Canada's Environmental Record

The Case of (and for) the Kyoto Protocol

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IN JUNE 1992, over 100 heads of state and government as well as 30,000 activists and journalists gathered in Rio de Janeiro, Brazil for the first-ever "Earth Summit". The meeting was widely heralded as the highest-level gathering in human history. Participants produced ground-breaking agreements to combat climate change and stem the loss of biological diversity, and in the process galvanized world attention on to environmental issues. The Rio meeting also created "Agenda 21", a global blueprint for implementing "sustainable development" which involves a balanced and integrated approach to ecological, economic and social concerns—into the 21st century.

Rio not only established a new regime of international law on sustainable development, it also institutionalized what Steven Bernstein labels the "compromise of liberal environmentalism"— i.e. "the predication of international environmental protection on the promotion and maintenance of liberal economic order." This paper examines from a Canadian perspective, a key and current agreement on sustainable development and an instrument of liberal environmentalism, the Kyoto Protocol under the climate change regime UN Framework Convention on Climate Change which emerged from the Rio Summit, from a Canadian perspective.

The United Nations designated the 1990s as the "turn around decade" on sustainable development; instead, the last ten years have been characterized by some as the lost decade in this regard. Since the 1992 UN Earth Summit, Canada is widely considered to have turned from environmental leader to environmental laggard—both at home and abroad.⁴ Indeed, the MulroneyConservative government is seen to have been much better on the environment than the Liberal government of Jean Chrétien.⁵

It is true that in Rio, Canada readily signed onto general agreements on biodiversity and climate change—commitments which federal Environment Minister David Anderson later characterized as "immodest." There is no doubt that the main agreements of the 1992 Summit—Convention on Biological Diversity, the UN Framework Convention on Climate Change, a Statement of Forest Principles and Agenda 21—were lofty. Unfortunately, many of the outputs that emerged from the ten-year follow-up conference to Rio—the World Summit on Sustainable Development (WSSD) held in Johannesburg, South Africa in September 2002—appear to be headed for the same ineffectual fate as their predecessors. Indeed, many view the 2002 Earth Summit as constituting a step back from the 1992 one. Because Canadian negotiators were instructed by their political masters to resist specific targets and timelines on a broad range of issues, Canada bears some responsibility for this outcome. At the Johannesburg Summit, Canada earned a place alongside Australia and the United States to form what Greenpeace and other well-established NGOs dubbed the "Axis of Environmental Evil".

Although such rhetoric is undoubtedly excessive, it is clear that Canada no longer holds the mantle of international environmental leadership it once did. While Canada was one of the leading OECD countries to sign and ratify the original Rio conventions on biodiversity and climate change, it has subsequently stalled on stricter and more substantive sub-agreements, such as the Biosafety Protocol⁶ to regulate international trade involving GMOs and, of course, the Kyoto Protocol to reduce greenhouse gas emissions globally.

At the domestic level, after commissioning an arms-length assessment of Canada's environmental performance since Rio, the federal government stalled on releasing the critical outcome: Canada's na-

tional report to the World Summit on Sustainable Development was made public only weeks before the conference started—several months past the due date set by the United Nations.⁷

A comprehensive review of Canada's environmental performance over the last decade⁸ is well beyond the scope of this chapter. Instead, this overview will focus on a single case as an illustration of Canada's environmental record under the Chrétien government. The case in question is an environmental issue currently at the forefront of Canada's political agenda: the *Kyoto Protocol* to the 1992 *UN Framework Convention on Climate Change*.⁹ Key concerns about the accord will be addressed according to five themes (or '5 Cs'): competitiveness, credibility, consultations, commitment, and consistency in public and foreign policy.¹⁰

The Kyoto Protocol

In 1992, under the Conservative government of Brian Mulroney, Canada was one of the first industrialized countries to both sign and ratify¹¹ the *United Nations Framework Convention on Climate Change*¹²—one of two treaties to emerge from the Rio Earth Summit. The *Kyoto Protocol*—named after the Japanese city in which it was adopted on 11 December 1997 —constitutes the first substantive treaty aimed at reinforcing and operationalizing the principles embodied in the original framework agreement on climate change. Specifically, the accord calls for industrialized countries to reduce their greenhouse gas (GHG) emissions by at least 5% below 1990 levels within by the period 2008-2012 timeframe (the first commitment period). Under Kyoto, Canada is to achieve a 6% reduction below the 1990 base year. Kyoto represents the first critical step to meeting global climate change commitments. These entail a total reduction of 50-75% in global greenhouse gases in this century alone.

In light of its reduced environmental reputation in the decade since Rio, Canada did not go into World Summit on Sustainable Development from a position of strength. Therefore, Prime Minister Chrétien's Summit pledge that Parliament would ratify the Kyoto Protocol by year's end came as a surprise to the UN community, to Canadians and, apparently it would appear, to his own Cabinet. ¹⁴ Nonetheless, it was a critical announcement at a critical time. Kyoto now stands poised to become legally binding. To be operational, the

accord requires ratification by a minimum of 55 countries responsible for at least 55% of the globe's GHG emissions. Although Kyoto has long surpassed the first criterion for entry into force, the second has remained elusive, especially in light of the Bush Administration's refusal to ratify the agreement. While the U.S. contributes roughly 25% to total GHG emissions, Canada produces a mere 2%. But person-for-person, it is Canadians—along with Australians—are the biggest energy consumers in the world. Thus, the country has a unique opportunity and responsibility to contribute to the global fight against climate change. Canada Our country should compensate for its vast size and extreme climate not with more GHG emissions, but with greater innovation and investment in efficient sources of energy.

Kyoto—A Question of Competitiveness

Opponents of Kyoto claim that Canada cannot afford to implement the accord because it would damage Canada's economic competitiveness. However, the policy uncertainty created by the government's protracted hesitation regarding ratification and the lack of a clear implementation plan has been most costly for corporate decision-making. Canadian corporations have a legitimate concern about the negative effects of uncertainty on their competitiveness and ability to attract investment. Ratification of the accord and efficient negotiation of details of the implementation plan in conjunction with key industrial sectors the provinces and territories provides the best way to address such uncertainty. Clear and credible targets allow corporations to make more informed investment and other business decisions.

Kyoto will provide very substantial opportunities to make a transition to a more efficient and competitive economy. According to the Alberta-based Pembina Institute for Appropriate Technology, Canada's competitiveness is likely to benefit, not suffer, from a decision by Parliament to ratify the Kyoto Protocol. ¹⁶ Their report finds that by taking a lead on environmental policy, governments position firms to be more efficient and competitive. In a survey of corporations in several key sectors (such oil and gas, electricity, chemicals, transportation and manufacturing) with major operations in Canada, those firms which took early action to improve efficiency and effect

emission-reduction strategies in anticipation of Kyoto ratification also increased their competitiveness. For example, from 1990 to 2000, Dupont reduced its GHG emissions by 60% while production increased by 10% and shareholder return quadrupled. Between 1995 and 2001, Interface (a flooring products firm) reduced GHG emissions (per unit of production) by 64% in its Canadian operations while the company's waste reduction program produced savings of over \$185 million worldwide. In recent ads, British Petroleum, one of the world's largest oil companies, has dubbed itself "Beyond Petroleum". This is more than an advertising campaign: in 1997, the company committed to reducing its GHG emissions by 10% below 1990 levels by the year 2010. Not only has BP already achieved this target eight years ahead of schedule (March 2002), it has done so at no net economic cost (savings from increased efficiency outweighed expenditures) while more than doubling its basic earnings per share (from \$0.17 in 1998 to \$0.36 in 2001). Canadian policy now needs to recognize and credit this progress, and set clear and realistic targets for further improvements.

The editor of the Canadian business magazine Corporate Knight, Tony Heaps, in the November 2002 issue, described Kyoto as "an Innovation Agenda in Disguise")¹⁰ with the following explanation:

New technologies that make sense in a world that puts cost constraints on emitters of greenhouse gases will emerge. Firms that invest in cleaner ways of doing business will gain market share and reduce costs. By aligning firms with price signals that send a clear message (pollution costs), Kyoto will stir up a critical mass of activity establishing a business web of innovative firms that will act as a reinforcing network for developing ever-cleaner and more efficient processes. Those firms that continue to waste will waste away.¹⁷

Opportunities for trade in clean technologies are not limited to OECD countries. The emergence of markets in the developing world and economies in transition—China, India, Latin America and Africa as well as Eastern and Central Europe—will provide those who move quickly with tremendous economic opportunity. Indeed, over

the next twenty years alone, the global market for climate-related technologies will be valued in the trillions of dollars. As developing countries continue to grow in the coming decades, Canada will be poised to export the very technologies that they will urgently need to develop in an environmentally sustainable way.¹⁸ Thus, in meeting its Kyoto targets, Canada will not only be contributing to emission reductions and global sustainability, we will be at the forefront of an emerging world market that will represent a fundamental transition of the global economy.

Also prominent in the rhetoric of Kyoto critics is the notion that Canada cannot afford to implement the agreement because its largest trading partner has rejected it. This argument confuses lack of leadership by the Bush administration on climate change with lack of action by American states, cities, companies and citizens. Indeed, state and municipal governments in the U.S. are moving faster and further to reduce GHG emissions than their Canadian counterparts in reducing GHG emissions.¹⁹ Moreover, despite the Bush team's opposition to Kyoto, Washington still administers a much more substantial body of GHG-reducing measures than does Ottawa. At every level of government, Canada lags behind its American counterparts in its efforts to curb climate change. If these trends continue, the U.S. may well shrink its GHG emissions in line with Kyoto targets despite not having formally ratified the accord. And although it is unlikely to do so under the Bush Administration's watch, the U.S. may well ratify under a future administration. With American ratification would come a stronger push for enforcement mechanisms, and thus potentially costly trade measures. So, Canada has a choice: it can pay now or pay more later.

Although the U.S. appears to be making progress on climate change outside the Kyoto framework, Canada's track record remains very poor. In the absence of legally-binding targets, Canada invoked the voluntary Rio pledge to stabilize its GHG emissions at the 1990 level by 2000. Instead, despite a slew of federal and provincial plans purporting to address climate change, Canada's emissions levels grew by 20% in the last decade; and in 1997, it abandoned the voluntary target altogether. Given the country's ever-growing emissions levels, the federal government estimates that Canada will need to reduce its current levels by 25% in order to meet its Kyoto target by 2010.

In short, implementing Kyoto will not only allow Canada to con-

tribute to the global effort to curb climate change, it will have the practical effect of narrowing—not widening—the gap with the U.S. Moreover, Kyoto does not preclude Canada from strengthening its this global commitments with national or indeed regional (NAFTA-based) ones—provided these enhance rather than erase our Kyoto targets.

Currently, while the U.S. remains outside the global climate change regime, the demand for special emissions permits²⁰ (which Parties to Kyoto can purchase to offset their excess emissions) will be lower—thereby reducing the price of such permits and thus the cost of complying with Kyoto targets.

Kyoto — a *Question of Credibility*

Despite the initial praise it inspired in some international and environmental circles, the commitment made by Mr. Chrétien in Johannesburg was not clear-cut: for too long, Canada's position remained contingent upon two additional and improbable conditions—one national, the other international:

- nationally, ratification seemes to depend upon the environmental and economic equivalent of a "Clarity Act on Kyoto"
 —a level of detail rarely, if ever, required by other international agreements Canada has signed; and
- 2. the international condition for ratifying Kyoto appeared to be credits for clean energy exports—Canada's appeal for special consideration due to the U.S. refusal to ratify failed to secure any substantive support during international negotia tions on climate change.

This equivocation has undermined Canada's credibility on this critical issue both at home and abroad. Far from re-establishing the country's credentials as an environmental champion, the confusion following the Prime Minister's remarks in Johannesburg alienated important stakeholders on all sides of this issue:

1. *The international community*, especially the European Union, would likely block any additional amendments to Kyoto, particularly those proposed by a country widely seen to

have already watered down the accord.²¹ In this light, the position—held by several prominent political and business leaders—that Canada should not ratify Kyoto because it is too feeble proves perverse: If Kyoto does not do enough to curb climate change, it is in part because countries such as Canada have consistently negotiated additional concessions (such as getting credits for its forests as "carbon sinks") which have served to weaken the Protocol's effect in terms of real reducttion in greenhouse gas emissions. Having sucessfully softened the accord, Canada's walking away from it would have been viewed by the international community as an act of bad faith, if not betrayal. All too often, this is the American approach to international treaties—not the Canadian one.

Concretely, rejection of Kyoto would also mean that Canada would have little if any influence in future rounds of global climate negotiations, which are expected to bring key countries such as India, China and Brazil into the fold.²² Thus, from an international perspective, non-ratification is non-starter: it would damage Canada's reputation and its leverage in future international negotiations on critical issues beyond climate change.

- 2. Environmentalists who strongly support Kyoto viewed the Johannesburg announcement as a last-ditch, legacy-driven effort to reverse the country's decade-long slide from environ mental leader to laggard. Many perceived the belated support for the accord as an act of "ecological opportunism" stemming from the Prime Minister's preoccupation with his legacy rather than from a real concern for the environment. Nonetheless, despite private musings regarding the motivation and timing²³ of the Johannesburg pledge, most environmentalists expressed public support for the decision.
- 3. Business may resent the added burden of having to now scramble to meet Kyoto targets within a much tighter time-frame. Had Canada not only signed but also ratified the protocol following its 1997 adoption, energy producers and consumers

- would have had more time to transition to a cleaner, less carbon-dependent economy. The policy confusion created by the government's protracted hesitation regarding Kyoto has also proven problematic for corporate decision-making, which thrives in conditions of certainty. It is time to bring clarity and get on with the business of implementation; this is what the corporate community does well: set clear rules, and it will work to meet them.
- 4. Some provinces decried the federal government's 'breech of public trust' in changing the focus of cross-Canada consultations on Kyoto from ratification to implementation. Alberta even threatened to legally challenge the federal government's authority in this regard. There is no doubt that the federal government has circumvented a public consultation process that it had itself laid out. However, as noted above, this process was illconceived and over-extended from the start. Consent of the provinces is not required for ratification of international agreements; this authority rests strictly with the federal government. However, given the provinces' shared jurisdiction over natural resources, the federal government does have a responsibility to consult its provincial and territorial counterparts on how it arrives at implementing these treaties. It must work to involve the provinces, particularly in areas of action under their jurisdiction. Indeed, without securing the full cooperation of the provinces, a number of key instruments may be unavailable for implementation.

According to an international lawyer who has closely followed climate change negotiations since 1990:

The federal government has clear jurisdiction to ratify the Kyoto Protocol. Only [it] can enter into international obligations on behalf of Canada, and no province can veto the ratification of an international treaty.... [In addition] the federal government can act to address climate change and meet the Kyoto commitments on its own accord, without waiting for complimentary action by any or all of the provincial and territorial govern-

ments....While a federal-provincial-territorial and municipal strategy is the most desirable route [both in political and practical terms], the reality of economic and environmental interests in the different provinces tells us that only if the federal government is prepared to act unilaterally is it going to be possible to effectively pursue a process of building a national consensus on implementation so that it does not have to act unilaterally.... In short, the history of climate change negotiations within Canada shows that only if the federal government is prepared to use its authority unilaterally are the changes high of not actually having to do so. Conversely, taking this arrow out of the federal quiver, as was done in 1992 by the Mulroney government [in order to assuage provincial concerns], seriously reduces the chances of gaining a national consensus.24

Therefore, if one views ratification as a matter of foreign policy (to be exercised by the federal government for the common good) and implementation as a matter of domestic environmental and economic policy (to be ecercised by the federal and provincial governments), the revised focus of the current deliberations—from consultations on whether to ratify to real negotiations on how to implement—is not only more acceptable, it is preferable (again, notwith-standing as outlined above).

Kyoto – a Question of Consultations

Contrary to popular belief, Canada's commitment to ratify the Kyoto Protocol did not come with the Prime Minister's pledge at the Johannesburg Summit in September 2002. The Liberal government initially signaled its intent to ratify Kyoto when it signed²⁵ the accord on 29 April 1998. Why then, in the almost five years since first signing the accord, has Ottawa failed to produce a viable national action plan to implement the agreement? This failure is not, as some would have it, due to lack of consultations or technical know-how;

Canada has some of world's best people in both the private and public sectors working on climate change issues. The failure to craft a clear, comprehensive and timely implementation program is due purely to a lack of political will.

Complaints regarding the federal government's failure to fully consult with the provinces, key sectors and stakeholders are disingenuous in light of the real record: Kyoto has arguably been more extensively consulted upon than any other treaty signed by Canada. Imagine, if you will, the federal government consulting Canadians this much on whether it should adhere to international institutions —such as NAFTA or the WTO—which meet the approval of powerful sectors of the Canadian economy. The objection here is not to consultations per se, but to their selective use for purely opportunistic or PR purposes. As decisions once enacted by elected representatives in national legislatures are increasingly made by nonelected officials at international summits, it is critical that citizens and parliamentarians become more informed and involved at all levels and stages of the policy-making process. But tackling the "democratic deficit" in international decision-making should not be a discriminatory undertaking; nor should it be used as a delay tactic regarding matters on which the government would rather avoid taking decisive action.

Ottawa's mistake lies not in its failure to consult but, rather, in its failure to consult the right people on the right question: until recently, selective discussions with elites, experts and special interest groups been framed by "whether to ratify" Kyoto; instead, the Chrétien government should have been consulting Canadians directly on "how to implement" the accord from the start. This is what Ottawa poised to do in 2003—but only after years of policy confusion, procrastination and vacillation.

Kyoto—a Question of Commitment

As Canada commits to Kyoto, implementation of the plan that follows ratification is of central importance. With ratification, Kyoto becomes domestic law and Canada has six to ten more years to reach its targets. The country does not—as has been alleged by some government leaders —have another ten years to work out the plan. 2008-2012 is the deadline for achieving the plan, not developing it.

This reality check leads some to want to abandon Kyoto altogether. It leads others to the opposite conclusion: Canada must expedite ratification as a matter of utmost priority, and then actively engage the stakeholders on how—not whether—to achieve them.

Whatever side of the issue one espouses, it is clear that , one thing is clear: the federal government has mismanaged Kyoto from the beginning. No doubt, the Protocol is a political and technical minefield, but Ottawa has exacerbated the issue's inherent complexity and controversy through confusion. Instead of addressing Kyoto as a matter of public policy, federal and provincial governments have treated it as a matter of public relations—and it has done even this poorly. In the case of Kyoto, federal government has so far broken every basic rule of crafting and selling public policy: define the problem and get public to accept it; propose a solution and consult on it; develop and negotiate plan to implement it, and accept the consequences. ²⁶

For Canada to meet its Kyoto targets, it must craft a national plan based on a truly national effort: a renewed federal, provincial, territorial and municipal undertaking that involves stakeholders from industry and labour as well as environmental and consumer groups. Demand for public information and stakeholder engagement is high: In the first three weeks since releasing its climate change plan, the federal government received over 1000 written submissions by individuals and its website had roughly 100,000 downloads. A cross-Canada "Commission on Climate Change" might be envisioned as a way of directly engaging concerned citizens and their elected representatives.

Reaching our Kyoto targets will require not only effective actions and measures to reduce GHG emissions, but effective governance systems to guide the implementation process. Building on core democratic principles such as leadership, transparency, accountability, enforcement and engagement, the first task in the postratification process will be to rebuild confidence among key stakeholders so that implementation is both credible and predictable. The president of *Strategies to Sustainability* (Stratos. Inc. – an Ottawabased consulting firm which facilitated the National Stakeholder Workshops on Climate Change¹ in spring 2002) proposed two key coordinating mechanisms:

- 1. An efficient, central focal point for the federal government. Given that responsibilities for climate change lie with many agencies, and that accountabilities need to assigned to these same agencies, there is a need for a federal climate change coordination office which has the necessary authority and the technical knowledge to make this work;
- 2. An effective inter-jurisdictional body operating at both the political and bureaucratic levels. The National Air Issues Coordinating Committee has served this role until summer 2001. This body could be resurrected or a new one created, e.g. a "National Climate Change Action Committee".

During a special presentation to parliamentarians during the ratification debate, George Greene concluded:

We need an effective governance system to implement Kyoto that provides: clear and transparent decision-making; accountability for delivering on commitments and obligations; and oversight and monitoring to ensure we are making progress. And we must always keep in mind the need for effective engagement of the public and key interests in moving forward.²³

Any national initiative must also go beyond Kyoto *per se* to address global climate change. The continuing rise in Canada's GHG emissions places the country on a path that is far from sustainable. This trend must be reversed: the consensus of international scientists is that global emissions must fall by 50-75% in this century alone if we are to avoid dangerous man-made disruption of our climate. Such projections underscore the importance of Kyoto's modest 6% target as a vital first step in bringing Canada into the carbon-constrained world of the new millennium.

This Liberal Government has already proven it can muster the massive political will and resources to successfully tackle seemingly intractable problems: the fiscal deficit provides a compelling case in point. The rationale presented was short-term pain for long-term gain: it would be irresponsible to leave such a burden on future generations. The

same logic applies, if not more so, to the ecological debt. If Canada can mobilize around something as seemingly mundane as a fiscal deficit, surely it can make headway on the environmental deficit.

In polls, the environment consistently ranks as a core value among Canadians. It is central to both our national economy and our national identity. Citizens are experiencing the effects of environmental deterioration—from increasingly volatile weather patterns to suuficating smog and poisoned water—all around them, and they want action. Among a broad range of worthy ecological issues and initiatives, Kyoto has become the litmus test on the environment. Any government, sector or individual seen to be stalling on Kyoto will be seen to be stalling on the environment.

In a survey of Canadian values conducted by liberal pollster Michael Marzolini,²⁹ a majority of Canadians expressed strong support for state action on the environment and a preference for government's role in helping to equip them for the future. This challenge raises a question posed by Thomas Homer-Dixon in his award-winning book, *The Ingenuity Gap*: "Can we generate and implement useful ideas fast enough to solve the very problems—environmental, social and technological—we've created?"³⁰

Ultimately, curbing climate change will constitute an unprecedented test not only of technical know-how, but of public will and political leadership. Kyoto will help determine whether Canada's citizens and leaders are up to the challenge of bringing our country and our economy into the 21st century. It will also provide very substantial opportunities to make a transition to a more efficient and competitive economy.

Kyoto—a Question of Consistency

Ratifying the Kyoto Protocol does not preclude Canadians from developing a Made-in-Canada action plan on climate change; it compels us to do so. Kyoto provides an internationally-agreed framework for meeting targets on greenhouse-gas reductions within a specified timeframe. It does not dictate how countries are to meet these objectives. In fact, through a series of global market-based mechanisms, the accord augments, not diminishes, the flexibility with which individual countries can meet their climate change commitments. In short, Kyoto sets the context for action on climate

change, but does not dictate how a nation meets its international commitments.

The real issue is whether Canada will address climate change within a global framework, or whether it will adopt a strictly national (or, indeed, provincial or sectoral) approach to what is a global problem. Will Canada apply its general preference for multilateralism to climate change?

Canada has expressed strong support for a multilateral approach to solving international problems, such as Iraq and its potential use of weapons of mass destruction beyond its own borders. Just as our country has opposed a go-it-alone by the United States vis-à-vis Iraq, so too must it reject strictly unilateral approaches to curbing climate change. On both the issues of Iraq and climate change, anything short of globally-sanctioned action would represent not only diplomatic defeats, but sub-optimal solutions to what are ultimately global security threats.³¹

Within the hierarchy of international relations, "hard" security and trade matters have traditionally trumped "soft" social and environmental ones. The reality, however, is that ecological degradation is a growing source of conflict in the world, and thus represents a real threat to collective security. Pervasive climate change has been described as second only to nuclear war in terms of its catastrophic effects globally. In this sense, climate change is far more than a matter of environmental policy; it is increasingly a matter of national security.

The evidence underlying global climate change is objective, farreaching and compelling. Indeed, few issues on the global agenda have galvanized such widespread consensus within political and scientific communities. The Intergovernmental Panel on Climate Change³²—representing 1,500 of the world's leading atmospheric scientists, economists and technologists—have repeatedly concluded that: (1) the current scope, scale and pace of climate change are unprecedented, and (2) human activity—mainly through the production of greenhouse gases such as carbon dioxide—is increasingly influential in this regard. Canadian scientists from across the country have been active in their areas of expertise in the work of this international panel. And even sceptical nations find the science convincing. Thirteen national academies of science—including the American counterpart whose members were hand-picked by President George W. Bush himself—concur with these findings. Still, international affairs are not susceptible to courtroom proofs beyond reasonable doubt. It is precisely for this reason that a "Precautionary Principle" underlies many environmental agreements such as the *Kyoto Protocol*. While the U.S. (and, to some extent, Canada) has sought to expel direct reference to this principle in international treaties, its intent is straightforward: where there is a threat of serious or irreversible harm, lack of scientific certainty should not preclude action. Otherwise, positive proof would come too late. The principle essentially asserts that it is better to err on the side of action that turns out to be unnecessary than to expose ourselves to preventable devastation through inaction.³³

Conclusion

The Kyoto Protocol represents the most important international initiative to date for combatting rising greenhouse gas emissions. Indeed, Kyoto is the only global game in town for addressing global warming and other consequences of climate change. The result of ten years of tough negotiations³⁴ in which Canada played an influential role, the accord reflects trade-offs among more than 150 states with divergent interests at vastly different stages of their economic development. Significantly, Kyoto recognizes that it is industrialized countries that have been producing the majority of the globe's anthropogenic greenhouse gas emissions, and that it is these countries that must lead the lead the global effort to reduce these. Kyoto also acknowledges that developing countries must have room to grow their economies while preparing to assume their own targets in the future. As such, for critics of Kyoto to suggest that developing and least-developed countries are somehow getting a free ride is simply misguided.

Domestic disagreements within Canada about how to address climate change only serve to reinforce Kyoto's value as an international agreement. Indeed, the Protocol embodies innovative liberal principles³⁵—as "Intergenerational Equity", "Common but Differentiated Responsibility", the "Polluter Pays Principle" and the "Precautionary Principle"—which may prove instructive for Canada as it seeks establish a fair and equitable national climate change regime that does not unduly burden particular provinces, sectors or stakeholders.

After more than a decade of international negotiations and national consultations on climate change, the federal government released a "Climate Change Action Plan for Canada"36—a matter of days before Parliament began debating whether Canada should be legally bound to Kyoto by ratifying the accord. There is no doubt that Canada's "ratification readiness" would have been greatly enhanced by a more comprehensive implementation plan to ensure we can meet our Kyoto commitments. However, the foot-dragging of the past decade made it clear that no such plan would materialize until ratification was assured. For better or worse, implementation is contingent upon ratification. By protracting the debate on ratification, the country has been running out the clock on implementation. The longer Canada postpones effective implementation, the more difficult—if not impossible—it will be to meet its Kyoto targets. Failure to meet our global climate change commitments could well become a self-fulfilling prophecy.

N.B. At the time of press, Parliament voted overwhelmingly in favour of ratifying the Kyoto Protocol on 9 December 2002. The Prime Minister of Canada signed an executive order-in-council which finalized the ratification process on 16 December 2002. The following day, Environment Minister deposed the instrument of ratification with the United Nations for formal international recognition of Canada's binding commitment to the Kyoto Protocol. With this act, Canada became the 98th country to become a Party to the Protocol; it provides positive encouragement to countries such as Russia which continue to waver regarding their own ratification. Canada's international efforts should focus on securing support of this and other major greenhouse-gas producing countries-without which Kyoto cannot become fully operational. Domestic efforts should be devoted to building credibility and certainty into implementation initiatives. Although Canada's ratification of the Kyoto Protocol is now complete, the contentious nature of the debate surrounding this decision guarantees that the domestic implementation process will be dynamic, if not divisive.

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- The Rio Earth Summit known officially at the United Nations Conference on Environment and Development – marked the 20th anniversary of the United Nations Conference on the Human Environment held in Stockholm, Sweden. Canadian businessman and diplomat Maurice Strong spearheaded both summits.
- The term "sustainable development" remains controversial: some perceive it as an attempt to legitimate economic growth within the concept of environmental protection. It was originally defined by the 1987 report of the World Commission on Environment and Development (or *Brundtland Report*) as "development that meets the needs of the present without compromising the ability of future generations to meet their own needs." In Canada, this definition has been integrated into federal legislation and into the amendments to the Auditor General Act (1995), which established the Commissioner of the Environment and Sustainable Development. For analyses of sustainable development in the Canadian context, see: O.P. Dwivedi, Patrick Kyba Peter J. Stoett and Rebecan Tiessen, *Sustainable Development and Canada: National and International Perspectives* (Peterborough: Broadview Press) 2001; Environment Canada, *Sustainable Development Strategy 2001-2003.* (Ottawa: Minister of Public Works and Government Services Canada) 2001.
- Steven Bernstein, "Liberal Environmentalism and Global Environmental Governance" in *Global Environmental Politics*, vol. 2, no. 3: 1-16 (August 2002).
- Désirée M. McGraw, "Ten Years after the Earth Summit" in the Montreal Gazette, p.B7 (1 June 2002). See also Glen Toner, "Canada: From Early Frontrunner to Plodding Anchorman," pp.53-84 in William M. Lafferty and James Meadowcroft (eds.) Implementing Sustainable Development: Strategies and Initiatives in High Consumption Societies (New York: Oxford University Press) 2000.
- Notwithstanding election pledges outlined in the Liberal Party of Canada's policy platforms. See in particular "Sustainable Development" (ch.4, pp. 62-70) in the Liberal Party of Canada's *Red Book*, formally entitled *Creating Opportunity: The Liberal Plan for Canada* (Ottawa, Liberal Party of Canada, 1993). See also policy platforms for 1997 (entitled *Securing Our Future Together: The Liberal Plan for Canada*) and 2000 (entitled *Opportunity for All: The Liberal Plan for the Future of Canada*).
- Canada was the first industrialized country to sign the *Convention on Biological Diversity* (CBD) in Rio, thereby creating the "biodiversity bandwagon" which convinced most G7 countries to sign on despite overt opposition by the Bush (41st) Administration. Canada has been viewed by North and South alike as a champion of the biodiversity issue-area. As a result, it managed to beat out countries such as Spain, Switzerland and Kenya in its bid to host the CBD Secre tariat, which has been headquartered in Montreal since 1996. However, Canada's support for the CBD has slipped in more recent years. Most notably, Canada has signed but not yet ratified the first legally-binding sub-agreement to the CBD: the *Biosafety Protocol* addressing transboundary movement of genetically modified organisms (GMOs). During these negotiations, Canada served as the spokesperson for the so-called "Miami Group" of major agricultural exporters, which resisted any binding agreement regarding the trade in or labelling of products containing GMOs.

For an examination of the biosafety negotiations, see John Vogler and Désirée M. McGraw, "An International Environmental Regime for Biotechnology? The Case of the Cartagena Protocol on Biosafety" in John Vogler and Alan Russell (eds.) *The International Politics of Biotechnology: Investigating Global Futures* (Manchester: at

the University Press) 2000. For an overview of the biodiversity negotiations, see Désirée M. McGraw "The Convention on Biological Diversity – Key Characteristics and Implications for Implementation" in *Review of European Community and International Environmental Law*, vol. 11, no.1: 17-28 (Spring 2002). See also Désirée M. McGraw, "The Story of the Biodiversity Convention: From Negotiation to Implementation" in Philippe Le Prestre (ed.) *Governing Global Biodiversity: The Evolution and Implementation of the Convention on Biological Diversity* (London: Ashgate Press) 2002.

- See Government of Canada, Sustainable Development: A Canadian Perspective. (Ottawa: Minister of Public Works and Government Services Canada) August 2002. http://www.wssd.gc.ca/canada at wssd/canadian perspective e.pdf
- For a more complete analysis of Canada's environmental performance throughout the 1990s, see official reports by Canada's Commissioner on Environment and Sustainable Development (1997-2001) and a special report entitled "The Commissioner's Perspective: The Decade after Rio. Commissioner of the Environment and Sustainable Development" in Report of the Commissioner of the Environment and Sustainable Development to the House of Commons of Canada (Ottawa: Minister of Public Works and Government Services Canada) 2002. http://www.oag-bvg.gc.ca See also non-governmental publications, such as "Rio Report Cards" by the Sierra Club of Canada (1993-2001) and "Shadow Reports" by the Canadian Environmental Network and One Sky (2002). Nikki Skuce (ed.) Summit or Plummet: A Call for Canadian Leadership Ten Years after Rio. (Ottawa: Canadian Environmental Network) July 2002. http://www.cen-rce.org/wssd
- UN Doc.A/AC237/18 (Part II, Add.1), 31, *International Legal Materials* 848. See also official climate convention website http://www.unfccc.int
- The "five Cs" framework was developed by the author during presentations to the following conferences: Searching for the New Liberalism (Munk Centre for International Studies, University of Toronto, Toronto) September 2002; the Banff Forum (Banff Conference Centre, Alberta) October 2002; and NetImpact (MBA program, McGill University Faculty of Management, Montreal) December 2002. The frame work also appears in the author's: "How fast should we go on Kyoto?" in Globe and Mail, p.A19, 22 October 2002; and "The Case for Kyoto: A Question of Competitiveness, Consultations, Credibility, Commitment and Consistency" in Policy Options, vol. 24, no.1: 35-39 (December 2002-January 2003). See website of Institute for Research on Public Policy https://www.irpp.org
- Ratification is one of several formal processes (alongside acceptance, approval and accession) by which an international treaty becomes domestic law. For an excellent analysis of Canada's domestic application of international law, see Jutta Brunnée and Stephen J. Toope., "A Hesitant Embrace: The Application of International Law by Canadian Courts" (forthcoming publication) 2002.
- It has been argued that Canada's legal obligations to combat climate change stem not only from its adherence to the UNFCCC, but to other treaties in the fields of environment, human rights, trade and investment. See Lina Carlsson et al, Canada's International Legal Obligations with Regard to Climate Change. (Montreal: Centre for International Sustainable Development Law) November 2002. http://www.cisdl.org
- According to Article 3 of the Kyoto Protocol, Parties included in Annex I (i.e. indus rialized countries and those in transition to market-based economies) "shall, indust-vidually or jointly, ensure that their aggregate anthropogenic carbon dioxide equivalent emissions of the greenhouse gases... do not exceed their assigned amounts...with a view to reducing the overall emissions of such gases by at least 5 per cent below 1990 levels in the commitment period 2008 to 2012." Moreover, "Each Party included in Annex I shall, by 2005, have made demonstrable progress in achieving its commit-

- ments under this Protocol." Although Article 4.6 provides that those countries listed in Annex I which are transitioning to a market economy are accorded a "certain degree of flexibility" in meeting their commitments.
- At the time of submitting this article for publication, Parliament had not yet voted to ratify the Kyoto Protocol. However, ratification was a foregone conclusion given that the majority of legislators (particularly MPs from the Liberal Party, NDP and Bloc Québecois) were expected to vote in support of the accord. Moreover, the Prime Minister reserves the right to ensure ratification through an executive order-in-council (requiring the signature of a few Cabinet Ministers).
- According to Article 25 of the Kyoto Protocol, the rules for its entry into force require 55 Parties to the Convention to ratify (or approve, accept, or accede to) the Protocol, including Annex I countries accounting for 55% of that group's carbon dioxide emissions in 1990.
- See Sylvie Boustie with Marlo Raynolds and Matthew Bramley, How Ratifying the Kyoto Protocol Will Benefit Canada's Competitiveness. (Ottawa: Pembina Institute for Appropriate Technology for the Canadian Climate Action Network) June 2002.
- See Toby A.A Heaps, "Kyoto An Innovation Agenda in Disguise" in *Corporate Knights*, 10-14 (November 2002).
- Developing countries' demand for clean technology will significantly increase if they are required to grow in an environmentally-sustainable way, e.g. by decreasing their GHG emissions and other measures. By leading on Kyoto, Canada will have a greater say at the negotiation table as to whether and when countries such as Brazil, China and India come on board the global climate change regime. Ratification by industrialized countries such as Canada will also create an additional incentive for developing economies to commit to their own targets. In this way, Canada's commitment to Kyoto would support both its environmental and economic objectives. By ratifying Kyoto, Canada sends an important political signal which will strengthen future markets for its environmentally-friendly economic goods and services.
- Matthew Bramley with Kirsty Hamilton and Leslie-Ann Robertson, Comparison of Current Government Action on Climate Change in the U.S. and Canada, Ottawa: Pembina Institute for Appropriate Technology and World Wildlife Fund Canada) May 2002.
- The sale of emissions permits is one of several global market-based mechanisms under Kyoto that increase flexibility and reduce costs in terms of meeting targets. Other Kyoto schemes such as "Joint Implementation" and the "Clean Development Mechanism" also allow industrialized countries such as Canada to work with other countries so that not all implementation must be carried out domestically.
- Canada played an influential role throughout the Kyoto and other global climate negotiations by successfully securing a number of concessions which reflect its national interests. One such example is the inclusion of "carbon sinks" in the Bonn agreement of November 2001: Canada helped to negotiate credits for expanding the size and carbon storage of its managed forests. The increased range and flexibility of mechanisms countries may employ to meet their commitments must be acknowl edged as a diplomatic success for Canada. However, this same initiative has been criticized as a substantive weakness from an environmental perspective given that it effectively entails fewer real reductions in greenhouse gas emissions.
- The most recent round of negotiations, held in New Delhi in November 2002, failed to commit developing countries to binding targets, but their inclusion will remain the focus of ongoing talks.
- At a Liberal caucus retreat in Chicoutimi, Québec just days before the Kyoto pledge in Johannesburg Mr. Chrétien announced his intention to step down as Prime Minister in February 2004.

- Howard Mann, "Jurisdictional Issues," in notes for presentation to Beyond Kyoto: A Win-Win Climate Change Action Plan or Canada (Citizen-Government Dialogue, Parliament Hill, Ottawa) 4 December 2002.
- While a treaty is adopted collectively by the international community (e.g. via the United Nations), it is signed by individual countries. In international law, signature represents the first formal step on the road to ratification. Ratification by a requisite number of countries (normally specified in the treaty itself) ensures that a treaty enters into force, and thus becomes legally binding on all Parties (i.e. all countries which have ratified the agreement). Transforming an international agreement into domestic law is done differently in different countries. In Canada, this occurs through the adoption of legislation at the federal or provincial levels (and sometimes both levels) that creates domestic legal obligations consistent with the agreement. In some cases, the agreement as a whole can also be included in a statute that is adopted by the legislative or executive branch of government. Domestic implementation can also be accomplished in whole or in part by administrative acts of the governments of the individual Parties, such as the elaboration of national action plans.
- Perhaps Canada should follow the example of Norway and other parties to Kyoto. After assembling a team of high-profile and well-respected individuals to both champion the accord with domestic audiences and coordinate its implementation, Norway produced a solid national action plan in a matter of six weeks.
- These consultations were comprised of 14 day-long meetings in every province and territory of Canada, and involved over 900 stakeholders. Under consideration were four broad policy options for achieving climate change targets as outlined in Government of Canada, Discussion Paper on Canada's Contribution to Addressing Climate Change (Ottawa: Minister of Public Works and Government Services Canada) May-June 2002.
- ²⁸ George Greene, "Putting in Place Governance and Engagement Processes for Implementation," in notes for presentation to *Beyond Kyoto: A Win-Win Climate Change Action Plan or Canada Citizen-Government Dialogue*, Parliament Hill, Ottawa) 4 December 2002.
- Michael Marzolini, "Polling Alone: Canadian Values and Liberalism," paper presented to Searching for the New Liberalism (Munk Centre for International Studies, University of Toronto, Toronto) 27-29 September 2002.
- Thomas Homer-Dixon, *The Ingenuity Gap: Can We Solve the Problems of the Future?* (Toronto: Vintage Canada) 2001.
- Just as there is little doubt that the U.S. even acting alone would prevail militarily against Iraq, a Made-in-the-USA alternative to Kyoto could undoubtedly help address climate change. But international relations are about means not just ends. Both unilateral responses would represent not only diplomatic defeats, but sub-optimal solutions to what are ultimately collective-action problems on a global scale. Let it be stated emphatically that there is no moral equivalence between the potential deployment of weapons of mass destruction by Saddam Hussein and the dangers posed by climate change. While the former would represent the deliberately evil act of a single despot, the latter reflects the seemingly benign actions of countless producers and consumers throughout the world (mainly in industrialized countries). Notwith standing this important distinction, there is a clear double-standard in international affairs: the burden of proof for taking collective action against an environmental threat appears to exceed that required for responding to a military one.
- The World Meteorological Organization (WMO) and the United Nations Environment Programme (UNEP) established the Intergovernmental Panel on Climate Change (IPCC) in 1988. The role of the IPCC is to assess the scientific, technical and socio-

economic information relevant for the understanding of the risk of human-induced climate change. So far the IPCC has produced three key reports: the First Assessment Report, released in 1990, was instrumental informing the negotiations leading to the adoption of the UN Framework Convention on Climate Change in 1992; the Second Assessment Report, entitled *Climate Change 1995*, provided key input to the negotiations which led to the adoption of the Kyoto Protocol in 1997; the Third Assessment Report, entitled *Climate Change 2001*, publishes the results of findings on climate change in relation to three key areas – (1) scientific basis, (2) impacts, adaptation and vulnerability, and (3) mitigation. For more information, see http://www.ipcc.ch/about/about.htm

- According to this logic, Kyoto (as a first, albeit far more timid, global step) is, in a way, to climate change what an internationally-sanctioned pre-emptive attack might be to Iraq's use of weapons of mass destruction. Such an analogy will undoubtedly irritate environmentalists and military strategists alike, but it serves to highlight the need to apply a consistent standard of evidence as a basis for action across a range of international issues. Indeed, it could be argued that the burden of proof needed to justify a military action, which may involve loss of human life, should be higher than that required for a non-violent response to an environmental danger: implementing Kyoto may cost jobs (although it may also create some), but it will not cost lives (indeed, it may save some, particularly in small-island developing states that do not have the means to adapt to climate change).
- For an examination of these negotiations, see Irving M Mintzer and J.A. Leonard, *Negotiating Climate Change* (Cambridge: at the University Press and Stockholm Environment Institute) 1994.
- Many of these principles are enshrined in the 1992 "Rio Declaration" contained in the Report of United Nations Conference on Environment and Development, U.N. Doc. A/ CONF.151/6/Rev.1, 31 International Legal Materials 874. See also Philippe Sands, Principles of International Environmental Law: Frameworks, Standards and Implementation, Vol.I (Manchester: at the University Press) 1996.
- 36 Government of Canada, Climate Change Plan for Canada Achieving our Commitments Together (Ottawa: Minister of Public Works and Government Services Canada) November 2002.