

March 2011

## Backgrounder

# Federal Election 2011

## A Checklist for Clean Energy Success

by the Pembina Institute

### About the Pembina Institute

The Pembina Institute is a non-partisan sustainable energy think tank.

We create sustainable energy solutions through innovative research, education, consulting and advocacy. The Pembina Institute promotes environmental, social and economic sustainability in the public interest by developing practical solutions for communities, individuals, governments and businesses.

## Overview

This document outlines the core elements of a strong climate change and energy electoral platform. Throughout the federal campaign, the Pembina Institute will be assessing parties' climate change and energy commitments using the criteria outlined in this document, which are drawn from our research and analysis on these topics.

Our checklist covers:

- climate change
- oilsands
- renewable energy
- energy efficiency, and
- transportation.

# 1. Climate Change

We are looking for commitments in three core areas of climate change policy: domestic plans and targets; carbon pricing; and international climate change policy.

## Domestic plans and targets

- ✓ Commit to produce and implement a plan within the next six months that is capable of meeting or beating Canada's current 2020 target of 17% below the 2005 level.
  - An effective plan would include carbon pricing, complementary regulations and policies, and public investments in clean energy and emission reductions (such as energy efficiency, renewable energy and public transit; see Sections 3, 4 and 5 for details). It also requires transparently reporting on plans and results over time.
- ✓ Adopt a science-based 2050 emissions reduction target of 80% below the 1990 level or more for Canada, along with a series of five-year interim goals designed to reach the 2050 targets. These goals should be informed by scientific, technical and economic analysis, and the government should report at regular intervals on its progress towards meeting them.<sup>1</sup>

## Putting a price on greenhouse gas pollution

- ✓ Commit to implement a federal carbon pricing system in 2012 (or sooner), either through an effective cap-and-trade system or a carbon tax.

In the case of a **cap-and-trade** system, the system should:

- Be broad-based (cover ~80% of Canada's greenhouse gas emissions);
- Auction the majority of allowances, and dedicate some of the revenues raised to further emission reductions (e.g. energy efficiency, renewable energy and public transit);
- Minimize, and tightly control, any use of offsets for compliance;
- Be administratively simple and ensure adequate financial oversight;
- Be designed so that the sectors covered are making a proportional and adequate contribution to meeting Canada's target; and
- Ensure that any flexibility mechanisms (such as banking and borrowing, price floors/ceilings, etc.) are applied in such a way that they preserve the environmental integrity of the cap.

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<sup>1</sup> This process may well result in strengthening Canada's current 2020 target, and it certainly should not result in weakening it. As an interim 2020 target before the analysis is complete, we recommend a science-based target of 25% below the 1990 level.

In the case of a **carbon tax**, the system should:

- Be broad-based (cover ~80% of Canada's greenhouse gas emissions);
- Dedicate some of the revenues raised to further emission reductions (e.g. energy efficiency, renewable energy and public transit);
- Be administratively simple and ensure adequate financial oversight; and
- Be designed so that the sectors covered are making a proportional and adequate contribution to meeting Canada's target.

## International climate policy

- ✓ Assert that Canada can and should move more quickly than the U.S. in implementing climate policies when this is needed to achieve our national emission reduction goals.
- ✓ Play a constructive role in negotiating a fair, ambitious and binding international climate change treaty.
- ✓ Take ambitious action to implement Canada's 2009 G20 commitment to phase out inefficient fossil fuel subsidies over the medium term (2020 or earlier).
- ✓ Provide Canada's fair share of support for climate action in developing countries. For 2011 and 2012, this means at least \$400 million a year in new and additional funding, with a balanced allocation between adaptation and emission reduction efforts and the vast majority delivered in the form of grants, not loans.

## 2. Oilsands

**Federal government environmental mismanagement of the oilsands sector is leading to avoidable environmental impacts and economic liabilities, and is contributing to negative international attention that is hurting Canada's reputation abroad.**

In order for Canada to credibly claim a leadership role in the responsible oversight of oilsands development, we need a federal government that commits to:

- ✓ Ensuring the oilsands industry does its fair share to reduce Canada's greenhouse gas emissions;
- ✓ Requiring industry to phase out tailings ponds within a decade; and
- ✓ Implementing a robust water and air quality monitoring program, and then using that information to set binding caps on water and air pollution.

More specifically, political parties should commit to using the Government of Canada's existing authority under federal legislation to:

- ✓ **Set binding caps on air and water pollution** to protect human health and the environment. To ensure those caps are not exceeded, implement and enforce rigorous

and transparent monitoring of oilsands impacts on air and water quality.

- ✓ **Phase out tailings ponds within a decade.** Currently, companies like Suncor are demonstrating that solutions exist to clean up tailings ponds, yet neither the federal nor the Alberta government has mandated that all industry adopt the best technology to clean up this toxic legacy as quickly as possible.
- ✓ **Require the oilsands to contribute its fair share of emission reductions** in line with a science-based national greenhouse gas emission target for 2020 and 2050. The most effective way to do so would be through a robust, broad-based carbon pricing system.
- ✓ **Deal with the economic downsides of oilsands development.** Parties should commit to convene a parliamentary study of the impacts of the “petrocurrency” effect on the Canadian economy. In addition, Canada’s next federal government should develop and implement a strategy to deal with the negative impacts of oilsands development on other sectors of the economy, and reinvest oilsands revenues in clean energy while planning for economic diversification and easing the transition for oilsands workers and communities.<sup>2</sup>
- ✓ **Protect species at risk.** Protect wildlife by enforcing the Species at Risk Act and by working with Alberta and Saskatchewan to create a regional network of protected areas. In doing so, Canada’s next government should prioritize the identification and protection of critical habitat for woodland caribou in the boreal forest.
- ✓ **Respect Aboriginal Peoples.** Live up to the federal government’s legal and constitutional duty to protect the interests of Aboriginal Peoples by ensuring adequate consultation with First Nations communities before approvals are granted for oilsands development; monitoring environmental and health impacts of oilsands operations; and enforcing environmental limits within federal jurisdiction.

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<sup>2</sup> A 2009 University of Ottawa study estimated that 42% of manufacturing job loss in Canada from 2002 to 2007 attributable to Canada’s stronger dollar has been a result of the real exchange rate impacts (the so-called “Dutch disease” phenomenon) due to increased oil exports.

## 3. Renewable Energy

Cleaning our energy supply by ramping up Canadians' access to renewable energy technology will help to meet air quality and climate change targets while ensuring that Canada's electricity system is robust, reliable and sustainable. Below we propose four specific ways to move forward on renewable energy.

### Restoring stability to Canada's renewable electricity industry

- ✓ Federal support for new renewable electricity effectively ended in the 2011 fiscal year. A federal re-investment in renewable electricity would help to create stability in Canada's market.
- ✓ The federal government needs to partner with the provinces to build on the success of its ecoENERGY for Renewable Power program with a long-term investment. This program should support 8,000 megawatts of new renewable energy capacity in the next three years.

### Investing to build Canada's solar hot water industry

With the end of most of the suite of ecoENERGY programs in the 2011 federal budget,<sup>3</sup> solar hot water heaters will no longer receive federal support. The next federal government should:

- ✓ Establish a \$25 million annual fund to support this proven technology and its Canadian manufacturers and skilled installers. This investment would result in over \$240 million of economic activity while reducing over 8,800 tonnes of carbon dioxide emissions annually.

### Mapping Canada's potential to generate electricity

Geothermal electricity generation has the potential to provide renewable, emissions-free baseload power by taking advantage of Canada's drilling know-how, and could help to replace the dirtiest electricity source — coal. Parties should commit to:

- ✓ Establish a national geothermal data system, resource assessment and classification system to help harness Canada's geothermal potential. The United States is updating its geothermal resource assessment at an estimated cost of US\$30 million. In order to begin a serious effort to understand Canada's resource, at least \$15 million in federal investment would be required.

### Securing Arctic and remote communities' local energy supply

Wind energy represents a significant opportunity for Canada's northern, remote and Aboriginal communities. At present, these communities are largely dependent on diesel-

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<sup>3</sup> The exception was a one-year, \$400 million renewal of the ecoENERGY for home retrofits program.

powered electricity generation that is expensive, polluting and leaves communities at the whim of import prices and long-term availability. In response, the federal government should:

- ✓ Establish a Northern Wind Incentive Program that targets these communities. The program 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.

## 4. Energy Efficiency

A massive scale-up of federal efforts to improve energy efficiency is required to meet or exceed Canada's 2007 APEC commitment to achieve a "reduction in energy intensity of at least 25% by 2030."<sup>4</sup> Below we propose three specific ways to start scaling up Canada's energy efficiency.

### A national green homes retrofit strategy that includes low-income support

Federal support for home retrofits had been available since 2002, but ended in 2010. The 2011 federal budget proposed a one-year, \$400 million renewal of the ecoENERGY for home retrofits program. While this program has been successful in reaching 8% of Canadian homes, more targeted incentives are required to ensure that federal investments target incremental and high value retrofits. If retrofitted with insulation, high efficiency equipment and weatherproofing, most homes in Canada could reduce their energy consumption by 30%.

The next federal government should:

- ✓ In partnership with the provinces, establish a national strategy to reach achievable goals of retrofitting 15% of existing housing stock by 2015, 40% by 2020, and 100% by 2030. This strategy would bring Canada in line with the U.S. and the UK.
- ✓ The federal government should re-invest in a revamped, more targeted home retrofit incentive program as a bridge until a longer term strategy is developed.
- ✓ This investment should include specific programs for low-income households that complement provincial and territorial efforts.
- ✓ To keep federal costs manageable, incentives should target longer-payback items. 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.

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<sup>4</sup> [http://pandora.nla.gov.au/pan/64638/20071026-0047/www.apec2007.org/apec1440.html?inc= lw/lw\\_syd\\_dec](http://pandora.nla.gov.au/pan/64638/20071026-0047/www.apec2007.org/apec1440.html?inc= lw/lw_syd_dec)

## Easy access to capital with “Green Bonds” for energy efficiency upgrades

Access to capital can be an ongoing challenge to residential, commercial and industrial 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 of accessing capital and return predictable energy savings. Green Bonds would also enable the establishment of low cost financing to enable Canadians to “repay as they save.”

- ✓ The next federal government should adopt a Green Bond mechanism to raise capital for efficiency upgrades and reduce the government outlay required.

## Ramp up regulations on the efficiency of equipment, buildings and vehicles

The Council of Energy Ministers has developed papers that show that major energy efficiency improvements in all sectors are both possible and cost effective — but only if governments take action to remove barriers to market transformation and aggressively regulate efficiency of equipment, buildings and vehicles. In addition, mandatory energy labeling of products, buildings and homes will protect consumers, renters and home buyers by informing them about the long-term energy cost of their purchases.

The Council of Energy Ministers’ working papers recommended short term targets for the built environment, including 2012 and 2020 milestones.

- ✓ Working in partnership with provincial governments, the next federal government should take the next step and start implementing these recommendations. Future federal budgets should include financial support programs for efficiency in the industrial sector, and for all modes of transportation and freight movement.

# 5. Sustainable Transportation

Canada remains the only OECD and G8 country without a long-term federal transit plan or a long-term, predictable federal transit investment policy. The federal government should invest in public transit infrastructure and operations across Canada, and support employer benefits for commuting by transit and active transportation. In particular, consideration should be directed to Metrolinx’s regional transit plan for the Greater Toronto and Hamilton Area (GTHA), where traffic congestion is critical.

To make Canada’s transportation system more sustainable, the next federal government should:

- ✓ Develop a policy framework for long-term, dedicated investment in national public transit, building on current federal investments (\$6 billion over 5 years).
- ✓ Provide direct funding to Metrolinx for GTHA transit investments.

- ✓ Amend the Income Tax Act to exempt certain types of employment benefits that encourage transit, active transportation and carpooling. Examples of amendments to the Income Tax Act to exempt three types of employer-provided benefits from the calculation of taxable income include:
  - Up to \$150 per month in public commuter transit service expenses related to commuting to and from work.
  - 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).
  - Up to \$240 per year to purchase and maintain a bicycle used to commute to and from work.

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## Appendix: Pembina References by Topic Area

### Climate Change: Domestic Plans and Targets

Canada's performance <http://www.pembina.org/pub/2129>  
Achieving Canada's target <http://www.pembina.org/pub/1909>  
Achieving Canada's target (blog) <http://www.pembina.org/blog/487>  
2050 targets and long term plans <http://www.pembina.org/pub/1911>  
Canadian policy choices <http://www.pembina.org/pub/1720>  
Domestic planning <http://www.pembina.org/op-ed/1996>  
Achieving Canada's targets <http://www.pembina.org/op-ed/1916>  
Science-based targets <http://www.pembina.org/pub/536>

### Climate Change: Carbon Pricing

Cap-and-trade principles <http://www.pembina.org/pub/2015>  
Cap-and-trade design <http://www.pembina.org/pub/1794>  
Canada-U.S. linking <http://www.pembina.org/pub/1955>  
Carbon pricing principles <http://www.pembina.org/pub/1584>  
Canada-U.S. carbon pricing <http://www.pembina.org/pub/2036>  
Use of offsets <http://www.pembina.org/pub/1868>  
Carbon taxes <http://www.pembina.org/op-ed/2008>  
Cap-and-trade system design in Manitoba <http://www.pembina.org/pub/2180>

### Climate Change: International

Recommendations for climate financing for developing countries  
<http://www.pembina.org/pub/2173>  
Assessment of Canada's 2010 climate financing (blog) <http://www.pembina.org/blog/413>  
International negotiations <http://www.pembina.org/pub/2119>

U.S. greenhouse gas regulations <http://www.pembina.org/pub/2125>

Canada-U.S. climate policy harmonization <http://www.pembina.org/op-ed/2159>

G8 and G20 <http://www.pembina.org/op-ed/2045>

Climate financing overview <http://www.pembina.org/pub/1815>

## **Oilsands: Federal Responsibility**

English version <http://www.pembina.org/pub/2101>

French version <http://pubs.pembina.org/reports/duty-calls-fr-final-web2.pdf>

## **Renewable Energy and Energy Efficiency**

Green Budget Coalition (p. 6 and 31) <http://www.greenbudget.ca/2011/main.html>

Scaling up renewable energy and energy efficiency <http://pubs.pembina.org/reports/re-scaleup-all-parties.pdf>

Canada-U.S. clean energy comparison <http://www.pembina.org/pub/1979>

## **Sustainable Transportation**

Green Budget Coalition (p. 34) <http://www.greenbudget.ca/2011/main.html>