Improving The Effectiveness Of Environmental Assessment In Addressing Federal Environmental Priorities

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ABSTRACT

This discussion paper explores the extent to which the *Canadian Environmental Assessment Act* has been used effectively to address the federal government's stated environmental priorities. Three recent joint panel reviews are used as case studies to determine whether environmental assessment has been applied effectively to address identified environmental priorities (including greenhouse gas emissions and climate change). Recommendations are proposed for reforming the *Canadian Environmental Assessment Act* and related regulations and policies to afford more

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Abbreviations and acronyms

BCF	Building Canada Fund
BLIERs	Base-Level Industrial Emission Requirements
CAAQS	Canadian Ambient Air Quality Standards
CAMS	Comprehensive Air Management System
CCME	Canadian Council of Ministers of the Environment
CEAA	*Canadian Environmental Assessment Act*
CEMA	Cumulative Environmental Management Association
CEQ	White House Council on Environmental Quality
CO_2e	equivalent carbon dioxide
EARPGO	Environmental Assessment and Review Process Guidelines Order
EPBCA	*Environmental Protection and Biodiversity Conservation Act, 1999* (Australia)
ERCA	*Energy Resources Conservation Act* (Alberta)
GHG	greenhouse gas
MGP	Mackenzie Gas Project
NEB	National Energy Board

NEPA	*1970 National Environmental Policy Act* (U.S.)
NOx	nitrogen oxides
NWPA	Navigable Waters Protection Act
NWT-PAS	2005 Northwest Territories Protected Areas Strategy
PM	particulate matter
POGG	Peace, Order and Good Government
S.C.	Supreme Court of Canada
UNFCCC	1992 United Nations Framework Convention on Climate Change

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Introduction

Global climate change caused by burning fossil fuels and changing land use is arguably the defining challenge for humanity in the twenty-first century. For over twenty years, Canadian federal governments, both Conservative and Liberal, have acknowledged the seriousness of the climate change challenge for Canada's ecosystems and people, and issued regulations and policies, signed international agreements, and allocated funding promising to reduce greenhouse gas (GHG) emissions in Canada.[1] Provincial governments have also acknowledged the seriousness of this challenge.

Yet as recently as 2007, a joint federal-provincial panel established under the *Canadian Environmental Assessment Act* (CEAA)[2] and the Alberta *Energy Resources Conservation Act* (ERCA)[3] failed to rationalize its determinations[4] on the environmental effects of GHG emissions from a proposed oil sands project even when directed to do so by the Federal Court of Canada.[5] Annual GHG emissions

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1 For example, see *Canada's Green Plan 1990* at p. 101: "The federal and provincial governments are considering a three-part approach to climate change issues [in the National Action Strategy on Global Warming], namely to: limit net emissions of greenhouse gases...."

2 S.C. 2002, c.37 as am. by S.C. 2003, c.9.

3 R.S.A. 2000, c. E-10.

4 *Report of the Joint Review Panel established by the Alberta Energy and Utilities Board and the Government of Canada (Kearl Oil Sands Project)* February 27, 2007, Alberta Energy and Utilities Board and Canadian Environmental Assessment Agency.

5 Pembina Institute for Appropriate Development v. Canada (Attorney General) (2008 FC 302) T-535-07, March 5, 2008.

from the Kearl Oil Sands Project, now under construction, are expected to be 3.7 million tonnes $C0_2e$, the equivalent of putting 800,000 passenger vehicles on the road.[6]

How is it that the environmental assessment under CEAA of a Canada-Alberta joint review panel could give short shrift to the project's GHG emissions? What of other federal environmental priorities: Are they being assessed effectively under CEAA? This discussion paper asks whether the CEAA environmental assessment process has been used effectively by the Government of Canada to address its own stated environmental priorities, perhaps the most important of which is to reduce GHG emissions.

The discussion paper makes the assumption that it is primarily the responsibility of the federal government to address environmental issues that are of Canada-wide concern. On occasion, provincial and territorial governments act in concert to address Canada-wide issues without the engagement of the federal government but examples are rare. It is often difficult for the federal government to act decisively to address its own stated environmental priorities through environmental assessment, or other means, because provincial governments often share legislative authority under Canada's constitution with respect to these priorities. There is also an issue, analyzed in this discussion paper, as to whether or not the federal government has authority

6 *Backgrounder – Imperial Kearl Oil Sands Mine Hearings* Affidavit extracted from Federal Court of Canada Affidavit of Simon Dyer, Pembina Institute, January 11, 2008.

under the *Constitution Act, 1867*[7] to require environmental assessments of proposed projects in the absence of another required federal decision, on the basis that these projects may cause adverse environmental effects.

What follows is an examination of how environmental assessment under the current or a reformed CEAA could be used more effectively by the Government of Canada to meet its stated environmental priorities. The discussion focuses on environmental assessments of proposed projects under CEAA and does not address so-called "strategic" environmental assessment of proposed government policies, programs and plans.

7 Enacted as the *British North America Act, 1867*, 30 & 31 Vict., c.3 (U.K.) renamed by item 1 of the Schedule to the *Constitution Act, 1982*.

Approach

This paper starts by noting the Government of Canada's environmental priorities. Next, it assesses whether CEAA and related federal environmental assessment laws provide a useful legislative framework and tools for addressing those four federal priorities. The focus then shifts to three recent CEAA joint panel reviews to see whether CEAA has in fact been used effectively to address the priority issues. Fourth, the paper discusses whether the federal government has the authority under the *Constitution Act, 1867* to enact laws that enable the use of environmental assessments for addressing federal environmental priorities. Finally, the paper outlines potential legal and policy options that would allow the federal government to use CEAA more effectively in addressing its environmental priorities with assessments of development projects.

While effectiveness in addressing federal environmental priorities could be determined in several ways, this paper chooses to focus on whether an environmental assessment has gathered and analyzed data, and made recommendations to address one or more environmental priority through mitigation or other means. Other possible approaches would be to determine whether or not such recommendations were included as conditions of project approvals by federal agencies, and whether or not there was appropriate follow-through by project proponents and federal agencies to ensure that the conditions were met over time.

A draft of this paper was discussed at the March 13, 2010 meeting of the Environmental Planning and Assessment Caucus of the Canadian Environmental Network. A revised draft was distributed to caucus members in September 2010 for comment. Comments of caucus members have been incorporated to the extent possible; the comments of Dr. Robert Gibson (University of Waterloo), Dr. John Sinclair (University of Manitoba) and Barry Robinson (Ecojustice) were especially valuable.

What are Canada's federal environmental priorities?

Federal governments rarely compile their environmental priorities into a tidy list at a website or in a public document. The Progressive Conservative government's 1990 Green Plan[8] was an exception to this rule, and the current Conservative government's Federal Sustainable Development Strategy[9] (in draft at time of writing) could be another. In the absence of such authoritative sources, a government's environmental priorities can be gleaned from throne speeches, budgets, policy statements, legislative and regulatory proposals, international and domestic law requirements, international and federal-provincial forums, scientific evidence of environmental concerns, and particular decisions on development projects such as tar sands mines, oil and gas pipelines, or nuclear power facilities.

These priorities are also shaped and constrained by the constitutional limits on federal legislative authority, the state of federal finances, the attention of media and opposition parties, and other, often higher, government priorities such as regional economic development. They are also shaped by whether an environmental issue is of Canada-wide or regional and local significance.

8 Environment Canada (1990) *The Green Plan: A National Challenge*, Ministry of Supply and Services Canada, Ottawa.

9 Sustainable Development Office, Environment Canada (March 2010) *Planning for a Sustainable Future: A Federal Sustainable Development Strategy Consultation Paper*.

The discussion that follows is intended to indicate the current Conservative government's environmental priorities since its election in January 2006. The list of priorities was not developed by using quantitative measures or ranking systems, so does not pretend to be definitive. It is, however, the result of a considered attempt to identify the environmental issues the government, by its own admission, wants to tackle seriously.

This process of identifying the government's stated environmental priorities does not imply that the government has acted effectively with respect to them, or even that it is determined to act at all. The focus is on what the government has said about an environmental issue and its importance, what it has said it will do, and what money it has said it will spend.

Every government has priorities, policies and political considerations, stated or unstated, that contradict or undermine its environmental priorities. The notion that elected politicians do not always follow through on their promises should come as no surprise to any Canadian; senior officials can be quite sanguine about it. For example, during a meeting with members of the Green Budget Coalition in 2005 a former Clerk of the Privy Council commented on statements made by coalition members about such inconsistencies by saying, not entirely in jest, "Surely you don't expect the federal government to have coherent policies!"[10] Competing forces within

10 Personal communication, Alex Himelfarb.

an organization as complicated as the federal government mean that stated environmental priorities often yield to other top-of-mind political or policy concerns.

All the same, it has been possible to deduce, from a number of sources, the top environmental priorities of the federal government. The list includes:

- Climate change
- Smog and toxics pollution
- Water supply protection, and
- Wilderness protection

Climate Change

Climate change has been identified as an environmental issue for action for federal governments at least since the 1990 launch of the Green Plan by the Progressive Conservative government of Brian Mulroney. The Government of Canada has taken on international legal obligations under the 1992 United Nations Framework Convention on Climate Change (UNFCCC)[11] and the 1998 Kyoto Protocol,[12] and it signed the Copenhagen Accord in December 2009.[13] The UNFCCC committed signatory governments to "reduce atmospheric concentrations of greenhouse gases"

11 International Negotiating Committee for a Framework Convention on Climate Change, *United Nations Framework Convention on Climate Change,* 5th Sess., Annex, U.N. Doc. A/AC.237/18 (Part II)/Add.1 (1992), I.L.M. 849.

12 *Conference of the Parties to the Framework Convention on Climate Change: Kyoto Protocol,* (December 10, 1997) U.N. Doc. FCCC/CP/1997/L.7/add.1, 37 I.L.M. 22 (1998).

13 *The Copenhagen Accord,* U.N. Doc. FCCC/KP/CMP/2009/L.9 (December 18, 2009).

with the objective of "preventing dangerous anthropogenic interference with Earth's climate system."[14] The Kyoto Protocol set out specific targets for GHG emission reductions, requiring Canada to reduce its emissions 6 percent from 1990 levels, by 2008–12.[15] The Copenhagen Accord recognized that "deep cuts in global emissions are required according to science"[16] but did not specify additional targets.

The 2006 Speech from the Throne committed the newly elected Conservative government to "take measures to achieve tangible improvements in our environment, including reductions in pollution and greenhouse gas emissions."[17] A year later, the April 2007 Turning the Corner federal strategy committed the government to reducing Canada's total GHG emissions by 20 percent by 2020, from 2006 levels,[18] a commitment repeated in the 2008 Speech from the Throne.[19] At the time, Environment Minister John Baird declared, "After years of inaction, Canada now has one of the most aggressive plans to tackle greenhouse gases and air pollution in the world."[20]

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14 UNFCCC, *supra* note 11, Art.2.

15 *Kyoto Protocol*, *supra* note 12, Annex B.

16 *Copenhagen Accord*, *supra* note 13, Art. 2

17 *Speech from the Throne to Open the First Session of the 39th Parliament of Canada* (April 4, 2006).

18 Environment Canada (April 26, 2007) *Turning the Corner: An Action Plan to Reduce Greenhouse Gases and Air Pollution*.

19 *Speech from the Throne to Open the Second Session of the 39th Parliament of Canada* (October 16, 2007).

20 Environment Canada (April 27, 2007) *Canada's New Government Announces Mandatory Industrial Targets to Tackle Climate Change and Reduce Air Pollution*, News Release.

The Climate Change Plan announced in August 2007 clearly indicated that the newly elected Conservative government did not intend to meet Canada's commitments under the Kyoto Protocol, which had been signed and ratified by the previous Liberal government. The Climate Change Plan did, however, confirm Canada's ratification of the Kyoto Protocol, which requires a reduction of GHG emissions between 2008 and 2012 to levels below those registered in 1990.[21]

In its Turning the Corner strategy, the Conservative government declared its intention to regulate reductions in GHG emissions although key regulations were not yet in force. More stringent vehicle fuel efficiency and appliance energy efficiency regulations had started advancing through the federal regulatory system.

Parliament enacted the *Kyoto Protocol Implementation Act*[22] in 2007, although the government and Conservative members of Parliament opposed this private member's bill. Another private member's bill, the *Climate Change Accountability Act*,[23] was debated in the House of Commons in the second session of the 40th Parliament and will likely be considered again in the third session.

The 2010 Speech from the Throne also emphasized climate change as a leading federal environmental priority by committing the government to:

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21 *A Climate Change Plan for the Purposes of the Kyoto Protocol Implementation Act – 2007* Environment Canada 2007 at 3.

22 S.C. 2007 c.30.

23 Bill C-311 *An Act to ensure Canada assumes its responsibilities in preventing dangerous climate change* 3rd Session, 40th Parliament, 59 Elizabeth II, 2010.

- "invest in clean energy technologies";
- "provide funding to help developing economies reduce their emissions and adapt to climate change";
- "continue to take steps to fight climate change by leading the world in clean electricity generation"; and
- "work to reduce emissions through the Canada-U.S. Clean Energy Dialogue launched last year." [24]

Federal budgets delivered in 2006, 2007, 2008 and 2010 (but not that of 2009, the so-called "economic stimulus" budget) have all included new spending and tax measures to stimulate reductions in GHG emissions. However, the March 2010 federal budget included only two new measures of note: $80 million for home energy retrofits in 2010-11, and $100 million over four years for advanced clean energy technologies in the forestry sector.[25]

Although Canada's GHG emissions have continued to increase, year after year, under Conservative and Liberal administrations, the federal commitment to reduce these emissions has been clear and expressed in many forms since 1990.

24 *Speech from the Throne to Open the Third Session of the 40th Parliament of Canada*, March 3, 2010.
25 Department of Finance, Budget 2010: Leading the Way to Jobs and Growth, Chapter 3.3.

Smog and Toxics Pollution

Reducing toxics and smog pollution has also been an environmental priority for federal governments at least since passage of the *Canadian Environmental Protection Act* in 1988.[26] The Government of Canada has taken on international legal obligations to reduce air and water pollution through such international agreements as the December 2008 Statement of Intent on North American Chemicals Cooperation[27] and the 1979 Convention on Long-range Transboundary Air Pollution.[28]

Reducing toxics and smog pollution has been a focus of the Conservative government since its election in 2006. The 2006 Speech from the Throne committed the newly elected government to reducing toxics pollution.[29] The December 2006 Chemicals Management Plan initiated a series of regulatory and other actions designed to manage chemicals that are harmful to human health and the environment, such as through restrictions on re-introduction and new uses of chemicals; rapid screening of lower risk chemical substances; accelerated re-evaluation of older pesticides; mandatory ingredient labeling of cosmetics; regulations to address environmental risks posed by pharmaceuticals and personal care products; and enhanced management of environmental contaminants in food.[30]

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26 *Canadian Environmental Protection Act* 1999 c.33 replaced *Canadian Environmental Protection Act*.

27 *Statement of Intent on North American Chemicals Cooperation* (December 23, 2008).

28 United Nations Economic Commission for Europe, *Convention on Long-range Transboundary Air Pollution 1979*.

29 *Speech from the Throne to Open the First Session of the 39th Parliament of Canada* (April 4, 2006).

30 Government of Canada (December 8, 2006) *Chemicals Management Plan*.

The amount of $300 million was allocated to Environment Canada and Health Canada to deliver the Chemicals Management Plan.

In October 2006, Prime Minister Stephen Harper publicly committed to introducing legislation that would impose tough regulations on smog-producing industries. He stated that poor air quality is not a "minor irritant" but poses "a serious risk to the health and well-being of Canadians.[31]

The April 2007 Turning the Corner strategy committed the government to reducing Canada's smog pollution by 50 percent by 2015 from 2006 levels through a federal regulatory regime. This strategy has evolved into the proposed Comprehensive Air Management System (CAMS), developed by federal and provincial governments, and industry, environment and health groups. CAMS proposes nationally applied Base-Level Industrial Emission Requirements (BLIERs) and Canadian Ambient Air Quality Standards (CAAQS) for smog pollutants, combined with place-based management tools, such as air quality action triggers and the use of local air zones and regional airsheds.[32] At time of writing, Environment Minister Jim Prentice had not yet committed Environment Canada or the federal government to adopt CAMS, but senior Environment Canada officials remained supportive as of July, 2010.[33]

31 CBC News (October 11, 2006) Harper set to impose strict regulations on smog producers, www.cbc.ca/Canada/story/2006/10/10/harper-industry.html.

32 Comprehensive Air Management Steering Committee (April 2010) *Comprehensive Air Management System: A Proposed Framework to Improve Air Quality Management.*

33 Personal Communication, Ian Shugart.

The 2009 federal budget allocated $80.5 million in increased funding over the next two years to manage and assess federal contaminated sites, facilitating remediation work totaling $165 million over two years.[34] The 2010 budget included $8 million for Great Lakes cleanup and $18.4 million over two years for Canadian Environmental Sustainability Indicators of water and air quality and GHG emissions.[35]

34 Minister of Finance (January 27, 2009) *Canada's Economic Action Plan: Budget 2009*.

35 *Supra* note 24.

Water Supply Protection

Protection of water supplies has been an environmental priority for the Conservative government over the past four years. Key federal statutes relating to water include the *Fisheries Act*[36] and the *Navigable Waters Protection Act*.[37] International agreements relating to protection of water supplies include the Boundary Waters Treaty[38] and the Agreement on Great Lakes Water Quality, 1978.[39] Note that the government focus seems to be on protecting supplies of water for human consumption rather than protecting the quality of water naturally occurring in lakes, rivers, and wetlands.

In 2007, the government proposed a National Water Strategy that committed to creating new standards to ensure that all First Nations residents have access to safe drinking water. The strategy also committed to working with the provinces on improved regulations and controls to reduce the health risks caused by municipal wastewater.[40] Draft Wastewater Systems Effluent Regulations[41] were issued in March 2010 for municipal, community, federal, and other wastewater systems. The draft regulations include standards for national wastewater effluent quality and provide regulatory clarity with rules on reporting for more than 3,700 Canadian facilities. The

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36 R.S.C. 1985 c. F-14.

37 R.S.C. 1985 c. N-22.

38 *Treaty between the United Kingdom and the United States of America Concerning Boundary Waters and Questions arising along the Boundary between Canada and the U.S.A.* (1909) CUS 312.

39 (1978) CTS 20, as am. (1983) CTS 22 and (1987) 32.

40 Environment Canada (March 22, 2007) *Canada's New Government Marks World Water Day with National Water Strategy*, News Release.

41 *Canada Gazette Part I* (March 20, 2010), "Wastewater Systems Effluent Regulations", Vol. 144, No. 12.

regulations are intended to implement the Canadian Council of Ministers of the Environment's Canada-wide Strategy for the Management of Municipal Wastewater, endorsed by the federal and provincial governments with the exception of Québec in 2009.

The 2007 National Water Strategy also was intended to facilitate progress towards cleaning up the Great Lakes, Lake Simcoe, and the Lake Winnipeg Basin as well as towards improving the health of oceans and fisheries. The 2007 Budget provided $93 million in funding for these initiatives under the National Water Strategy as well as $324 million to the Canadian Coast Guard for six new boats. The $33 billion Building Canada Fund set up in the 2007 budget provided funding for water treatment in the Yukon, and for upgrades to water and sewer systems in Québec.[42]

The November 2008 Speech from the Throne focused on water to the extent that the government committed to bring in legislation to ban all bulk water transfers or exports from Canadian freshwater basins.[43] Then the March 2009 budget allocated $165 million over two years for completing water and wastewater infrastructure projects on 18 First Nations Reserves.[44]

Launched in January 2009 as part of the budget and Economic Action Plan, the Building Canada Fund (BCF) is the federal government's flagship infrastructure program to address the economic downturn. A $4 billion two-year Infrastructure

42 Minister of Finance (March 22, 2007) *The Budget Plan 2007: Aspire to a Stronger, Safer, Better Canada* at 57.
43 *Speech from the Throne to Open the First Session of the 40th Parliament of Canada*, November 22, 2008.
44 *Supra* note 35 at 148.

Development Program under the BCF provided funding to wastewater and drinking water (water treatment) infrastructure projects, which represent two of five national funding priorities under the BCF. A $1 billion, five-year Green Infrastructure Program under the BCF also provided funding for wastewater treatment projects.[45]

Most recently, the March 2010 Speech from the Throne committed the government to "bolster[ing] the Action Plan on Clean Water"; and to "introduce new legislative measures to further the goal of making "safe drinking water and effective waste-water treatment on-reserve a national priority". The government also committed to take action to reduce pollution from shipping and other maritime traffic.[46] In addition to other measures relating to water identified earlier, the 2010 federal budget included $331 million over two years for a First Nations water and wastewater action plan.

45 Infrastructure Canada *Creating Jobs, Building Communities* http://www.buildingcanada-chantierscanada.gc.ca/creating-creation/isf-fsi-eng.html

46 *Convention on Biological Diversity (1992)* ILM 818 (1993) CTS 24; www.biodiv.org Art. 8(a).

Wilderness Protection

The Conservative government has identified protection of wild lands and waters as a priority. The key international agreement, signed by Prime Minister Brian Mulroney on behalf of Canada, is the 1992 Convention on Biological Diversity, which calls on signatory countries to: "[e]stablish a system of protected areas or areas where special measures need to be taken to conserve biological diversity."[47] The Convention also recognized the importance of environmental assessment of projects as a tool to protect biological diversity, requiring signatories to "[i]ntroduce appropriate procedures requiring environmental impact assessment of its proposed projects that are likely to have significant adverse effects on biological diversity with a view to avoiding or minimizing such effects and, where appropriate, allow for public participation in such procedures."[48] More specifically, environmental assessment is useful for determining the extent of wilderness fragmentation caused by development projects, and mitigating such fragmentation effects.

Key federal laws to protect wilderness include the *Canada National Marine Conservation Areas Act*,[49] the *Canada National Parks Act*,[50] the *Canada Wildlife Act*, [51,] and the *Fisheries Act*. [52]

47 *Convention on Biological Diversity* (1992) ILM 818 (1993) CTS 24; www.biodiv.org Art. 8(a).
48 *Ibid.*, Art.14.
49 S.C. 2002, c.18.
50 S.C. 2000, c.32.
51 R.S.C. 1985, c.W-9
52 R.S.C. 1985, c.F-14

Following WWF Canada's 1989 Endangered Spaces campaign, the Progressive Conservative government responded in its 1990 Green Plan, stating that: "Canada's long-term goal is to set aside as protected space 12 percent of the country through various federal and provincial designations and that these areas should represent Canada's natural regions."[53]

A number of large areas of mainly northern wilderness have been protected since the Conservative government was elected in 2006. A leading example is Nahanni National Park Reserve in Northwest Territories, which was expanded seven-fold to encompass almost the entire South Nahanni River watershed, an area the size of Vancouver Island. Land withdrawals for the East Arm of Great Slave Lake National Park Reserve, also in Northwest Territories, were ordered.[54]

The federal government also signed an agreement with the Déline First Nation and the Déline Land Corporation to work towards permanently protecting and cooperatively managing Sayoue Edacho National Historic Site of Canada (also in Northwest Territories), which is a 5,500 square kilometre wilderness area over two peninsulas jutting into Great Bear Lake.

53 *Supra* note 1.
54 Environment Canada (November 21, 2007) *Government of Canada takes Landmark Action to Conserve Canada's North*, News Release.

Establishment of the Lake Superior National Marine Conservation Area was announced on October 22, 2007.[55] At roughly one million hectares in size, this is the largest freshwater protected area in the world.

In October 2009, a Memorandum of Understanding was signed between the federal and Nova Scotia governments to protect Sable Island, which is home to important wildlife populations of wild horses and migratory birds, as well as the largest congregation of breeding grey seals in the world.[56]

In February 2010, the federal government and the government of Newfoundland and Labrador announced their commitment to establishing a new national park reserve of approximately 10,700 square kilometres within the Mealy Mountains region of Labrador. The park will be the largest national park in eastern Canada.[57]

In June 2010 Parliament approved establishment of Gwaii Haanas National Marine Conservation Area Reserve and Haida Heritage Site in British Columbia. This 3,500-square kilometre seascape surrounding Gwaii Haanas National Park Reserve is on the Queen Charlotte Islands.[58] This enactment followed a 2009 agreement between the federal government and the Haida Nation to co-manage the Gwaii Haanas National Marine Conservation Area. The March 2010 Speech from the Throne committed to

55 Parks Canada (October 25, 2007) *Prime Minister Harper unveils new environmental initiative (Lake Superior)* News Release.
56 Environment Canada (May 18, 2010) *Sable Island to be Protected as a National Park*, News Release.
57 Environment Canada, (February 5, 2010*) Canada and Newfoundland and Labrador commit to creating new National Park Reserve in the Mealy Mountains, Labrador*, News Release.
58 *Parks Canada (June 7, 2010)* Minister Prentice: Protection for Gwaii Haanas to extend from mountain tops to sea floor News Release.

"build on creation of more than 85,000 square kilometers of national parks and marine conservation areas as part of a national conservation plan."[59]

The federal government invested $225 million in the Natural Areas Conservation Program, which is designed to assist non-profit, non-government organizations secure ecologically sensitive lands to ensure the protection of ecosystems, wildlife, and habitat. More than 120,000 hectares have been set aside in wild places ranging from Brooms Brook (Newfoundland), the Darkwoods (British Columbia), Wilson Island (Ontario), the Snows Conservation Area (Québec), and Wascana Creek (Saskatchewan).[60]

Other investments include funds for the Great Bear Rainforest along British Columbia's mid-coast, Stanley Park in Vancouver, and Point Pleasant Park in Halifax.

Draft Federal Sustainable Development Strategy

In March 2010, the Hon. Jim Prentice, federal environment minister, released Planning for a Sustainable Future: A Federal Sustainable Development Strategy for Canada,[61] in draft for public consultation. This draft strategy was prepared in response to the *Federal Sustainable Development Act*.[62] Interestingly, it purports to

> ... provide the first comprehensive view of federal activities in four broad environmental areas that are important to Canadians and their

59 *Supra* note 24.

60 *Protected Areas, The Climate's Best Allies: Notes for an address by The Honorable Jim Prentice, Minister of the Environment to the 9th World Wilderness Congress* (November 7, 2009) Mérida, Mexico.

61 *Planning for a Sustainable Future: A Federal Sustainable Development Strategy for Canada* Consultation Paper, Sustainable Development Office, Environment Canada, March 2010.

62 S.C. 2008 c. 33.

government. Goals, targets and implementation strategies have been identified in each of these areas:

- addressing climate change and air quality;
- maintaining water quality and availability;
- protecting nature; and,
- shrinking the environmental footprint – beginning with government.[63]

With the exception of the last item, the shrinking environmental footprint of governments, these themes line up with the priorities gleaned from other sources and identified in this paper.

63 *Supra* note 61.

Can CEAA environmental assessments serve as an effective tool for addressing federal environmental priorities?

It is reasonable to expect a government to use all of the tools in its legal, policy, and program toolbox on an issue that it has publicly identified as a priority for action. Environmental assessment is one such tool. Has the federal project environmental assessment process been used effectively by the Canadian government to address its stated environmental priorities?

Adequacy of Current CEAA Provisions

A starting point is to ask whether CEAA includes provisions that require or authorize environmental assessments for projects that are likely to have significant adverse effects with respect to federal environmental priorities. To what extent does the Minister of Environment have the authority to refer a project for environmental assessment when negative effects on climate change or another priority issue hang in the balance? Does the federal minister have any authority to make such a referral for a project which does not have a federal proponent, require a federal licence or permit, involve federal funding or call for a disposition of federal land? A summary of the CEAA provisions relevant to these questions follows.

To begin, CEAA requires environmental assessments only for projects that require a federal decision because a federal authority is the proponent, or provides funding, or disposes of an interest in land, or issues a licence or permit to enable the project to

be carried out.[64] CEAA does not require an environmental assessment for a project that does not fit into one or more of these four categories. Thus, no CEAA environmental assessment is required for a tar sands mine that would emit hundreds of thousands of tonnes of GHGes (GHG) every year, or a dam that would destroy critical habitat for threatened species—such an assessment is only required if the project has been triggered by one of those four categories of decisions. A future regulation under the *Canadian Environmental Protection Act* requiring permits for projects proposing to release GHG emissions or destroy threatened species habitat could potentially trigger a CEAA environmental assessment if such a regulation is listed on the Law List Regulations of CEAA, but no such regulation is currently in force.

Noteworthy purposes of CEAA are to:

- "ensure that projects are considered in a careful and precautionary manner before federal authorities take action in connection with them, in order to ensure that such projects do not cause significant adverse environmental effects";
- "encourage authorities to take actions that promote sustainable development and thereby achieve or maintain a healthy environment and a healthy economy"; and

64 See *Canadian Environmental Assessment Act supra* note 2 s.5.(1).

- "ensure that projects that are to be carried out in Canada or on federal lands do not cause significant adverse environmental effects outside the jurisdiction in which projects are carried out".[65]

CEAA provides discretionary authority to the Minister of Environment to refer a project for which an environmental assessment may be triggered to a mediator or review panel when the minister is of the opinion that the project may have significant adverse environmental effects, or that public concerns warrant such a reference. [66] CEAA also provides discretionary authority to the Minister of Environment to refer a project that has not otherwise been triggered to a mediator or a review panel when the Minister is of the opinion, subject to several conditions, that the project may have significant adverse environmental effects including:

- transboundary effects, one province to another;
- international effects; and
- effects on lands of federal interest such as Indian reserves, National Parks, and aboriginal land claims agreement lands.[67]

Since CEAA came into force in 1995, these discretionary authorities held by the Minister of Environment have not been exercised for any project.

65 *Ibid.* s..4.
66 *Ibid.* s..25.
67 *Ibid.* ss..46-48.

Finally, it is noteworthy that the discretion of federal ministers to refer projects affecting a federal environmental priority such as climate change is constrained under the several statutes implementing comprehensive claims agreements with northern indigenous peoples. The *Mackenzie Valley Resource Management Act* is of particular interest in that federal ministers are authorized, certain conditions having been met, to refer a project to a joint panel review "where they determine that it is in the national interest to do so." [68]

In summary, CEAA provides authority to the federal environment minister to refer for panel review a project likely to have effects on federal environmental priorities when the federal government has some other decision-making authority over the project. However, CEAA nowhere requires any federal minister to assess the effects of projects likely to have impacts in federal environmental priorities or to refer such projects for panel review. Further, CEAA provides no authority to any federal minister to require an environmental assessment where the federal government is not a decision-making authority, even though adverse environmental effects of a project may prejudice the achievement of federal objectives with respect to an environmental priority such as climate change.

68 S.C.1998, c.25 s.130.(1)(c).

Has CEAA been applied effectively to projects with environmental effects in areas of federal priority?

To what extent, then, has CEAA been applied effectively when it comes to addressing the federal priorities of climate change, smog and toxics pollution, water supply protection, and wilderness protection?

Beyond Bill C-9 Study

The House of Commons Standing Committee on Environment and Sustainable Development asked a similar question of the Chrétien Liberal government in its June 2003 report Sustainable Development and Environmental Assessment: Beyond Bill C-9.[69] The Standing Committee asked whether CEAA

> … is being applied to key environmental issues and projects, for example:
>
> - … [o]vercutting and overharvesting issues such as the policies that led to the destruction of the Atlantic cod fishery and declines in Pacific salmon stocks? . . .
> - … the dangers posed by greenhouse gas emissions? . . .
> - … continuing fragmentation of wilderness landscapes? . . .
> - … biodiversity issues such as threats to endangered species and problems with invasive species …?"[70]

69 Parliament of Canada (June 2003) *Sustainable Development and Environmental Assessment: Beyond Bill C-9: Report of the Standing Committee on Environment and Sustainable Development.*
70 *Ibid* at 8.

The Committee found that "greenhouse gas emissions figure infrequently in federal environmental assessments." CEAA was not applied to "the most environmentally damaging forms of fishing such as bottom trawling" nor to "massive road-building and logging schemes" in northern regions of provinces. The "world's largest nuclear waste storage" to be located at Bruce Nuclear Power Station in Ontario was subjected to a CEAA screening but not a panel review or comprehensive study. [71]

The Committee concluded,

> ...although thousands of small projects are assessed more or less effectively under CEAA each year, many large, potentially environmentally damaging projects avoid assessment or are scoped so narrowly as to make the EA of questionable value.[72]

In other words, don't sweat the big stuff.

There is some evidence, therefore, that CEAA was not being used effectively to address federal environmental priorities such as climate change, at least prior to 2003. This is not surprising given the lack of clear policy and guidance for application of environmental assessment to projects affecting these priorities.

Climate Change

71 *Ibid* at 8, 9.
72 *Ibid* at 9.

The federal government, and more specifically the Canadian Environmental Assessment Agency, has recognized that environmental assessment is a tool that can assist in reducing Canada's GHG emissions. A 2003 guide entitled *Incorporating Climate Change Considerations in Environmental Assessment: General Guidance for Practitioners* is evidence of this recognition. [73] The purpose of the document is to provide environmental assessment practitioners with general guidance for incorporating climate change considerations in project environmental assessments. It "is the result of federal, provincial and territorial collaboration, and is applicable across jurisdictions."[74] The guidance document was developed because:

- climate change has been recognized internationally and by the federal, provincial and territorial governments in Canada as an important environmental issue
- EA [environmental assessment] has the potential to link project planning to the broader management of climate change issues in Canada . . .[75]

The document goes on to state that,

> Jurisdictions expect that the consideration of climate change in project EAs will:
>
> - be consistent with broader climate change policy;
> - increase attention to, and awareness of, GHG emissions from projects subject to EA;
> - stimulate consideration of less emission-intensive ways to design and operate projects;

73 The Federal-Provincial-Territorial Committee on Climate Change and Environmental Assessment (November 2003) *Incorporating Climate Change Considerations in Environmental Assessment: General Guidance for Practitioners.*.
74 *Ibid.*
75 *Ibid.*

- help proponents manage or reduce the potential risks associated with climate change impacts on projects; and
- assure the public that climate change considerations are being taken into account.[76]

Has the 2003 guidance document been used to address the adverse environmental effects of climate change and reduce GHG emissions from proposed projects? Have recent panel reviews focused on climate change and GHG emissions associated with proposed projects being assessed under CEAA? The next section examines these questions in the context of three recent joint panel reviews: Kearl Oil Sands Project (February 2007), Romaine River Hydro-electric Complex Development Project (February 2009), and the Mackenzie Gas Project (December 2009). These projects were selected because they each received a joint panel review under CEAA and have projected costs that will run to many billions of dollars. As well, all of these projects are likely to have environmental effects in most of the four identified federal environmental priority areas: GHG emissions likely to exceed 100,000 tonnes $C0_2e$ annually; smog or toxics pollution; impacts on water supplies, and destruction or fragmentation of wilderness.

Kearl Oil Sands Project

The Kearl Oil Sands Project, north of Fort McMurray Alberta, includes the design, construction, operation and reclamation of four open pit mines and three trains of ore preparation and bitumen extraction facilities. The project is designed to produce 55,000 cubic meters of bitumen per day for a period of 50 years. It will be

76 *Ibid.*

responsible for average emissions of 3.7 million tonnes $C0_2e$ per year (which equals the annual GHG emissions of 800,000 passenger vehicles in Canada) and will contribute 0.51 percent and 1.7 percent respectively of Canada and Alberta's annual GHG emissions (based on 2002 data).

The Joint Review Panel concluded that the Kearl project "is not likely to result in significant adverse environmental effects to air quality, provided that the mitigation measures and recommendations proposed are implemented."[77]

Pembina Institute and Sierra Club Canada challenged the environmental assessment in an application for judicial review to the Federal Court of Canada. The court found that given the amount of GHGs to be emitted to the atmosphere and the evidence presented that intensity-based targets will not address the problem of GHG emissions, it was incumbent upon the panel to provide a justification for its recommendation on this particular issue.[78]

The groups argued that the absolute amount of GHG pollution from oil sands development would continue to rise under intensity-based targets because of the planned increase in total production of bitumen. The court found that the panel had dismissed as insignificant the GHG emissions without any rationale as to why the intensity-based mitigation would be effective to reduce the GHG emissions to a level of insignificance.

77 *Joint Panel Report of a Joint Review Panel established by the Alberta Energy Resources Conservation Board and the Government of Canada: Imperial Oil Resources Ventures Limited Application for an Oil Sands Mine and Bitumen Processing Facility (Kearl Oil Sands Project) in the Fort McMurray Area* (February 27, 2007) at 60.
78 *Pembina Institute for Appropriate Development v. Canada (Attorney General)* 2008 FC 302 (March 5, 2008).

The groups' application for judicial review was allowed in part, and the matter was remitted to the same panel with a direction to provide a rationale for their conclusion that the proposed mitigation measures will reduce the potentially adverse effects of the project's GHG emissions to a level of insignificance.

The Joint Review Panel reconvened without public hearings and submitted an addendum purporting to respond to the Federal Court of Canada's decision two months after that decision was rendered. The addendum repeated the Joint Review Panel's previous conclusions that the Kearl Oil Sands project "is not likely to result in significant adverse environmental effects to air quality, provided that the mitigation measures and recommendations proposed are completed."[79] There was no apparent attempt to make use of CEAA's 2003 guidance document to assess climate change effects.

The Joint Review Panel did not recommend that Imperial Oil prepare a GHG emissions management plan, but it did call on the federal and provincial governments to take

> … more aggressive leadership roles in completing the management frameworks and integrated plans that would establish the context for management of the cumulative environmental impacts of oil sands developments instead of on a project by project basis.[80]

79 *Joint Panel Report Kearl Oil Sands Project : Addendum to EUB Decision 2007-013Additional Rationale for the Joint Review Panel's Conclusion on Air Emissions* (May 6, 2008).
80 *Ibid*.

The Joint Review Panel did not make any additional recommendations for mitigation measures to reduce the GHG emissions from the Project.

Romaine River Hydro-electric Complex Development Project

In 2000, Hydro-Québec proposed construction of a hydroelectric complex on the Romaine River in the north shore region of eastern Québec. With an installed capacity of 1,550 MW, the complex would have an average annual production capacity of 8.0 TWh. The project would consist of four hydroelectric power plants, each of which would include a rockfill dam, flood spillway, supply main, power plant with two turbine-alternator sets, and temporary by-pass structure. The four reservoirs would cover a total area of 279 km.[81]

Greenhouse gas emissions associated with fuel consumption during construction and production of cement for the project alone are estimated by the proponent to be 138,420 tonnes C02e.[82]

The Joint Review Panel report includes several pages of discussion of GHG emissions related to the project, many of them summarizing the information provided by Hydro-Québec.

81 *Romaine River Hydroelectric Complex Development Project: Investigation and Public Hearing Report*. Joint Review Panel. Bureau d'Audiences Publiques sur l'environnement, Report 256, February 2009.
82 *Ibid* at 186-188.

The report sets out virtually no analysis of this information, and makes no attempt to make use of CEAA's 2003 guidance document to assess climate change effects. It does not address criticisms raised by participants at the panel's hearings, that the proponent failed to take into account certain sources of GHGs, such as indirect emissions from changes to the natural environment (wide-scale deforestation with the filling of reservoirs, construction of roads, *et cetera*), and did not consider the specific characteristics of the watershed ecosystem.

The Joint Review Panel appeared content to comment that coal and gas-fired electricity generating plants generate more greenhouse gas emissions than hydro-electricity and to recommend that the proponent "validate its greenhouse gas emission forecasts" and that Environment Canada "require accountability for greenhouse gas emissions at Canadian hydroelectric facilities in the national Greenhouse Gas Inventory". [83] The Joint Review Panel recommended no mitigation measures to reduce GHG emissions.

Mackenzie Gas Project

The proposed $16 billion Mackenzie Gas Project (MGP) includes three major natural gas production fields north of Inuvik in Northwest Territories and two underground natural gas pipelines (the longest is 1220 km) to carry the gas and natural gas liquids south along the Mackenzie Valley to northern Alberta.

83 *Ibid* at 186.

Central to the assessment of MGP's climate change impacts was a "sustainability framework" adopted by the Joint Review Panel. The panel recognized that:

> ...key sustainability objectives are to ensure net gains without significant adverse impacts during the life of the Project and effective use of the Project and associated opportunities as a bridge to a desirable and durable future .... The core question asked by the Panel was: Can we be reasonably confident that the Project as filed, if built and operated with full implementation of the Panel's recommendations, would deliver valuable and lasting overall benefits, and avoid significant adverse environmental impacts?[84]

The section on GHG in the Joint Review Panel's report opened with these words: "Climate change is widely considered to be one of the most urgent and far-reaching challenges to sustainability facing the world today... [and it] brings with it threats to the livelihood, health, culture and well-being of all northern peoples."[85]

The Mackenzie Gas Project's direct GHG emissions from combustion of natural gas for the compressors and venting of gas to relieve pressure for example, are predicted to increase Northwest Territories' emissions by 41 percent (with a pipeline throughput of 1.2 billion cubic feet per day). They are also predicted to approximately double Northwest Territories' overall emissions by raising its total throughput of 1.8 billion cubic feet per day.[86]

84 *Executive Summary, Foundation for a Sustainable Northern Future: Report of the Joint Review Panel for the Mackenzie Gas Project* (December 2009) at 5.
85 *Foundation for a Sustainable Northern Future: Report of the Joint Review Panel for the Mackenzie Gas Project* December 2009 at 214.
86 *Ibid.* at 207, 213.

Despite this finding, the Joint Review Panel determined that the evidence "did not establish that the Project's greenhouse gas emissions would result in significant adverse environmental impacts" and concluded that,

> ...even taking into consideration the possible expansion of the Project and the greenhouse gas emissions associated with end uses of the gas, the ultimate impacts of the Project on global climate change could be viewed as minor (approximately 0.1%). [87]

The Joint Review Panel's Recommendation #8-6 requests that the National Energy Board (NEB) require a project-specific target or series of targets for reductions in upstream GHG emissions if federal regulations under the *Kyoto Protocol Implementation Act* are not in place, although no particular targets are specified. [88] Recommendation #8-7 recommends the proponents publicly report on GHG emissions with respect to the GHG target. [89] Recommendation #8-8 is that the federal government legislate GHG emission reductions to at least meet its commitments in the 2007 Climate Change Plan for Canada (i.e., 20 percent below 2007 levels by 2020, and 65 percent below 2007 levels by 2050).[90]

Despite the views of proponents and governments that the end use of gas produced by the project was outside the Joint Review Panel's mandate, the panel held that end use was of fundamental importance to the question of whether the MGP will contribute to sustainability. Recommendations #8-8 and #8-9 call on governments to

87 *Ibid.* at 217.
88 *Ibid.* at 216.
89 *Ibid* at 216.
90 *Ibid.* at 216.

establish new laws and policies to direct end use of the natural gas to "wise" uses. Recommendation #8-8, which calls for new legislation and regulations to reduce Canada's GHG emissions in general, would help direct the end use of natural gas in that such laws would presumably promote the replacement of more carbon-intensive fuels (such as oil and coal) with less carbon-intensive fuels (such as natural gas) and facilitate a conversion to renewable sources. Recommendation #8-9 is directly concerned with optimizing the benefits of natural gas by directing end use.

The Joint Review Panel concluded that without such changes (appropriate mitigation in place downstream) the project will not contribute to sustainability but will instead contribute to the adverse global cumulative impacts of GHGs and thus to climate change.[91]

Under Recommendation #8-10, the panel recommends that the Canadian Environmental Assessment Agency and related northern EA boards "develop a guidance document on the assessment of greenhouse gas emissions in environmental assessments in which sustainability is an overarching objective or principle."[92]

The crucial understanding of the MGP Joint Review Panel is that sustainability assessment is a more useful tool to analyze a project's GHG emissions than environmental assessment alone. The former examines the overall contribution to

91 *Ibid* at 217-218.
92 *Ibid* at 218.

sustainability while the latter merely addresses the significance of the adverse environmental effects, which are easy to dismiss because they are small when considered in a global environmental context.

Smog and Toxics Pollution

The effectiveness of application of CEAA to the priorities of smog and toxics pollution and wilderness protection can be determined by examining their application to the Kearl Oil Sands, Mackenzie Gas and Romaine River Hydro-electric Complex projects.

Kearl Oil Sands Project

Issues relating to smog and toxics pollution were reasonably well-assessed for the Kearl Project itself, although less well with respect to its cumulative effects on regional air quality. Nitrogen oxide (NO_x) emissions from the project's stationary sources and its mobile mine fleet were predicted to raise the region's emission levels by 11 percent. Alberta Environment suggested that regional NO_x emissions would increase due to the number and size of proposed oil sands projects, including the Kearl Project, which could in turn lead to an increased potential for environmental impacts associated with acid deposition and nitrogen eutrophification.

Environment Canada introduced evidence at the hearings that criteria air contaminants (CAC) from oil sands developments were predicted to increase significantly.[93] The federal officials noted that these pollutants contributed to the formation of ozone, $PM_{2.5}$, and acid deposition, as well as having a direct effect on human health. Other evidence based on 2002 data showed that Alberta was the

93 *Supra* note 77 at 56-57.

largest emitter of NO_x in Canada. Environment Canada made several recommendations to monitor and mitigate NO_x, sulphur dioxide, and particulate emissions in particular, several of which were included in the recommendations of the Joint Review Panel.[94]

According to the Kearl joint review, the responsibility for developing regional environmental management frameworks has been assigned largely to the Cumulative Environmental Management Association (CEMA) and this work is important to the sustainable development of the oil sands over the long term. The Joint Review Panel said that it believes CEMA's efficiency needs to be improved to keep pace with current development in the region, and that more definitive priority setting and adherence to deadlines are needed. The panel saw CEMA's success as critical to the entire project. It maintained that management of environmental effects in the region is ultimately the responsibility of the regulators, and so it encouraged the regulators to take a more direct leadership role in all aspects of CEMA.

While the Joint Review Panel decided that the project was in the public interest, it also emphasized how important it was that the governments of Alberta and Canada give priority attention for a number of key environmental issues to critical challenges related to cumulative impacts: "With each additional oil sands project, the growing

94 *Ibid.* at 58-59.

demands and the absence of sustainable long-term solutions weigh more heavily in the determination of the public interest."[95]

The difficulty with this statement is that the panel was avoiding its own responsibilities. The Joint Review Panel (wearing the hat of Alberta's Energy Resources Conservation Board) itself has the obligation to determine the public interest—not CEMA or other federal or provincial regulators.

How can the ERCB or the federal government continue to maintain that further oil sands projects are in the public interest with smog and toxic pollution, not to mention GHG, from the Athabasca region continuing to mount?

Mackenzie Gas Project

Smog and toxic pollution associated with the MGP was an important issue for the Joint Review Panel given the naturally high quality of air and water in the Mackenzie Valley. The panel assessed air quality issues arising from construction impacts (road dust, waste incineration at construction camps) and operational impacts (smog from trucks, barges and other mobile sources). Water quality impacts were related to wastewater treatment in construction camps, drilling waste, industrial wastewater, and drinking water in the town of Wrigley.[96]

Environment Canada presented evidence with respect to air quality impacts, and the government of Northwest Territories presented evidence with respect to drinking

95 *Supra* note 77 at viii.
96 *Supra* note 85 at 219-222.

water quality impacts. Based on this and other evidence, the panel determined that impacts on air and water quality would not be significant if its relevant recommendations were adopted. Key recommendations were that governments develop a Regional Air Quality Management Strategy,[97] that the National Energy Board require the proponent to file a comprehensive Air Quality and Emissions Management Plan and an incineration management strategy as part of its Waste Management Plan, [98] and that the conditions for an NEB licence include the commitments to the panel made by the proponent. [99]

Romaine River Hydro-electric Project

Mercury was the key toxics issue in the environmental assessment of the Romaine River Hydro-electric Project. The Joint Review Panel noted a consensus among public health specialists that the creation of reservoirs behind hydroelectric dams and dikes leads to higher methyl mercury concentrations in fish, due to transformation of inorganic mercury through bacterial decomposition of terrestrial organic matter.[100] A Health Canada review, however, was satisfied with analysis of the situation by Hydro-Québec, which concluded that the current level of exposure of residents to mercury is low and the level of exposure would remain low (and no cause for concern) when the project is completed.

97 *Ibid* at 203 (Recommendation 8-3).
98 *Ibid* at 206 (Recommendation 8-5).
99 *Ibid* at 222 (Recommendation 5-11).
100 *Supra* note 81 at 184.

The panel found that few people eat fish and other wildlife resources in the area affected by the project, and monitoring and public information mechanisms have been relatively well tested over the thirty years Québec has been developing hydroelectric reservoirs. It accepted Health Canada's opinion that the mercury exposure level stemming from the project would not create a concern for human health.

The creation of reservoirs would increase mercury concentrations in fish and would require additional limits on fish consumption. However, given the local population's eating habits, the communication of risks and the monitoring proposed, this increase would not create a concern for human health.[101] While this conclusion was not supported by interveners such as Société pour vaincre la pollution, the panel's environmental assessment was a useful tool to understand methyl mercury contamination issues associated with the project.

Water Supply Protection

As noted, the priority of protecting water supply differs from the other three environmental priorities in that the government's focus is on protecting water supplies for human use (through sewage treatment and water purification infrastructure), rather than protecting water quality in Canada's lakes, rivers and seas.

101 *Ibid* at 184-186.

Water supply protection issues in the three projects have already been alluded to. The Kearl Oil Sands project Joint Review Panel examined arsenic contamination and other possible water quality issues in the Athabasca River, concluding that there would be no impacts of significance. However, a recent study by Dr. David Schindler at the University of Alberta is raising doubts about the validity of that conclusion. [102]

The MGP Joint Panel Review assessed wastewater treatment in construction camps, disposal of drilling waste and industrial wastewater, and drinking water quality in the Town of Wrigley.[103] The Romaine River Project Joint Panel Review focused on methyl mercury contamination in reservoir waters, and consequent contamination of fish eaten by residents.

In amendments to Exclusion List Regulations put through in 2009, the federal government removed for two years its environmental assessment requirements for thousands of Building Canada Plan projects. These exclusions, with no sunset clause, were subsequently legislated through CEAA amendments introduced in 2010. While the removal of environmental assessment requirements may help accelerate the construction of sewage treatment and water purification facilities, possible adverse effects on water quality may result from a lack of studies at the outset of the

102 Escience News (August 30, 2010) *New study shows that oil sands mining and processing are polluting the Athabasca River*.
103 *Supra* note 85 at p. 219-222.

projects. For example, construction of a sewage treatment plan in a wetland could damage the natural water purification properties of that wetland.

As well, amendments to the *Navigable Waters Protection Act* (NWPA) put through in 2009 authorize the Governor in Council to regulate and the Minister of Transport to order that certain bridges, dams and other obstructions to navigation do not require a permit and therefore do not require a federal environmental assessment. The extraordinary powers provided to the Minister of Transport to order the exemption of projects from NWPA permit requirements are not limited to minor projects or works.

Such exemptions from environmental assessment could also, therefore, run counter to the federal priority of protecting water supplies and result in adverse effects on water quality. For example, construction of a bridge or dam could destroy a wetland, which serves as a natural way to purify water. Elimination of CEAA requirements for projects previously needing an NWPA permit may well result in beneficial wetlands being damaged or destroyed.

Thus, while the three joint panel reviews have made an effort to understand the impacts of projects on drinking water supplies, the federal government has been undermining the CEAA regulatory regime by limiting its capacity to assess such impacts.

Wilderness Protection

The discipline of conservation biology draws attention to the importance of protecting connected networks of large areas of wilderness, unfragmented by roads or other development. Such networks maintain biodiversity and populations of larger mammals such as caribou, wolves and bears. For an environmental assessment, the challenge of protecting a large connected area of wilderness is quite different from that of protecting a particular threatened species in a particular habitat, or maintaining the populations of moose, geese, trout or other species valued by hunters, anglers or others.

Cumulative effects assessment is one tool used in the attempt to find a balance between protecting large and intact wild lands and waters, on the one hand, and developing a natural gas pipeline, oil sands mine or a hydroelectric dam on the other.

The treatment of wilderness protection issues under the three joint panel reviews (Kearl Oil Sands, Romaine Hydro-electric Development Complex, and Mackenzie Gas projects) presents a stark contrast. Note that all three of these projects are proposed for relatively intact wild landscapes, and that all are located in boreal forest, although the MGP extends into boreal taiga and tundra in the northwest part of its project area.

Kearl Oil Sands Project

The Kearl Oil Sands Project is slated to strip mine 200 square kilometers of boreal forest and wetlands. The Joint Review Panel simply did not consider whether any wilderness in the oil sands region should be set aside for the sake of conservation biology, although the project would result in virtually a complete loss of a large boreal ecosystem (subject to land reclamation efforts by the proponent Imperial Oil, efforts considered problematic). The panel seemed to take at face value the proponent's claim that "it was confident that a stable, self-sustaining natural landscape that would result in an equivalent land capability could be re-established" and that "the closure landscape would support a suite of current land uses in the area and would result in a net benefit for some resources, such as several wildlife species and fish habitat."

The panel concluded, with apparently no further analysis, that the Kearl Oil Sands project "is not likely to significantly affect the capacity of renewable resources to meet the needs of present and future generations." They took the view that Imperial Oil had proposed adequate mitigation measures and the project is unlikely to result in significant adverse environmental effects on renewable resources if those measures and the panel's recommendations are implemented.[104]

104 *Supra* note 77 at 98, 99.

Note that there are no significant protected areas in the oil sands region; Wood Buffalo National Park lies 120 kilometres to the north, Birch Mountains Wildlands Park lies 75 kilometres to the northwest and Marguerite River Wildlands Park 85 kilometres to the east. At the time of the Kearl Oil Sands project environmental assessment, the province of Alberta had no strategy in place to plan for land use or to establish protected areas. For its part, the Joint Panel Review undertook no cumulative effects assessment to determine the need for protected areas, and thus missed the opportunity to make serious recommendations to conserve the biodiversity of the boreal forest in the region.

Romaine Hydroelectric Project

The Romaine Hydroelectric Project will also result in a major loss of boreal wetlands and forest, given that the four reservoirs included in the project would cover a total area of 279 square kilometers. The lower 30 kilometers of the Romaine River adjacent to the Gulf of St. Lawrence are included in the Mingan Archipelago National Park Reserve. Hydro-Québec estimated that 1,359 hectares of wetland would be lost due to the project. Environment Canada expressed concerns about the loss of 4-7 percent of the potential habitat of a number of sensitive forest bird species in the study area. The panel noted the great sensitivity of woodland caribou to anthropogenic disturbance, concluding that the operation of the hydroelectric complex could have a negative cumulative effect on woodland caribou. The panel

reported that the Québec Department of Sustainable Development, Environment and Parks and the Québec Department of Natural Resources and Wildlife are working together to create protected areas for woodland caribou in the Romaine River region in cooperation with the Government of Newfoundland and Labrador.[105]

The Joint Review Panel assessed these and other habitat losses expected to be caused by the project. However, there was no effort made to protect the ecological integrity of the Romaine River watershed by assessing cumulative environmental effects from a conservation biology perspective. There was no mention of Québec's 2004 protected areas strategy, and how the project might affect its goals and related action plans.[106]

Mackenzie Gas Project

In contrast to the Kearl and Romaine project panel reviews, the MGP Joint Review Panel undertook a serious analysis of the impacts of the project on conservation management and protected areas in the Mackenzie Valley. The touchstone for this analysis is the 2005 Northwest Territories Protected Areas Strategy (NWT-PAS), which was developed by Aboriginal organizations, the territorial and federal governments, environmental organizations, and industry to protect a network of culturally significant and ecologically important protected areas. A five-year action plan (2004-

105 *Supra* note 81 at 71.
106 *Stratégie québécoise sur la diversité biologique 2004-2007 Pour la mise en oeuvre au Québec de la Convention sur la diversité biologique des Nations Unies* Gouvernment du Québec, 2004.

09) was implemented to advance the NWT-PAS in the Mackenzie Valley. The panel also recognized the importance of other protected areas such as the Kendall Island Bird Sanctuary and the globally and continentally significant Important Bird Areas found in the Mackenzie Valley and Delta.[107]

The Joint Review Panel made several important recommendations to protect wildlife habitat and the ecological integrity of the Mackenzie Valley, such as approvals for regional land use plans,[108] the setting aside of a network of protected areas pursuant to the NWT-PAS,[109] funding for the Cumulative Impacts Monitoring Program,[110] and completion of recovery strategies and action plans for threatened species and their habitat.[111]

Conclusions

Based on the analysis of three joint panel reviews, what conclusions can be drawn about the effectiveness of CEAA environmental assessments in addressing the federal environmental priorities of climate change, smog and toxics pollution, water supply protection, and wilderness protection?

A first point is that the joint panel reviews varied dramatically in how they approached these priorities, despite the fact that each project will have multi-billion

107 *Supra* note 85 at 318, 323-327.
108 *Ibid* at 358-359.
109 *Ibid* at 356-358.
110 *Ibid* at 576-578.
111 *Ibid* at 281-282.

dollar costs. The Kearl project's Joint Review Panel gave the strong impression that it was going through the motions and that the end result—approval of the project with recommendations neither challenging not inconvenient for the proponent—was never in doubt. The MGP panel, on the other hand, was careful and thorough in how it assessed environmental effects for each priority issue and in its recommendations. The work of the Romaine River project's Joint Review Panel was situated between these extremes.

A second observation is that none of the panels indicate the federal government provided guidance in terms of reference or elsewhere as to the environmental issues that were most important to the government. The assumption appears to be that all environmental effects of the project would be assessed as required under CEAA, but that the setting of priorities for assessment would be the responsibility of the Joint Review Panels.

The MGP Joint Review Panel did a creditable job assessing climate change effects associated with the project, using an analysis of adverse environmental effects and sustainability. The work of the other joint review panels, however, was weak on GHG emissions and certainly did not involve a sustainability analysis comparable to that of the MGP project, to guide their recommendations.

Smog and toxics pollution to be emitted by the Kearl Project, by all accounts, will be orders of magnitude worse than such pollution from MGP or the Romaine River project, yet the analysis of environmental effects by its Joint Review Panel was weak, simplistic, and probably wrong, given evidence from more recent studies.

As well, impacts of toxic substances on water supplies can be expected to be more significant for the Kearl (arsenic, other heavy metals) and Romaine River (methyl mercury) projects than for the MGP (camp sewage), but the analyses and recommendations relating to the Kearl and Romaine River projects left much to be desired.

Finally, the MGP Joint Panel Review was the only one to assess seriously the project's impacts on wilderness, analyzing wildlife habitats with high-conservation value, and recommending measures to protect wilderness that are based on the principles of conservation biology.

Federal constitutional authority to enact environmental assessment laws to address federal priorities

Assume that the federal government is of a mind to make effective use of CEAA environmental assessments as a tool to achieve its priorities: reducing GHG, smog and toxics emissions, and protecting water supplies and wilderness. Does the federal government have legislative authority under the *Constitution Act, 1867* to mandate the use of environmental assessments to address federal environmental priorities that are not tied to explicit federal constitutional powers? In other words, would a federal statute requiring an environmental assessment of a proposed tar sands mine project that would produce large quantities of GHGs be constitutional even though the federal government was not called upon to issue any permits, provide funding, or dispose of federal land to advance the project?

As a federation, all of Canada's legislative powers under the *Constitution Act, 1867* are divided between Parliament and provincial legislatures. Under that act, the federal government has exclusive power to legislate with respect to certain classes of subjects such as sea coast and inland fisheries, navigation and shipping, and criminal law. [112] Provincial governments also have exclusive powers to legislate with respect to other classes of subjects such as development, conservation and management of

112 *Supra* note 7, *Constitution Act, 1867*, s. 91.

non-renewable resources. Legislative authority over other classes of subjects, including agriculture, is shared by Parliament and provincial legislatures.

Environment and environmental assessment are not identified as classes of subjects under the *Constitution Act, 1867*, in general both levels of government have a variety of powers to address environmental issues. In *Friends of the Oldman River*[113] and *Hydro-Québec*[114] cases, the Supreme Court of Canada held that environment is not a matter that falls within the exclusive jurisdiction of either level of government. Rather, it is a "diffuse subject" subject to shared jurisdiction.[115] Jurisdiction over environment is linked to other heads of power; an environmental law is valid constitutionally so long as its dominant purpose falls within that legislature's jurisdiction relating to one or more of those other heads of power.[116]

Both CEAA and the Environmental Assessment and Review Process Guidelines Order (EARPGO),[117] the predecessor to CEAA, were both drafted to follow this approach. Federal environmental assessment requirements are explicitly tied to the exercise of other constitutionally valid federal powers including permitting of projects under statutes such as the *Fisheries Act* and *Navigable Waters Protection Act*, spending federal funds, and disposing of federal lands.

113 *Friends of the Oldman River Society v. Canada (Minister of Transport*), [1992] 1 S.C.R.
114 *R. v. Hydro-Québec* (1997), 151 D.L.R. (4th) 32 (S.C.C.).
115 *Ibid* at 93.
116 *Ibid* at 94.
117 *Environmental Assessment and Review Process Guidelines Order* S.O.R./84-467.

In *Friends of the Oldman River*, the Supreme Court upheld federal jurisdiction to conduct an assessment under EARPGO.[118] A majority of the court held that environmental matters related to a head of power may be considered as part of the jurisdiction under that power. The federal environmental assessment could thus be undertaken with respect to "matters directly related to the areas of federal responsibility affected."[119]

The federal government has jurisdiction to assess the environmental effects of aspects of a project related to a federal head of power, but cannot use an environmental assessment to assess areas under provincial jurisdiction. While construction of dams is not within exclusive federal legislative jurisdiction, Parliament can legislate with respect to the environmental effects of dam construction to the extent that the construction has effects on matters that fall under federal heads of power.

Provincial works, such as the Oldman Dam, are not shielded from federal environmental assessment by virtue of some doctrine of interjurisdictional immunity. Parliament has authority to require an environmental assessment of a development project, such as the Oldman Dam, which, for example, required a permit under the *Navigable Waters Protection Act*.

118 *Supra* note 113.
119 *Supra* note 113 at 72.

Provincial legislative authority with respect to land use planning and resource planning is predominant given provincial ownership of natural resources, and exclusive jurisdiction with respect to property and civil rights; in general, all matters of a purely local or private nature; and development, conservation and management of non-renewable natural resources.[120]

The criminal law power under the *Constitution Act, 1867*[121] has been held by the Supreme Court of Canada in *R. v. Hydro-Québec* to support the *Canadian Environmental Protection Act*, a key federal statute that purports to control or prohibit releases of toxic substances into the environment. The criminal law power supports any prohibited act with penal consequences, and includes the power to establish new crimes and enact legislation for the prevention of crime. But the presence of a prohibition and penalty does not necessarily mean that a statute is a valid exercise of the criminal law power. If a statute is primarily regulatory in nature, it will not be upheld under this head of power.

The *Friends of the Oldman River* case indicates that Parliament may lack constitutional authority to amend CEAA, for example, to require federal environmental assessments of a proposed project merely because that project is likely to have environmental effects (such as GHG emissions) that fall within a designated "federal priority" category, unless the so-called Peace, Order and Good Government (POGG) provides that authority. In *Friends of the Oldman River*, the

120 *Supra* note 7, s. 92.(10), (13) and 92A.
121 Supra note 7, s. 91(27).

Supreme Court did go on to uphold EARPGO under the POGG power because it was an information-gathering process linked to federal decision-making.[122]

While the POGG power has an emergency aspect and a broader national concern aspect, only the latter is relevant in the current discussion. The test as to whether a federal law is justified constitutionally under the POGG power was first articulated in the 1946 *Canada Temperance Federation* case:

> the true test must be found in the real subject matter of the legislation: if it is such that it goes beyond local or provincial concern or interest and must from its inherent nature be the concern of the Dominion as a whole . . . then it will fall within the competence of the Dominion Parliament as a matter affecting the peace, order and good government of Canada ... [123]

In *R. v. Crown Zellerbach Ltd.*, the Supreme Court of Canada upheld the federal *Ocean Dumping Control Act*,[124] and more generally federal authority to legislate with respect to ocean pollution. With respect to the national concern doctrine, the Supreme Court concluded that

> [it] applies to both new matters which did not exist at Confederation and to matters which, although originally matters of a local or private nature in a province, have, in the absence of national emergency, become matters of national concern. [125]

To qualify as a matter of national concern, the Supreme Court held that it must have

122 *Supra* note 113 at 75.
123 *A.G. Ont. v. Canada Temperance Federation*, [1946] A.C. 193 at 205, [1946] 2 D.L.R. 1 (P.C.).
124 S.C. 1974-75-76, c.55 (now Part VI of CEPA).
125 R. *v. Crown Zellerbach Ltd.* (1988) 1 S.C.R. 401 at 431-432.

> a singleness, distinctiveness, and indivisibility that clearly distinguishes it from matters of provincial concern and a scale of impact on provincial jurisdiction that is reconcilable with the fundamental distribution of legislative power under the Constitution. [126]

Examples of matters of national concern dealt with by federal legislation and upheld by courts on account having such "singleness, distinctiveness, and indivisibility" include broadcasting, air transport, and atomic energy.

Third, the Supreme Court held that: "it is relevant to consider what would be the effect on extra-provincial interest of a provincial failure to deal effectively with the control or regulation of the intra-provincial aspects of the matter."[127] For example, federal *Clean Air Act* provisions authorizing national emissions standards were upheld under the POGG power on the basis that one province cannot as a practical matter legislate controls on air pollution produced in another province.[128]

Crown Zellerbach also suggests the importance of Canada's international treaty commitments (in this case the London Dumping Convention) as factors pointing to the necessary distinctiveness of the subject matter. The *Kyoto Protocol Implementation Act*, [129] which requires the federal government to report on progress in achieving GHG emission reduction targets, is probably valid federal legislation under the POGG power because of the distinctness of Canada's international

126 *Ibid.*
127 *Ibid.*
128 *Canada Metal Co. Ltd. and R.,Re* (1982), 144 D.L.R. (3d) 124, [1983] 2 W.W.R 307 (Man. Q. B.).
129 S.C. 2007.

commitments under the Kyoto Protocol, and because individual provinces acting alone will not be able to address climate change.

To summarize, there is ample federal legislative authority under the Constitution to require environmental assessments, so long as these environmental assessments are linked to the exercise of decision-making pursuant to another federal head of power. There also appears to be sufficient federal legislative authority to regulate emissions of GHGs and smog and toxics pollutants under the criminal or POGG heads of power.

So it would seem that CEAA could be amended or CEAA regulations issued (i.e., Law List Regulations) to require federal environmental assessments of proposed projects likely to cause adverse environmental effects in these areas of federal priority. Imposition by the federal government of environmental assessment requirements on projects that generate GHG or other emissions in the absence of a federal decision to be made under another federal head of power would appear to be much more problematic under the Constitution, but could possibly be justified under the national concern test of the POGG head of power.

Federal legislative authority to establish protected areas on non-federal lands outside the territories is more problematic even if an argument could be mounted in favour of the national concern test under the POGG power. Similarly, imposing a federal environmental assessment requirement on a project likely to have adverse environmental effects relating to fragmentation of wilderness would also be

problematic, given the predominant provincial responsibility under the Constitution to legislate with respect to land use and land use planning.

Options for improving the effectiveness of CEAA environmental assessments in addressing federal environmental priorities

The discussion above leads to a conclusion that CEAA is not being used effectively to address environmental issues the federal government has identified as priorities. The analysis of CEAA provisions suggests that the reason for this lack of effectiveness relates to a failure to provide direction on environmental priorities in the environmental assessment process, rather than a lack of authority under CEAA to require rigorous environmental assessments of projects likely to affect adversely those priorities.

This section sets out several policy, regulatory and statutory reform options to encourage more effective use of CEAA as a means of addressing federal environmental priorities such as climate change. These options include the following:

- Replace CEAA with a new statute that would transform the federal environmental assessment process to one that requires sustainability assessments of triggered projects;
- Amend CEAA to provide regulatory authority to require a CEAA environmental assessment of triggered projects likely to adversely affect the achievement of a designated federal environmental priority, such as climate change;
- Issue a Cabinet Directive that would declare a federal policy affecting proposed projects triggered under CEAA that would adversely affect a

federal environmental priority (such as climate change). Under the policy, federal ministers would be required to refer such projects for public review; and

- Have the Minister of Environment and Canadian Environmental Assessment Agency direct that federal environmental priorities be recognized in terms of reference for CEAA environmental assessments.

Option 1: A Canadian Sustainability Assessment Act

Recent panel reports for such projects as MGP, White's Point Basalt Quarry and Marine Terminal, and the Red Chris Mine have all employed a sustainability analysis, which goes beyond the conventional approach of identifying adverse environmental effects, determining their significance, and identifying measures to mitigate these effects.

As the MGP Joint Review Panel report demonstrated, sustainability assessment is a better approach to addressing GHG emissions associated with a proposed project than assessing the significance of adverse environmental effects. Comparison of alternatives is also more helpful for sustainability assessment, because it prompts judgments to be made about alternatives that represent the "best option", as opposed to whether a project is merely "acceptable" in not generating significant adverse environmental effects. Sustainability assessment would also be a better tool as well for determining how much wilderness needs to be protected in a project region to ensure that populations of key wildlife species are high enough for those populations to survive.

One option is to replace CEAA with a "Canadian Sustainability Assessment Act". This legislation would require sustainability assessments, examining issues relating to the environmental, economic and social sustainability of projects. Application of such a "Canadian Sustainability Assessment Act" would need to be coordinated with work carried out pursuant to departmental sustainable development strategies under the

Auditor General Act [130] and the federal sustainable development strategy required to be developed under the *Federal Sustainable Development Act*. A proposal for such a bill for Parliamentary review could emerge out of the CEAA seven-year review process, required to be initiated by June 2010.

Although CEAA arguably allows already for sustainability-based assessments, and section 4 of CEAA (purposes) implies that contribution to sustainability should generally be a key criterion in CEAA assessments, an explicit change in legislative focus to *sustainability* assessment from *environmental* assessment would represent a step forward. At a minimum, CEAA could be strengthened along the lines of the *Yukon Environmental and Socio-economic Assessment Act*[131] by broadening the scope to the assessment process, including social, economic, cultural as well as biophysical considerations and their interrelations.

Option 2: Designated Federal Environmental Priority Amendment to CEAA

A second option would involve amending CEAA to provide regulatory authority to require a CEAA environmental assessment of triggered projects that are likely to adversely affect the achievement of a designated federal environmental priority such as climate change. A list of "designated federal environmental priorities" would be set out in a CEAA regulation. A project would be automatically referred for public review if it is triggered under CEAA and is likely to adversely affect achievement of such a designated federal environmental priority. For each designated federal

130 R.S.C. 1985 c. A-17 as am. S.C. 1995, c. 43 and S.C. 2008, c. 33
131 S.C. 2003 c.7.

environmental priority a quantitative metric would be specified (e.g., the public review referral would only occur for projects proposing to emit a quantity of GHG emissions higher than a specified threshold amount). Similar metrics could be applied to trigger a screening or comprehensive study for proposed projects with below-threshold proposed emissions.

A similar approach has been taken in Australia's *Environmental Protection and Biodiversity Conservation Act, 1999* (EPBCA). [132] Under this statute, an environmental impact assessment and approval is required for actions that are likely to have a "significant impact on a matter of national environmental significance." [133] Examples of such actions set out in the statute include "world heritage properties, wetlands of international importance, Commonwealth marine areas, and nuclear actions", "actions that are on and /or will significantly affect Commonwealth land" and "action that Commonwealth agencies initiate that are likely to significantly affect the environment." Actions are defined to include: a project, development, undertaking, activity, or series or activities. Climate change and GHG emissions are not included in the list of "matters of national environmental significance", but note that this statute was enacted by a Liberal Australian government, which did not accept that Australia should be rapidly reducing its GHG emissions.

An interesting aspect of the EPBCA is that the Minister of Environment has a mandate to approve actions that are subject to an EPBCA environmental impact

132 Act No 91 of 1999 as amended (Australia).
133 *Ibid* s. 11.

assessment because such actions are deemed to have a significant impact on a matter of national environmental significance. These environmental impact assessments are required whether or not the Australian Commonwealth (federal) government would otherwise have been involved. This "matter of national environmental significance" would conceivably be used to replace the so-called Law List trigger for CEAA, under which certain federal regulatory decisions for projects require that environmental assessments be first completed.

This leads the discussion back to the question of whether Canada's federal government has legislative authority under the Constitution to amend CEAA to require an assessment of the environmental effects of projects with respect to a designated federal environmental priority, even if the project does not require some other federal decision.

If climate change truly is the defining issue for humankind in the 21st century, arguably the federal government could take advantage of the POGG head of power in the *Constitution Act, 1867* to require environmental assessment of proposed development projects with large GHG emissions. Should it matter that a project emitting large quantities of GHG emissions does not require an authorization under the *Fisheries Act* or is not receiving federal funds? However, such a proposed amendment to CEAA would no doubt generate considerable political controversy, and the constitutionality of such an amendment would likely be subject to legal challenge by one or more provincial governments.

Option 3: Designated Federal Environmental Priority Cabinet Directive

A third option would be for the Governor in Council to issue a Cabinet Directive that would declare a federal policy under which federal Ministers are required to refer for public review proposed projects triggered under CEAA that would adversely affect achievement of a designated federal environmental priority (such as climate change). Such a directive would not be legally binding but would presumably provide clear policy direction to federal ministers.

The government has issued two other Cabinet directives that impact federal environmental assessments. The 2004 Cabinet Directive on the Environmental Assessment of Policy, Plan and Program Proposals sets out:

> ...obligations for federal departments and agencies regarding strategic environmental assessments...[which are] designed to encourage government departments and agencies to incorporate environmental considerations into the review process of policies, plans and programs....[134]

This Cabinet Directive calls for strategic environmental assessments to be conducted for any policy, plan, or program proposal submitted to a minister or to Cabinet for approval that is likely to have important environmental effects, positive or negative. The directive also establishes criteria to help federal departments and agencies determine when such an assessment is appropriate, and offers guidance on its preparation.

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134 *Strategic Environmental Assessment: The Cabinet Directive on the Environmental Assessment of Policy, Plan and Program Proposals*, Privy Council Office and Canadian Environmental Assessment Agency, 2004.

The second is the Cabinet Directive on Implementing the *Canadian Environmental Assessment Act*, which declares the federal government's intention to "administer the Act in a manner that places a priority on the delivery of high quality environmental assessments in a predictable, certain and timely manner."[135] This Cabinet Directive "creates a framework within which federal authorities can exercise their respective powers, duties and functions established under the *Canadian Environmental Assessment Act* and its regulations."

It is interesting to note that the United States government is moving to direct its agencies to address GHG emissions in proposed actions by those agencies. In February 2010, the White House Council on Environmental Quality (CEQ) announced steps to reinvigorate the 1970 *National Environmental Policy Act*[136] (NEPA, the United States equivalent of CEAA).[137] As part of this announcement, the CEQ issued a draft Guidance Memorandum for public comment on when and how federal agencies must consider GHG emissions and climate change in their proposed actions.

The memorandum makes a clear link between U.S. federal commitments through "statutes, Executive Orders and agency policies" to the "goals of energy conservation, reducing energy use, eliminating or reducing GHG emissions, and promoting the

135 *Cabinet Directive on Implementing the Canadian Environmental Assessment Act*. See online <http://www.ceaa-acee.gc.ca/default.asp?lang=En&n=AD4BBBA0-1.
136 42 U.S.C. §4321.
137 *Memorandum for Heads of Federal Departments and Agencies: Draft NEPA Guidance on Consideration of the Effects of Climate Change and Greenhouse Gas Emissions*, Nancy H. Sutley, Chair, Council on Environmental Quality February 18, 2010.

deployment of renewable energy technologies that are cleaner and more efficient" and environmental impact assessments of development projects (subject to NEPA).

> Where a proposal for Federal agency action implicates these goals, information on GHG emissions (qualitative or quantitative) that is useful and relevant to the decision should be used when deciding among alternatives.... CEQ proposes to advise Federal agencies that they should consider opportunities to reduce GHG emissions caused by proposed Federal actions and adapt their actions to climate change impacts throughout the NEPA process and to address these issues in their agency NEPA procedures.

The CEQ proposed a reference point of 25,000 tonnes $C0_2e$ annual GHG emissions as a "useful indicator—rather than an absolute standard of insignificant effects—for agencies' action-specific evaluation of GHG emissions and disclosure of that analysis in their NEPA documents."

Applying the CEQ approach to Canada, a Cabinet Directive could require all responsible authorities considering approvals of projects that are likely to produce more than 25,000 tonnes $C0_2e$ annual GHG emissions must undergo an environmental assessment under CEAA.

Option 4: Environmental priorities included in terms of reference for CEAA environmental assessments

This option suggests that the federal Minister of Environment could take action through the Canadian Environmental Assessment Agency to further the consideration

of federal environmental priorities in CEAA environmental assessments short of statutory amendments, regulatory changes or Cabinet directives.

Having developed a list of designated federal priorities, the minister could direct the agency to ensure that all panel review and comprehensive studies address those priorities. With respect to GHG emissions for example, the minister could direct all review panels to focus on GHG emissions, consider sustainability issues with respect to these emissions (such as end uses of fossil fuels being produced by oil, natural gas or coal projects) and develop mitigation measures that would, for example, achieve net zero GHG emissions for those projects. Such directions by the minister would be closely tied to international commitments, legal requirements and policy priorities that the minister and the government of the day have set.

This ministerial direction would be easiest to achieve for CEAA comprehensive studies, which are carried out by the agency itself. For screenings (which are carried out by other federal authorities such as Department of Fisheries and Oceans), interdepartmental discussions between the agency and other federal authorities would be needed. If the proposed CEAA environmental assessment is intended to be a joint panel review, the minister and agency would ensure that federal priorities are reflected in the terms of reference negotiated with the provincial or Aboriginal claims based governments. If the panel review is to be conducted by independent agencies such as the National Energy Board or Canadian Nuclear Safety Commission, some

direction by Cabinet on behalf of the government would probably be required according to the governing statute for the agencies in question.

Conclusions

CEAA has not been used very effectively by the Government of Canada to address at least several of its own stated environmental priorities. It is beyond incongruous that GHG emissions of development projects – whether of tar sands mines, hydroelectric dams, or other projects – have been given short shrift in CEAA assessments despite the fact that Canadian governments of different political stripes have for two decades stated their commitments to reducing such emissions. Similarly, federal governments have made international and policy commitments to protect biodiversity by protecting more wilderness, yet environmental assessments often fail to consider the need for new or expanded protected areas.

Environmental assessment of projects is a useful tool that could have been – and still can be – used to assist Canada in meeting its international and legal commitments to reduce GHG emissions, reduce smog and toxics pollution, protect water supplies, protect wilderness, and achieve other federal environmental priorities.

This discussion paper has set out several legislative, policy and operational options to enable the federal government to make more effective use of environmental assessment to address its own stated priorities. There may be many others. They all raise the question: Is the federal government serious about reducing Canada's GHG emissions? Is it serious about meeting other environmental priorities such as

reducing toxics and smog pollution, providing safe drinking water and protecting wilderness?

If so, why not make serious use of environmental assessment as a tool to address those priorities?