

Evaluation of the Government of Canada's Greenhouse Gas Reduction Policies, Prepared for the Climate Change Performance Index 2008

By Johanne Whitmore and Matthew Bramley
November 2007

This evaluation was prepared by the Pembina Institute as input to the Climate Change Performance Index 2008. The index, published by Germanwatch, ranks countries' performance in controlling greenhouse gas (GHG) emissions. It covers 56 countries accounting for over 90% of global energy-related carbon dioxide (CO₂) emissions. Full information on the index, including countries' rankings, is available at <http://www.germanwatch.org/ccpi.htm>.

This document consists of detailed responses to the standard questionnaire used to compile the national government policy component of the Climate Change Performance Index. Policies are rated as follows:

1= very good 2= good 3= neutral 4= poor 5= very poor

Summary

Sector	Policy	Rating
Energy production	ecoENERGY for Renewable Power (incentive)	3
	Class 43.1/43.2 accelerated capital cost allowance rates and Canadian Renewable and Conservation Expenses	4
	Regulatory Framework for Air Emissions	5
	Overall	5
Manufacturing and construction	Canadian Industry Program for Energy Conservation (information)	4
	ecoENERGY for Industry (incentives)	3
	Regulatory Framework for Air Emissions	5
	Overall	4
Transport	Renewable fuel content targets and subsidies	3
	Mandatory targets for the automotive industry	4
	Vehicle Efficiency Incentive	3
	Overall	4
Buildings	ecoENERGY Retrofit — Homes (incentive)	3
	Energy Efficiency Regulations	2
	ecoENERGY Retrofit Incentive for Buildings	4
	Overall	4
Kyoto commitments	Chance to reach Kyoto target with current policies	5
International climate diplomacy	Performance at recent UNFCCC ¹ conferences	5
	Performance at other recent international conferences	4

¹ United Nations Framework Convention on Climate Change.

I. Energy production

1. Does your country have any national policies and measures for the reduction of CO₂ in the energy sector?

Yes

2. If yes, please list the most important national policies and measures (max three) for the reduction of CO₂ in the energy sector and rate them according to their effectiveness.

A. ecoENERGY for Renewable Power²

The ecoENERGY for Renewable Power program, announced in January 2007, provides incentive payments of one cent per kilowatt-hour (kWh) for ten years to low-impact, renewable electricity generation projects (including wind, biomass, low-impact hydro, geothermal, solar photovoltaic and ocean energy) constructed over the next four years (April 1, 2007 to March 31, 2011). This initiative replaces the Wind Power Production Incentive (WPPI), originally announced in the 2001 federal Budget, which provided incentive payments for ten years to wind power generation facilities, and the similar Renewable Power Production Incentive (RPPI), which the previous government did not have time to implement.

The ecoENERGY for Renewable Power incentive is expected to encourage the production of 14.3 terawatt-hours of new electricity from renewable energy sources. Projects are receiving the incentive on a “first in construction, first served” basis, up to a total budget amount of C\$1.48 billion over 15 years, corresponding to up to 4,000 megawatts of new renewable electricity capacity by 2011.

The previous WPPI/RPPI and now the ecoENERGY for Renewable Power programs are an important factor in growing the low-impact renewable energy sector. However, the current program’s objective is quite modest given Canada’s vast renewable energy potential and the need for a massive scale-up of efforts to reduce GHG emissions.

Rate: 3 (good program but insufficient scale)

B. Class 43.1/43.2 accelerated capital cost allowance rates and Canadian Renewable and Conservation Expenses

The Class 43.1 accelerated capital cost allowance rate and Canadian Renewable and Conservation Expenses (CRCE) were introduced in the 1996 federal Budget to promote energy efficiency and small- to medium-scale renewable energy. Class 43.1 in Schedule II of the Income Tax Act allows taxpayers an accelerated write-off at up to 30% per year of equipment generating electricity from wind, small hydro, biomass, solar PV, geothermal and certain cogeneration systems. The 2005 federal Budget created a new Class 43.2 with an increased capital cost allowance rate of 50% for the full range of renewable energy generation equipment included in Class 43.1. The 2006 federal Budget expanded the scope of cogeneration systems included in Class 43.1/43.2.

² The information presented in this document is mostly drawn from federal government publications. Information sources can be provided by the authors on request.

CRCE is a category of 100% tax-deductible expenditures associated with the start-up of projects for which at least 50% of the capital costs of the property would be described in Class 43.1. Expenses eligible under CRCE include, for example, service connection costs incurred to transmit power from the project to the electric utility and test wind turbines.

A number of small hydro facilities have been made economically viable by the Class 43.1 accelerated capital cost allowance rate alone, but Class 43.1 and CRCE do not appear, on their own, to have resulted in the installation of any other kinds of green power facilities. The effects of Class 43.2 have not yet been assessed, but they are unlikely to be dramatically different from those of Class 43.1.

Rate: 4 (incentives appear too weak to be effective on a large scale)

C. Regulatory Framework for Air Emissions

In April 2007, the federal government announced a Regulatory Framework for Air Emissions containing the latest in a series of federal commitments to regulate GHG emissions from heavy industry (including energy producers) dating back to November 2002. The Framework proposes increasingly stringent regulated targets for heavy industry sectors, beginning in 2010 and extending to 2020. In theory the Framework will result in heavy industry emissions falling to 18% below the 2006 level in 2020 (this is still 12% above the 1990 level). In reality, its effect on emissions cannot be known with any certainty, because (i) its targets are expressed in terms of emissions intensity, not actual emissions; (ii) we do not yet know how targets will be defined for new facilities; (iii) “fixed process emissions” are exempted but have not been fully defined; and (iv) some of the “compliance options” that companies can use to meet targets (notably, payments into a Technology Fund) will not result in immediate emission reductions, and some may not result in any real emission reductions at all. The “backloading” of actual reductions towards the end of the period up to 2020 reduces environmental benefits and diminishes the likelihood of emissions actually being reduced in 2020 to the extent claimed, given that the Framework will be subject to a review in 2012. The Framework treats the oil and gas sector leniently in several respects relative to other industry sectors.

Rate: 5 (late implementation, weakness of targets, and many actual and potential loopholes)

3. Considering its current emission reduction (or limitation) requirements on the one side, and its potential to reduce emissions on the other, how do you rate the current national climate policy of your country in the energy sector?

Rate: 5 (**very poor**; assessment dominated by inadequacy of proposed Regulatory Framework, especially in light of increases in energy producers’ emissions)

4. Please give an additional comment:

The projected rapid development of Alberta’s oil sands over the next several years is set to add tens of megatonnes (Mt) to Canada’s annual GHG emissions. But the government has not yet responded to the federal Commissioner for Environment and Sustainable Development’s call, in her 2006 report, for the government to “clearly state how it intends to reconcile the need to reduce greenhouse gas emissions against expected growth in the oil and gas sector”.

II. Manufacturing and construction

1. Does your country have any national policies and measures for the reduction of CO₂ in the manufacturing and construction sector?

Yes

2. If yes, please list the most important national policies and measures (max three) for the reduction of CO₂ in the manufacturing and construction sector and rate them according to their effectiveness.

A. Canadian Industry Program for Energy Conservation

In 1975, the federal government launched the Canadian Industry Program for Energy Conservation (CIPEC), a voluntary partnership with industry to improve Canada's industrial energy efficiency. The program provided several tools to improve energy efficiency such as incentives for industrial energy audits, energy management workshops, and access to a knowledge-sharing and learning network for industrial energy management practitioners. The program was eventually extended to all sectors, including mining, manufacturing, construction, as well as electricity and oil and gas. However, according to the 2006 Report of the Commissioner of the Environment and Sustainable Development, total reductions in annual emissions by March 2006 as a result of CIPEC were only 1.3 Mt CO₂e.

In January 2007, the federal government announced a C\$20 million (over four years) ecoENERGY for Industry program, to be delivered through CIPEC, with the aim of accelerating energy-saving investments by industry. The ecoENERGY for Industry budget includes two new financial incentives: the ecoENERGY Retrofit Incentive for Industry and the ecoENERGY Assessment Incentive for Industry (see following item).

Rate: 4 (helpful provision of information but very modest emission reductions)

B. ecoENERGY for Industry: ecoENERGY Retrofit Incentive for Industry and ecoENERGY Assessment Incentive for Industry

The ecoENERGY Industry program was announced in January 2007 with C\$20 million of funding over four years. It includes the ecoENERGY Retrofit Incentive, providing up to 25% of project costs to a maximum of C\$50,000 per application and C\$250,000 per corporate entity to help small- and medium-sized industrial facilities implement energy-saving projects. To be eligible for funding, a retrofit project must involve capital expenditures that modifies or upgrades an existing industrial building, equipment/systems or process, and have a net payback period of more than one year. Industrial facilities that are in a sector to be regulated under the Regulatory Framework for Air Emissions are not eligible for assistance.

The ecoENERGY Industry program also includes the ecoENERGY Assessment Incentive, which provides up to 50% of audit costs to a maximum of C\$50,000 to help industrial companies identify energy-saving opportunities in a large or moderately complex industrial process.

Rate: 3 (good program but insufficient scale)

C. Regulatory Framework for Air Emissions

In April 2007, the federal government announced a Regulatory Framework for Air Emissions containing the latest in a series of federal commitments to regulate GHG emissions from heavy industry dating back to November 2002. The Framework proposes increasingly stringent regulated targets for heavy industry sectors, beginning in 2010 and extending to 2020. In theory the Framework will result in heavy industry emissions falling to 18% below the 2006 level in 2020 (this is still 12% above the 1990 level). In reality, its effect on emissions cannot be known with any certainty, because (i) its targets are expressed in terms of emissions intensity, not actual emissions; (ii) we do not yet know how targets will be defined for new facilities; (iii) “fixed process emissions” are exempted but have not been fully defined; and (iv) some of the “compliance options” that companies can use to meet targets (notably, payments into a Technology Fund) will not result in immediate emission reductions, and some may not result in any real emission reductions at all. The “backloading” of actual reductions towards the end of the period up to 2020 reduces environmental benefits and diminishes the likelihood of emissions actually being reduced in 2020 to the extent claimed, given that the Framework will be subject to a review in 2012.

Rate: 5 (late implementation, weakness of targets, and many actual and potential loopholes)

3. Considering its current emission reduction (or limitation) requirements on the one side, and its potential to reduce emissions on the other, how do you rate the current national climate policy of your country in the manufacturing and construction sector?

Rate: 4 (poor)

4. Please give an additional comment:

[none]

III. Transport

1. Does your country have any national policies and measures for the reduction of CO₂ in the transport sector?

Yes

2. If yes, please list the most important national policies and measures (max three) for the reduction of CO₂ in the transport sector and rate them according to their effectiveness.

A. Renewable fuel content targets and subsidies

In December 2006, the federal government published a Notice of Intent to regulate the average renewable fuel content in Canada’s total gasoline and diesel supplies: 5% ethanol by 2010 and 2% biodiesel by 2012. Later that month, the government announced a C\$345 million biofuel initiative to support achievement of these targets, of which C\$200 million would be used to create a four year program, the Capital Formation Assistance Program for Renewable Fuels Production, to provide repayable capital funding arrangements

of up to 25% of total project costs or a maximum of C\$25 million to assist agricultural producers in contributing to biofuels facilities; and C\$145 million over five years to launch the Agriculture Bioproducts Innovation Program to help finance research and development in the areas such as biofuels, other forms of bioenergy, biochemicals and biopharmaceuticals.

In the 2007 federal Budget, the government announced additional funding of up to C\$2 billion over seven years for a renewable fuels strategy. This strategy includes a 10 cent/litre operating subsidy to producers of renewable alternatives to gasoline and up to 20 cent/litre operating subsidy for diesel alternatives (for the first three years). As of April 1, 2008, these subsidies will replace the current renewable fuels excise tax exemption of 10 cents/litre for gasoline and 4 cents/litre for diesel (of which the cancellation will save the government C\$40 million per year). C\$500 million out of the C\$2 billion total is allocated to the establishment of large-scale facilities for the production of “next generation renewable fuels” produced from waste materials. These funds will be managed by Sustainable Development Technology Canada.

Rate: 3 (at best very limited impact on emissions in the near-term; potential for larger reductions in the longer term)

B. Mandatory targets for the automotive industry

In April 2005, the previous federal government and the Canadian automotive industry signed a voluntary Memorandum of Understanding (MoU) to reduce annual GHG emissions from cars and light trucks by 5.3 Mt in 2010 relative to a business-as-usual baseline. Automakers can meet the target not just through improved fuel efficiency but also through measures such as reduced leakage from air conditioning systems. The most recent public report on implementation of the MoU does not quantify the industry’s progress towards meeting the target.

In April 2007, the present government committed to introduce a mandatory fuel-efficiency standard, beginning with the 2011 model year, that would be “benchmarked against as stringent, dominant North American standard.” These new regulations are to be developed and implemented under the Motor Vehicle Fuel Consumption Standards Act; details are to be published by the end of 2008.

Rate: 4 (late implementation of regulations, uncertainty of both current progress under the MoU and future regulated targets)

C. Vehicle Efficiency Incentive

The Vehicle Efficiency Incentive (VEI) — a feebate for passenger cars and light trucks — was introduced in the 2007 federal Budget. The VEI comprises the ecoAUTO Rebate Program, which provides a C\$1,000–2,000 rebate for purchases of the most fuel-efficient vehicles as well as “E85” flex fuel vehicles, and the Excise Tax (Green Levy) on Fuel Inefficient Vehicles (excluding pick-up trucks) of C\$1,000–4,000. The VEI is not fully revenue-neutral, as the Green Levy is expected to exceed the ecoAUTO Rebate by C\$25–30 million per year..

The VEI is not expected to be particularly effective in changing vehicle purchase decisions, because it affects a relatively small proportion of vehicle purchases, because light trucks

(including minivans and SUVs) are eligible for the rebate when cars of the same efficiency are not, and because pick-up trucks are excluded from the Green Levy. The jump from a zero rebate to a rebate of \$1,000 at a particular level of fuel efficiency introduces an arbitrariness that could be removed by using sliding scales.

Rate: 3 (good initiative in principle but poorly designed)

3. Considering its current emission reduction (or limitation) requirements on the one side, and its potential to reduce emissions on the other, how do you rate the current national climate policy of your country in the transport sector?

Rate: 4 (**poor**; assessment dominated by the uncertainty around mandatory targets, as well as inadequate policies for freight and public transit)

4. Please give an additional comment:

The government has yet to provide adequate funding for public transit infrastructure. The 2006 federal Budget confirmed investments of C\$1.3 billion in public transit infrastructure over four years. The present government has continued the transfer of a portion of federal gasoline tax money to large cities, but has said that this can be used for roads, whereas under the previous government it was reserved for transit and water infrastructure. The 2006 Budget also committed C\$370 million over two years to provide a tax credit to consumers covering the cost of public transit passes, starting on July 1, 2006. However, a leaked government document revealed that this initiative is expected to increase transit use by only 2.5–3.3%, at a cost of C\$2,000 per tonne of CO₂e saved — making it an extremely cost-ineffective way to reduce GHG emissions. In 2007, the government committed C\$8.8 billion over seven years to a new infrastructure fund called Building Canada, but it remains to be determined what fraction of that funding will be spent on public transit.

Overall, national government funding of public transit in Canada remains at a fraction of the levels that are typical in the EU (e.g., in 2002 the German federal government was providing more than C\$12.6 billion per year to support local public transport systems (i.e., excluding inter-city public transit)). In August 2007, the Canadian Urban Transit Association stated: “Nationally, transit systems [in Canada] have capital needs of C\$20.7 billion between 2006 and 2010. That’s \$4.1 billion annually ... By comparison, recent investment in transit infrastructure reached a peak of \$1.6 billion in 2005.”

The federal government has also failed to adopt adequate policies to control GHG emissions from freight trucks, despite these emissions having nearly doubled between 1990 and 2005. In February 2007, the government announced C\$61 million of funding for its ecoFREIGHT program, the most significant component of which is the Freight Technology Incentive Program, which will provide up to 50% of the costs for the purchase and installation of “proven emission-reducing technologies”. However, by 2010–2012 ecoFREIGHT is expected to reduce annual Canadian freight emissions by only about 1.2 Mt relative to business-as-usual (freight trucks emitted a total of 60 Mt in 2005).

IV. Buildings

1. Does your country have any national policies and measures for the reduction of CO₂

in the buildings sector?

Yes

2. If yes, please list the most important national policies and measures (max three) for the reduction of CO₂ in the buildings sector and rate them according to their effectiveness.

A. ecoENERGY Retrofit — Homes

In late 2003 the federal government began providing grants for energy efficiency retrofits in the residential sector under the EnerGuide for Houses (EGH) program. EGH grants averaged about C\$750 per home, with several provinces providing additional top-up grants. The program enabled qualifying homeowners to reduce their energy use by 27% on average. By the end of 2005, the federal government had allocated a total of C\$452 million to the program, although by March 2006 only C\$37 million had been paid out in grants.

In January 2007 the present government replaced the EGH with the similar ecoENERGY Retrofit — Homes program. The new program has been allocated a budget of C\$220 million over four years and provides home owners with grants expected on average to be close to C\$1,100. However, in contrast to the EGH, home energy audits are no longer subsidized.

At C\$1,100 per home, the funds allocated to this program are sufficient to retrofit 200,000 homes — just 1.5% of Canada's 13 million homes — by 2011.

Rate: 3 (generally good program, but the scale is insufficient)

B. Energy Efficiency Regulations

In 1992, Canada enacted an Energy Efficiency Act, enabling the government to adopt regulations for minimum performance standards and a labelling scheme for a wide range of appliances and other energy-using products imported into Canada, or produced in Canada and shipped between provinces. The first Energy Efficiency Regulations came into effect in 1995. They have since been amended several times to simplify administrative requirements for certain sectors, to introduce standards for additional products and, in some cases, to tighten existing standards.

In April 2007, the federal government committed to regulate the efficiency of eighteen products that are not currently regulated and to tighten requirements for ten products that are already regulated. Through this process officials are proposing to harmonize Canada's energy efficiency standards with standards set in leading North American jurisdictions. In the case of lighting, the government has committed to phase out incandescent light bulbs in common applications by 2012. Further details of all the new amendments to regulations are due to be published in stages between December 2007 and December 2010.

Rate: 2

C. ecoENERGY Retrofit Incentive for Buildings

Before 2007, the federal government's EnerGuide for Existing Buildings (EEB) program

provided two forms of financial assistance for energy efficiency retrofits of commercial or institutional buildings. Energy Retrofit Assistance for Planning Activities (ERA-P) provided 50% of eligible costs or up to C\$1 per gigajoule (GJ) of annual energy consumption — whichever amount was less — for energy efficiency audits and feasibility studies to a maximum of C\$25,000. Energy Retrofit Assistance for Implementation Projects (ERA-I) provided up to C\$7.50 per GJ of annual energy savings or up to 25% of eligible costs for energy efficiency retrofits to a maximum of C\$250,000.

In October 2005, the EEB was renewed with an allocation of C\$210 million over five years, but the new government elected in 2006 confirmed the EEB budget only to the end of March 2007. On January 21, 2007, the EEB and other programs were replaced by the ecoENERGY for Buildings and Houses program (C\$60 million over four years), which includes the ecoENERGY Retrofit Incentive for Buildings. Unlike the previous EEB program, the new one does not cover the costs associated with the pre-project energy audit or feasibility studies. It only provides up to C\$10 per GJ of annual energy savings or up to 25% of eligible costs for energy efficiency retrofits to a maximum of C\$50,000; and buildings over 10,000 m² are now not eligible.

Rate: 4 (appropriate program, except that it is limited to relatively small buildings and the budget is very small)

3. Considering its current emission reduction (or limitation) requirements on the one side, and its potential to reduce emissions on the other, how do you rate the current national climate policy of your country in the residential sector?

Rate: 4 (**poor**; assessment based on both the inadequate scale of the retrofit incentive programs and the absence of any incentives for the construction of new energy-efficient buildings)

4. Please give an additional comment:

The federal government currently offers no financial incentives for the construction of new energy-efficient homes or commercial buildings. The present government cancelled the previous Commercial Building Incentive Program and Industrial Building Incentive Program, which provided financial incentives for new construction. The government currently has no targets for energy performance in buildings.

V. Kyoto commitments

1. Please rate the chance for your country to reach the Kyoto target with the recent policy.

Rate: 5 (**very poor**)

2. Please give an additional comment:

The present government has repeatedly made clear — notably in the October 2007 Speech from the Throne — that it will not attempt to ensure Canada meets its Kyoto target. For instance, Canada would need to purchase considerable volumes of international credits to

meet its Kyoto target, but the government has ruled out purchasing any, and does not intend to enforce regulated GHG targets for industry until 2010 at the earliest. Government members of parliament voted repeatedly against bill C-288 (*The Kyoto Protocol Implementation Act*), a law that requires the government to implement policies strong enough for Canada to meet its Kyoto target. But the government has confused the issue by suggesting that Canada continues to participate meaningfully in the Kyoto Protocol. In 2005, Canada's GHG emissions were 25% above the 1990 level (compared to Canada's Kyoto target of 6% below the 1990 level during 2008–12).

VI. International climate policy

1: How would you rate the international climate diplomacy of your government, considering its performance at recent UNFCCC conferences?

Rate: 5 (very poor)

2. How would you rate the international climate diplomacy of your government, considering its performance at other recent international conferences (e.g. G8+5 Summit, Gleneagles Dialog)?

Rate: 4 (poor)

3. Please give an additional comment:

- At the Commonwealth Summit in November 2007, Canada's Prime Minister Stephen Harper insisted that developed countries should not commit to binding GHG emission reduction targets unless major developing countries did too. The Prime Minister was reportedly isolated in taking this position, widely seen as a violation of the UNFCCC principle of "common but differentiated responsibilities."
- On October 15, 2007, Canada formally joined the Asia-Pacific Partnership on Clean Development and Climate, a voluntary initiative championed by U.S. and Australian governments opposed to the Kyoto Protocol.
- In his two speeches in New York, in September 2007, at the time of the UN Secretary-General's High-Level Event on Climate Change, the Prime Minister failed to mention the Kyoto Protocol or the need to launch negotiations on a post-2012 global climate treaty at COP-13 in Bali. He called for "binding targets for all the world's major emitters," but failed to mention the need for developed countries to make the greatest emission reductions.
- At the most recent UNFCCC climate conference (AWG-4, Vienna, August 2007), Canada was among the countries opposing text in the draft conclusions recognizing the need for emission reductions for industrialized countries of -25 to -40% below 1990 levels by 2020, in line with analysis by the Intergovernmental Panel on Climate Change.
- At the G8 Summit in June 2007, the Prime Minister supported the "launch [of] negotiations toward a global and comprehensive post-2012 agreement" at COP-13.
- At COP-12 in Nairobi (November 2006), the plenary speech of Canada's then Environment Minister Rona Ambrose's was widely criticized for misrepresenting the domestic GHG reduction policies of the present and previous governments.