecological threats from distant locations, and vested interest in the proper functioning of the global ecosystem as a whole. Its exceptional exposure is underscored by a steady succession of environmental problems with origins in distant realms, such as overfishing off Canada's Atlantic coasts, and the presence of POPs in the Arctic ecosystem.

A decade ago, these ecological vulnerabilities were paralleled and outweighed by economic ones, given the heavy resource weighting in Canada's export dependent economy (Kirton and Richardson 1992). The current economic situation remains much the same, even though it now has a different internal mix. For the declining share of natural resources and primary products in overall exports has been matched by a much greater export dependency of the Canadian economy as a whole. Such ecologically intense exports remain critical for many of Canada's regional economies and communities. They face severe threats from their far off destinations, ranging from boycotts of some forestry exports harvested by allegedly unsustainable methods or the collapse in global commodity prices and demand as in the financial crisis of 1997-9.

With close to 90% of Canada's exports destined for the North American marketplace, it appears that the regional NAFTA regime cover a high portion of Canada's economic interests. It provides much less comprehensive coverage for Canada's ecological interests, which are far more, and becoming ever more, global in scope. And even in the economic domain, the advent of globally integrated production systems and business alliances, and the need for a more coherent North American voice in shaping relevant multilateral regulatory regimes induces Canada to act strategically on a wider stage.

the environmental provision of the core NAFTA would inform Canada's national and coalition-building approach to the launch of a new Millennium Round of multilateral trade negotiations and current efforts at IMF and international financial architecture reform.

Canada's capabilities flow from its high international ranking in overall ecological capital and many of the major ecological resources.¹⁷ These are reinforced by its innovative leapfrogging environmental technologies, its deeply embedded public support for global environmental protection as a foreign policy priority¹⁸, and its demonstrated political and official level success in securing the major new environmental regimes of the 1990's, with the conventions on biodiversity and high seas overfishing, and the Montreal biosafety protocol at the head of the list. Other more recent assets include its commitment to expand official development assistance (ODA) after a decade of reductions, and its new status since 1996 as a net outward foreign direct investor. The frequency of high profile incidents of Canadian-owned firms causing environmental damage in their foreign operations provides a new incentive for investment-related environmental regime building, with multilateral agreement rather than unilateral Canadian extraterritoriality the generally preferred path.

5. Conclusion: Canada's 2002 Opportunity

The ability of Canada to catalyze the creation of such an institution, as it did the WTO itself starting with its proposal in February 1990, is enhanced by the conjuncture of three key processes in the ongoing cadence of global governance. The first is Canada's continuing chairing of the Group of Twenty (G20) finance ministers, and the possibility of Canada hosting a second ministerial meeting in 2001 following the recently concluded October 24-25, 2000 Montreal meeting. The second is Canada's hosting of the G7/G8 leaders meeting, and with it the lead-up individual meetings of finance, foreign, trade, and environment ministers, in the year 2002. And the third is the occurrence of the "Rio plus ten" review conference, possibly at the leaders level, that same year. All three processes could form part of a single strategy, directed at the broader theme of coherence in global governance and designed to bring a new global environmental organization about.¹⁹

a. The G20

The utility of the G20 rests on its status as an institution with a membership from all global regions, one that combines the major developed and emerging countries in roughly equal balance, and that contains a large share of the GDP and population of the world (Johnson 2001, Kirton 2001). As a forum of finance ministers, central bank governors and

¹⁷ For example, Canada possesses 25% of the world's natural forest. It is also the world's eighth largest emitter of greenhouse gases.

¹⁸ Domestically, 87% of Canadians currently list the environment as a concern and 93% feel their children's health is affected by a poor environment.

¹⁹ A similar emphasis on plurilateral leadership through the G* and G20, with Canada as part of the core leadership coalition, is outlined in regard to forests by Victor and Ausubel (2000:141-142). See also Bryner (1997: 196).

institutions such as the IMF, it contains influential individuals responsible for national budgets and often trade policy as well as investment and finance. The G20 was created to assist in the immediate task of constructing a new crisis response and prevention mechanism and new international financial architecture in the wake of the global financial crisis of 1997-9

At its second ministerial meeting, held in Montreal, its focus broadened considerably to embrace “Responses to the Challenges of Globalization.” Moreover, amidst a far reaching, socially sensitive “Montreal consensus” highlighted by Paul Martin and encoded in its communique, the G20 dealt extensively with trade as well as finance issues, and accepted the need to provide developing countries with greater access to the markets of developing countries. Moreover, it further pledged, publicly, to “Contribute to international efforts to increase the provision of other global public goods to address serious issues such as...the environment, which cut across national borders and require concerted global cooperation” (G20 2000). During the coming year, the G20 is a promising forum to engender a consensus among influential ministers from key developed and emerging countries on the need for a new organization, and a willingness to provide the funding required to bring it to life.

b. The G7/G8: Through Genoa to Italy

The centrality of the G7/G8 summit and system lie in its proven performance in arriving at timely, well tailored, ambitious agreements in the field of sustainable development, including in the economy-environment and trade-environment domains (Kirton and Richardson 1995). It lies also in its success in inducing member national governments to comply with their collective sustainable development commitments made at the G7/G8 summits (Kokotsis and Daniels 1999). Underlying this performance are several distinctive institutional features, notably: its ability as a non legally bound, but leaders-driven institution to focus freely on priority issues, set new directions and make new integrative linkages and tradeoffs; the relative equality it accords its subordinate ministerial forums for the environment and the economy; its capacity for rapid movement given the low transactions costs and high degree of common purpose among its compact common group of eight major market-oriented democracies; and the relative internal balance it contains among the environmentally conscious members of Germany, Japan, Canada, and the European Union and the others (Kirton 1999).

The G7/G8 has had a long history of catalyzing and directing the reform of existing international institutions and bringing new ones to life. It last did so, under Canadian leadership, as the centerpiece of its 1995 Halifax Summit. Here Canada, working with the United States, centered the Summit on the question of what institutions the international community requires to meet its needs in the twenty first century. Moreover Canada

broadened the initial tendency to focus narrowly on international financial institutions, to embrace the full range of UN bodies in its review.

At the most recent Summits, in Cologne 1999 and Okinawa 2000, environment issues enjoyed rather less prominence than that had at Summits during the previous decade, beginning with Toronto in 1988. Yet Cologne did importantly set a new direction by beginning to develop a new “Cologne consensus” on the need for socially sensitive and sustainable globalization (Kirton, Daniels and Freytag 2001). It and surrounding Summits have also had a robust international reform agenda, focused on designing and delivering a new international financial architecture to meet the needs of the global economy in the rapidly globalizing twenty first century (Kaiser, Kirton and Daniels 2000). Most recently, the Okinawa 2000 Summit, with its focus on development in an era of globalization, and its creation of several new innovative processes (notably Dot-Force and the renewable energy task force), did much to create a legitimacy and constituency for G8 led initiatives, and to pioneer the more open and inclusive forms of governance that a GEO would require. It also saw Canada and its colleagues offer increased ODA and improved market access, incentives which could be critical in inspiring broader multilateral support for the creation of a new GEO.

Looking ahead, there is reason to believe that Canada is currently contemplating having environmental issue featured as a core agenda item at the Summit it will host in the Year 2002. Following its successful initiative at Tokyo 1993, it is similarly envisaging trade as a major component, especially if a new comprehensive round of multilateral trade negotiations is not launched by that time. On the road to Canada 2000, Italy, as host of the July 20-22, 2001 G7/G8 Summit offers a traditionally environmentally friendly chair to work with in the necessary preparatory activity, beginning at the first sherpa meeting of the Italian season to be held in Palermo, Italy in February 2001. In keeping with the Naples-Halifax cadence of the previous cycle, the objective could be to have the G8 leaders at Genoa agree that global environmental governance (perhaps as part of a broader focus on coherence in global governance) would be a focus for their discussions the following year, to pose the question of “what global governance system and component institutions does the international community need to meet the environmental and sustainable development needs of the twenty first century” and mandate the G7/G8 ministerial bodies and other international organizations to do the relevant preparatory work. Part of the Genoa contribution could be for G8 leaders to make a clear commitment to make the Rio plus Ten Review a summit level event of Rio-like dimensions, by personally promising to attend for the necessary time and through other means.

c. Rio Plus Ten Review

It is critical for that review to have such Rio-like proportions if it is to generate a new system of global environmental governance, establish a strong GEO at its core, create a

genuine Earth Charter as a normative foundation, and effectively link this new system to that for global economic governance in a way that Rio largely failed to do. That Summit could feature the establishment of such a new institution as its centrepiece deliverable, should the necessary preparatory and negotiating processes begin in the near future. Its focus on the updating and implementation of the core Rio conventions for climate change and biodiversity could lead to a highlighting of their ecological interconnections, the need for new conventions in related areas, and the values of a single properly resourced institutional centre to lead an integrated approach.

The central attention Rio plus Ten will give to the climate change issue could lead to innovative ways to forge an improved environment-economy link. Here the focus could be, as the NAFTA regime recognized, not only on the traditional trade-environment issues, but on the investment-environment issues where the OECD-led MAI failed, and where developing countries see their prospects for development in a globalizing era centrally engaged. One promising proposal is to have a multilateral investment regime embedded within an updated Climate Change and similar conventions, through a bargain in which developing countries accept disciplines over primarily Northern sourced FDI, in exchange for the resource transfers and differential commitments required to meet the climate change targets required (von Moltke 2000).

References

Bernauer, Thomas, "International Institutions and the Environment," *International Organization* 49 (Spring 1995): 351-377.

Bryner, Gary (1997), *From Promises to Performance: Achieving Global Environmental Goals*, (W. W. Norton: New York).

Camdessus, Michel (2000), "Development and Poverty Reduction: A Multilateral Approach," Address at the Tenth United Nations Conference on Trade and Development, Bangkok, 13 February.

Charnovitz, Steve (1996), "Trade Measures and the design of International Regimes," *Journal of Environment and Development* 5 (2) June 168-96. Also in Alan Rugman and John Kirton with Julie Soloway, eds. (1998), *Trade and the Environment: Economic, Legal and Policy Perspectives*, (Cheltenham: Edward Elgar), 444-472.

Cordonnier Segger, Marie-Claire et al. (1999), *Trade Rules and Sustainability in the Americas*, (International Institute for Sustainable Development, Winnipeg).

Dodds, Felix (2000), "Reforming the International Institutions," in Felix Dodds, eds., *Earth Summit 2002: A New Deal*, (Earthscan Publications: London), pp. 290-314.

Esty, Dan (1998), *Strengthening Global Environmental Governance*, (Yale Environmental Governance Dialogue; New York)

Esty, Dan et al. (2000), *NAFTA and the Environment: Seven Years On*, (Institute for International Economics, Washington, D.C.).

G20 (2000), *Press Release, Meeting of the G-20 Finance Ministers and Central Bank Governors*, October 25, 2000.

Gummer, John (2000), "Fish Forever," in Felix Dodds, eds., *Earth Summit 2002: A New Deal*, (Earthscan Publications: London), pp. 278-290.

Haas, Peter, Robert Keohane and Marc Levy, eds., *Institutions for the Earth: Sources of Effective International Environmental Protection*, (Cambridge; MIT Press, 1993).

Homer-Dixon, Thomas, "Global Environmental Change and International Security," in David Dewitt et al., pp. 185-228.

Kaiser, Karl, John Kirton and Joseph Daniels, eds. (2000), *Shaping a New International Financial System: Challenges of Governance in a Globalizing World*, (Ashgate: Aldershot).

Kirton, John (2000), "Canada-U.S. Trade and the Environment: Regimes, Regulatory Refugees, Races, Restraints and Results," Paper presented to a session on "Canada-U.S. Trade and the Environment," at a conference on "Rethinking the Line: The Canada-U.S. Border," sponsored by the Policy Research Secretariat, The Waterfront Centre Hotel, Vancouver, October 22-25, 2000.

Kirton, John (1999), "Explaining G8 Effectiveness," in Michael Hodges, John Kirton and Joseph Daniels, eds., *The G8's Role in the New Millennium*, (Ashgate: Aldershot), pp. 45-68.

Kirton, John J., Joseph P. Daniels, and Andreas Freytag, eds. (2001) *Guiding Global Order: G8 Governance in the Twenty-First Century*, (Ashgate: Aldershot, forthcoming).

Kirton, John and Raphael Fernandez de Castro, *NAFTA's Institutions: The Environmental Potential and Performance of the NAFTA Free Trade Commission and Related Bodies*, (Montreal: Commission for Environmental Co-operation, 1997).

Kirton, John and Sarah Richardson, eds. (1995), *The Halifax Summit, Sustainable Development, and International Institutional Reform*, (Ottawa: National Roundtable on the Environment and the Economy, 1995), pp 133.

Kirton, John and Sarah Richardson, eds. (1992), *Trade, Environment and Competitiveness: Sustaining Canada's Prosperity*, (National Roundtable on the Environment and the Economy: Ottawa).

Kokotsis, Ella and Joe Daniels (1999), "G8 Summits and Compliance," in Michael Hodges, John Kirton and Joseph Daniels, eds., *The G8's Role in the New Millennium*, (Ashgate: Aldershot), pp. 75-94.

Le Prestre, Philippe, ed. (2001), *Toward a New International Biological Order? Enhancing the Effectiveness of the Convention on Biological Diversity*, (Ashgate: Aldershot, forthcoming).

Litfin, Karen, "'Sovereignty in World Ecopolitics," *Mershon International Studies Review* (1997): 167-204.

Meyer, John et al, "The Structuring of a World Environmental Regime, 1870-1900," *International Organization* 51 (Autumn 1997): 623-652.

Rogers, Raymond, *The Oceans are Emptying*, (Black Rose Books, 1995).

Rugman, Alan, John Kirton, and Julie Soloway, *Environmental Regulations and Corporate Strategy: A NAFTA Perspective*, (Oxford: Oxford University Press, 1999).

Rugman, Alan and Julie Soloway (1997), "An Environmental Agenda for APEC" lessons from NAFTA," *International Executive* 39/6 : 735-44.

Spencer, Robert, John Kirton and Kim Richard Nossal, eds. (1981), *The International Joint Commission Seventy Years On*, (Centre for International Studies, University of Toronto, 1981).

Sprinz, Detlef and Tapani Vahtoranta, "The Interest-based Explanation of International Environmental Policy," *International Organization* 48 (Winter 1994): 77-106.

UNEP (2000), *Global Environmental Outlook Report 2000*, (United Nations Environmental Program, Nairobi).

Victor, David and Jesse Ausbel (2000), "Restoring the Forests," *Foreign Affairs* 79 (November/December): 127-144.

Von Moltke, Konrad (2000), *An International Investment Regime? Issues of Sustainability*, (International Institute for Sustainable Development: Winnipeg).

World Bank (2000), *The Little Green Data Book 2000: From the World Development Indicators*, (International Bank for Reconstruction and Development, Washington, D.C.).

Keywords: Global Environmental Governance (GEG), Environmental development, Issues of GEG, Actors of GEG, Environmental development in Bangladesh. 1. Preamble. Human induced environmental pressures might seriously affect national and international security (Ullman, 1983: 145). The Stockholm conference created the opportunity for advancement in the field of environment. Following the decisions of the conferences, many countries of the world formed environmental institutions and undertook environment management related initiatives (Najam, 2005: 303-321). The 1992 Rio Earth Summit and the 2002 Johannesburg Summit on Sustainable Development mark just two of the many policy landmarks of this rapid evolution of the GEG system (Najam, 2003). Global Environmental Governance is the title of a book written by Adil Najam, Mihaela Papa and Nadaa Taiyab. All the information of this article comes from this book. Global environmental governance (GEG) is the sum of organizations, policy instruments, financing mechanisms, rules, procedures and norms that regulate the processes of global environmental protection. The efficacy of global environmental governance will ultimately depend on implementation at global and domestic levels. National centre of global environmental governance more comprehensive, coherent, capable and economically connected than is provided by the current system of individualized multilateral environmental agreements with a few robust regional organizations. Given its world leading environmental vulnerabilities and capabilities, Canada has both an incentive and an ability to pioneer this new generation of environmental governance, centered on a powerful new Global Environmental Organization (GEO) that both it and the international community need.