Environment

Investing in a prosperous green future

As Canada moves toward hosting the G-8 and G-20 summits this year, it is important that strong steps be taken to support effective global action on climate change — both for the benefit of future generations and for Canada's international reputation.

The AFB will start by taking the most important step:

- Putting a price on greenhouse gas emissions by introducing a national harmonized carbon tax in July 2011, combined with strategic measures to protect Canadians and trade-exposed sectors from undesired impacts.

The AFB will also finance these three priority environment and conservation measures:

- Renewing Canada's support for renewable energy, to attract investment and create jobs (estimated cost $1,653 million over 3 years).
- Protecting ecosystems and biodiversity from dangerous climate change, by funding a national ecosystem-based adaptation strategy (estimated cost $594 million over 3 years).
- Investing in Canada's freshwater future, beginning with the Great Lakes-St. Lawrence basin (estimated cost $2,562 million over 3 years).

These three actions alone will create over 8,000 new jobs in renewable energy, ensure a clean source of drinking water for millions of Canadians, and help create new national parks.

Investing in renewable energy and a national water strategy, and imposing a price on carbon, will expedite the transformation of the Canadian economy into a globally leading, environmentally-restorative economy that creates jobs while preserving Canadians' enviable quality of life. They will also help Canada shine on the world stage during the International Year of Biodiversity (2010) and in the lead-up to hosting the G-8 Summit in June.

Delaying action further 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.

The good news is that the solutions to these severe environmental problems will also lead to important economic, social, human health, and environmental benefits for Canadians. To that end, the AFB will implement a comprehensive environmental plan to address the environmental challenges Canada faces and to make Canada an international environmental leader.

The transformation to a globally-leading, environmentally-restorative Canadian economy requires major investments in renewable energy and water and wastewater infrastructure; forcing polluters to pay for the environmental and health damage they cause; and making financial transfers to governments and subsidies to industry conditional on achieving defined environmental outcomes.

Policies will also be needed to ensure that market prices for goods and services accurately reflect 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 associated with their development, production, transportation, sale, use, and disposal. This approach is often called ecological fiscal reform (EFR), and will be implemented through a mix of market-based instruments, such as taxes, fees, rebates, credits, tradeable permits, and subsidy removal.

Such policies will reward environmental leaders in business and society, preserve natural resources for higher value uses, stimulate environmental innovations with global export potential, and expedite the development of economies where 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. Fairness to citizens and business will be enhanced through the "polluter pays" principle,[1] forcing polluters to pay for the harm they cause.

Putting an adequate price on carbon is the most crucial step towards making our economy work in harmony with a healthy environment, because it will set a price on pollution that spurs emission reductions throughout the economy. But market-based economic instruments cannot do the job on their own. They need to be combined with government leadership, strong regulations, education and R&D, pro-active industrial policies, and significant public investments. The change needed will lead to many jobs being lost in some sectors and gained in others. Full-cost pricing to protect our climate and other resources will impose proportionately greater costs on lower-income families, who have less ability to adapt to change. Polluter-pay and user-pay policies must therefore be balanced with the ability-to-pay principle.

Climate change, carbon pricing, and energy

The failure of the world's political leaders to reach an effective and legally binding agreement at last December's UN Climate Change Summit in Copenhagen may have caused many Canadians to lose hope of making further progress on global warming. But such despair is unwarranted. The Copenhagen conference did show just how difficult it is to achieve an accord based on an international cap-and-trade system, which is the underlying framework for Kyoto and subsequent negotiations.

This doesn't mean that we should stop trying to achieve an effective international agreement based on a cap-and-trade framework to reduce global emissions; but neither does it mean we can't take action now with alternative methods.

The simplest and most effective alternative to a cap-and-trade system is a price-based carbon tax — a measure that many noted economists and climate experts agree would be more efficient and effective than a quota-based cap-and-trade system. Among those now calling for countries to implement a carbon tax are Nobel Prize-winning economist Joseph Stiglitz and leading climate change expert James Hansen.[2]

A carbon tax doesn't necessarily guarantee specific emission reduction levels, but it does provide much more certainty for businesses to plan into the future. It also eliminates the speculation, windfall profits, and false savings that will accompany a cap-and-trade system. One big advantage of a carbon tax is that it can be introduced almost immediately instead of waiting many more years to obtain international agreement on a cap-and-trade system.

In 2009, the AFB established a price for greenhouse gas (GHG) emissions of at least $30/tonne carbon dioxide equivalent (CO_2e) to be implemented by the start of 2011, rising to at least $75/tonne by 2020. This was to provide two years to develop a continent-wide cap-and-trade system in collaboration with the Obama administration, and to provide enough lead-time for industry and households to adjust without endangering the economic recovery.

With the failure of Copenhagen, it will now take at least several more years to develop and put in place a continental cap-and-trade system with the United States. But this is no reason for Canada to remain a laggard in introducing a national carbon tax. British Columbia's carbon tax is set to rise to $20 a tonne on July 1, 2010, to $25 per tonne by 2011, and to $30 a tonne by 2012.

In this year's AFB, we are introducing a national harmonized carbon tax set at $50 per tonne, to be introduced July 1, 2011. Detailed analysis by Marc Jaccard, Canada's foremost climate change economist, has shown that in order to meet the 2°C target to prevent very damaging climate change, Canada needs to introduce a carbon price of $50 a tonne now, rising to $200 a tonne by 2020.[3] If these revenues were recycled into investments in renewable energy and tax refunds for individuals, we could achieve deep reductions in our greenhouse gas emissions while maintaining strong economic growth and generating even more jobs than under the status quo. The carbon tax system will be integrated with and consistent with provincial carbon taxes, such as B.C.'s, with half of the revenues going to provincial governments. The carbon tax will be applied to all non-renewable fuels based on their CO_2 emission factors.

For large emitters, who comprise close to 50% of Canada's GHG emissions, the carbon tax will be integrated with any cap-and-trade system that may eventually be introduced.

Companies will be able to claim a carbon tax credit against their costs of achieving emission reductions through the cap-and-trade system.

The carbon tax and cap and trade system will be accompanied by a border carbon tariff adjustment to ensure that domestic producers are not forced to compete against countries with weaker or no similar environmental regulations. The tariff will be calculated by product category, based on the average greenhouse gas content of the goods. This will include an exemption for more impoverished and developing countries. Revenues from this tariff will go into a Green Climate Fund to help poorer countries reduce their emissions and to adapt to and mitigate the effects of climate change. Canada's commitment for the Global Climate Fund agreed to at the Copenhagen conference should start at $400 million in both 2010 and 2011, increasing to $800 million in 2012, and then by $400 million a year to 2014–15. Funding for this would come from the carbon tax and any border carbon tariff.

These international rules will, with carbon tariffs and the climate funding, provide a strong incentive for other countries to introduce effective greenhouse gas reduction measures.

The carbon tax would rise by $10 a tonne each year, reaching $90 per tonne by 2015. At that time, the effectiveness of the tax at reducing emissions would be gauged, with adjustments to the scheduled increases made as required. The tax may have to rise to the $200 per tonne carbon tax in 2020 that the Jaccard study found would be necessary to meet the 2% target. However, it is expected that other complementary measures, including renewable energy investments, energy

efficiency programs, building and fuel efficiency standards and investments in public transit and energy retrofits would accelerate emission reductions, thereby requiring less reliance on carbon prices.

A carbon tax of $50 per tonne of CO_2 emissions will mean a tax of about 12 cents a litre for gasoline, 14 cents a litre for diesel and fuel oil, and 9.5 cents a cubic metre for natural gas. The tax will raise about $12 billion a year in the first full year (less amounts that would be credited to exporters). While most of this revenue will be quickly reintroduced into the Canadian economy, how it is reintroduced is of great importance. The AFB will transfer half the revenues from this tax to provinces to fund tax reductions, including direct payments to individuals, and further climate change measures.

The federal share of the revenues raised will be directed towards four priority areas:

- a Green Energy Tax Refund, to compensate Canadians, particularly low-income Canadians, for the additional costs they face, without reducing the incentive for behaviour change;
- helping to meet Canada's GHG reduction target (including investments in energy efficiency, renewable energy, ecosystem protection, and international emission reduction credits);
- border carbon tariff adjustments to protect the international competitiveness of trade-exposed sectors; and
- helping to meet Canada's international climate finance obligations, to support mitigation and adaptation efforts in developing countries.[4]

Green Energy Tax Refund

Together with the carbon tax, the AFB will introduce a *Green Energy Tax Refund* to ensure that a majority of Canadians are fully compensated for all the additional direct costs they bear from the federal portion of the carbon tax. In addition, it will more than compensate lower- and lower-middle-income families for all the additional indirect costs they bear from the carbon tax and the cap-and-trade system.

The tax refund will be set at $10 per adult and $5 per child annually for every $1/tonne in carbon taxes, on top of any associated provincial carbon tax credit. For instance, in the first full year, the tax refund will be $250 to every adult and $125 per child to compensate for the federal government's half share of the $50 per tonne carbon tax. The credit will be phased out progressively for family incomes above $70,000.

As the carbon price is increased, the value of this credit will be increased proportionately to ensure that middle- and lower-income households are not adversely affected. This refund will be much more progressive than the revenue recycling measures adopted by the British Columbia government as part of its carbon tax.[5] Provinces could choose to harmonize their credits with this federal tax credit, as many have done with the GST tax credit, which would double its value.

Other revenues from the carbon tax will be directed to public programs and investments to help households, businesses, and workers reduce their emissions and make the transition to a greener economy. These will include renewable energy and energy efficiency investments, including retrofits of homes and commercial and public buildings, and a Just Transition Strategy to assist adversely affected workers.

Collectively, these measures will further enhance success in reducing the risks related to climate change, and also ensure that households, workers, and other vulnerable Canadians are assisted in making the transition toward a greener economy.

Sustainable energy

The realities of climate change, both ecological and economic, make it clear that Canada must move decisively to take a sustainable energy path. This requires not just supporting renewable energy and energy efficiency, but also removing public subsidies that encourage unsustainable fossil fuel extraction and production. Such an approach will generate economic opportunities, as well as clean our air and water.

This an important time for Canada to increase its support for renewable power, to enable us to meet our target of 90% non-emitting electricity by 2020, and to create new economic development opportunities while keeping pace with major growth in the sector, both in the United States and overseas. In particular, we must focus on renewable electricity[6] in order to be prepared for the necessary replacement of many of Canada's power plants that are reaching the end of their working lives, and for the potential increased demand from electric and plug-in hybrid cars, while reducing the emissions from current power stations.

The AFB will start by seizing the opportunity to invest in clean electricity by:

- replacing the sun-setting ecoENERGY for Renewable Power (eERP) program with a capital grant program, including a specific set-aside for northern and remote communities;
- establishing Green Energy Bonds to ease access to capital and reduce borrowing costs for renewable energy developers, while enabling individual Canadians to directly support the development of renewable electricity; and
- unlocking Canada's geothermal potential by developing a national geothermal data and classification system to assess and quantify Canada's national geothermal resources.

Energy efficiency

Government programs that help individuals and business improve their energy efficiency are equivalent to a tax cut, since they reduce monthly energy costs, thus increasing disposable income or ability to grow business. Efficiency measures also create jobs in retrofits, equipment manufacturing, and the retail sales of efficiency equipment and installation materials. As the next steps leading to longer-term targets and programs, the AFB will immediately invest in actions to advance: home heat pumps, smart grid technologies, new green buildings, retrofits to existing apartment buildings, electric/hybrid vehicle fleets, and a national energy efficiency advertising campaign.

Just Transition Strategy

A Just Transition Strategy will assist workers and communities impacted by shifting employment caused by the transition to a greener economy. Supporting effective global action on climate change will mean job losses in some sectors, job gains in others, and shifts in the types of jobs available. Workers who lose jobs must be provided with other employment options, particularly in sectors experiencing overall growth. We will require transition programs for displaced workers to ensure that the Canadian labour force has the skills required to support a greener economy.

The Just Transition program will fund:

- training and educational opportunities for skills upgrading that allow workers to upgrade their skills for the jobs that are being created;
- early notice of layoffs so that workers can access counselling and training programs quickly;
- income support for displaced workers for up to three years to enable them to take advantage of training and educational opportunities;

- peer counselling to assess workers' needs, and analysis of labour market needs; and
- relocation funds for those who must move in order to find new work.

The AFB will invest $551 million a year to implement the entire Renewable Energy Strategy, which includes the Just Transition Strategy, energy efficiency research, and investments in renewable energy.

Conserving nature, safeguarding water, protecting human health

Protecting ecosystems and biodiversity

2010 is the International Year of Biodiversity, and the deadline for reporting to the United Nations Convention on Biological Diversity (CBD) on progress in protecting biodiversity. Given that Canada has not fully met our commitments under the CBD, there is a need to enhance efforts and actions that will result in the long-term protection of Canada's ecosystems and natural resources.

To improve Canada's performance on biodiversity protection, the AFB will act now to fund a national ecosystem-based adaptation strategy worth 208 million per year for the first two years, $178 million per year for the subsequent three years:

- completing Canada's national systems of national parks and federal protected areas for wildlife,[7] and ensuring their long-term protection;
- implementing integrated oceans management plans in five Large Ocean Management Areas (LOMAS), completing a national system of marine protected areas that covers at least 30% of Canada's ocean area, and enhancing efforts to recover wild salmon populations through fisheries, aquaculture, and habitat protection reforms; and
- creating incentives for protecting and restoring greenhouse gas reservoirs in natural forests and wetlands.

The AFB will also fund the full, effective implementation of the *Species At Risk Act*.

Such bold actions, along with federal leadership to coordinate complementary work by all levels of government nationwide, are essential to secure the ongoing health of our lands, waters, and wildlife, which in turn support the long-term health of our economy and human society.

Safeguarding Canada's waters

Canadians strongly believe that water is our single most important natural resource, ahead of oil, forestry and agriculture, and that federal leadership is crucial in protecting Canada's freshwater resources.

Canada should deliver its promised federal water strategy,[8] building upon its actions over the past three years, with initial implementation in the Great Lakes-St. Lawrence basin due to its unique economic, social and cultural importance. Federal leadership is required to ensure that actions to protect and restore the Great Lakes and St. Lawrence are focused and well coordinated.

The AFB will prioritize investments in the waters of the Great Lakes-St. Lawrence in these areas:

- **Water quantity and quality**
  - improve water quality by updating water and wastewater infrastructure and integrating conservation measures to ensure sustainability of water resources; and
  - ensure the clean up and de-listing of existing Great Lakes Areas of Concern (AoCs) and delivery of Ecological Rehabilitation Action Plans for both AoCs and the St. Lawrence Zones

d'intervention prioritaire (ZIPS) in Québec.

- **Freshwater ecosystems**
  - foster healthy biodiversity through the preservation and protection of ecologically sensitive wetland habitat in the watershed, particularly near shore areas; and
  - protect them from invasive species.

Such investments will ensure a clean healthy source of drinking water for millions of Canadians, strengthen the ecosystem's capacity and resilience to support strong economic and social systems, and facilitate a healthy, growing economy and business climate for area residents. The AFB will allocate $854 million per year for the next five years to this endeavour.

Renewable energy

The AFB will allocate $551 million/year (average) to the promotion and development of renewable energy sources for 4 years, and $100 million/year (average) for the subsequent 6 years

Notes

1 The government defined "polluter pays" in Budget 2005 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." The "polluter pays principle" was previously defined in the 1972 OECD Guiding Principles on the International Economic Aspects of Environmental Policies, as cited in OECD (2001): Environmentally Related Taxes in OECD Countries: Issues and Strategies, Paris, p.16.

2 http://www.project-syndicate.org/commentary/stiglitz121/English ; http://www.carbontax.org/ http://www.nytimes.com/2009/12/07/opinion/07hansen.html?_r=2

3 See Climate Leadership, Economic Prosperity, Pembina Institute and David Suzuki Foundation, October 2009.

4 The Green Budget Coalition describes the merits of these four areas in more detail in its Recommendations for Budget 2010: Investing in a Prosperous Green Future, pages 38–40. See http://www.greenbudget.ca/2010/main.html. It suggests two further areas — other tax reductions and compensating households in unduly impacted regions , which, under this AFB policy, would be addressed through the provincial revenue shares.

5 See Marc Lee and Toby Sanger (2008) for an analysis of the distributional impact of BC's carbon tax. Is BC's Carbon Tax Fair? Canadian Centre for Policy Alternatives, 2008. http://www.policyalternatives.ca/documents/BC_Office_Pubs/bc_2008/ccpa_bc_carbontaxfairness.pdf

6 "Renewable electricity" refers to electricity generated by renewable energy sources.

7 Federal protected areas for wildlife comprise National Wildlife Areas and Migratory Bird Sanctuaries.

8 In the 2007 Speech from the Throne, Canada's government committed to a "new water strategy". Steps have been taken toward fulfilling this commitment under the Government of Canada's Action Plan for Clean Water.