RECOMMENDATIONS FOR Budget 2011

GREEN BUDGET COALITION

Bird Studies Canada • Canadian Environmental Law Association • Canadian Parks and Wilderness Society
Centre for Integral Economics • David Suzuki Foundation • Ducks Unlimited Canada • Ecojustice • Environmental Defence
Équiterre • Friends of the Earth • Greenpeace Canada • International Institute for Sustainable Development • MiningWatch Canada
Nature Canada • Nature Conservancy of Canada • Pembina Institute • Pollution Probe • Sierra Club Canada
Social Investment Organization • Wildlife Habitat Canada • WWF–Canada

EXECUTIVE SUMMARY

Dan Sokolowski

Canada's environment is central to Canadians' prosperity and health, providing clean air and water for our day-to-day health, natural resources that power our lives and economy, and world-renowned wild spaces and species.

To protect Canadians' prosperity, it is crucial that the federal government preserves its existing capacity to protect the environment, nature, and Canadians' health from pollution.[1] The oil leak in the Gulf of Mexico has highlighted the extensive economic and environmental costs that can occur when environmental protection is sacrificed for short-term financial savings.

The Government of Canada has achieved important progress in conservation, water, and energy efficiency in recent years. **Budget 2011 is a prime opportunity for the government to build on these successes to further establish the necessary framework for enduring environmental, economic, and health prosperity for Canadians.**

The **Green Budget Coalition (GBC)** brings together the collective expertise of twenty-one of Canada's leading environmental and conservation organizations, representing over 600,000 Canadians, to assist the federal government in developing and adopting the strategic budgetary and fiscal measures critical to achieving long-term environmental sustainability interwoven with economic prosperity.

This document details the GBC's three priority recommendations and eleven recommendations on other important issues for Budget 2011 and also outlines the importance of subsidy and pricing reform for an efficient transition to a sustainable Canadian economy.

The Green Budget Coalition's priority recommendations for Budget 2011 are:

1. **A Conservation Plan for Canada,**
2. **Energy Efficiency: Putting Money Back in Canadians' Pockets, and**
3. **Canada's Freshwater Resources: Investing in Health, Jobs, and International Responsibility.**

In addition, a suite of subsidy reform recommendations could save Canadians over $800 million annually and finance many of the other recommendations.

At the same time, strong action on climate change continues to be needed. As Prime Minister Harper has asserted, "climate change is perhaps the biggest threat to confront the future of humanity today."[2] Waiting longer to act will create real costs for Canadians – in missed business opportunities, in increased financial and economic costs for future environmental protection, and in greater risks to our collective health and climate.[3] Implementing a robust price on greenhouse gas (GHG) emissions[4] is required for effective action to address climate change and to credibly pursue long-term environmental sustainability for ourselves and future generations.[5]

[1] *The Clean Air Regulatory Agenda* (including the EcoEnergy programs) and the Chemicals Management Plan are two notable initiatives whose objectives are very important to Canadians' prosperity, but whose funding is set to end in March 2011, and for which no public announcement of renewed funding has yet been made. Species at risk protection and science programs are also fundamental to protecting biodiversity for Canadians.

[2] Speech by Prime Minister Stephen Harper in Berlin, Germany, on June 4, 2007. www.pm.gc.ca/eng/media.asp?category=2&id=1681.

[3] Sir Nicholas Stern has shown that the costs to the global economy of not taking action on climate change could reach $7 trillion annually. "$7-trillion warning on global warming" (*Globe and Mail*, 30 October 2006).

[4] A price on greenhouse gas emissions – a "carbon price"– can be implemented through a cap-and-trade system or a carbon tax.

[5] The Green Budget Coalition included detailed recommendations for carbon pricing in its *Recommendations for Budget 2008* and *Budget 2009*, both available at www.greenbudget.ca.

1) A Conservation Plan for Canada

The GBC supports the development of an ambitious, integrated Conservation Plan for Canada, focused on protecting Canada's remarkable ecosystems, wildlife, and wilderness heritage for future generations.This proposal is directly linked to implementing the Speech from the Throne commitment to "*build on the creation of more than 85,000 square kilometres of national parks and marine conservation areas as part of its national conservation plan"*.

Developing an effective Conservation Plan will require strong federal leadership to bring together federal, provincial/territorial, and Aboriginal governments, conservation organizations, industry representatives and individual Canadians to develop a shared vision, goals and strategy to protect Canada's wildlife and ecosystems.

The federal government should continue to fund current conservation programs while a new more integrated plan is developed, including programs supporting federal protected areas, species at risk, migratory birds, ecosystem science and other areas of federal responsibility for conservation.

Investment Required:

To develop a Conservation Plan for Canada:

$10 million per year for two years

To continue progress on currently proposed national parks, marine conservation areas, and other federal protected areas, while this plan is being developed:

$50 million per year, ongoing, for establishment and long term management

Additional funding will be needed to implement the Conservation Plan once it is completed.

2) Energy Efficiency: Putting Money Back in Canadians' Pockets

Any government program that helps individuals and business improve their energy efficiency has the same benefit as a tax cut in increasing disposable income. The federal government has played a key role in increasing Canadian energy efficiency, but with almost all of the ecoENERGY programs set to end in March 2011, and many already prematurely exhausted of funds, there is a great deal of uncertainty about the future of these programs and the industries they helped create. The scope and level of ambition of these programs needs to be renewed and expanded, including the development of national sectoral targets, with priority to:

1. **A National Green Homes Retrofit Strategy Including Low-Income Support.** Federal support for home retrofits has been available since 2002, and many provinces have developed complementary programs. As the uptake of these programs has increased, so has their cost, indicating more targeted incentives need to be offered, including specific programs for low income households. Target: Increase retrofits to 15% of all Canadian homes by 2015, including 130,000 low income homes by investing $1.25 billion over 5 years.

2. **Easy access to capital for efficiency upgrades.** Access to capital can be an on-going challenge to energy efficiency projects even when they are cost effective in the medium- to long-term. The creation of government-backed loan guarantees, or "Green Energy Bonds" will not only reduce the cost of capital but also reduce the risks and difficulties of accessing it. This will enable many opportunities for efficiency improvements across the country at a minimal cost to the government. Target: Creation of a $2.5 billion fund over 5 years, of which less than $100 million per year would require federal funds.

Energy efficiency and conservation are widely acknowledged to be the most cost effective, fastest to implement and most environmentally beneficial means of reducing the environmental impact of our energy supply. Taking action now is critical to meeting our clean air and climate change targets, and to strengthening our manufacturing and trades to compete in this growing global economic sector.

Total investment: $1.75 billion over 5 years

3) Canada's Freshwater Resources: Investing in Health, Jobs, and International Responsibility

With a large endowment of freshwater, Canada's record of protecting its water resources is shameful. Canadians remain one of the largest users of water per capita in the world and municipalities continue to dump contaminated water into our waterways. Canada is not living up to its international obligations and we are falling behind in an economic sector worth $400 billion worldwide. Canada needs to focus investments on its freshwater resources to protect public health, create jobs, promote innovation and safeguard this resource for future generations.

Priority areas for investment are:

1. **Investing in wastewater infrastructure across Canada** – Focus infrastructure funding on wastewater management systems to meet existing and proposed regulations. Direct $1 billion in existing infrastructure funding, plus $600 million per year in new funding, over 5 years.

2. **Improving water conservation through product labelling** – Reduce Canadians' utility bills by developing a labelling program for water-efficient fixtures and appliances. $5 million (total) over 5 years.

3. **Cleaning up Canadian Areas of Concern (AOCs) and Zones d'intervention prioritaire (ZIPs)** – Meet our international obligations to clean up and restore Great Lakes AoCs and to deliver Ecological Rehabilitation Action Plans for both AoCs and the St. Lawrence ZIPs in Quebec. $31.1 million per year over 5 years.

4. **Protection from invasive species** – Take serious action to protect Great Lakes fisheries, infrastructure and ecosystems from aquatic invasive species. $43 million per year over 5 years.

Total Investment (over 5 years):
$1 billion in existing funding from the Building Canada and Green Infrastructure Funds, plus **$3.3755 billion** *in new funding.*

Subsidy Reform: Fundamental for a Sustainable Economy

One of the fundamental requirements for making a successful and efficient transition to a sustainable Canadian economy – one that improves the lives of Canadians and the health of our environment in an ongoing, integrated fashion – is for governments' fiscal policies to be aligned with, and support, the achievement of Canada's sustainability objectives.

Two fiscal strategies are of particular importance:

1) "Levelling the playing field" for natural resource exploration and development through subsidy reform; and

2) Ensuring market prices "tell the environmental truth" through environmental pricing reform.

Governments need to "level the playing field" for natural resource exploration and development (including consideration of recycling and conservation options) so that the fiscal treatment of different natural resources is equitable, or else that fiscal policies favour resources whose life-cycle and human health impacts are more positive.

The first step in implementing such ecological subsidy reform is to remove any existing preferential treatment ("subsidies") for energy sources which are non-renewable or whose development or use is significantly environmentally-damaging or -risky.

The Green Budget Coalition has commended the Government of Canada's past budgets for making important progress towards aligning federal fiscal policy with sustainability, including the phase-out of the 100% accelerated capital cost allowance (ACCA) for the oil sands in *Budget 2007*, and is highlighting prime opportunities in this document to build upon that progress.

Subsidy Reform – Further Aligning Fiscal Policy with Sustainability:

In Budget 2011, the federal government could save Canadians well over $800 million annually by ending counterproductive subsidies for oil, nuclear power, primary mineral exploration and extraction, and for chrysotile asbestos promotion.

1. **Tax Subsidies for Oil:** Honour Canada's G-20 commitment, and save over $761 million annually, by removing four tax preferences from the oil industry, particularly the 100% Canadian Exploration Expense and the 30% Canadian Development Expense.

2. **Nuclear Power:** Protect federal taxpayers from expensive subsidies and liabilities by: requiring nuclear reactor operators to cover the full costs and risk of reactor operation, construction, and repair; ending the federal government's backstopping of Atomic Energy of Canada Limited (AECL); raising the minimum accident insurance; and removing the cap on reactor operator liability.

3. **Mineral Sustainability:** Support innovation and the development of environmentally sound closed-loop metal and mineral recycling by harmonizing the tax benefits between primary extraction and recycling and by supporting new material stewardship initiatives.

4. **Chrysotile Asbestos:** End the annual federal $250,000 contribution to the Chrysotile Institute, which promotes the use of chrysotile asbestos, a known carcinogen, internationally.

5. **Ecogift Tax Incentives:** Further assist Canadian landowners to preserve Canada's natural heritage by extending the Ecological Gifts program to cover lands held as inventory.

Investing in the Foundations of A Healthy, Sustainable Society

To achieve a sustainable economy and society, while minimizing costs to Canadians, strategic investments will also be required – particularly in energy efficiency, renewable energy, intra- and inter-city transit, water and wastewater infrastructure, and climate action in developing countries, as detailed in the following recommendations.

In many cases, the scale of these government investments can be significantly reduced by implementing subsidy and pricing reform measures, as discussed above.

6. **Air Quality:** Sustain funding for the development and implementation of regulations to improve air quality in Canada and complementary research and monitoring initiatives. Launch the proposed Comprehensive Air Management System (CAMS) – or an alternative program if the federal government does not authorize CAMS – including five fundamental components.

7. **Renewable Energy:** Catalyze growth in emerging opportunities, and create jobs in the new clean energy economy, by investing in Canada's solar hot water industry, mapping Canada's geothermal resources, and supporting wind hybrid systems in Arctic and remote communities.

8. **Transportation:** Invest in public transit infrastructure across Canada, and support employer benefits for commuting by transit and active transportation.

9. **Global Climate Finance:** Provide Canada's fair share of financial support for climate action in developing countries, as committed under the Copenhagen Accord.

10. **Carbon Pricing:** Recycle future carbon pricing revenues to six priority areas: helping meet Canada's greenhouse gas emission reduction target and international climate finance obligations, protecting low-income Canadians and the international competiveness of trade-exposed sectors, compensating households in regions at risk of undue impacts, and reducing personal and corporate taxes.

Governance for Sustainability

11. **Natural Capital Indicators:** Expand upon existing indicators of Canada's natural capital, building on federal progress to date, in order to provide better information to federal decision-makers and to advance implementation of the Federal Sustainable Development Act.

Ensuring Market Prices "Tell the Environmental Truth"

Market prices do not currently "tell the environmental truth." Indeed, as Sir Nicholas Stern has pointed out, "climate change is the greatest market failure the world has seen."[6]

Canada's economy will only maximize benefits for Canadians and be truly sustainable when market prices for goods and services do tell the environmental truth by reflecting the true value of the required resources, today and in the future, as well as the full costs and benefits to the environment and human health (including risks of major accidents) associated with their development, production, transportation, sale, use and disposal.

This approach is often called environmental pricing reform (EPR), and could be implemented through a mix of market-based instruments, such as taxes, fees, rebates, credits, tradable permits and subsidy removal.

Summary

The Green Budget Coalition strongly believes that the recommendations in this document are crucial for providing Canadians with a healthy environment, a thriving, sustainable economy, and the opportunity to live healthy lives. For this reason, we expect to continue promoting and refining these recommendations until they are adopted. Feedback and suggestions are welcome.

For further information, please contact:
Andrew Van Iterson
Manager, Green Budget Coalition
613-562-8208 ext. 243
avaniterson@naturecanada.ca

[6] October 30 2006, Press note: *Publication of the Stern Review on the Economics of Climate change*, http://www.hm-treasury.gov.uk/newsroom_and_speeches/press/2006/press_stern_06.cfm.

TABLE OF CONTENTS

Dan Sokolowski

The Green Budget Coalition sincerely thanks the EJLB Foundation for their longstanding, ongoing generous support, and the McLean Foundation for making the development of these recommendations possible.

This document is also available at www.greenbudget.ca/2011/main.html.

www.greenbudget.ca

Who We Are

The Green Budget Coalition brings together Canada's leading environmental and conservation organizations to assist the federal government to develop and implement strategic budgetary and fiscal measures critical to achieving long-term environmental sustainability for Canadians.

The Green Budget Coalition (GBC) was founded in 1999 with the recognition that the annual federal budget is often the most important Canadian policy document of the year in terms of environmental impact, and that the integration of environmental values into economic and fiscal policy is a fundamental requirement for achieving environmental sustainability and lifelong human health. The GBC's primary focus is selecting, developing, circulating, and then discussing, with government officials and parliamentarians, strategic environmental and conservation recommendations for each annual federal budget, along with the advancement of ecological fiscal reform. The GBC is committed to continually refining its recommendations, through in-depth analysis and ongoing dialogue with representatives of the Canadian government and non-governmental organizations.

The Green Budget Coalition comprises twenty-one of Canada's leading environmental and conservation groups. These member groups collectively represent over 600,000 Canadians, through their volunteers, members, and supporters. The GBC operates within four caucuses: Clean Air & Climate Change, Protecting Canada's Natural Capital, Healthy Communities & Toxics Cleanup, and Ecological Fiscal Reform, and makes its decisions on a consensus basis. Barry Turner, Director of Government Relations for Ducks Unlimited Canada, is the volunteer Chair of the Green Budget Coalition. Nature Canada hosts the GBC.

A CONSERVATION PLAN FOR CANADA

Dan Sokolowski

Recommendation Summary

The GBC supports the development of an ambitious, integrated Conservation Plan for Canada, focused on protecting Canada's remarkable ecosystems, wildlife, and wilderness heritage for future generations. This proposal is directly linked to implementing the Speech from the Throne commitment to *"build on the creation of more than 85,000 square kilometres of national parks and marine conservation areas as part of its national conservation plan"*.[7]

Developing an effective Conservation Plan will require strong federal leadership to bring together federal, provincial/territorial, and Aboriginal governments, conservation organizations, industry representatives and individual Canadians to develop a shared vision, goals and strategy to protect Canada's wildlife and ecosystems in the face of growing pressures from climate change, habitat loss, invasive species and other stressors. Continuing progress on new national parks and marine conservation areas will also require some additional funding over the next several years.

The federal government should continue to fund current conservation programs while a new, more integrated plan is developed, including programs supporting federal protected areas, species at risk, migratory birds, ecosystem science and other areas of federal responsibility for conservation.

Investment Required:

To develop a Conservation Plan for Canada:

$10 million per year for two years

To continue progress on creating new national parks marine conservation areas and other federal protected areas while this plan is being developed:

$50 million per year, ongoing, for establishment and long term management.

Additional funding will be needed to implement the Conservation Plan once it is completed.

[7] Government of Canada, 3 March 2010, Speech from the Throne. http://www.speech.gc.ca/eng/media.asp?id=1388.

Benefits for Canadians

Healthy marine and terrestrial ecosystems are the foundation upon which Canada's environmental, economic and cultural well-being depends. Specific benefits include:

- Supporting Canadian competitiveness in the global marketplace as consumers demand sustainable products from healthy ecosystems,
- Enabling Canada's species and their habitat to better adapt to climate change, and safeguarding essential ecological services such as clean water, air and climate regulation,
- Substantial contributions to the Canadian economy, for example:
  - The value of natural capital contained in diverse ecosystems in Canada is in the hundreds of billions of dollars;
  - Canadian and US visitor spending on nature-related activities contributes over $12 billion to Canada's Gross Domestic Product (GDP), and sustains 215,000 jobs;[9]
  - Parks Canada's program spending of approximately $500 million contributes $1.2 billion to the Canadian economy per year and supports 37,600 jobs;[10]
- Conserving biodiversity in marine and terrestrial environments, and northern and southern landscapes.

Background and Rationale

"To further protect and preserve the diversity and health of our natural environment, our Government will…build on the creation of more than 85,000 square kilometres of national parks and marine conservation areas as part of its national conservation plan."

March 2010 Speech from the Throne

The Green Budget Coalition was pleased that the 2010 Speech from the Throne proposed the idea of a National Conservation Plan for Canada. The GBC supports the development of an ambitious, integrated Conservation Plan for Canada, focused on protecting Canada's remarkable ecosystems, wildlife, and wilderness heritage for future generations.

The federal government has made significant progress towards creating new national parks, national wildlife areas, and marine conservation areas over the past few years. Highlights include the 2009 expansion of Nahanni National Park Reserve, and the creation of Gwaii Haanas National Marine Conservation Area, as well as progress towards permanent protection of a suite of other sites.

While Canada has many important conservation programs that warrant on-going investment, strong evidence of the continuing decline of species and ecosystem health in Canada demonstrates that we are still not doing enough. Our conservation programs are largely disconnected across and within jurisdictions, and we have no way of assessing the overall effectiveness of our various efforts across the country. It's time to conduct a fundamental review of what is needed to effectively protect Canada's natural heritage for future generations, and to work together to develop a bold new plan.

A Conservation Plan for Canada should address conservation on land and in our oceans and freshwater, focusing on:

1. Protecting large core areas of wildlife habitat in all regions of the country and connecting these together as a network through which wildlife can move freely, regardless of jurisdictional boundaries;

2. Setting bold, scientifically rigorous targets for expanding our network of protected lands and waters;

3. Implementing world leading standards for the sustainable use of natural resources on the rest of our land and oceans, thus positioning Canada as a leader in the global "green" resource economy;

4. Conserving globally significant carbon stores and sensitive ecosystems;

5. Setting up an integrated ecosystem monitoring program linked to our protected areas network;

6. Honouring our commitments to Aboriginal Canadians; and

[8] For example, the total non-market value of boreal forest ecosystem services is estimated at $703 billion – 14 times greater than the net market value of boreal natural capital extraction (Counting Canada's Natural Capital: Assessing the Real Value of Canada's Ecosystem Services, 2009, Mark Anielski, Sara Wilson for the Pembina Institute. Commissioned by the Canadian Boreal Initiative. http://www.borealcanada.ca/documents/BorealBook_CCNC_09_enFINAL.pdf, p. 2). Ontario's Greenbelt alone contributes $2.6 billion worth of non-market ecological services each year, an average value of $3,487 per hectare (Ontario's Wealth, Canada's Future: Appreciating the Value of the Greenbelt's Eco-Services (2008) Sara Wilson for the David Suzuki Foundation).

[9] Environment Canada, 1999, Survey on the Importance of Nature to Canadians: Survey Highlights. Federal-Provincial-Territorial Task Force on the Importance of Nature to Canadians. http://www.ec.gc.ca/nature/index_e.htm.

[10] Parks Canada, 2001, prepared by Outspan Group, A Study of the Economic Impacts of Parks Canada.

7. Engaging a broad range of Canadians in conserving our natural heritage.

The Plan should build on and enhance leading edge conservation initiatives underway across the country, such as:

- Recent progress on establishing new national parks and other federal protected areas;
- Federal leadership on planning for the protection of critical habitat for Species at Risk;
- the Northwest Territories Protected Areas Strategy and conservation focused land use planning;
- Provincial government commitments in Ontario, Quebec and Alberta to protect their boreal regions;
- Implementation of the Canadian Boreal Forest Agreement, recently signed between environmental organizations and the Forest Products Association of Canada and its member companies.
- Private land conservation programs in southern Canada, including purchasing and protecting and restoring high value conservation lands.

Developing an effective Conservation Plan will require federal leadership to bring together federal, provincial/territorial, and Aboriginal governments, conservation organizations, industry representatives and individual Canadians to develop an ambitious shared vision, goals and strategy to protect Canada's wildlife and natural heritage. Implementation of the Plan will require conservation-focused regional land and ocean planning processes that reflect the needs of wide-ranging species across jurisdictional boundaries.

The Green Budget Coalition believes that implementing an ambitious and more integrated Conservation Plan in Canada could reverse the decline of our wildlife and ecosystems, build on our country's strengths, and position Canada as a world leader in nature conservation by 2017, our 150th anniversary.

Investment Required — Details

To support the development of a Conservation Plan for Canada, the GBC recommends an investment of **$10 million per year** for two years. This could support a high level Conservation Commission to lead the development of the Plan, a secretariat, science and Aboriginal advisory teams, and a program to engage Canadian society in the discussion.

In the meantime, to continue current progress on creating new national parks and marine conservation areas, per the 2010 Speech from the Throne, we recommend an investment of **$50 million per year** to the Parks Canada Agency for their establishment and long-term management.[11] This renewed long term funding is critically important to ensure the Agency can continue to negotiate park establishment agreements in good faith with Aboriginal partners and others, including for long term financial commitments, and can operate and manage the new parks and marine conservation areas once they are established.

We also recommend that the federal government continue to fund other existing conservation programs while the Conservation Plan is developed, including for federal protected areas, species at risk, migratory birds, ecosystem science and other areas of federal responsibility.

Funding will be required to support implementation of the Conservation Plan once it is completed.

Contacts

Lead Contacts:
Alison Woodley, CPAWS, 613-569-7226 ext. 230
awoodley@cpaws.org
Barry Turner, Ducks Unlimited Canada, 613-565-5294
b_turner@ducks.ca

Terrestrial Areas:
Alison Woodley, CPAWS, 613-569-7226 ext. 230
awoodley@cpaws.org
Mara Kerry, Nature Canada, 613-562-3447 ext. 300
mkerry@naturecanada.ca
Jean Langlois, Nature Canada, 613-562-3447 ext. 236
jlanglois@naturecanada.ca
Rachel Plotkin, David Suzuki Foundation
613-594-9026, rplotkin@davidsuzuki.org

Oceans:
Bill Wareham, David Suzuki Foundation
604-732-4228 ext. 223, bwareham@davidsuzuki.org
Sabine Jessen, CPAWS, 604-657-2813
sabine@cpawsbc.org

Wetlands:
Barry Turner, Ducks Unlimited Canada, 613-565-5294
b_turner@ducks.ca
Dr. George Finney, Bird Studies Canada
519-586-3531 #116, gfinney@bsc-eoc.org

[11] This would support new national parks in the Mealy Mountains (NL), Nahanni Headwaters (Nááts'ihch'oh, NWT), South Okanagan-Lower Similkameen (BC), Sable Island (NS), Northern Bathurst Island (NU), East Arm of Great Slave Lake (NWT), as well as Bowen Island (BC), Flathead Valley (BC) and southern Yukon/northern BC. It would also support new national marine conservation areas in the Southern Strait of Georgia (BC), Lancaster Sound (NU) and les Iles de la Madeleine (QC), as well as in James Bay, the Bay of Fundy, and Newfoundland.

ENERGY EFFICIENCY: PUTTING MONEY BACK IN CANADIANS' POCKETS

istockphoto.com

"Canada is one of the highest per-capita CO_2 emitters in the OECD and has higher energy intensity than any IEA member country. A comprehensive national energy efficiency strategy, coupled with a coordinated climate change policy targeted at the key emitting sectors, is needed."

- International Energy Agency: Energy Policies of IEA Countries, Canada 2009 Review (2010)[17]

Recommendation Summary

Any government program that helps individuals and businesses improve their energy efficiency has the same benefit as a tax cut in increasing disposable income. The federal government has played a key role in stimulating energy efficiency progress in Canada, but with almost all of the ecoENERGY programs slated to end in March 2011, and many already prematurely exhausted of funds, there is a great deal of uncertainty about the future of these programs and the industries that have evolved around them. The scope and ambition of these programs need to be renewed and expanded to include national sectoral targets, starting by funding:

1. **A National Green Homes Retrofit Strategy Including Low-Income Support.** Federal support for home retrofits has been available since 2002. Building on this success, a national program should be set up to reach achievable goals of 15% of existing housing stock by 2015, 40% by 2020, and 100% by 2030. The federal government should re-invest in a home retrofit incentive program as a bridge until a longer term strategy is developed to meet 2030 targets. Such a strategy should include specific programs for low income households that complement provincial and territorial efforts. Target: Increase retrofits to 15% of all Canadian homes 2015, including 130,000 low income homes.

2. **Easy access to capital for efficiency upgrades.** Access to capital can be an on-going challenge to energy efficiency projects even when they are cost effective in the medium- to long-term. The creation of government-backed loan guarantees, or "Green Energy Bonds" would reduce the costs and risks of accessing capital. Low cost financing should be set up to enable Canadians to "repay as they save." Using a Green Bond mechanism to raise this pool of capital reduces the government outlay that is required, at a time of pronounced fiscal constraints, although there is still a cost associated with such a mechanism, both to administer it as well as to cover the small fraction of defaulted loans. Target: Creation of a $2.5 billion fund over 5 years, of which less than $100 million per year would require federal funds.

Total Investment: **$1.75 billion over 5 years**
Green Homes Retrofit Strategy: $1.25 billion (over 5 years)
Green Energy Bonds: $500 million (over 5 years)

Benefits to Canadians

Energy efficiency is a prime means of improving an economy's productivity. Energy efficient households, businesses and economies have lower variable costs and are therefore more resilient to price increases and external shocks. Investing in energy efficiency and conservation boosts productivity, reduces costs, cleans our air and water, and creates jobs everywhere and is the cheapest way of reducing greenhouse gas and other emissions.

Energy efficiency is our cleanest, cheapest and fastest to deploy source of making new energy available to our economy. As an energy source, energy efficiency is unique in that it pays for itself through savings.

Paying less for energy helps the overall economy grow by freeing up capital and discretionary income for more productive investments.

In addition to providing these economic advantages, energy efficiency and conservation are widely acknowledged to be the most cost effective, fastest to implement and most environmentally beneficial means of securing our energy supply, and reducing air emissions. Taking immediate action will have a strong environmental benefit at home and will also help strengthen the position of Canadian manufacturers and suppliers to keep pace in the global market for efficient products, after major investments were made in the 2009 and 2010 global economic stimulus packages, notably in the United States.

Background and Rationale

Canada's energy use grew more rapidly than its population in 2007-08, according to Natural Resources Canada's report to Parliament under the *Energy Efficiency Act*.[12] Canada will need to stabilize and begin to reduce energy consumption in order to increase our economy's resilience to energy price changes while reducing environmental impacts.

In addition to economic resilience, the National Round Table on the Environment and the Economy (NRTEE) has recommended that two key enabling conditions are necessary for achieving a low-emissions economy: an economy-wide emissions price signal and widespread low-carbon technology deployment.[13] These necessary conditions will not occur overnight, and an economy-wide carbon price will eventually will take time to rise.

An energy efficient Canada will mean that less gasoline needs to be imported, less coal needs to be burned and fewer alternatives need to be built. A recent McKinsey & Company study illustrates that government programs can result in over twice the return on investment in energy savings[14] and echoes many other studies that show how dollars invested in energy efficiency result in multiple dollar savings.

Canada has already implemented some successful energy efficiency programs, but much more is needed. The following energy efficiency programs all expire at the end of this fiscal year:

- ecoENERGY Retrofit – Homes
- ecoENERGY for Buildings and Houses
- ecoENERGY for Industry
- ecoENERGY for Equipment
- ecoENERGY for Fleets
- ecoENERGY for Renewable Heat
- ecoENERGY for Personal Vehicles

As part of an overall federal government strategy on energy efficiency, programs such as these urgently need to be renewed and expanded. Investments in efficiency not only save money for Canadians, but also create long-term labour and manufacturing jobs while reducing negative impacts on the environment.

These two Green Budget Coalition recommendations are prime examples of the many such cost-effective programs that the federal government could implement quickly and that would rapidly create tangible benefits for Canadian households, consumers and businesses, while making progress towards accomplishing long-term targets and reductions.

[12] Natural Resources Canada, 2009, Improving Energy Performance in Canada. Report to Parliament Under the Energy Efficiency Act For the Fiscal Year 2007-08. http://oee.nrcan.gc.ca/publications/statistics/parliament07-08/pdf/parliament07-08.pdf.

[13] National Round Table on the Environment and Economy, 2007, Getting to 2050: Canada's Transition to a Low-emission Future.

[14] McKinsey & Company, July 2009, Unlocking Energy Efficiency in the U.S. Economy. http://www.mckinsey.com/clientservice/electricpowernaturalgas/US_energy_efficiency/.

Detailed Recommendations

1. Home Retrofit Strategy

There are over 9 million homes in Canada, and the energy that is consumed in these homes accounts for close to 10% of the country's annual greenhouse gas emissions. If retrofitted with insulation, high efficiency equipment and weatherproofing, most homes in Canada could reduce their energy consumption by 30%. As successful as previous retrofit programs have been, only 8% of Canadian homes have been upgraded to date, and more needs to be done. A national program should be set up to reach achievable goals of 15% of existing housing stock by 2015, 40% by 2020, and 100% by 2030. This strategy would bring Canada in line with the US and the UK.

To meet these goals, the focus of ecoENERGY needs to be expanded to include a full suite of support measures, including energy labelling, financing options allowing home owners to pay for retrofits out of future energy savings, and training and certification of renovators to ensure quality control. As an important part of this strategy, it is essential that the EnerGuide Home Rating Systems be strengthened and maintained without a break, as this is a tool used across the country. Furthermore, re-launching a home retrofit incentive program is an important step to maintain the skilled labour that has been developed in this area, as well as complementary provincial and territorial programs. In order to keep federal costs manageable, more targeted incentives need to be offered. Natural Resources Canada needs to prioritize incentives that target longer-payback items in order to improve program results efficiency. The incentive program also needs to encourage fuel switching to low-carbon energy sources as well as major appliance upgrades. Initial audits need to be made available free of charge.

2. Green Bonds for Energy Efficiency

A green bond is a government-backed financial instrument designed to engage the public by raising capital to accelerate clean energy such as renewable energy or energy efficiency, and to address the market gap that many individuals and businesses face in accessing capital for clean energy investments even when they have overall positive rates of return. Addressing this gap will accelerate the deployment of carbon-reducing technology, while contributing to achieving broader government goals such as its climate change targets and its laudable goal of generating 90 per cent of Canada's electricity from non-emitting sources within the next ten years.
(See *Renewable Energy: Catalyzing Growth in Emerging Opportunities*, later in this document.)

Green Bonds would directly involve the Canadian public in a positive way on the climate change issue. A 2007 poll conducted by Nanos Research found that 82 per cent of Canadians support the idea of a Green Bond initiative and 62 per cent indicated they would purchase Green Bonds with an interest rate similar to a Canada Savings Bond. The European Investment Bank issued a Climate Awareness Bond in 2007, which can be examined as a precedent for this initiative.

However, there is still a fundamental requirement for a long-term strategy that sets short and long-term targets, and implements programs to achieve them. This process has begun under the Council of Energy Ministers (CEM), but needs to be committed to in earnest.

Complementary Measures

Working papers prepared for the CEM show that major improvements in all sectors are both possible and cost effective, but only if action is taken by governments to remove barriers to market transformation and to aggressively regulate efficiency of equipment, buildings and vehicles. These CEM papers recommended short-term targets for the built environment, including 2012 and 2020 milestones and need to be moved into action by federal and provincial governments. Future federal budgets need to include financial support programs for efficiency in the industrial sector and for all modes of transportation and freight movement.

The federal government can provide leadership by implementing and communicating to the public its energy efficiency programs, but this needs to be supported by complementary regulatory actions in the industrial and transportation sectors, as well as by continually increasing the minimum efficiency standards for energy-using products.[15]

Contact

Tim Weis, P.Eng.
Pembina Institute
780-485-9610 ext. 105
timw@pembina.org

[15] Minimum energy efficiency standards should meet or exceed the best levels in North America, be extended to cover all energy-using equipment (and those that influence energy use), and be upgraded to the best in North America every four years.

Dan Sokolowski

Investing in Health, Jobs, and International Responsibility

Recommendation Summary

With a large endowment of freshwater, Canada's record of protecting its water resources is shameful. Canadians remain one of the largest users of water per capita in the world and municipalities continue to dump contaminated water into our waterways. Canada is not living up to its international obligations and we are falling behind in an economic sector worth $400 billion worldwide. Canada needs to focus investments on its freshwater resources to protect public health, create jobs, promote innovation and safeguard these resources for future generations. Priority areas for investment are:

1. **Investing in wastewater infrastructure across Canada** – Focus infrastructure funding on wastewater management systems to meet existing and proposed regulations. Direct $1 billion in existing infrastructure funding, plus $600 million per year in new funding, over 5 years.
2. **Improving water conservation through product labelling** – Help reduce Canadians' utility bills by developing a labelling program for water-efficient fixtures and appliances, similar to the US WaterSense program. $5 million (total) over 5 years.
3. **Cleaning up AoCs and ZIPs** – Meet our international obligations to clean up and restore Great Lakes Areas of Concern (AoCs) and deliver Ecological Rehabilitation Action Plans for both AoCs and the St Lawrence Zones d'intervention prioritaire (ZIPs) in Québec. $31.1 million per year over 5 years.
4. **Ensuring protection from invasive species** – Take serious action to protect Great Lakes fisheries, infrastructure and ecosystems from aquatic invasive species. $43 million per year over 5 years.

Investment Required:

For wastewater management:

$600 million per year, for 5 years, in new infrastructure funding
Assign $1 billion of un-allocated funding from the Building Canada Fund and Green Infrastructure Fund.

To protect and restore key freshwater systems:

$75.1 million per year, for 5 years

Benefits for Canadians

- Improved health.
- Upgraded wastewater infrastructure, to meet higher standards.
- Strengthened ecosystem capacity and resilience to support an economy, social systems, and business climate which:
  - Provides sustainable employment,
  - Delivers quality goods and services, and
  - Uses natural resources in a manner that ensures access to those natural resources for future generations; and
- Financially independent public utilities achieved through the fiscal benefits of water conservation and efficiency.

Background and Rationale

A. Investing in Canada's Water Infrastructure

1. **Wastewater infrastructure across Canada**
   Degraded wastewater systems have an enormous impact on public health, economic development and the physical environment. Fecal coliform bacteria and other biological and chemical compounds pollute sources of drinking water, close beaches and threaten ecosystems. This burdens society in terms of health costs and lost productivity and also negatively impacts tourism. The Government of Canada's proposed new standards for wastewater effluent are a good start, but municipalities are struggling to reach existing standards and a growing infrastructure deficit may mean these new standards will not be achieved for decades.

   To ensure that existing and new sewage effluence standards are achieved, the federal government needs to invest in water treatment infrastructure, to be matched by provincial and municipal governments under a shared funding model. In the case of municipalities whose finances have been severely weakened by the loss of tax generating industries, or that do not have sufficient tax bases to pay for upgrades to sewage and storm water treatment infrastructure, the federal and provincial governments must cooperate to assume a greater financial responsibility.

   A Federation of Canadian Municipalities (FCM) – McGill University survey estimated Canada's municipal infrastructure deficit related to meeting current standards for wastewater and stormwater systems to be approximately $19.9 billion.[16] In addition, the Canadian Council of Ministers of the Environment (CCME) estimates that it will cost $10 billion to $13 billion for a Canada-wide strategy to address the new sewage effluent standards.[17] Thus, for the infrastructure deficit to be addressed over ten years and the new standards over thirty years, an investment of about $12 billion is required over the next five years.[18] The Green Budget Coalition suggests that these costs be shared equally between the federal, provincial and municipal governments, requiring a total investment from the federal government of $4 billion over the next 5 years, of which $1 billion could come from existing, uncommitted funding in the Building Canada Fund's Major Infrastructure Component and the Green Infrastructure Fund.[19]

   In order to maximize benefits to Canadians, funding should only be provided where certain conditions and assurances are met. Municipalities must exercise demand side management and provide an effective, independently-monitored water conservation plan. The pumping and treatment of water are considerably high expenditures for municipalities, and managing the demand for water can reduce these costs. Maximizing the efficiency of current water usage demands will also reduce future needs for water infrastructure expansion, allowing for greater focus on renewing and repairing existing infrastructure.

[16] FCM, November 2007, Danger Ahead: The Coming Collapse of Canada's Municipal Infrastructure. ISBN 978-1-897150-20-7, http://www.fcm.ca/english/View.asp?mp=601&x=622, p. 16. The municipal water supply deficit was also estimated at $11.1 billion, out of a total municipal infrastructure deficit of $123 billion.

[17] CCME, February 1 2009, Canada-wide Strategy for the Management of Municipal Wastewater Effluent, http://www.ccme.ca/assets/pdf/cda_wide_strategy_mwwe_final_e.pdf, p. iii.

[18] The $12 billion, 5-year cost estimate represents $10 billion to address half of a 10-year strategy to address Canada's $20 billion wastewater infrastructure deficit, plus $2 billion to address one-sixth of a 30-year, roughly $12 billion strategy to address the new sewage effluent standards.

[19] As of October 2010, the latest information indicated that about $1.2 billion in existing federal infrastructure funding was still potentially available for wastewater infrastructure (or other projects meeting Fund criteria), including $373 million in the Green Infrastructure Fund (GIF) (per then Minister of Transport, Infrastructure and Communities John Baird on May, 27, 2010 to the House of Commons Standing Committee on Transport, Infrastructure, and Communities, www2.parl.gc.ca/HousePublications/Publication.aspx?DocId=4558857&Language=E&Mode=1&Parl=40&Ses=3; and the Infrastructure Canada web site listing of GIF projects at http://www.buildingcanada-chantierscanada.gc.ca/creating-creation/gif-fiv-eng.html) and up to $850 million in the Building Canada Fund's Major Infrastructure Component (MIC) (figures based on discussions with Infrastructure Canada officials, indicating that more than $5.8 billion of MIC funds had been committed).

Budget

Assign $1 billion of *existing infrastructure funding,* plus $600 million per year in new funding, for 5 years.

2. **Water conservation and labelling**
Stronger water conservation efforts are needed to protect water resources, habitat, and water quality, while responding to the predicted impacts of climate change. National water conservation programs, public education, incentives and standards for industry, agriculture, and residential developments all need to be strengthened. A labelling standard should be created for water efficient technologies similar to the US Environmental Protection Agency (US EPA) program WaterSense.[20] This policy is supported by all Canadian premiers, through the Council of the Federation.[21]

The US EPA WaterSense label provides vital information to consumers on water fixtures and appliances, similar to Canada's Energy Star label. Products bearing the WaterSense label: perform as well or better than their less efficient counterparts; are 20 per cent more water efficient than average products in that category; realize water savings on a national level; provide measurable water savings results; achieve water efficiency through several technology options; are effectively differentiated by the WaterSense label; and obtain independent, third-party certification.[22]

Such a program could be easily adapted to Canada, and would require minimum investment with maximum returns. The US WaterSense 2009 Accomplishments Report reported saving 36 billion gallons of water and $267 million to customers on water and sewage bills, as well as reducing electricity consumption by 4.9 billion kWh and CO_2 emissions by 1.7 metric tons.[23] Proportionally similar yearly savings could be expected in Canada.

A WaterSense Canada program could benefit from technical and administrative programs already operational in the US. The EPA WaterSense program is funded by the US federal government at a cost of $5 million annually. With a much lower population, a Canadian WaterSense program should be able to function effectively on roughly $1 million per year, decreasing over time.

Budget
$5 million (total) over 5 years

B. Fulfilling our obligations in the Great Lakes – St. Lawrence

3. **Cleaning up AOCs and ZIPs**
Ensure and coordinate the clean up and de-listing of the Canadian AOCs and the implementation of ZIP Ecological Rehabilitation Action Plans (ERAPs) – Since 2007, federal budgets have provided modest commitments in addition to the existing $4.8 million annual funding (from 2007 to 2010),[24] to clean up contaminated sediment at Great Lakes sites. While important, these commitments are only trifling compared to Environment Canada's estimate of $150 million being required to clean up contaminated sediment in Canadian AOCs[25] (significantly less than estimates for the US side of the lakes – US$1.5 billion to US$4.5 billion).

Stratégies Saint-Laurent, the government-supported NGO that manages the ZIP program in Quebec, estimates that an additional $1.1 million per year is required to maintain the operations of the 14 ZIP committees along the St. Lawrence River.[26] Each ZIP committee partners up with other organizations in order to deliver projects that implement aspects of

[20] US Environmental Protection Agency, www.epa.gov/WaterSense/.

[21] Council of the Federation, August 2010, Water Charter, http://www.councilofthefederation.ca./pdfs/Water_Charter_Aug_4_2010.pdf.

[22] US Environmental Protection Agency, www.epa.gov/WaterSense/.

[23] US Environmental Protection Agency, 2010, EPA WaterSense 2009 Program Accomplishments, http://www.epa.gov/WaterSense/about_us/program_accomplishments.html

[24] Funding under the Great Lakes Sustainability Fund, from 2007 to 2010. Office of the Auditor General, March 2008, Status Report of the Commissioner of the Environment and Sustainable Development to the House of Commons – Chapter 7: Areas of Concern in the Great Lakes Basin, http://www.oag-bvg.gc.ca/internet/English/parl_cesd_200803_07_e_30133.html#ex4.

[25] 2008 Status Report of the Commissioner of the Environment and Sustainable Development to the House of Commons – Chapter 7: Areas of Concern in the Great Lakes Basin, http://www.oag-bvg.gc.ca/internet/English/parl_cesd_200803_07_e_30133.html.

[26] Each ZIP Committee currently receives $75 000 per year, but this figure has not changed in the past 15 years, despite increases in operational costs.

each ZIP's Ecological Rehabilitation Action Plan. The ERAPs address a wide range of issues, from invasive species and biodiversity to wastewater issues and restoration of riverbanks for public use.

Budget
$31.1 million per year for 5 years

4. **Protection from Invasive Species**
In *Budget 2010*, Canada renewed program financing for Canada's Invasive Alien Species Strategy to reduce the risk of invasive species being introduced to Canada.[27] While this renewal was welcomed, the Auditor General of Canada's 2008 Status Report on the Control of Aquatic Invasive Species found that "unsatisfactory" progress had been made towards assessing the economic and social risks of invasive species and described the efforts to prevent and control existing invasive species as "inadequate".[28] A mere renewal of funding is insufficient to protect Canadian freshwater resources, let alone agricultural ones. The Great Lakes region alone needs to be the focus of significant investment in the understanding and prevention of the introduction and proliferation of alien aquatic species. The US Great Lakes Regional Collaboration estimates that an effective invasive species program would cost $693.5 million over 5 years.[29] The Great Lakes Fishery Commission conducts research and administers the international Sea Lamprey program in the Great Lakes at a cost of $15 million annually, of which Canada currently contributes 31% (and the US 69%). Using that cost-sharing basis, Canada must contribute roughly $43 million annually to advance research and improve efforts to protect against invasive species and to ensure that Canada is meeting its international obligations.

Budget
$43 million per year over 5 years

Alternative and Complementary Policies

To complement these efforts, federal legislation including the *Canadian Environmental Protection Act* (CEPA) must facilitate stronger implementation of the multi-barrier protection approach, which includes preventing contaminants from entering the wastewater stream, including by regulating chemicals in consumer goods whose manufacturing, use or disposal can have potential impacts on the environment and human health. As a long-term goal, municipal governments must be provided with the tools to ensure that water and wastewater services are fiscally sustainable through measures such as conservation and cost recovery programs.

Stronger water conservation efforts are needed to protect water resources, habitat, and quality, and to respond to the impacts of climate change. National water conservation programs, public education, and incentives and standards for industry, agriculture, and homes all need to be strengthened. A Water Efficiency Act could be modelled on *Canada's Energy Efficiency Act.*

Model bylaws and building codes that facilitate water conservation should be created as guidelines for provincial and municipal governments. Funds should also be dedicated to enable municipal water conservation measures. Efficient means of delivering these funds would include providing financial assistance to municipalities to implement broader residential water metering and sustainable water pricing, and increasing existing investment in the Green Municipal Fund[30] administered by FCM. These actions would spur innovation and market growth in water efficiency technologies and extend the life of existing water supplies, thus decreasing the need to expand infrastructure and reducing the energy required to pump and treat water. Overall, this would reduce costs for federal, provincial, territorial and municipal governments as well as for residential and commercial water users, and also reduce greenhouse gas emissions. Furthermore, these efforts would support provincial commitments to implement the *Great Lakes – St. Lawrence River Basin Sustainable Water Resources Agreement* of 2005.

[27] $19 million over two years.

[28] Office of the Auditor General of Canada, *2008 March Status Report of the Commissioner of the Environment and Sustainable Development.* "Chapter 6—Ecosystems—Control of Aquatic Invasive Species", Exhibit 6.5- —Progress in addressing our recommendation on managing the risks of aquatic invasive species is unsatisfactory. http://www.oag-bvg.gc.ca/internet/English/parl_cesd_200803_06_e_30132.html#ex5.

[29] Aquatic Invasive Strategy Team of the Great Lakes Regional Collaborative, *Appendix A - Aquatic Invasive Species Strategy Team Implementation Actions and Milestones*, http://www.glrc.us/documents/strategy/AIS-Appendix.pdf.

[30] See http://gmf.fcm.ca/Home/.

Protecting headwaters, wetlands and coastal habitats as natural heritage sites would not only preserve the natural beauty of the Great Lakes and St. Lawrence River for future generations, but also safeguard the health of those whose drinking water comes from the Great Lakes and St. Lawrence River, and protect critical habitat for numerous endangered species.

Green Budget Coalition members also call on the federal government to close the resource gap for First Nations, Inuit, and Métis water systems. These systems are among the most under-resourced in the county, and the recently introduced *Safe Drinking Water for First Nations Act*,[31] if passed, will not be successful unless adequate resources for operating and capital costs, as well as for the training, testing and certification costs of those water systems are available. Recent studies indicate Canada still has a long way to go to provide safe water in hundreds of First Nations communities across the country.[32]

Contact

Theresa McClenaghan
Canadian Environmental Law Association
theresa@cela.ca
416-960-2284 ext. 219

[31] Government Bill S-11, First Reading May 26, 2010. http://www2.parl.gc.ca/HousePublications/Publication.aspx?DocId=4550782&Language=e.

[32] See Simeone, Tonina, *Safe Drinking Water in First Nations Communities*, Social Affairs Division Parliamentary Information and Research Service, Library of Parliament, *Revised 28 May 2010*, http://www2.parl.gc.ca/content/LOP/ResearchPublications/prb0843-e.htm; See also, 2005 Report of the Commissioner of Environment and Sustainable Development to the House of Commons, Chapter 5, Drinking Water in First Nations Communites, http://dsp-psd.pwgsc.gc.ca/Collection/FA1-2-2005-5E.pdf.

Dan Sokolowski

Fundamental for a Sustainable Canadian Economy

A truly sustainable Canadian economy would improve the lives of Canadians and the health of our planet in an ongoing, integrated fashion. A sustainable economy would recognize that conserving and protecting natural systems is critical to our ongoing prosperity, and that the health of our economy is intrinsically linked to the health of our environment.

One of the fundamental requirements for making a successful and efficient transition to a sustainable economy is for governments' fiscal policies to support the achievement of Canada's sustainability objectives rather than detract from them.

Two fiscal strategies are of particular importance:

1) "Levelling the playing field" for natural resource exploration and development through ecological subsidy reform; and

2) Ensuring market prices "tell the environmental truth" through environmental pricing reform.

1) Ecological Subsidy Reform

Firstly, governments need to "level the playing field" for natural resource exploration and development so that the fiscal treatment of natural resource is equitable, or else that fiscal policies favour resources whose life-cycle and human health impacts are the most positive. This should include consideration of conservation and recycling options.

The first step in implementing such ecological subsidy reform is to remove any existing preferential treatment ("subsidies") for energy sources which are non-renewable or whose development or use is significantly environmentally-damaging or -risky.

The federal government made important progress in this area in *Budget 2007* by initiating the phase-out of the 100% accelerated capital cost allowance (ACCA) for the oil sands.

This document outlines the most important next steps in ending such counterproductive subsidies, in four recommendations regarding *Tax Subsidies for Oil, Nuclear Power, Chrysotile Asbestos*, and *Mineral Sustainability.* The subsidies identified in these recommendations are, collectively, damaging to environmental and human health, financially wasteful, and allow major financial risks for Canadians.

The federal government could save over $800 million annually and make important progress towards sustainability by ending these subsidies. Bringing the deductable rates for oil, under the Canadian Exploration Expense and the Canadian Development Expense, in line with normal capital depreciation rates could save $700 million alone.

2) Ensuring Prices "Tell the Environmental Truth"

Market prices do not currently "tell the environmental truth." Indeed, as Sir Nicholas Stern has pointed out, "climate change is the greatest market failure the world has seen."[33]

Canada's economy will only maximize benefits for Canadians and be truly sustainable when market prices do tell the environmental truth by reflecting true values – today and in the future - as well as the life-cycle costs and benefits - financial, environmental, and social – of their production and consumption.

[33] October 30 2006, Press note: *Publication of the Stern Review on the Economics of Climate change*, http://www.hm-treasury.gov.uk/newsroom_and_speeches/press/2006/press_stern_06.cfm.

When measuring the life-cycle impacts of specific goods and services, we generally consider the costs and benefits associated with resource depletion, waste creation, pollution emissions, and ecological restoration resulting from the development, production, transportation, sale, use, and disposal of those goods and services. However, the full spectrum of such costs and benefits is generally not represented in the market price of goods and services, and instead the remaining "externalities"[34] are borne by society at large. As a result of this imbalance, businesses and consumers tend to over-consume (or, in some cases, under-supply) particular goods and services as their market prices are artificially low.[35]

Economists refer to this situation as a "market failure" because there is no market for the externalities, and the market for the goods and services is distorted. Economic theory states that when prices reflect true costs, an optimal level of consumption takes place, and society's welfare is maximized.

Canada's economy suffers from two major types of ongoing market failure: (1) we are over-consuming, and thus inefficiently utilizing, our non-renewable natural resources; and (2) we are over-polluting our air, water, and soil — and through them our own human bodies — well beyond capacities to absorb this pollution without notable harm.

As a result of these market failures, when businesses and citizens make strategic operational and purchasing decisions to favour human health and the environment, they often find themselves incurring increased costs in order to do so as these goods and services are competing with more harmful options whose prices are artificially low. This imbalance is counterproductive to achieving a healthier sustainable society because it sends the wrong signals to all of us as economic decision-makers.

Environmental Pricing Reform

The Green Budget Coalition firmly believes that Canada's prosperity requires that market prices for goods and services accurately reflect the true value of resources required to produce them, today and in the future, as well as the full costs (including risks of major accidents) and benefits to the environment and human health associated with their development, production, transportation, sale, use and disposal.

This approach is often called environmental pricing reform (EPR), and could be implemented through a mix of market-based instruments, such as taxes, fees, rebates, credits, tradable permits and subsidy removal.

Such EPR policies create many benefits. They preserve natural resources for higher value uses, reward environmental leaders amongst businesses and citizens, and stimulate environmental innovations with global export potential. Overall, they expedite the development of healthy, sustainable economies, where economic success brings concurrent environmental and human health benefits, and where self-interested economic choices are more frequently those with the most social and environmental benefits. Furthermore, such policies provide enhanced fairness to citizens and business through the "polluter pays" principle,[36] by forcing polluters to pay for the harm they cause.

Canada lags behind most other industrialized countries — including the United States and Australia — in utilizing market-based instruments, particularly financial disincentives.

However, the GBC has commended the government for some important fiscal actions, including steps towards imposing a price on greenhouse gas emissions through a cap-and-trade system, and the introduction of a modest, temporary carbon tax as part of a revenue-neutral "feebate" structure for new automobile purchases.

The most important EPR actions available to the federal government are (1) the implementation of a robust carbon price and (2) the development and implementation of a comprehensive EPR plan, in coordination with provincial, territorial and municipal governments.

[34] "Externalities" refers to costs or benefits, resulting from an economic activity, that impact an individual or entity not involved in determining that activity, and which are not reflected in market prices. Common environmental externalities include air, water and noise pollution, as well as the stewardship of wetlands and forests.

[35] Common examples of over-consumed goods include oil and natural gas (where prices do not usually reflect pollution impacts on health and the environment) and roads for transportation (where usage fees are rarely charged), and imported fruits and vegetables (where prices do not reflect the environmental and health costs of the transportation-related pollution). Under-supplied services include forests (where the environmental and health benefits are rarely compensated financially).

[36] In Budget 2005, the Government defined "polluter pays" as meaning that "the polluter should bear the costs of activities that directly or indirectly damage the environment. This cost, in turn, is then factored into market prices." [http://www.fin.gc.ca/budget05/bp/bpa4e.htm] On May 29, 2007, as Environment Minister, the Hon. John Baird re-affirmed the government's commitment to this principle by telling the Standing Committee on the Environment and Sustainable Development that the government "believes that the polluter should pay."

Carbon Pricing: Recycling Revenues highlights how the anticipated revenues from a carbon price could be strategically directed to create further environmental and economic benefits in addition to the emission reductions stimulated by the carbon price.

Investing in Sustainability

To achieve a sustainable economy and society, while minimizing costs to Canadians, strategic investments will also be required – particularly in energy efficiency, renewable energy, intra- and inter-city transit, water and wastewater infrastructure, and climate action in developing countries (each of which is addressed by recommendations in this document).

In many cases, the scale of these government investments can be significantly reduced by implementing ecological subsidy reform and environmental pricing reform measures, as discussed above. For example, the costs of accelerating energy efficiency and renewable energy can be reduced by implementing a robust carbon price, while ending existing tax subsidies to oil, natural gas and nuclear power will make private investments in renewable energy more attractive. Net transit operating costs can be significantly reduced by implementing fair disincentives to driving, particularly a strong carbon price and road user pricing. Also, the need for building expensive new water and wastewater infrastructure can be reduced by raising water usage fees to better cover the costs of the related infrastructure.

In addition, for fiscal policy to support sustainability, federal financial transfers to provincial and municipal governments, and subsidies to industry, should be made conditional on achieving defined environmental outcomes, with some inter-governmental transfers made conditional on implementing true-cost pricing measures (such as for road use).

istockphoto.com

Fulfilling G20 Commitment to Phase Out Inefficient Fossil-Fuel Subsidies

Recommendation Summary

As a member of the G-20, Canada has pledged to phase out its inefficient fossil-fuel subsidies over the medium term, and is planning to fully remove tax write-offs for oil sands projects worth $300 million per year by the end of 2015. But new research shows that federal subsidies to the oil industry still total $1.38 billion annually. In order to honour our commitment at the G-20, live up to stated ambitions to be a 'clean energy superpower', and reap these significant fiscal savings, the federal government needs to reduce its support to the oil industry. The first step will be to remove the following tax preferences, identified by the Department of Finance Canada as subsidies for potential reform:[37]

1. ***Canadian Exploration Expense***: Allows companies to deduct 100% of their exploration expenses from their income tax each year. The deductible rate should be brought in line with normal capital depreciation rates.
   Annual savings: $233 million per year[38]
2. ***Canadian Development Expense:*** Allows companies to deduct 30% of their development expenses from their income tax each year. The deductible rate should be brought in line with normal capital depreciation rates.
   Annual savings: $478 million per year
3. ***Flow through shares:*** Allows the rights to income tax deductions for new expenditures on exploration and development by the company to be passed on to investors when income is not available to take advantage of the Canadian Exploration Expense, Canadian Development Expense and Canadian Oil and Gas Property Expense. The flow-through shares should be adjusted according to the tax reforms for each deductible expense.
   Annual savings: Likely small
4. ***Tax depreciation rates for oil sands leases and building mines:*** Currently tax depreciation rates for the mining sector apply to oil sands leases and to building mines. This rate is more favourable than the rate applied for the oil and gas sector. Recommend reducing the rates to be aligned with the rest of the oil and gas sector.
   Annual savings: $50 million per year

Total savings: Over $761 million per year

[37] Memorandum from Michael Horgan to Minister of Finance, 18 March 2010, Subject: G-20 Commitment – Fossil Fuel Subsidies. http://pubs.pembina.org/reports/department-of-finance-subsidies-memo.pdf.

[38] Sawyer, Dave and Seton Stiebert, November 2010, Fossil Fuels: At What Cost? Government support for upstream oil activities in three Canadian provinces: Alberta, Saskatchewan and Newfoundland and Labrador. The Global Subsidies Initiative (GSI) of the International Institute for Sustainable Development, Geneva. All the "savings" figures in this recommendation come from this GSI study.

Benefits to Canadians

By substantially increasing annual federal revenues, these tax reforms would help to ease Canada's fiscal pressures and provide further opportunities to invest in the clean energy economy of the future, through energy efficiency, renewable energy technologies and financial support for climate action in developing countries. By note of comparison, savings from removing these four tax preferences could easily fund the Green Budget Coalition's first two recommendations – to implement an energy efficiency program and to develop a conservation plan for Canada; alternatively, the savings could fund the GBC's full freshwater recommendation, including the federal share for upgrading municipal wastewater infrastructure to meet the existing and proposed regulations. (see *Energy Efficiency: Putting Money Back in Canadian's Pockets; A Conservation Plan for Canada; and Investing in Canada's Freshwater Resources*, earlier in this document).

Eliminating federal subsidies for oil would also result in substantial greenhouse gas emission reductions with minimal impact on Gross Domestic Product (GDP).[39] Reducing the federal government's support to the oil industry will help to build Canada's reputation as a clean energy superpower and improve the industry's international image especially with regard to the oil sands.[40]

Background and Rationale

In September 2009, G-20 Leaders recognized that "fossil-fuel subsidies encourage wasteful consumption, distort markets, impede investment in clean energy sources and undermine efforts to deal with climate change" and pledged to rationalize and phase out inefficient fossil-fuel subsidies over the medium term.[41] The Government of Canada has reported its planned phase out of accelerated capital cost allowances (ACCAs) for oil sands by the end of 2015, worth $300 million per year, as being an initial step towards the G-20 commitment.[42] A new study by the Global Subsidies Initiative, using the World Trade Organisation's definition of "subsidy,"[43] estimates that total federal support to the oil industry amounts to $1.38 billion per year.[44] The tax expenditures that the GBC is recommending for reform in the 2011 Budget – worth over $760 million per year – were also recommended for reform by the Deputy Minister of Finance[45] and include those currently creating the highest costs for the federal government (in the form of unrecovered revenues). Reforming these subsidies is the next step to meeting Canada's commitment to the G-20. By comparison, the United States is proposing to remove preferential tax treatment for the oil and gas industry in the amount of $3.9 billion annually over 10 years to meet its G-20 commitment.[46]

Many of these tax preferences, accelerated deductions and flow-through shares recommended for reform date back to the 1970s and have since outlived their original objectives.[47] As the Deputy Finance Minister noted in his memo to the Finance Minister regarding the G-20 commitment (dated March 18, 2010) "These measures were historically premised on factors such as exploration risk, spillover benefits of exploration to third parties (similar to R&D), large capital requirements, price volatility, and a desire to be competitive. Today, however, it is not clear that these factors are unique to the sector or merit preferential treatment."[48] Phasing out these tax preferences would also be consistent with the Advantage Canada goal of enhancing growth by improving the sectoral neutrality of the tax system.

---

[39] Sawyer, Dave and Seton Stiebert, 2010.

[40] Canada's reputation as a 'clean energy superpower' was one of the rationales for supporting subsidy reform in the Deputy Finance Minister's memo to the Minister of Finance, March 2010.

[41] G-20 Leaders. (2009) Leaders' Statement: The Pittsburgh Summit. September 24-25, 2009. http://www.pittsburghsummit.gov/mediacenter/129639.htm.

[42] Submission to G-20 Leaders, 2010, *Annex: G-20 Initiative on Rationalizing and Phasing Out Inefficient Fossil Fuel Subsidies: Implementation Strategies and Timetables*. June 26-27, 2010. http://www.g20.org/Documents2010/expert/Annexes_of_Report_to_Leaders_G20_Inefficient_Fossil_Fuel_Subsidies.pdf.

[43] The WTO's Agreement on Subsidies and Countervailing Measures (ASCM), which is supported by 153 countries including Canada, defines four broad categories of subsidy: (i) direct transfer of funds or potential direct transfer of funds or liabilities; (ii) government revenue forgone or not collected (the category that tax expenditures in this recommendation fall into); (iii) government-provided goods or services, or government-purchased goods; (iv) income or price support. Uruguay Round Agreement. (1994). Agreement on Subsidies and Countervailing Measures, Article 1.

[44] Sawyer, Dave and Seton Stiebert, 2010.

[45] Memorandum from Michael Horgan to Minister of Finance, March 18, 2010.

[46] Submission to G-20 Leaders, 2010, *Annex: G-20 Initiative on Rationalizing and Phasing Out Inefficient Fossil Fuel Subsidies: Implementation Strategies and Timetables*. June 26-27, 2010.

[47] Sawyer, Dave and Seton Stiebert, 2010.

[48] Memorandum from Michael Horgan to Minister of Finance, March 18, 2010.

The Global Subsidies Initiative's study "Fossil Fuels: At What Cost? Government support for upstream oil activities in three Canadian provinces – Alberta, Saskatchewan and Newfoundland and Labrador" models the impact of removing $2.82 billion worth of federal and provincial subsidies by 2020 on the economy and greenhouse gas emissions. The savings from reduced government expenditure on subsidies[49] (even accounting for reductions in royalty payments and corporate income taxes from the oil sector) is expected to increase government budgets by 0.9 per cent for the federal government, 4.8 per cent for Alberta, and 3.8 per cent for Saskatchewan. Jobs are likely to increase as economic activity moves from the capital-intensive oil industry to more labour-intensive industries. Eliminating subsidies would also reduce national greenhouse gas emissions by 2.1 per cent.

The study finds that eliminating subsidies would reduce output from high-cost, marginal producers but that, overall, the oil sector will still double in size between now and 2020.

Contacts

John Drexhage
International Institute for Sustainable Development
613-238-9820
jdrexhage@iisd.ca

Kerryn Lang
The Global Subsidies Initiative, International Institute for Sustainable Development
0041 22 917 8920
klang@iisd.org

[49] Note that the study includes a wider set of subsidies (e.g. royalty reductions, direct spending, loan guarantees) for all four governments (Federal, Alberta, Saskatchewan, Newfoundland and Labrador) in the analysis.

Stock.xchng

Protecting Taxpayers from Subsidies and Liabilities

Recommendation Summary

Protect federal taxpayers by requiring reactor operators to cover the full costs and risks of reactor operation, construction and repair by:

1. Ending the federal government's fifty years of financial support and backstopping of Atomic Energy of Canada Limited (AECL),

2. Raising the level for minimum accident insurance to match those of other western nations, and

3. Removing the cap on reactor operator liability.

Financial Savings

Based on the past decade, ending direct and federal backstopping of AECL would save federal taxpayers **hundreds of millions of dollars each year.**

In the case of a nuclear accident, the federal government currently carries a significant off-book liability for damages because of the liability cap of $75 million for nuclear operators. Removing this cap, as other countries have done, would eliminate this off-book liability by transferring the liability to reactor operators.

Background and Rationale

Total historic subsidies to AECL top $20 billion[50] and ongoing subsidies continue to divert public funds from sustainable energy options. In 2009, for example, the federal government provided $651 million to AECL for operations research and to cover cost over-runs and AECL managed reactor projects.[51]

Despite fifty years of subsidies, AECL has only designed and sold one commercial reactor design, the CANDU-6, which was designed in the 1960s. For the past decade the federal government has been providing funding for the research and development of a new reactor design called the Advanced CANDU Reactor (ACR). Since 2003-04, the federal government has provided over $433 million in subsidies to AECL for the design of the ACR.[52] However, in 2009 the Ontario government suspended its purchase of two ACRs because the reported construction cost had topped $10,000 per KW or $26 billion.

[50] Tom Adams, *Federal Government Subsidies to Atomic Energy of Canada Limited, Energy Probe*, January 11, 2006.

[51] Tyler Hamilton, Atomic 'challenges' prompt Ottawa to shell out another $200 million, the Toronto Star, November 6, 2009, A13.

[52] Briefing Note, "Atomic Energy of Canada Limited," in response to an Access to Information Request for "A copy of the briefing book that was left at CTV's studios," September 25, 2009.

Instead of seeking more cost-effective generation options, the Ontario government has asked the federal government to subsidize its purchase of two ACRs and to also assume significant risk transfer.[53] Analysis shows, however, that it would be 18% to 48% cheaper for the province to expand its use of renewable power under its Green Energy Act than to purchase new reactors.[54]

In addition to direct subsidies to AECL, the federal government's backstopping of AECL's contractual performance guarantees for reactor life-extension projects also exposes the federal taxpayer to significant liabilities and distorts provincial electricity markets. In 2009 the federal government was forced to allocate $300 million in subsidies to pay for cost over-runs at reactor refurbishment projects in Ontario and New Brunswick.[55]

Privatizing AECL could make an important contribution to protecting Canadian taxpayers and to transiting Canada towards a more sustainable economy, by better internalizing nuclear power's costs, but only if it ensures an end to federal subsidies as well as to federal backstopping of contractual performance guarantees.

Similar to the off-book risk liabilities the federal government carries for AECL's activities, the federal tax-payer also carries a significant contingent liability for damages and clean up costs in the case of a nuclear accident.

The recent oil spill in the Gulf of Mexico, followed by the toxic flood in Hungary, have highlighted that catastrophic industrial accidents are a realistic possibility. The off-shore oil industry, like the nuclear industry in Canada, however, has historically enjoyed a cap on its accident liability in case of an accident. In the event of an accident, the federal government will be pressured to pay for clean up and compensation costs above this liability cap, creating an enormous contingent liability for taxpayers.

Internationally, there has been a move to modernize nuclear liability legislation to both require nuclear reactor operators to maintain more appropriate levels of minimum accident insurance and toward the removal of caps on reactor operator liability.

The federal government has proposed the *Nuclear Liability and Compensation Act* (NLCA)[56] in an attempt to modernize the Nuclear Liability Act, which dates from the 1970s. Instead of removing the cap on reactor operator liability, however, the draft NLCA proposes to simply increase the cap on reactor liability from $75 million to $650 million. All potential clean-up and compensation costs above $650 million are essentially an off-book taxpayer liability.

What's more, the standard adopted by most European countries for minimum levels of insurance is approximately $1.4 billion. The proposed NLCA would establish a level of minimum insurance at the same level as the liability cap at $650 million. There is no clear reasoning why minimum levels of insurance must or should coincide with a liability cap. The impact, however, is that the federal taxpayer carries a significant contingent liability in the event of a reactor accident.

Contact

Shawn-Patrick Stensil, nuclear analyst
Greenpeace Canada
(416) 597-8408 ext. 3013
shawn.patrick.stensil@greenpeace.org

[53] Tyler Hamilton, "26B cost killed nuclear bid," *Toronto Star*, July 14, 2009.

[54] Tim Weis, Shawn-Patrick Stensil, and Keith Stewart, *Ontario's Green Plan 2.0: Choosing 21st Century Energy Options, Renewable is Doable*, August 2010, Available at: renewableisdoable.com.

[55] Tyler Hamilton, "Atomic 'challenges' prompt Ottawa to shell out another $200 million," *Toronto Star,* November 6, 2009. A13

[56] Bill C-15, An Act respecting civil liability and compensation for damage in case of a nuclear incident, is the latest version of a bill that was initially proposed in June 2007, and has died three times when Parliament has been prorogued. http://www2.parl.gc.ca/legisinfo/index.asp?Language=E&Session=23&query=6989&List=toc.

MINERAL SUSTAINABILITY:

istockphoto.com

Shifting Incentives from Extraction to Recycling

Recommendation Summary

Support innovation and the development of environmentally sound closed-loop metal and mineral recycling through the following taxation and fiscal measures:

1. Harmonize the tax benefits between primary extraction and recycling by eliminating the 100% accelerated capital cost allowance (ACCA) for primary mineral extraction projects (or, alternatively, extending the 100% ACCA to metal recycling facilities).

2. Eliminate tax advantages for speculative exploration of primary minerals by ending the Mineral Exploration Tax Credit (METC).

3. Re-allocate $2-million of current Natural Resources Canada funding from promoting primary extraction to funding a new metal and mineral recycling and stewardship initiative.

Total Savings:

An estimated **$65 million per year**[57] from ending the METC,
plus* any annual tax gains** due to eliminating the 100% ACCA (or ***minus any tax losses due to extending the 100% ACCA).

Benefits for Canadians

- Increased government revenue,
- Reduction in energy consumption, greenhouse gas emissions and other pollutants, and
- Increased domestic supply of recycled metals and minerals.

Background and Rationale

Despite record spending on mineral exploration, economically viable Canadian mineral reserves have declined dramatically in recent years.[58] Few large, high grade deposits are being discovered, leaving the industry to rely on lower grade deposits and deposits in increasingly remote and challenging areas. Exploitation of these reserves is more costly both financially and ecologically. They create more solid waste, effluent, and greenhouse gases, and are more susceptible to fluctuating commodity prices.

Mineral stewardship should entail measures to promote environmentally responsible metal recycling, rather than provide advantages to primary extraction over recycling as current government policies and tax measures do. As the government is challenged to increase revenues, eliminating tax benefits that favour primary extraction over recycling is economically and environmentally sound policy.

[57] Estimate of value of METC from *Budget 2010*.

[58] Paul Stothart, 2007, Canada's Mineral Reserves Crisis. Mining Association of Canada. http://www.republicofmining.com/2008/09/24/canada%E2%80%99s-mineral-reserves-crisis-by-paul-stothart/.

In order to ensure a secure, sustainable, domestic source of minerals for Canadian metal processing industries and downstream manufacturing, Canada needs to invest in closing the loop of mineral stewardship. Developing expertise and technologies in this sector will also position Canada to be a leader in the international marketplace for these in-demand systems.

It is estimated that Canadian households discard between 116,000 and 232,000 tonnes of scrap metal a year, much of which could be recycled.[59] Substantial opportunities also exist in the construction and demolition, and institutional commercial and industrial sectors.

Recycling of metals and minerals has significant environmental benefits over primary extraction. Mining and metal processing is an energy intensive industry. From 2001 to 2008 twenty mining companies (excluding tar sands operations) reporting to the TSM saw an average increase of 7.6% per year in total greenhouse gas emissions.[60] In contrast to these growing emissions from primary extraction, promoting improved recycling of metals has the potential to achieve substantial greenhouse gas reductions.

Natural Resources Canada's website notes that for every tonne of ferrous metal recycled, the greenhouse gas (GHG) emission reductions are 1 tonne of equivalent carbon dioxide (eCO_2); for every tonne of aluminium recycled, the GHG emission reductions are 6 tonnes of eCO_2); and that for every tonne of copper recycled, the GHG emission reductions are currently estimated at 4 tonnes of eCO_2). The amount of water pollution and other sources of air pollution are also greatly reduced by recycling, as are the impacts on wildlife and landscapes that are caused by construction and operation of new mines.

The market price for secondary metal and mineral resources is the key driver for successful implementation of recycling. Currently, federal financial policies provide substantial tax benefits uniquely to the mining industry, helping make the prices of primary metals and minerals artificially low, and thus disadvantaging resource recovery and recycling.

The Mineral Exploration Tax Credit was introduced as a temporary measure to promote investment in mineral exploration during a decline in exploration activity caused by a low period in the metal commodities cycle. This temporary measure has, however, been continued, despite subsequent increases in both metal prices and investment in exploration. From an ecological fiscal reform perspective, the METC is inappropriate, and it is also uncertain whether or not it has a significant impact on mineral exploration expenditures, in increasing metal reserves, or in creating sustained economic activity. The 2009 update of *Taxation Issues for the Mining Industry*[61] found that in periods of higher metal prices, tax incentives did little to increase exploration. It also noted that in 2008 when exploration investment dropped 46% due to the recession and low mineral prices, Flow Through Shares (the investment vehicle that the METC is tied to) also decreased by 42%. This data calls into question the ability of the credit to boost exploration investment during lows in the commodity cycle.

Eliminating subsidies to primary extraction would help Canada fulfil its commitment under the OECD's recent Declaration on Green Growth, in which all OECD member countries declare that they "[e]ncourage domestic policy reform, with the aim of avoiding or removing environmentally harmful policies that might thwart green growth, such as subsidies […] that promote the unsustainable use of […] scarce natural resources; or which contribute to negative environmental outcomes. We also work towards establishing appropriate regulations and policies to ensure clear and long-term price signals encouraging efficient environmental outcomes."[62]

The Canadian Government's bias to primary extraction over recycling is also seen in Natural Resources Canada's 2010–2011 Report on Plans and Priorities,[63] which does not mention nor refer to any aspects of secondary resources, recycling or lifecycle stewardship of minerals and metals. Natural Resources Canada currently has two individuals dedicated to metals and minerals recycling but lacks a clear policy direction and budgetary commitment to improving Canada's performance in this strategic sector.

[59] Natural Resources Canada, 2009, What is Scrap Metal, http://www.nrcan-rncan.gc.ca/mms-smm/busi-indu/iar-ilr/wis-wis-eng.htm.

[60] Calculated with data from: Mining Association of Canada, Towards Sustainable Mining Progress Report, 2009, Greenhouse Gas Emissions and Energy Management Progress Report, http://www.mining.ca/www/media_lib/TSM_Publications/2009_Annual_Report/Technical_Data/06_GHG_and_Energy_E.pdf.

[61] Natural Resources Canada, Intergovernmental Working Group on the Mineral Industry, 2009, *Taxation Issues for the Mining Industry*: 2009 Update, http://www.nrcan.gc.ca/mms-smm/busi-indu/met-qfi/2009/int-int-eng.htm#e.

[62] OECD, June 25, 2009, *Declaration on Green Growth. Meeting of the Council at Ministerial Level*, 24-25 June 2009, C/MIN(2009)5/ADD1/FINAL, p. 2-3, http://www.olis.oecd.org/olis/2009doc.nsf/LinkTo/NT00004886/$FILE/JT03267277.PDF.

[63] Natural Resources Canada, *2010-2011 Report on Plans and Priorities*, 2009, http://www.tbs-sct.gc.ca/rpp/2010-2011/inst/rsn/rsn00-eng.asp.

Given appropriate levels of funding there are several key areas in which the federal government could engage with regards to advancing mineral and metal stewardship including:

- Supporting and facilitating improved data collection of diversion and recycling volumes throughout Canada,[64]

- Reviewing and reporting on effective regulatory measures to promote enhanced recycling including landfill bans, deposits/levies and extended producer responsibility, and

- Promoting research and innovation, and shared learning across design, engineering, economic and environmental fields.

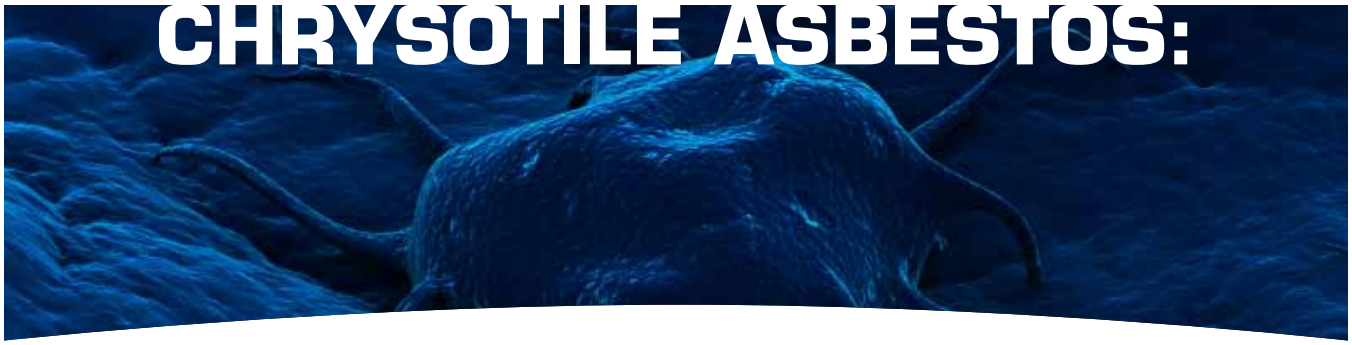
Integrating recycling into product design and manufacturing is possibly the key opportunity to reducing the costs and increasing the efficiency of recycling. Progress in this area will require innovative, creative and cross-disciplinary approaches. Through support for research and innovation the Government of Canada can support the Canadian manufacturing sector to develop new approaches to efficiently use secondary resources, increasing their competitiveness in a carbon-constrained marketplace while improving their environmental performance.

Contact

Ramsey Hart
MiningWatch Canada
613-569-3439
ramsey@miningwatch.ca

[64] Recycling Council of Alberta in partnership with the Recycling Council of British Columbia, Saskatchewan Waste Reduction Council, Recycling Council of Ontario, Réseau des ressourceries du Québec, and Clean Nova Scotia; March 2004, Scan of Metals and Minerals Recycling Programs and Associated Climate Change Impacts, http://www.recycle.ab.ca/images/stories/Download/MetalsMineralsScanFinal.pdf.

CHRYSOTILE ASBESTOS:



istockphoto.com

Ending Subsidies that Endanger Human Health

Recommendation Summary

End the federal government's annual $250,000 contribution to the Chrysotile Institute.

Financial Savings: $250,000 Annually

Background and Rationale

While asbestos was once widely used in Canada and the asbestos industry did represent an important part of Canadian mining and export, by the 1960s there was widespread recognition that asbestos fibres were incredibly harmful if inhaled and could cause a variety of severe and lethal health conditions. The World Health Organization now states that asbestos "is one of the most important occupational carcinogens causing about half of the deaths from occupational cancer."[65]

Recognition of the dangers of asbestos resulted in regulations and outright bans on its use in most developed nations. Most of the asbestos mines in Canada have closed but there is still one operating mine in Quebec, producing chrysotile asbestos, over 90% of which is exported.[66] Chrysotile asbestos is a known carcinogen and it is often contaminated with even more dangerous amphibole asbestos fibres.[67]

The Chrysotile Institute, based in Montreal, promotes the use of chrysotile asbestos internationally, and the federal government provides one-third of its annual budget. Canada's support for the industry hinges on the belief that chrysotile can be used safely, but evidence from Quebec and India (the world's largest chrysotile importer) shows that "safe use" policies are not sufficiently protective.[68]

Numerous, well-respected organizations have called for an end to the extraction and trade of asbestos. These groups include the Quebec Medical Association and sixteen of Quebec's top medical professionals who wrote that:

> *The so-called "safe use of asbestos" is so inapplicable in reality that the world has been forced to recognize that, for this precise reason, the only way to protect humanity against the risks of asbestos is to completely renounce the use of this material.*

Other notables include the World Health Organization, the Ministers of Health of MERCOSUR,[69] International Trade Union Federation, the Canadian Cancer Society, the Canadian Medical Association, the Canadian Public Health Association, the International Labour Organization, and the National Public Health Institute of Quebec.

Elimination of the annual $250,000 subsidy to the Chrysotile Institute would send an important signal that the Canadian Government will not support economic development dependent on the export of toxic substances, nor on the creation of severe human health risks to workers, wherever they may be.

Contact

Ramsey Hart, MiningWatch Canada, 613-569-3439, ramsey@miningwatch.ca

[65] World Health Organization, 2006, *Elimination of Asbestos Related Diseases*. http://whqlibdoc.who.int/hq/2006/WHO_SDE_OEH_06.03_eng.pdf

[66] Natural Resources Canada, 2009, Main Minerals and Metals Produced in Canada. http://www.nrcan-rncan.gc.ca/mms-smm/busi-indu/mmp-mmp-eng.htm#asbestos.

[67] Expert Panel on Chrysotile Asbestos, 2008, *Chrysotile Asbestos Consensus Statement and Summary.* Report to Health Canada (email panel@hc-sc.gc.ca to obtain an electronic copy of the report).

[68] Institut National de Santé Publique de Québec (2004). *The Epidemiology of Asbestos Related Diseases in Quebec*, http://www.inspq.qc.ca/pdf/publications/293-EpidemiologyAsbestos.pdf, CBC – The National. 2009. *Canada's Ugly Secret,* http://www.cbc.ca/video/#/News/TV_Shows/The_National/Health

[69] MERCOSUR (Mercado Común del Sur) comprises Argentina, Brazil, Paraguay and Uruguay.

ECOGIFT TAX INCENTIVES:

istockphoto.com

Extending to Inventory Lands

Recommendation

Amend the ***Income Tax Act*** to extend the tax incentives provided under the Ecological Gifts Program to apply to donations of ecologically significant lands held by corporations or individuals and not considered capital property (e.g. lands held as inventory). Such donations of inventory lands would, however, need to satisfy all of the existing criteria for an ecological gift.

Background and Rationale

In *Budget 2006*, the Government of Canada took important steps to help Canadian landowners and conservation groups preserve Canada's natural heritage through the reduction of the capital gains inclusion rate on ecological gifts to zero. This measure had long been advocated by the conservation community and its enactment is seen as a very positive step in encouraging private landowners to donate land for conservation purposes. The Green Budget Coalition fully recognizes the importance of this measure and is highly appreciative of the Government's support for conservation as demonstrated through this initiative.

Notwithstanding this measure, certain donations of ecologically significant lands — specifically lands held as inventory rather than as capital property — nonetheless still do not qualify for this preferential form of tax treatment under the Ecological Gifts program. Such lands are often in close proximity to urban areas and face tremendous development pressures that threaten their ecological values. Conservation of such lands is critical to the goal of preserving Canada's natural heritage.

The disposition of lands held as inventory typically generates an income profit rather than a capital gain (because inventory lands are not considered to be capital property). Unlike the gift of capital property, one hundred per cent of the fair market value of donated inventory land must be included in income, although the cost of such land may be deducted for the purposes of determining profit. The result is that the more favourable tax benefits of the Ecological Gifts program therefore do not apply to these types of inventory lands, thereby creating a disincentive to donations of such types of non-capital property, important as these may be. Since the purpose of the Ecological Gifts Program is to offer incentives to preserve significant ecological areas, it is strongly recommended that the benefits of this excellent program be extended equally to all people and companies owning qualified lands which meet the criteria necessary for the determination of an Ecogift, regardless of the basis under which these lands are held. In so doing, the Government will create a powerful incentive to landowners to donate lands of significant ecological value, for the benefit of all Canadians.

Contact

Rob Wilson
Nature Conservancy of Canada
416-932-0050 ext. 278
rob.wilson@natureconservancy.ca

Dan Sokolowski

Reducing Pollution in the Air We Breathe

Recommendation Summary

Sustain funding for the development and implementation of regulations to improve air quality in Canada and complementary research and monitoring initiatives. Launch the proposed Comprehensive Air Management System (CAMS) – or an alternative program if the federal government does not authorize CAMS – including:

1. Credible and enforceable industrial emission reduction requirements;
2. Protective Canadian ambient air quality standards;
3. Compliance and enforcement activities;
4. Monitoring and reporting on air quality, including obligations under the Canada-U.S. Air Quality Agreement; and
5. Scientific research related to the health effects of air quality and environmental trends.

Investment Required: $65 million per year, ongoing

Recommendation Endorsed by Canadian Lung Association

Background and Rationale

> "Over recent years, the number and severity of smog days across Canada has been on the rise. This development is completely unacceptable to our government. Poor air quality isn't just a minor irritant to be endured. It is a serious problem that poses an increasing risk to the health and well-being of Canadians."
>
> - Prime Minister Stephen Harper, October 10, 2006[70]

The Canadian Medical Association estimates that 21,000 Canadians died prematurely as a result of air pollution in 2008 and that the economic cost of air pollution-related illness and death in Canada topped $8 billion. Due to demographic trends, if air quality does not improve, the annual death toll is expected to increase to nearly 45,000 by 2031, with associated costs of $250 million.[71] According to the most recent environmental indicators, Canadians' exposure to ground level ozone increased over the past decade while exposure to fine particulate matter remained unchanged (i.e., did not improve).[72] The U.S. has recently updated critical air quality standards, but Canada's National Ambient Air Quality Objections date back to the 1970s.

In 2007, the Government of Canada committed to a regulatory framework that would deliver "reductions in air pollutant emissions that cause smog and acid rain by up to 55%," as outlined in *Turning the Corner: An Action Plan to Reduce Greenhouse Gases and Air Pollution. Turning the Corner* was never

[70] Prime Minister of Canada, 10 October 2006, PM Announces Canada's Clean Air Act. http://pm.gc.ca/eng/media.asp?id=1349.

[71] Canadian Medical Association, 2008, No Breathing Room: National Illness Cost of Air Pollution. Ottawa. http://www.cma.ca/index.php/ci_id/86830/la_id/1.htm.

[72] Environment Canada, 31 May 2010, Canadian Environmental Sustainability Indicators, Air Quality. http://www.ec.gc.ca/indicateurs-indicators/default.asp?lang=En&n=4B5631F9-1.

implemented. Subsequently, federal cabinet mandated Environment Canada officials to work with provinces and stakeholders in a tripartite forum to develop an alternative approach. The resulting proposal for a Comprehensive Air Management System (CAMS) was endorsed by federal and provincial environment ministers in October 2010.

The CAMS proposal calls for **base-level industrial emission requirements, Canadian Ambient Air Quality Standards**, and co-ordinated **air zone management** (including regular, public reporting on air quality). The proposal also contemplates formalizing federal/provincial/territorial responsibilities in an Air Quality Accord and establishing an Air Quality Council – with stakeholder involvement – to advise governments on implementation.

The CAMS process was supported by Environment Canada and Health Canada under the government's Clean Air Agenda, along with complementary initiatives (i.e., research, monitoring, Air Quality Health Index, etc).[73] Funding for the Clean Air Agenda currently ends in March 2011. Sustained investment is required to support implementation of CAMS (or an alternative program to reduce emissions and improve air quality, if the federal government does not authorize CAMS).

Contact

Lisa Gue
David Suzuki Foundation
613-594-5428
lgue@davidsuzuki.org

[73] Budget 2006 committed $1.7 billion over four years to the Clean Air Agenda, including $339 million over four years for the Clean Air Regulatory Agenda. The initial envelope incorporated both climate change and air quality measures. This recommendation would sustain current funding levels for the air quality regulatory agenda and related research and monitoring activities.

stock.xchang

Catalyzing Growth in Emerging Opportunities

Governments can play a vital role in advancing energy efficiency, as investors in programs that stimulate actions and as policymakers and regulators that help shape the marketplace.

- Council of Energy Ministers, Moving Forward on Energy Efficiency in Canada (2007)

Recommendation Summary

The federal government has played an important role in advancing the development of wind power in Canada, including a national wind resource map, accelerated capital cost depreciation, and production incentives for new projects built between 2002 and 2010. Many provinces are pursuing efforts to build on this momentum started by the federal government. The successes of these efforts need to be replicated for many other important clean energy technologies if we as a country are going to meet our climate change commitments, as well as the government's laudable goal of achieving 90 per cent of our electricity from non-emitting sources by 2020,[74] while creating jobs in the new clean energy economy.

As the next steps leading to longer-term targets and programs, the following actions should be taken immediately:

1. **Investing to build Canada's solar hot water industry.** With the end of the suite of ecoENERGY programs, solar hot water heaters will no longer receive federal support. Creating a $25 million annual fund to support this proven technology, which has many manufacturers and skilled installers in Canada, will not only create over 1,200 jobs, but will also result in over $240 million of economic activity while reducing over 8,800 tonnes of CO2 emissions annually. ***Target: 5-year/$25 million per annum capital cost support for solar hot water heating systems.***

2. **Mapping Canada's potential to generate electricity from the Earth's heat.** Geothermal electricity generation has the potential to provide renewable, emissions-free baseload power by taking advantage of Canada's drilling know-how,[75] which could help to displace some of Canada's dirtiest coal power plants. Unfortunately, there are no geothermal electricity stations operating in Canada,

[74] 2008 Speech from the Throne. http://www.discours.gc.ca/eng/media.asp?id=1383.

[75] Geothermal power has traditionally have focused on areas with high levels of tectonic activity, research is now showing that enormous potential could exist by drilling to depths less than 10 km – depths that are already within Canadian expertise: Moore, M. and Majorowitcz, J., 2008, *Enhanced Geothermal Systems (EGS) Potential in the Alberta Basi*n, University of Calgary, www.aeri.ab.ca/sec/new_res/docs/Enhanced_Geothermal_Systems.pdf.

while the largest producer of geothermal electricity is the United States.[76] Public investment in geosciences has a proven track record in successfully fuelling Canadian industries and is now urgently needed to help Canada access its geothermal potential. Just as Environment Canada's ***Wind Energy Atlas***[77] has been an important tool in the development of wind energy projects in Canada, a **National Geothermal Data System, Resource Assessment and Classification System** would be an important tool to help harness Canada's geothermal potential. The United States is updating its geothermal resource assessment at an estimated cost of US$30 million.[78] In order to begin a serious effort to understand Canada's resource, at least $15 million in federal investment would be required. ***Target: 3-year/$5 million per annum support to conduct a national geothermal resource assessment.***

3. **Securing Arctic and remote communities' local energy supply.** Wind energy represents a significant opportunity for Canada's northern, remote and Aboriginal communities who are largely dependent on diesel-powered electricity generation that is expensive, polluting and leaves communities at the whim of import prices and long-term availability. While wind-diesel hybrid systems are operating from Alaska to Antarctica, projects in Canada's remote communities have not benefited from traditional federal incentive programs for wind energy because they did not recognize the costs associated with work in small, northern and remote communities. A Northern Wind Incentive Program (NorWIP) that targets these communities could displace over 300 million litres of diesel fuel imported and burned in the Arctic every year, while stabilizing long-term energy costs using Canadian developed technology. ***Target: 5-year/$12 million per annum fund to support the deployment of wind hybrid systems Northern and remote communities and mines.***

Total investment: $42 million per year for 3 years,
***followed by* $25 million per year for 2 years**

Benefits to Canadians

In both 2008 and 2009, global investment in new renewable electricity generation facilities surpassed investment in new nuclear, coal and natural gas electricity facilities combined. The investments the Green Budget Coalition is recommending represent diverse and strategic opportunities for Canada to develop technologies that not only reduce air pollution, but create long-term jobs for Canadians and Canadian technology. Supporting these opportunities represents three key areas of market development, from early resource mapping (geothermal), to commercialization of emerging technology (wind-diesel hybrid) to growing an emerging sector (solar hot water). These investments also target a diverse breadth of the Canadian landscape from home and business owners (solar hot water), to northern and remote communities (wind-diesel hybrid), to ordinary consumers of electricity, assisting all of them to become more sustainable and to consume energy with a lower environmental impact.

Background and Rationale

Canada's federal government has successfully played an important role in initiating and stimulating new renewable energy technologies. These efforts now need to continue into newer and less established technologies to help Canada heed the Commissioner

[76] The United States has over 3,000 MW of geothermal capacity, the equivalent of 3 nuclear power plants.

[77] Canadian Wind Energy Atlas, www.windatlas.ca.

[78] US Department of Energy, May 27 2009, President Obama Announces Over $467 Million in Recovery Act Funding for Geothermal and Solar Energy Projects, http://www.energy.gov/news2009/7427.htm.

of the Environment and Sustainable Development's call for a "massive scale up" to effectively address climate change.[79]

Continued federal support for renewable power is crucial to ensure Canada becomes a leading player in the rapidly expanding global marketplace for clean, renewable power. These three practical and achievable policies can be implemented this fiscal year, and their impacts would be felt immediately in three strategic areas that would help to diversify our skills and manufacturing capabilities in emerging renewable energy technologies. These recommended policies are all important near-term steps in a longer-term strategy for Canada. Failing to act risks missing out on investment and jobs in a burgeoning industry that not only reduces greenhouse gas emissions while meeting Canada's energy needs.

Given its abundant renewable energy resources, Canada has the potential to become a global leader in renewable energy. Helping Canadians capitalize on the global growth and demand for clean energy will provide economic benefits across the country in the form of job creation in manufacturing, installation and maintenance, while reducing Canada's vulnerability to conventional energy costs and creating a cost-effective energy supply. Increasing use of low-impact renewable energy will also reduce the harmful air, water and greenhouse gas pollution caused by our current reliance on fossil fuels.

Additional infrastructure investments in inter-provincial electricity transmission, as well as "smart grid" technologies, should be considered as complementary and priority areas for infrastructure funding going forward.

Contact

Tim Weis, P.Eng.,
Pembina Institute,
780-485-9610,
timw@pembina.org

[79] Johanne Gélinas, 3 October 2006, Opening Statement to the Standing Senate Committee on Energy, Environment and Natural Resources, http://www.oag-bvg.gc.ca/internet/English/oss_20061003_e_23771.html.

stock.xchang

Investing in Public Transit

Recommendation Summary

Invest in public transit infrastructure and operations across Canada, and support employer benefits for commuting by transit and active transportation. Priority funding should be directed to Metrolinx's regional transit plan for the Greater Toronto and Hamilton Area (GTHA), where traffic congestion is most critical.

Priority Actions

1. Develop a policy framework for long-term, dedicated investment in national public transit, building on current federal investments. $6 billion over 5 years.

2. Provide direct funding to Metrolinx for critical GTHA transit investments.

3. Amend the Income Tax Act to exempt certain types of employment benefits that encourage transit, active transportation and carpooling.

Investment Required:

- **$1.2 billion** additional national transit investment for 2010-2011, over and above existing federal commitments through the Gas Tax Fund, Building Canada Fund and other ongoing mechanisms.

- Between **$10 million to $180 million per year** for ***Income Tax Act*** changes.

Benefits for Canadians

Scaling up public transit infrastructure and operations in Canada reduces traffic congestion, air pollution and commute times and improves productivity and quality of life. Increasing access to transit and offering incentives for active transportation, carpooling or active transportations provides Canadians with viable options to single occupancy vehicles.

Background and Rationale

Transportation is responsible for a quarter of Canada's greenhouse gas emissions and personal vehicle road transportation contributes about 2/3 of these emissions.

Annual increases in the number of vehicles on Canada's roads continue to exacerbate greenhouse gas emissions, regional pollution, and traffic congestion, particularly in urban regions. Problems are most pronounced in Canada's largest urban area, the Greater Toronto and Hamilton Area, which suffers from the worst traffic congestion in North America with an average commute time of 80 minutes, impacting productivity and quality of life. Direct annual costs of congestion exceed $3.3 billion.[80]

[80] OECD, OECD Territorial Reviews: Toronto, Canada, 2009, www.oecd.org/document/1/0,3343,en_2649_34413_43985281_1_1_1_1,00.html.

The federal Gas Tax Fund was made permanent in 2008 and the federal government has maintained and increased existing commitments.[81] However, federal funding for transit is not keeping pace with public transit infrastructure needs.[82] Canada remains the only OECD and G8 country without a long-term federal transit plan or a long-term, predictable federal transit-investment policy.[83]

Transit Action

Dedicated Long Term Funding for National Transit: The Toronto Board of Trade, the Canadian Chamber of Commerce, the Federation of Canadian Municipalities, the Canadian Urban Transit Association (CUTA) and others have called for the creation of a national public transit strategy for long-term dedicated funding. Provinces and transit providers would benefit from an annual, reliable federal funding level transferred under a 'framework' approach, rather than the current set of federal policies that work on a project-by-project basis. CUTA identifies necessary additional federal funding of $6 billion over 5 years, or approximately $1.2 billion per year over and above existing federal commitments through the Gas Tax Fund, Building Canada Fund and other ongoing mechanisms.[84] The House of Commons Finance Committee's last pre-budget report cited wide support for a national public transit strategy funded by a larger allocation of the Gas Tax Fund, potentially increasing it by one cent.[85]

Metrolinx: The federal government should be recognized for providing more than $2.8 billion in funding to transit projects in the GTHA region since 2002. Building on this commitment the federal government has invested $350 million in Metrolinx projects; however, approximately $6 billion is needed from the federal government to achieve Metrolinx's goals. Annually, Metrolinx requires a dedicated $2 billion (total) investment in capital expenditures, split between the federal, provincial and municipal governments.[86]

A recent report by the Toronto City Summit Alliance (TCSA) identifies a Federal-Provincial Funding Strategy for long term dedicated funding to Metrolinx within a basket of funding mechanisms for the Big Move transit plan. One of this strategy's revenue options, falling within federal jurisdiction, is to earmark HST gas revenues to Metrolinx.[87] A range of "road-pricing" policies, such as a regional gas tax, tolls and parking levies, is also being considered by the TCSA to fund Metrolinx transit and to reduce GTA traffic congestion.

Employer Benefits: Road pricing 'disincentives' can be complemented by a range of "commuter choice" policies including employer-based incentives. Employer-based incentives refer to incentive and disincentive programs, including: refunding non-drivers for the savings of not having to provide parking; carpooling services; end of trip facilities (bike racks and showers); and parking supply restrictions. These employer benefits have been found to reduce vehicle kilometres traveled by between 5% and 25%.[88]

Bill C-466: *An Act to Amend the Income Tax Act (transportation benefits)*[89] proposed legislative

[81] Infrastructure Canada, 2009, Section II: Analysis of Program Activities by Strategic Outcome, http://www.tbs-sct.gc.ca/dpr-rmr/2008-2009/inst/inf/inf02-eng.asp. Funding includes the $4-billion Infrastructure Stimulus Fund, the $8.8 billion Building Canada Fund and the $2 billion per year Gas Tax Fund. In particular it allocated $32 million over two years in new funding for the Regional and Remote Passenger Services Contribution Program, and another $199 million of stimulus funding for improved rail systems.

[82] Canadian Urban Transit Association (CUTA). Transit Infrastructure needs are $53-billion for next five years: Media Release: March 31, 2010. CUTA states that allowing transit to keep up with ridership demand and population growth requires $40.4 billion over the next 5 years.

[83] Toronto Board of Trade. *Toronto as a Global City: Scorecard on Prosperity*, March 2010.2010. http://www.bot.com/AM/Template.cfm?Section=Scorecard.

[84] CUTA identifies a need for $53.5 billion in national transit capital investment over the next 5 years. Of this, $36 billion can be covered from existing and committed sources. The remaining $17.5 billion would require an equitable three-way sharing of this investment; the federal portion would represent about $6 billion of additional investment. See Canadian Urban Transit Association (CUTA), March 2010, Transit Infrastructure Needs for the period 2010–2014, http://www.cutaactu.ca/en/publicationsandresearch/resources/2010-14_Infrastructure_Needs_Report_EN.pdf.

[85] House of Commons Canada: James Rajotte MP Chair, December 2009 40th Parliament 2nd Session, *A Prosperous And Sustainable Future For Canada: Needed Federal Actions, Report of the Standing Committee on Finance*, http://www2.parl.gc.ca/content/hoc/Committee/402/FINA/Reports/RP4304866/finarp06/finarp06-e.pdf.

[86] This figure may need adjusting in subsequent years to accommodate needs for operations, maintenance and local transit.

[87] Toronto City Summit Alliance, Transportation and Other Infrastructure Working Group Discussion Paper. *Time to Get Serious: Reliable Funding for the GTHA Transit/ Transportation Infrastructure.* Prepared by Neal Irwin, IBI Group and Andrew Bevan, Sustainable Prosperity, 1 July 2010.

[88] Donald Shoup, "Evaluating the Effects of Cashing Out Employer-Paid Parking: Eight Case Studies", in *Transport Policy*, Vol. 4, No. 4, 1997, pp. 201-216. Paper published earlier as a program evaluation report for the California Air Resources Board.

[89] House of Commons of Canada, Bill C-466, 2009, http://www2.parl.gc.ca/HousePublications/Publication.aspx?Language=E&Parl=40&Ses=3&Mode=1&Pub=Bill&Doc=C-466_1&File=24.

amendments to the Income Tax Act to exempt three types of employer-provided benefits from the calculation of taxable income:

1) Up to $150 per month in public commuter transit service expenses related to commuting to and from work;
2) Up to $150 per month in parking expenses related to the use of public commuter transit or a carpooling group (e.g. park and ride services).
3) Up to $240 per year to purchase and maintain a bicycle used to commute to and from work.

The Parliamentary Budget Officer investigated the costs of Bill C-466's proposals, and estimated the forgone revenues, following a five-year implementation period, to be between $10 million and $180 million annually.[90]

Contact

Cherise Burda
Pembina Institute
416-644-1016 ext. 1
cheriseb@pembina.org

[90] *A Cost Estimate of Proposed Amendments to the Income Tax Act to Exempt Certain Employer-Provided Transportation Benefits from Taxable Income Ottawa*, Canada February 4, 2010, www2.parl.gc.ca/Sites/PBO-DPB/documents/Costing_C-466_EN.pdf.

istockphoto.com

Providing Canada's Fair Share for Developing Countries

Recommendation Summary

To fulfill its international climate change commitments, provide Canada's fair share of financial support for climate action in developing countries through an investment of $400 million (or more) in new and additional funding for fiscal year 2011–12. To provide predictability, the government should also announce a 2012–13 contribution of at least $400 million and outline its plans for increased contributions after 2012.

Investment Required: $400 million per year for 2011 and 2012.

Background and Rationale

Poorer countries require financial support to adapt to the impacts of climate change and to reduce their own greenhouse gas (GHG) emissions. For example, adaptation expenses could include strengthening infrastructure enough to withstand more violent storms; financing for emission reductions ("mitigation") could cover the extra cost of powering homes with electricity from wind energy instead of coal. These investments are urgently needed to protect some of the world's most vulnerable people from the consequences of a problem they did little to create. This funding is also widely seen as essential to build the trust between countries needed to successfully negotiate the next global climate agreement.

The December 2009 Copenhagen Accord set two specific goals for the provision of "scaled up, new and additional, predictable and adequate funding":

- Developed countries committed to provide "new and additional resources… approaching USD 30 billion for the period 2010–2012."
- Developed countries also committed to "mobilizing jointly USD 100 billion dollars a year by 2020… from a wide variety of sources."[91]

Many estimates show that much more funding will be needed to meet developing countries' needs; however, the financing outlined in the Copenhagen Accord is an important starting point.

The Government of Canada formally signalled its support for the Copenhagen Accord in January 2010[92] and announced its 2010 tranche of climate financing under the Accord in June.[93] Although this announcement lacked key details,[94] it took a critical first step by recognizing Canada's fair share of climate financing: when developed countries contribute funds for global goals, Canada's traditional share has been just over 4% of the total.[95] Environment Minister Jim Prentice announced a contribution of $400 million in 2010, or about 4% of the US$10 billion to be provided each year from 2010 to 2012. The Green Budget Coalition believes that Canada must build on this foundation by providing an equivalent $400 million (or greater) contribution for 2011 and 2012, and increase that contribution from 2013 onwards.

[91] Copenhagen Accord, Paragraph 8. Available at http://unfccc.int/home/items/5262.php.

[92] Canada's submission is available from http://unfccc.int/home/items/5264.php.

[93] Environment Canada News Release, "Government of Canada Makes Major Investment to International Climate Change" (June 23, 2010). Available at http://www.ec.gc.ca/default.asp?lang=En&n=714D9AAE-1&news=FD27D97E-5582-4D93-8ECE-6CB4578171A9.

[94] The Pembina Institute's response to the announcement is available at http://climate.pembina.org/media-release/2039.

[95] For more details, see Clare Demerse, *Our Fair Share: Canada's Role in Supporting Global Climate Solutions*, at http://climate.pembina.org/pub/1815.

Unfortunately, when Minister Prentice announced the details of Canada's 2010 allocation on October 1,[96] the news revealed significant shortcomings in Canada's 2010 approach.[97] In Budget 2011, Canada can improve its financing performance by:

- **Ensuring that its contributions are "new and additional" funding, as required by the Copenhagen Accord**. In our view, funding cannot be considered "new and additional" unless it is over and above the existing funding that Canada has committed to official development assistance (ODA). The need to provide additional funding is all the more essential in light of Budget 2010's announcement of a cap on the international assistance envelope.

- **Directing Canada's adaptation contribution to the poorest and most vulnerable**. The Copenhagen Accord calls for a "balanced" allocation of financing to adaptation and mitigation. In 2010, just 11% of Canada's total financing was earmarked for adaptation — a disappointingly small fraction that, in our view, falls short of being "balanced". In 2011 and beyond, Canada should devote a greater share of its climate financing to adaptation, and ensure that the adaptation dollars it provides are directed to funds or projects that take into account the perspectives of local communities, women, the poor, and other vulnerable groups. In particular, we believe that the Least Developed Countries Fund (LDCF) — a United Nations (UN) fund designed to address the immediate needs of the 48 poorest countries — is an excellent destination for Canada's adaptation support. For this reason, we were pleased to see Canada allocate $20 million in 2010 to the Least Developed Countries Fund. In 2011 and beyond, Canada should demonstrate leadership by directing financing to the UN's Adaptation Fund, which is mandated to give special attention to the needs of the most vulnerable communities, and which provides eligible countries and entities with direct access to funding.

- **Ensuring transparency.** The Government of Canada should report to Parliament and to Canadians on its climate financing contributions. Specifically, the government should:

  - *Demonstrate that its contribution is "new and additional,"* by providing clear information about the baseline it is using for additionality and the source of the funds. (Canada's 2010 announcement did not provide information about the source of funding.) By being transparent about its contribution, the government can assure Canadians that its climate change funding has not resulted in a reduction in funding to other international aid.

  - *Specify whether the total includes loans, and if so, how it is accounting for those loans.* The Green Budget Coalition believes that loans are not appropriate for adaptation, and was pleased to see that Canada did not provide any loans for adaptation in 2010. However, the government did allocate nearly three-quarters of its total contribution to the World Bank's private sector lending arm, the International Financing Corporation, in the form of loans for clear energy development. While a limited use of concessional loans to finance emissions reductions in the energy sector can be appropriate, there is also an essential role for grants in building capacity and supporting public emission-reduction policies. In 2011 and 2012, Canada should provide the vast majority of its fast-start financing in the form of grants. If Canada does opt to provide loans, only the "grant" (concessional) element of the loan should be counted as a contribution towards Canada's fair share of climate financing.[98] (In 2010, the Government of Canada instead claimed credit for the full face value of its loans.)

  - Provide the rationale for the specific funds or projects that the Government of Canada has decided to support.

[96] A backgrounder providing details of the allocation is available from Environment Canada's website, at http://www.ec.gc.ca/Content/4/5/4/454E8F15-55C2-4A70-9FC0-249B35E5DD80/faststart.pdf.

[97] For more information, please see the Pembina Institute's blog "Canada's 'fair share' is not as advertised" at http://www.pembina.org/blog/413.

[98] See p. 5–6 of Oxfam International's briefing note on "Climate Finance Post-Copenhagen" (http://www.oxfam.org/en/policy/climate-finance-post-copenhagen) for more information on the use of, and accounting for, loans in climate financing. The OECD's Development Assistance Committee (the body that sets rules for aid accounting) has established rules to determine whether a loan is "concessional" (i.e. whether a loan's terms are generous enough to constitute a "grant element"). For example, loans to the regional development banks' market-based lending operations are not considered to be concessional. (For more information on OECD loan definitions, see http://www.oecd.org/glossary/0,2586,en_2649_33721_1965693_1_1_1_1,00.html - 1965485.)

- **Supporting innovative means of generating funds for climate financing**. The best way to ensure adequate, predictable and additional international climate financing over the longer term is to find "innovative" ways of raising the funds. For example, the government could dedicate a portion of the proceeds from a domestic carbon pricing system to climate action in developing countries.[99] Canada should also support international means of raising funds, such as a levy on GHG pollution from aviation and shipping.

Contact

Clare Demerse
Pembina Institute
613-216-1976, ext. 24
clared@pembina.org

[99] For more information on this option, see the briefing note entitled "How to Finance Support for Climate Adaptation in Vulnerable Countries" (published by Oxfam Canada, Oxfam Quebec and the Pembina Institute) at http://climate.pembina.org/pub/1936.

stock.xchang

Recycling Revenues to Maximize Benefits

Recommendation Summary

Recent months have seen delay in progress towards putting a price on greenhouse gas (GHG) pollution in Canada and the United States. But with governments at both the federal and provincial/state level committed to putting a price on GHG emissions, the eventual adoption of some form of carbon pricing in North America appears to be a virtual certainty.

The Green Budget Coalition (GBC) produced detailed carbon pricing policy design recommendations in its Budget 2008 and Budget 2009 recommendations.[100] For Budgets 2010 and 2011, we have focused in on the use of revenue from carbon pricing; we wanted to elaborate our position on an area that has very direct implications for the Government of Canada's revenues.

Once introduced, a carbon price[101] will quickly begin to generate substantial amounts of revenue for government (or, alternatively, allow the government to distribute emission allowances with an equivalent financial value[102]). For instance, an "economy wide" carbon price of $100 per tonne (i.e., a price on all emissions from burning fossil fuels and almost all fixed process emissions),[103] has been projected to generate more than $45 billion in government revenue annually by 2020.[104] Most of that revenue will be quickly reintroduced into the Canadian economy. But because the financial flows could be very significant, the question of ***how*** the money is "recycled" becomes a critical factor. The Green Budget Coalition recommends the following priority areas for the use of carbon pricing revenues:

- Helping to meet Canada's GHG reduction targets
- Helping to meet Canada's international climate finance obligations
- Protecting low income Canadians
- Protecting the international competitiveness of trade-exposed manufacturing sectors that are demonstrably at risk of "carbon leakage"[105]
- Compensating households in regions at risk of undue impacts
- Reducing personal and corporate taxes

[100] Available from http://www.greenbudget.ca/main_e.html.

[101] A carbon price can be implemented through a cap-and-trade system or a carbon tax.

[102] Under a cap-and-trade system, emitters must hold a government-issued tradable allowance for every tonne they emit. The government can choose between auctioning off all the allowances, thereby generating revenues, or distribute some allowances free of charge to recipients who are free to sell the allowances themselves. Either way, a key policy decision is "who receives the financial value of the allowances?" ("allowance value"), whether the government distributes that value in the form of revenues (dollars) or in the form of allowances. In this recommendation, we use the term "revenues," but in the context of a cap-and-trade system our recommendations should be understood as applying more generally to the use of total allowance value.

[103] Excluding agricultural, forestry and landfill emissions.

[104] David Suzuki Foundation and Pembina Institute, 2009, Climate Leadership, Economic Prosperity. Vancouver, BC. http://pubs.pembina.org/reports/climate-leadership-report-en.pdf.

[105] Where production could be relocated to a jurisdiction with less stringent emission controls.

Background and Rationale

Whether it's applied through a direct tax on emissions or through a cap-and-trade system with auctioning, a federal carbon pricing system would quickly start to generate significant new funds for the Government of Canada. International experience shows that the use of that revenue will quickly become one of the most contested areas in any discussion about designing a carbon pricing system.

As with any other source of funding, governments could opt to treat carbon pricing funds as part of its general revenues. The government of British Columbia opted to make its carbon tax "revenue neutral" by enacting a requirement to cut other taxes by an amount equivalent to the revenues raised through the B.C. carbon tax.[106]

While this option has some merit, the Green Budget Coalition recommends a more targeted approach. Survey evidence suggests that public support for carbon pricing increases when the revenues raised are used strategically to further public policy goals directly linked to climate change and emission reductions.[107] This includes investments in climate solutions like energy efficiency, renewable energy and public transit; it also includes spending on measures to address some of the unintended consequences of a carbon price, and making investments needed to overcome some of the "market barriers" that could prevent an efficient response to the carbon price.

Sections A to F, below, outline the Green Budget Coalition's recommendations for the use of carbon pricing revenues. We believe that these uses should be specified and quantified in legislation, in order to provide greater certainty.

A. Helping to meet Canada's GHG reduction targets

Direct investment by government in GHG reductions can be a valuable way to generate emissions reductions in areas where other instruments (regulatory caps on large emitters or offsets) are of limited effectiveness. For example:

- Experience shows that, even when the environmentally friendly option costs less than a conventional alternative, consumers and businesses do not always choose the cleaner technology. Barriers like lack of familiarity, or lack of trained workers to service the technology, may get in the way. Targeted investments can help overcome those barriers.

- Depending on the stringency of the carbon pricing regime, the Government of Canada may need to support additional emission reductions to reach Canada's national GHG emission reduction target. For example, public investment in "smart" electricity grids can help complement the carbon price signal in Canada's electricity sector by providing more options for the deployment of renewable power.

- Even a broad-based carbon price in Canada will likely not include emissions from agriculture and forestry, so carbon pricing revenue can finance complementary investments in lowering emissions in those sectors. Ecosystem protection to conserve carbon-rich forests and wetlands is also an area in which direct government investment could play a valuable role.

A 2009 study conducted by MK Jaccard & Associates concluded that a targeted annual investment of carbon pricing revenue reaching $9.4 billion in 2020 would reduce annual emissions in that year by 21 million tonnes relative to a business-as-usual level.[108]

The Government of Canada may also choose to purchase emissions reduction credits on the international market (such as through the Clean Development Mechanism) in order to reach its national emission reduction targets; funding for these investments could also come from carbon pricing revenues.

The government's decisions about investments in GHG emissions reductions should be made in a transparent manner and directed guided by a number of criteria, including potential emission reductions, economic efficiency, sustainability (including both environmental and social criteria), and regional fairness.

[106] British Columbia Ministry of Finance: Tax Cuts, Funded by a Revenue-Neutral Carbon Tax. http://www.fin.gov.bc.ca/tbs/tp/climate/carbon_tax.htm.

[107] See, for example, the May 2008 survey released by the Pembina Institute, Strong National Support for British Columbia's Carbon Tax: Survey, at http://climate.pembina.org/media-release/1641.

[108] In this example, investments are targeted at three areas: electricity transmission grids, public transit (urban and inter-city), and government purchases of agricultural offsets. See Climate Leadership, Economic Prosperity (David Suzuki Foundation and Pembina Institute, 2009, http://climate.pembina.org/pub/1909, p. 9) and the fact sheet Transforming Canada's Energy Economy (Pembina Institute, http://climate.pembina.org/pub/1921, p. 3) for more detail.

B. Helping to meet Canada's international climate finance obligations

The December 2009 Copenhagen Accord, which the Government of Canada supports, contains specific obligations for developed countries to provide financial support for climate action in developing countries. In addition to a longer-term goal, the Copenhagen Accord calls for developed countries to "provide new and additional resources…approaching USD 30 billion for the period 2010 – 2012." In June, the Government of Canada announced that it would contribute 4% of that total, or C$400 million, in 2010.[109] The Green Budget Coalition is pleased to see Canada recognize its "fair share" of the international total, and believes that meeting the Copenhagen Accord's criteria of "new and additional" funding means ensuring that Canada's funding is over and above our current official development assistance (ODA) commitments. (See Global Climate Finance: Providing Canada's Fair Share for Developing Countries, elsewhere in this document, for more detail.)[110]

In Canada, a portion of carbon pricing revenues from a domestic carbon pricing system should be used to meet these international commitments. For example, a 2009 backgrounder from Oxfam and the Pembina Institute concluded that, in an effective cap-and-trade system with full auctioning, less than 10% of the total allowance value would suffice to fulfill Canada's fair share commitment to support adaptation in vulnerable countries.[111]

C. Protecting low income Canadians

The increase in energy costs that accompanies a carbon price will have disproportionate impacts on low income Canadians if it is not addressed. The revenue from carbon pricing should be used to compensate low income Canadians for the additional cost that a carbon price will impose upon them, without reducing the incentive for behaviour change.

D. Protecting the international competitiveness of trade-exposed manufacturing sectors

The application of an effective carbon price may have a negative economic impact on a handful of trade-exposed manufacturing sectors if other jurisdictions have a substantially lower price on carbon. If not addressed, this imbalance could lead to the migration of capital to the lower cost jurisdictions, with consequential employment losses and "carbon leakage."[112]

The Government of Canada should be prepared to use carbon revenue to provide targeted financial assistance to Canadian manufacturing sectors or facilities that can demonstrate a genuine risk of carbon leakage.[113]

E. Compensating households in regions at risk of undue impacts

With a carbon price in place, those provinces that rely most heavily on fossil fuel for heating and power could — if compensating measures are not implemented — experience disproportionate increases in household energy costs, as well as net outflows of carbon pricing revenue.

In these jurisdictions, the federal government could opt to provide compensation to affected consumers. For example, the payment of a fixed amount per person could overcome any disproportionate cost increases without diluting the incentive to conserve energy.

F. Corporate and personal tax reductions

Finally, a portion of government carbon price revenue could go to tax cuts for individuals and corporations in order to encourage employment and investment in the economy.

Contacts

Clare Demerse, Pembina Institute, 613-216-1976 ext. 24, clared@pembina.org
Pierre Sadik, David Suzuki Foundation, 613-594-5845, psadik@davidsuzuki.org
Martin von Mirbach, WWF-Canada, 613-232-8706, mvonmirbach@wwfcanada.org

[109] Speaking Notes for the Honourable Jim Prentice, Announcement - Canada shows leadership on climate change and the environment, June 23, 2010, http://www.ec.gc.ca/default.asp?lang=En&n=6F2DE1CA-1&news=BB5AC3DC-837A-406E-AD28-B92ED80F5A81.

[110] Emission reductions supported through climate financing must also be additional to any international emission reduction credits Canada may choose to purchase to meet its national target. Such purchases are included under the priority above, Helping to Meet Canada's GHG Reduction Target.

[111] See Pembina Institute, December 2009, *Briefing Note on Climate Adaptation Financing*, at http://climate.pembina.org/pub/1936.

[112] Carbon leakage "occurs when firms relocate to jurisdictions without carbon pricing policy or with less stringent policies and then continue to produce greenhouse gas emissions in the new location. In this case, a Canadian carbon pricing policy would not have reduced emissions overall, merely dislocated them outside its borders." National Round Table on the Environment and the Economy, 2009, Achieving 2050: A Carbon Pricing Policy for Canada (Technical Report), p.108-109, http://www.nrtee-trnee.com/eng/publications/carbon-pricing/carbon-pricing-tech/carbon-pricing-tech-backgrounder-eng.pdf.

[113] The Green Budget Coalition does not believe that such assistance should be provided to fossil fuel producers, as this would be incompatible with transitioning Canada to a clean energy economy.

Dan Sokolowski

Better Measurement for Better Management

Recommendation Summary

Expand upon existing indicators of Canada's natural capital, building on federal progress to date, in order to provide better information to federal decision-makers and to advance implementation of the Federal Sustainable Development Act. Provide funding for:

1. Municipal, provincial and federal governments to collect the necessary data to undertake priority natural capital valuation assessments related to water in Canada. $3 million for one year.[114]

2. Establishing a national research, education and training agenda focused on the valuation of natural capital for policy-making in Canada. This agenda could be facilitated by a number of national organizations that currently work on natural capital indicators. $3 million per year for 3 years.[115]

3. Instituting a national initiative to develop and measure critical indicators related to the environmental implications of human behaviour in Canada, including: sustainable energy and household material consumption, and the flows of key materials through the economy. $1.5 million per year for 3 years.

4. Developing pilot studies to examine how natural capital indicators can be effectively linked to decision making. $2 million per year for 3 years.

Investment Required

$9.5 million for the first year, then **$6.5 million per year** for the next 2 years

Background and Rationale

Countries around the world have learned that there are great potential benefits to integrating social, environmental and economic considerations when making policy decisions, and that the best economic, environmental, and social policy decisions create benefits in all three spheres, maximizing the use of public funds. At the same time, Canadians have learned from experience, including the East Coast cod fishery and the Walkerton water crisis, that the costs of making economic decisions in isolation from environmental and social concerns can be very high, requiring significant public funds to remediate environmental and social damage.

[114] It is expected that in each watershed examined the data gathering, analysis and research costs are approximately $150,000. This funding assumes the provision of funding for an initial pilot program in 20 cities and towns in Canada.

[115] This funding is based on a similar national research initiative like the Sustainable Forest Management Network.

As the Organisation for Economic Co-operation and Development (OECD) notes, building capacity to measure the progress of societies is one of the key opportunities to improve the quality of decision-making and accountability.[116] The Green Budget Coalition (GBC) commends the Government of Canada for its progress to date in implementing natural capital indicators, including their two-year renewal in Budget 2010, and previously in adopting the Federal Sustainable Development Act.[117]

Federal Sustainable Development Act

Canada has a great opportunity to lay the groundwork for comprehensively integrated policy by effectively implementing the Federal Sustainable Development Act, whose structure builds upon lessons learned in Canada and around the world.[118]

This important Act encourages the federal government to consider the interconnections between the economy, the environment and human well-being every time it makes a major decision. It embeds environmental and sustainability priorities at the highest level of decision-making by legislating a cabinet committee on sustainable development, only the second legislated cabinet committee in Canada's history, to oversee the development and implementation of a Federal Sustainable Development Strategy. The Act requires the federal government to set "measurable" targets for protecting Canada's environment, to set out a clear strategy for meeting those targets, and to assign specific Ministers the responsibility for meeting respective targets.

The Path Forward in 2011

The success of this Act in advancing integrated sustainability for Canadians will depend substantially on the information available to federal decision-makers and to the Canadian public.

To this end, the Government of Canada should make a longer-term and more comprehensive commitment to tracking the changing value of Canada's natural capital, as well as the known factors influencing these changes. The Green Budget Coalition believes the best next steps are to fund the four measures listed above, which will expand and broaden the benefits from Canada's current natural capital indicators. Implementing these recommendations will help the Government of Canada to measure progress towards achieving environmental and social objectives, and to gauge the effectiveness of different strategies.

Importantly, the realization of the full potential benefits from such indicators will also depend on the federal government providing leadership, coordination and support to improve the quantity and quality of environmental information monitored and shared by all levels of government in Canada.

It should be noted that the federal government currently collects some of the necessary information to capture an understanding of Canada's natural capital through the Canadian System of Environmental and Resource Accounts. Currently, these data sets are incomplete in their ability to capture the stock of natural assets and the flow of ecosystem services, which would constrain establishing their economic value. Immediate attention should be focused on developing a framework for collecting these data sets.

Contacts

Mike Kennedy
Pembina Institute
780-485-9610 ext. 101
mikek@pembina.org

Andrew Van Iterson
Green Budget Coalition
613-562-8208 ext. 243
avaniterson@naturecanada.ca

[116] OECD, Istanbul Declaration, 30 June 2007, http://www.oecd.org/dataoecd/14/46/38883774.pdf. See also OECD, Measuring the Progress of Societies, http://www.oecd.org/document/5/0,3343,en_40033426_40037349_40038469_1_1_1_1,00.html.

[117] *The Federal Sustainable Development Act* was enacted in June 2008. http://laws.justice.gc.ca/eng/F-8.6/index.html.

[118] For example, Mexico has integrated sustainable development principles explicitly into its national development planning structure, while the Philippines National Economic Development Authority chairs the Philippine Council for Sustainable Development. Switzerland and the United Kingdom have been leaders in using integrated environmental, economic and social frameworks for evaluating policy proposals. International Institute for Sustainable Development, 2003, *National Strategies for Sustainable Development*, p. x-xii. This document provides useful examples, and analysis, of how 19 countries have implemented sustainable development strategies.

GREEN BUDGET COALITION

75 Albert St., Suite 300

Ottawa, ON, K1P 5E7 Canada

Tel: 613-562-8208, ext. 243 Email: info@greenbudget.ca

www.greenbudget.ca