

KEEPING CANADA IN KYOTO

The case for immediate ratification and domestic emission reductions

Analysis and Comment

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Introduction

Climate change is now a reality in Canada and around the world.

Everyday, more evidence of the devastating economic and ecological consequences becomes available. Severe droughts are destroying the viability of Canadian prairie farms. Recent analysis from the University of Manitoba indicates that last year's drought cost the Canadian economy over \$5 billion in agricultural losses. Forest fires are encroaching on rural and urban communities in Alberta and across the prairies.

Permafrost is melting in the Far North throwing whole ecosystems and communities into jeopardy and creating dangerous conditions for pipeline stability. The government of Quebec is already developing plans to evacuate whole villages where melting permafrost threatens to sink houses in metres of mud. Due to unusually warm winters, pine bark beetle infestations are consuming more than half a million hectares of forest in BC, destroying more than \$4 billion in timber.

At the same time, in Eastern Canada unusually warm summers have resulted in the worst smog seasons on record. Few can deny that there are serious economic impacts from these changes, yet some political and industrial leaders continue to advocate for a "go slow" approach to addressing the problem, claiming that the economy will be irreparably harmed if we reduce our fossil fuel use.

In fact, there is clear and growing evidence that Canada can easily afford to meet our Kyoto Protocol commitments. Between now and the Protocol's first commitment period (2008 to 2012), the Canadian economy is projected to grow by more than 31 per cent. Under the realistic Kyoto implementation scenarios, emission reduction actions will barely impact on this growth. This is true for all provinces, including Alberta, and all sectors, including oil and gas. The Alberta government's claim that implementing the Kyoto Protocol is "a death knell for the economy" is pure hyperbole and has no basis in reality. This is demonstrated amply by the current economic analysis which was completed through the National Climate Change Process co-chaired by members of the Canadian and Albertan governments.

Over the last several years this process has brought together more than 500 experts from government, industry, academia and non-governmental organizations from every region of the country to identify opportunities for taking action on climate change.

There has been extensive consideration of how to reduce greenhouse gas emissions and more than sufficient economic analysis about the economic costs and benefits for Canada. This analysis forms the foundation of the recently released government of Canada discussion paper, "Canada's Contribution to Addressing Climate Change." This paper sets out four options for achieving the Kyoto commitment of stabilizing Canada's greenhouse gas emissions at 571 million tonnes per year in the 2008-2012 period.

The longer Canada waits to ratify Kyoto, the greater the impact on our atmosphere and environment and the greater the long-term cost for reducing emissions. The David Suzuki Foundation is looking forward to this one final round of intensive consultation in June 2002, followed by prompt ratification and implementation of the Protocol along with the overwhelming majority of the industrialized world.

The Case for Substantive Canadian Action

All four federal options rely heavily on the Kyoto Protocol's flexibility mechanisms under the mistaken assumption that these mechanisms make implementation of the Protocol more cost effective for Canada. In fact, more substantive domestic reduction measures can be taken in a cost-effective manner, based upon:

- Canadian and US experience since the late 1970s oil crises
- experience in other industrialized nations
- expert analysis from institutions, governments and industries worldwide

Rather than committing to an over-reliance on the flexibility mechanisms, a more proactive domestic emissions strategy should be adopted. This strategy should be based on the following principles developed by members of the Climate Action Network of Canada, including the David Suzuki Foundation:

1. Plan for the longer term with deep emission reductions

The plan chosen to reach Kyoto must be part of a larger plan to dramatically cut the use of fossil fuels and result in greenhouse gas emissions being reduced by over 50 per cent. Wise, longer term choices must be made now to ensure the best transition for the coming decades. The current federal options do not recognize that there is longer term and more significant goal beyond Kyoto.

2. State commitment to ratify the Kyoto Protocol without further delay.

Canada should immediately indicate the clear intent to ratify the Protocol as finalized in Marrakech and Bonn last year. The ratification decision will provide the impetus for innovation and decisions.

It has been ten years since Canada signed the 1992 United Nations Framework Convention on Climate Change in Rio and nearly five years since the Kyoto Protocol was negotiated in 1997. The Kyoto Protocol is the only framework that can put the world on a path to reduce greenhouse gas emissions. Canada has been successful in rewriting the Protocol at the insistence of the Alberta government and high-polluting industries, gaining extensive credit for carbon sinks and international activities. As a result, further delay on ratification puts Canada's international reputation at risk

3. Reject the Alberta Plan for increased climate pollution

Premier Klein's self-styled 'climate change plan' is unacceptable for climate protection goals within Canada and Alberta and does not merit further consideration as public policy. The Alberta strategy would lead to significant increases in greenhouse gas emissions, deprive Canadians of the benefits of improved air quality, and increase responsibility for emission reductions in the rest of Canada (see analysis below).

4. Abandon the "cleaner energy export credit" loophole

There is no need nor justification for Canada to demand a 70 megatonne "credit" for clean energy exports. The Kyoto Protocol awards emission reduction credits for new emission reduction actions. They must be in addition to those that occur in the normal course of business. Many experts argue that huge quantities of relatively cheap Canadian

natural gas and hydroelectricity actually discourage efficiency and clean power in the US, and encourage more energy use and pollution on both sides of the border.

Canada has already received a substantial reduction in its Kyoto target by forcing the international community to grant large forest and agricultural sink credits. Should this new loophole be granted (and there is no international support for this Canadian demand) the Kyoto Protocol will lose even more environmental integrity (see analysis below).

5. Achieve Canada's Kyoto target mainly in Canada

The federal government has frequently and publicly declared that Canada will make the majority of its emission reductions through domestic action. This ensures that the reductions will be real and not just "hot air" purchased internationally. It will also lead to significant environmental and economic improvements in Canada. Reducing greenhouse gas emissions results in improved air quality and public health, less environmental damage and improved habitat protection. This will be extremely important because reducing health costs associated with fossil fuel use in Canada would save an estimated \$1 billion per year in Ontario alone. Yet, the options put forward in the federal discussion paper deviate from federal promises and suggest the federal government will purchase international credits in excess of 50 per cent of the target.

Further, reducing emissions in Canada, even if it is slightly more expensive, will increase energy efficiency here, stimulate the economy, create new jobs, and encourage innovation in the "new energy economy" - all of which help Canada become more competitive.

It must also be recognized that there are already significant emissions reduction actions underway in key industrial US states like New York, Massachusetts, California, Michigan and New Jersey. These reductions will give American states new advantages in key energy and industrial sectors and in overall economic performance.

The five principles outlined above should be the basis for moving Canada forward on implementation of the Protocol. To underpin that implementation, a firm and unconditional commitment to ratify must be announced by Prime Minister Chrétien at this summer's G8 Summit, followed by formal, legal ratification prior to the World Summit on Sustainable Development in August.

Continued Economic Growth Forecast with Kyoto Actions

The Canadian government options paper contains the most up-to-date economic analysis for meeting the Kyoto target. With carbon dioxide valued at \$10 per tonne, emissions reduction measures for specific sectors and an emission trading system for large fossil fuel users, the following economic impacts are forecast:

- the Canadian economy grows by 30.4 per cent by 2012, from \$1 trillion to \$1.315 trillion
- the Ontario economy grows by 35 per cent; \$426.6 billion to \$575.9 billion
- the Alberta economy grows by 26.2 per cent, from \$118 billion to \$150 billion
- the oil and gas sectors grow by 24.6 per cent
- machinery and equipment manufacturing grows by 65.7 per cent
- transportation equipment grows by 28.3 per cent
- electrical and electronic components grow by 47.8 per cent

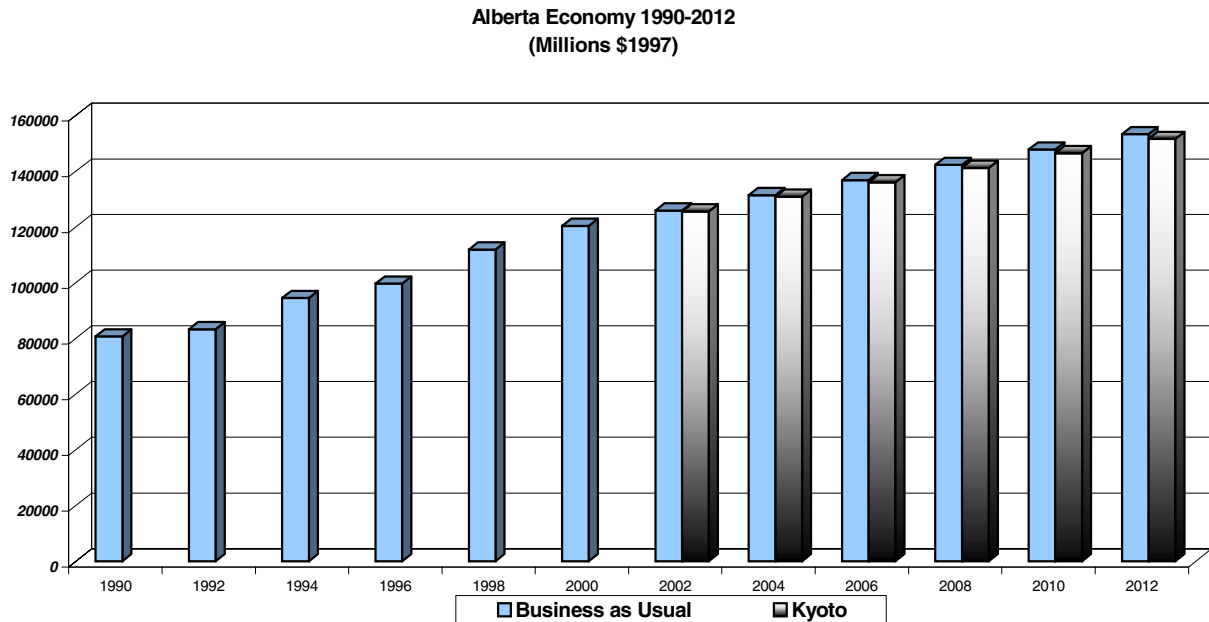
This conservative approach to implementing the Kyoto Protocol demonstrates that strong economic growth over the next decade will allow Canada to easily achieve Kyoto's modest environmental goal.

Other expert analysis indicates that the costs of achieving Kyoto may even be lower. A recent analysis by the government of the Netherlands, following the Marrakech climate negotiation session, shows that Canada gained significant economic advantages from these negotiations. As a result of Canada's increased allowance for biological carbon sinks and access to other countries quotas through emissions trading, the economic consequences for Canada are projected to be less than 0.02 per cent of GDP with a total cost of \$300 million. Recent modeling work by the US-based Tellus Institute also demonstrates that implementing energy efficiency measures and other Kyoto-compliant policies in Canada produces positive economic benefits. An additional 52,000 jobs would be created through domestic action on the Kyoto target. Unlike large fossil fuel projects, these jobs are created in all areas of the country ensuring that all regions benefit from the move to a more energy efficient economy. As well, Canada's GDP would increase by \$2 billion and average household income would grow by \$135 beyond business as usual projections.

In addition to the direct economic impacts of reducing fossil fuel consumption, there are significant human health and ecological benefits associated with fossil fuel reduction, which have not been included in most economic analysis. For example, reducing greenhouse gases from fossil fuel use will also cut local air pollution (acidic gases, particulate matter). Simply by achieving 25 per cent of the Kyoto target Canada can avoid over \$1 billion in health damages from this air pollution.

Preserving Alberta's Opportunities with Kyoto

By 2012 the Canadian economy in a business-as-usual forecast is projected to reach \$1.322 trillion, Alberta's economy grows to \$153.4 billion and the Ontario economy grows to \$577.6 billion. As the following graph demonstrates for Alberta, implementing the Kyoto protocol barely changes this forecast.



Alberta's Plan Means More Climate Pollution

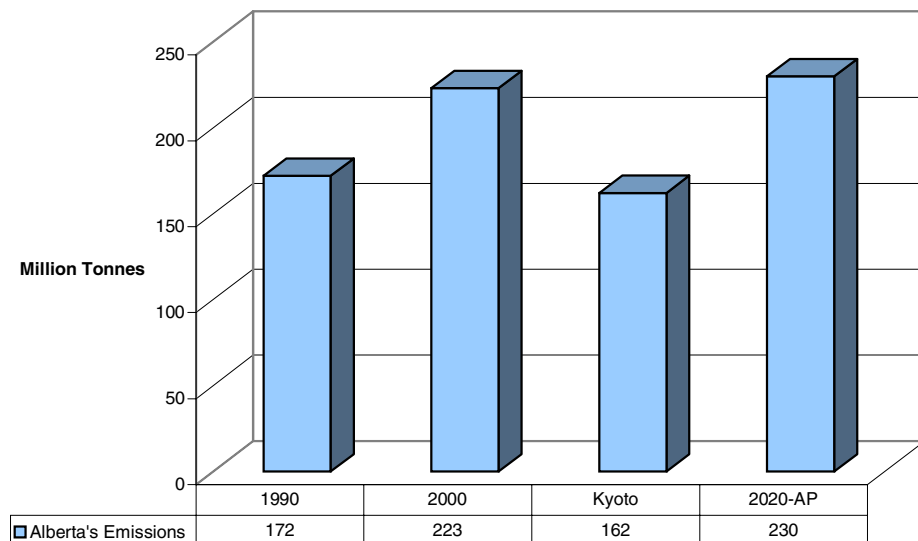
The Alberta government has stated that they can design their own plan to address climate change and that their plan achieves real reductions while the federal plan does not. In fact the vast majority of emission reductions under the Alberta plan come from an emissions “shell” game in which a large portion of emissions are ignored by Alberta. This “reduction” in Alberta's emissions is achieved by claiming that other provinces and the US should be responsible for the emissions that are produced by the Alberta energy industry.

Under the Alberta Climate Change Plan emissions are forecast to increase to a target range of 205-230 MTs by 2020. Alberta claims that their plan can reduce provincial emissions to a level comparable to the national Kyoto target of 6 per cent below 1990 levels. In reality this would require that Alberta's emissions be reduced to 162 MTs, by 2020. Under the Alberta plan this is achieved by arbitrarily assigning over 94 MTs of Alberta's emissions, 40-45 per cent, to other provinces and the US.

Alberta has no authority or convincing argument for shifting responsibility for that pollution since the emissions are actually caused by Alberta's fossil fuel industry which produces fuel for export to other provinces and the US. Producers of any resource or

product that isn't used in the jurisdiction where it is produced could make the same claim. As a result manufacturers would have no responsibility for any of their environmental pollution. For example, following Alberta's logic, a pulp and paper mill would not be responsible for its water pollution, the country that bought the paper would be responsible. While the Alberta government states that Alberta should not be responsible for the pollution caused by its export-oriented industry, in fact they should be. After all Alberta collects billions of dollars in royalties from that industry and captures enormous economic benefits from fossil fuel exports.

The following graph compares the emissions from Alberta's plan to current and historic emissions and to the provincial Kyoto target which Alberta claims can be reached through their plan.



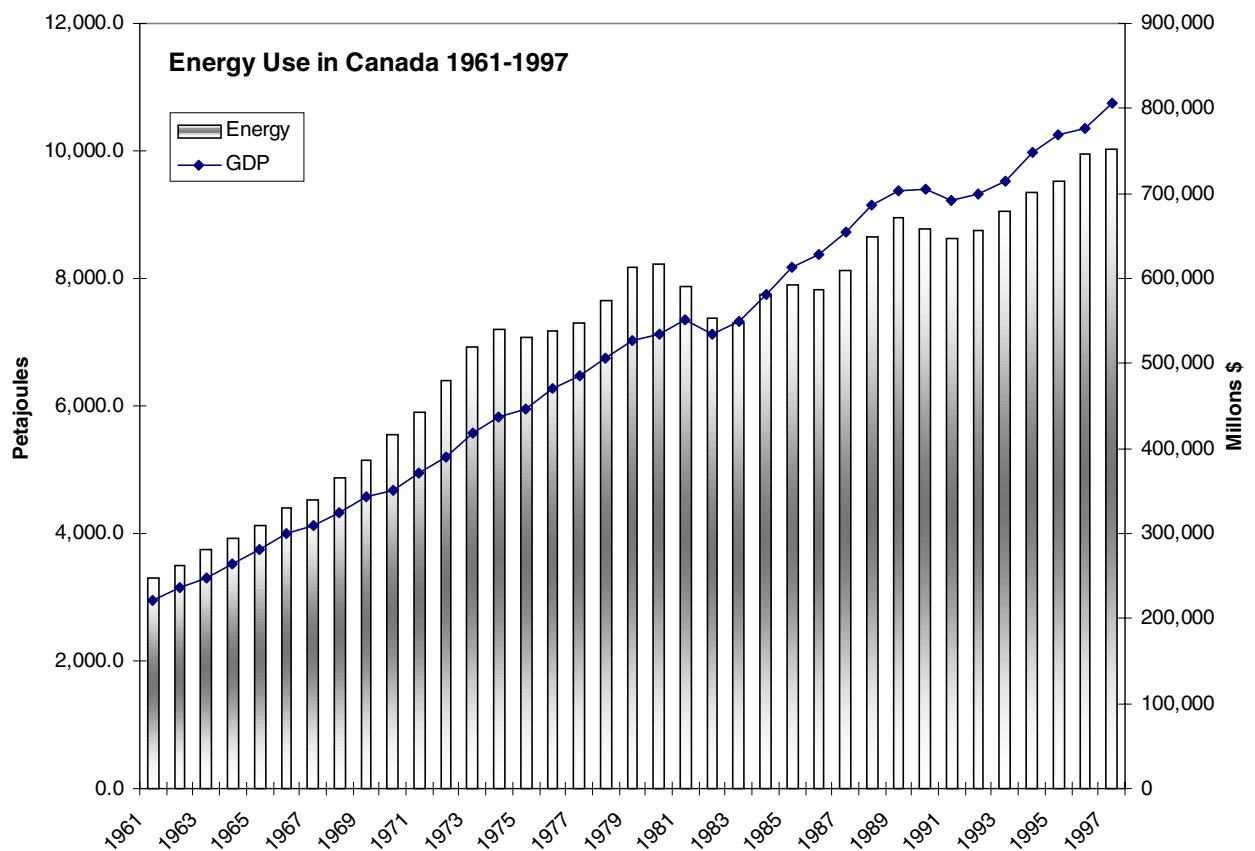
Kyoto: 1990 emissions minus 6 %
2020-AP: the Alberta Plan

Alberta's Emissions Intensity

Another key component of the Alberta plan is to allow the economy to grow faster than emissions. This results in a lower emissions intensity which is measured in tonnes of greenhouse gas per million dollars of provincial Gross Domestic Product (GDP). However this is not new climate change policy. Historical data shows that this improvement in emissions intensity has been occurring throughout the Canadian economy for the past 20 years. While emission intensity is an interesting indicator of how the total economy can grow faster than the amount of emissions, it doesn't provide any insight into how Alberta's climate change initiatives would actually work to reduce emissions.

In 1990 Alberta's emissions were 171 MTs. and GDP was \$80,690 million for an intensity of 2,112 tonnes per million GDP. In 1999-2000 Alberta's economy had a GDP of \$118,920 million, measured in 1997 dollars, while Alberta's total emissions were 214 million tonnes, for an emissions' intensity of 1,800 tonnes per million GDP. While the improvement in emissions intensity appears to be impressive, since it improved by 15 per cent over the ten year period, the environmental benefit is erased by the growth in emissions since actual emissions in Alberta increased by 25 per cent.

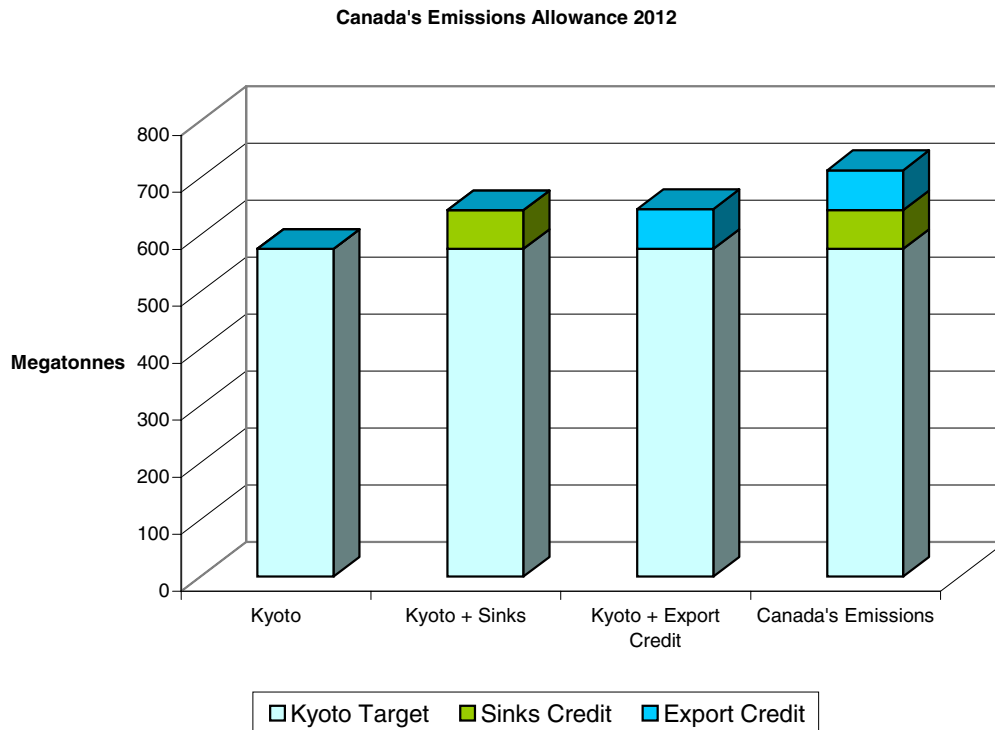
The following graph demonstrates that the improvement in economic performance has been moving faster than energy use throughout Canada since 1985, prior to any initiatives to tackle climate change. It appears that Alberta's plan merely allows this trend to continue in tandem with a creative accounting exercise which arbitrarily allocates Alberta's "upstream" emissions to other provinces.



As this analysis demonstrates, Alberta's plan will not produce greenhouse gas emission reductions. As the historic record shows, emissions would continue to grow in Alberta, even as intensity improves. In addition Alberta's strategy based on offloading emissions to other provinces and the US is doomed to failure. After all how likely or realistic is it to believe that those other jurisdictions will go along with this exercise?

Canada's New Kyoto Loophole – Energy Export Credits

Under the federal plan Option Four includes the controversial cleaner energy export credit – a mechanism to allow more pollution in Canada. By allowing Canada to receive 70 MTs of credit for natural gas and hydro-electric exports to the United States, emissions can grow by the equivalent of three large Alberta tar sands operations, five Ontario coal power plants and two million more SUVs. In fact, by getting this proposed credit for clean energy, we would be continuing to promote the dirtiest fossil fuels, namely coal and tar sands oil.



Export credits also set a bad precedent since many jurisdictions export goods which they would argue help to keep emissions lower than they might otherwise be. These include automobiles, transportation systems, renewable energy technologies, etc. Why would these nations ever allow the Canadian approach without also winning that for themselves, in which case the entire Protocol target and methodology would be undone?

In addition, many countries including Canada export cheap fossil fuels which can, and do, keep renewable energy and efficiency practices out of the market. Will countries whose exports hinder renewable energy and energy efficiency be penalized for such exports?

Allowing Canada to win this new provision and thereby increase its emissions beyond the Kyoto requirements will remove a powerful incentive for Canadian technological innovation. The cheapest measures will be done first and reductions which require investment in newer non-fossil fuel technologies and practices won't take place. Allowing credits for hydro and natural gas exports to the US would result in Canada's emissions increasing well beyond the Kyoto commitment. When combined with the

credits for carbon sinks which Canada negotiated in Marrakech (68 MTs of carbon dioxide), Canada's emissions could increase to 713 Megatonnes, 17 per cent higher than 1990 levels and yet Canada could still claim to have met the Kyoto target.

Conclusion

For many years, Canada has stated and re-stated its intention to act on climate change in a leadership role and in harmony with the international community. The finalization of the Kyoto Protocol in the Bonn and Marrakech negotiations of 2002, the recently completed economic research by the Analysis and Modeling Group, the development of the options paper, and the current round of consultations are all steps that have been awaited as pre-conditions to final adoption of the Protocol.

It is now time for the ratification process to come to a conclusion and for the implementation phase to begin. Further delay will betray Canada's international commitments, damage our reputation around the world, and allow global warming to continue unchecked. We urge speedy action to ratify and to move forward on substantive domestic emission reductions.

For further reference on climate change impacts, measures for reducing greenhouse gas emissions and the economics of climate protection:

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If you are interested in providing feedback on the federal government discussion paper, "Canada's Contribution to Addressing Climate Change", forward your comments to:

Federal Climate Change Secretariat
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Fax: 613-943-5811
Email: consultations@ccs.gc.ca

The federal government discussion paper is available at the National Climate Change Process website: www.nccp.ca