Evaluation of the Government of Canada's Greenhouse Gas Reduction Policies, Prepared for the *Climate Change Performance Index 2009*

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This evaluation was prepared by the Pembina Institute as input to the *Climate Change Performance Index 2009*. The index, published by Germanwatch and Climate Action Network Europe, ranks countries' performance in controlling greenhouse gas (GHG) 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 of ratings of Government of Canada policies

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 Industrial GHG Emissions	5
	Overall	*5*
Manufacturing	Canadian Industry Program for Energy Conservation (information)	4
	ecoENERGY for Industry (incentives)	3
	Regulatory Framework for Industrial GHG Emissions	4
	Overall	*4*
Transport	Investments in public transit infrastructure	3
	Renewable fuel content targets and subsidies	3
	Mandatory targets for the automotive industry	4
	Overall	*4*
Buildings	ecoENERGY Retrofit — Homes (incentive)	3
	Energy Efficiency Regulations	2
	ecoENERGY Retrofit Incentive for Buildings	4
	Overall	*4*
Kyoto commitments	Chance of reaching Kyoto target with current policies	5
International climate policy	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 carbon dioxide (CO_2) in the energy sector?

Yes

2. If yes, please list the most important national policies and measures (max. three) for the reduction of CO_2 in the energy sector and rate them according to their effectiveness.

A. ecoENERGY for Renewable Power[2]

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 between April 1, 2007 and March 31, 2011. This initiative replaced the similar Wind Power Production Incentive (WPPI), originally announced in the 2001 federal budget.

The ecoENERGY for Renewable Power incentive is provided to projects on a "first in construction, first served" basis, up to a total budget amount of $1.48 billion over 15 years, corresponding to up to 4,000 megawatts (MW) of new renewable electricity generation capacity installed by 2011.

This program is a key factor in growing Canada's green power industry. However, the program's current objective is modest given Canada's vast renewable energy potential, the green power capacity already installed in countries like Germany, the U.S. and Spain, and the need for a massive scale-up of efforts to reduce GHG emissions.

As of November 2008, more than 11,000 MW of projects had already registered for the program. According to Natural Resources Canada (the department responsible for the program), the current 4,000 MW limit will be fully allocated before the end of the 2009–10 fiscal year. This means that unless the program is expanded, over 7,000 MW of green power projects will effectively be stranded.

- ***Rating: 3 (neutral; the program is good but it urgently needs to be expanded)***

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 allowed 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, providing an increased capital cost allowance rate of 50% for all new renewable energy generation equipment of the types included in Class 43.1. The 2006 federal budget expanded the scope of cogeneration systems included in Class 43.1/43.2. Budget 2007 further increased the scope of Class 43.2 to

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

include wave, tidal and solar energy, stationary fuel cells, biogas from organic waste, and pulp and paper waste fuels. Budget 2008 added ground source heat pumps and additional types of biogas and bio-oil systems to Class 43.2.

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 43.2. 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 43.1/43.2 accelerated capital cost allowance rate alone, but Class 43.1/43.2 and CRCE do not appear, on their own, to have resulted in the installation of any other kinds of green power facilities.

- ***Rating: 4 (poor; these incentives appear too weak to be effective on a large scale)***

C. Regulatory Framework for Industrial GHG Emissions

In March 2008, the federal government announced an updated Regulatory Framework for Industrial GHG Emissions, 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 emissions intensity targets for heavy industry sectors (including electricity, oil and gas producers) beginning in 2010 and extending to 2020. The government projects that the proposed regulations will reduce annual emissions by 145 megatonnes CO_2 equivalent (Mt) below business-as-usual levels in 2020, bringing net emissions from the regulated sectors to 22% below the 2006 level by the same year.

In reality, the regulatory framework's effect on emissions cannot be known with any certainty, because (i) its targets are expressed in terms of emissions intensity, not actual emissions (meaning that emissions may be higher than predicted if production grows quickly); (ii) the "compliance options" that companies can use to meet targets are complex and some of them (notably, payments into a Technology Fund and "pre-certified investment credits") represent uncertain amounts of emission reductions occurring at an uncertain future date; and (iii) the legal text of the regulations, including a full definition of the targets, has yet to be published.

The framework delays a large proportion of the emission reductions until 2018, when intensity targets based on carbon capture and storage (CCS) are due to apply to oil sands facilities and coal-fired power plants that started up in 2012 or later. The treatment of oil sands is critical to the regulations' effectiveness because, under business-as-usual conditions, the oil sands are projected to be the single largest contributor to the growth in Canada's emissions.[3] Delaying major emission reductions until 2018 in this and other sectors diminishes the overall environmental benefits of the framework.

It should be noted that the proposed regulations would not "require" companies to capture and store CO_2; they would merely sets targets "based on" CCS. Companies could, for example, meet these targets by purchasing offset credits, the future price of which is very uncertain but could well be lower than the cost of capturing and storing a tonne of CO_2. In addition, the government has not yet explained how CCS-level targets would be set and the emissions they would apply to. Given these uncertainties, it is impossible to assess the extent to which the regulations would actually curtail GHG emissions from the oil sands by 2020.

[3] Annual emissions from the oil sands sector are projected to grow by 79 Mt between 2006 and 2020, while emissions from the other regulated sectors are projected to fall by 6 Mt.

All of this may be moot, because it is now no longer clear whether the government intends to implement the regulatory framework described above at all. In its November 2008 Speech from the Throne, the government made no mention of the regulatory framework, instead stating that it "will work with the provincial governments and our partners to develop and implement a North America-wide cap and trade system for greenhouse gases." This suggests a further delay in the regulation of Canada's industrial GHG emissions, because a U.S. cap-and-trade system is not considered likely to take effect before 2012.

- ***Rating: 5 (very poor; the system is very complex, emission reductions are highly uncertain, a large proportion of them are delayed until 2018, and regulations may now not take effect before 2012)***

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?

- ***Rating: 5 (very poor; assessment dominated by the inadequacy of the regulatory framework for industrial emissions)***

4. Please give an additional comment:

[none]

II. Manufacturing

1. Does your country have any national policies and measures for the reduction of CO_2 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 CO_2 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.

In January 2007, the federal government announced $20 million (over four years) for the ecoENERGY for Industry program, to be delivered through CIPEC, with the aim of accelerating energy-saving investments by industry. This new program includes two new financial incentives: the ecoENERGY Retrofit Incentive for Industry and the ecoENERGY Assessment Incentive for Industry; these are assessed below.

- ***Rating: 4 (poor; the program provides helpful information but produces very limited 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 $20 million of funding over four years. It includes the ecoENERGY Retrofit Incentive, providing up to 25% of project costs to a maximum of $50,000 per application and $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 modify or upgrade an existing industrial building, equipment/systems or process. The expenditures must also have a net simple payback period of more than one year. Industrial facilities that are in a sector to be regulated under the Regulatory Framework for Industrial GHG Emissions (see Section I.C) 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 $50,000 to help industrial companies identify energy-saving opportunities in a large or moderately complex industrial process.

- ***Rating: 3 (neutral; the program is good but its scale is insufficient)***

C. Regulatory Framework for Industrial GHG Emissions

See description above in Section I.C. We give here a slightly higher rating here than above, because the framework's weaknesses are less acute for manufacturing sectors than they are for energy producers.

- ***Rating: 4 (poor; the system is very complex, emission reductions are highly uncertain, and regulations may now not take effect before 2012)***

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?

- ***Rating: 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 CO_2 in the transport sector?

Yes

2. If yes, please list the most important national policies and measures (max. three) for the reduction of CO_2 in the transport sector and rate them according to their effectiveness.

A. Investments in public transit infrastructure

The 2006 federal budget confirmed investments of $1.3 billion in public transit infrastructure over four years (up to March 31, 2009). The 2008 budget additionally set aside "up to $500 million" for a public transit infrastructure trust, with funding to be allocated to provinces and territories that made public commitments to invest in transit before April 1, 2008. However, the accountability provisions associated with these funds are questionable, as the budget plan states

only that provinces and territories "are encouraged to report publicly on the expenditures financed and the outcomes achieved."

In addition to these specific transit infrastructure commitments, the government has announced a total of $33 billion of infrastructure spending over the period 2007–14 under a plan called Building Canada. However, $5.8 billion of this (the Goods and Services Tax Rebate) need not actually be spent on infrastructure. More generally, it is unclear what fraction of the $33 billion will go to public transit. Transit is one of just six eligible categories under the Gas Tax Fund ($11.8 billion out of the total), one of five categories under the Building Canada Fund ($8.8 billion), and is not mentioned as a priority for the other components of the $33 billion plan.

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 $12.6 billion per year to support local public transport systems). The Canadian Urban Transit Association recently acknowledged "the federal government's greatly expanded and very effective efforts in transit investment over the last few years," but also noted that "Canada remains the only OECD nation without a federal policy of predictable, long-term support for transit." According to the association, "Canadian transit systems reported $20 billion in currently unmet requirements for infrastructure expansion, replacement and renewal over the five years from 2008 through 2012." Investment at this rate would consume nearly all the Building Canada funds — but only a fraction of these will in fact be spent on transit.

- ***Rating: 3 (neutral; federal investments have increased in recent years but needs are still very far from being met)***

B. 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 respectively. (Draft regulations have not yet been published.) In the same month, the government announced funding to support achievement of the targets: $200 million over four years was allocated to the ecoAgriculture Biofuels Capital Initiative, to help agricultural producers invest directly in biofuels facilities; and $145 million over five years to the Agriculture Bioproducts Innovation Program to help finance research and development in biofuels and other forms of bioenergy, biochemicals and biopharmaceuticals.

In the 2007 federal budget, the government announced additional funding of up to $2 billion over seven years for a renewable fuels strategy. Up to $1.5 billion of this will be used for a 10 cent/litre operating subsidy to producers of renewable alternatives to gasoline and an operating subsidy of up to 20 cents/litre for diesel alternatives; these subsidies have replaced the previous excise tax exemption for renewable fuels. The remaining $500 million will be invested by Sustainable Development Technology Canada in the establishment of "large-scale facilities for the production of next generation renewable fuels."

- ***Rating: 3 (neutral; the impact on emissions in the near term will at best be very limited; there is potential for greater emission reductions in the longer term from the investment in "next generation" biofuels)***

C. 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 MoU also established interim emission reduction targets for 2007, 2008 and 2009, and a requirement to report performance for each of those years by May 31 the following year. However, the report due in May 2008 has not been published; the industry's progress towards meeting the targets is therefore unclear.

In April 2007, the present government committed to introduce a regulated fuel efficiency standard for light-duty vehicles, beginning with the 2011 model year, that would be "benchmarked against a stringent, dominant North American standard." The new regulation is to be developed and implemented under the Motor Vehicle Fuel Consumption Standards Act, which was originally passed by Parliament in 1982. The government has hinted that the regulation will follow proposed U.S. federal standards rather than the more stringent California standards; however, the details are not due to be published until the end of 2008.

- ***Rating: 4 (poor; regulations have been delayed for many years; progress under both the current MoU and future regulated targets is uncertain)***

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?

- ***Rating: 4 (poor; assessment dominated by the concerns related to mandatory targets, as well as inadequate policies for freight, discussed below)***

4. Please give an additional comment:

The Vehicle Efficiency Incentive (VEI) — a "feebate" for passenger cars and light trucks — was introduced in the 2007 federal Budget "to increase consumer purchases of more efficient advanced technology vehicles before the new fuel-efficiency standards take effect in 2011." The VEI comprises the ecoAUTO Rebate Program, which provides a $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 $1,000–4,000. (The VEI is not fully revenue-neutral, as the Green Levy was expected to exceed the ecoAUTO Rebate by $25–30 million per year.)

In the 2008 federal budget, the government announced that the ecoAUTO rebate would be discontinued at the end of 2008; the Green Levy will continue. This announcement was surprising as the program's initial justification was the absence of fuel efficiency standards; this absence is due to continue for two more years.

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 $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 CO_2 in the buildings sector?

Yes

2. If yes, please list the most important national policies and measures (max. three) for the reduction of CO_2 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 $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 $452 million to the program, although by March 2006 only $37 million had been paid out in grants.

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

At $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. A massive scale-up of efforts to reduce GHG emissions would require a much higher proportion of homes to be retrofitted in that timeframe.

- ***Rating: 3 (neutral; the program is generally good but it is not part of a plan to undertake home energy efficiency retrofits on the scale needed)***

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. The first batch of proposed amendments to regulations were published in March 2008; the two remaining batches are due to be published in December 2009 and December 2010.

In June 2008, the government moved to strengthen its ability to regulate energy efficiency by introducing a bill (S-4) to amend the Energy Efficiency Act. Key amendments included new authority to regulate classes of products as well as products that affect or control energy consumption (such as thermostats); and a requirement that the government regularly "demonstrate the extent to which the energy efficiency standards prescribed under this Act are as stringent as comparable standards established by" a Canadian provincial government, federal or state governments in the U.S., or Mexico. The bill died on the order paper when the 2008 election was called.

- ***Rating: 2 (good)***

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 $1 per gigajoule (GJ) of annual energy consumption — whichever amount was less — for energy efficiency audits and feasibility studies to a maximum of $25,000, and Energy Retrofit Assistance for Implementation Projects (ERA-I) provided up to $7.50 per GJ of annual energy savings or up to 25% of eligible costs for energy efficiency retrofits to a maximum of $250,000.

In October 2005, the EEB was renewed with an allocation of $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 ($60 million over four years), which includes the ecoENERGY Retrofit Incentive for Buildings. Unlike the previous EEB program, the new program does not cover the costs associated with the pre-project energy audit or feasibility studies. It only provides up to $10 per GJ of annual energy savings or up to 25% of eligible costs for energy efficiency retrofits to a maximum of $50,000; and buildings over 10,000 m^2 are now not eligible.

- ***Rating: 4 (poor; the program is appropriate, but limited to relatively small buildings, and it is not part of a plan to undertake energy efficiency retrofits on the scale needed)***

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?

- ***Rating: 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, discussed below)***

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 government's Commercial Building Incentive Program and Industrial Building Incentive Program, which provided financial incentives for new construction. In addition, the government has not set 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.

- ***Rating: 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. Members of Parliament from the governing

party voted repeatedly against Bill C-288 (The Kyoto Protocol Implementation Act), a law that requires the government to implement policies capable of reaching the Kyoto target.

In 2006, Canada's GHG emissions (excluding land-use, land-use change and forestry) were 721 Mt, 22% above the 1990 level of 592 Mt, placing Canada 30% above its 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?

- ***Rating: 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 Dialogue)?

- ***Rating: 4 (poor)***

3. Please give an additional comment:

- At the beginning of COP-13 in Bali, Canada's then Environment Minister John Baird insisted that "all large emitters," a category including major developing countries, must take on "absolute binding emission reduction targets." Canada was alone in adopting this position, widely seen as a violation of the UNFCCC principle of "common but differentiated responsibilities." Canada was publicly criticized in Bali by UN officials and national negotiators. Later, in his plenary speech, Minister Baird expressed both a more nuanced position on developing country commitments and his support for the principle of "common but differentiated responsibilities."
- At the conclusion of COP-13, Canada publicly opposed the inclusion of the indicative target range for emission reductions by industrialized countries of 25 to 40% below 1990 levels by 2020 in the negotiating text of the Ad Hoc Working Group on Further Commitments for Annex I Parties under the Kyoto Protocol. This range corresponds to the recommendations of the international climate science community. Canada only dropped its opposition to this target range when it found itself virtually isolated.
- 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.
- 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.
- A 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 federal governments.