



Montreal Economic Institute

IMPACT OF THE KYOTO PROTOCOL ON THE CANADIAN ECONOMY

ANSWERS FROM CANADA'S MAIN FEDERAL PARTIES TO QUESTIONS SUBMITTED BY THE MONTREAL ECONOMIC INSTITUTE

- 1. On its Web site, the Government of Canada still represents the temperature change curve in a 'hockey stick' formation despite the fact that scientists have discovered many shortcomings in this representation. The federal government even prints this curve on posters that it distributes to schools across the country. The curve was the scientific pillar of the Kyoto Protocol. But the pillar has fallen and even the Protocol's proponents avoid using it today. Do you think the Government of Canada should follow in their footsteps?**

Bloc Québécois: "The Bloc Quebecois firmly supports the precautionary principle which advocates preventive measures when there are enough reasons to believe that an activity can cause serious and irreversible damages to our health or the environment. Even when definitive proof of cause and effect can not be scientifically established, the principle is still applied.

In this perspective, the specific model used to show temperature increases is not important, as there are enough elements showing the heating effect of green house gases in the atmosphere and the possibility of resulting catastrophes.

The rates of temperature increases will possibly have to be reviewed in coming years to refine our scientific knowledge. It will always be appropriate to readjust our green house gas reduction targets. In the meantime, we have an urgency to get started with prompt reductions. Having had a 24% increase of green house gases since 1990, Canada has a lot of work to do in this matter".

Conservative Party of Canada: "The "hockey stick" graph has been discredited and should no longer be used as a tool to demonstrate the presence of climate change. There are other, more accurate, means of illustrating global climate change".

Green Party of Canada: "The Green Party understands that there has been a rise in global temperatures over the last two centuries and that Canadians must be informed of what this means now and what it will mean for future generations. For instance, according to the Arctic Climate Impact Assessment, the effects of climate change on Canada's North will be disastrous. Temperatures are rising twice as fast as the rest of the planet and could increase as much as 7 degrees over the next century. This process is ruining vital ecosystems and Inuit livelihoods, while causing sea levels to rise and melting glaciers to block climate-regulating sea currents. Entire species like the polar bear - a critical link in the food chain - are in peril. Educational tools

such as graphs and models are needed to help explain the fact that the world's temperatures are rising at alarming rates. Green Party MPs would pressure Parliament to adopt a comprehensive plan to reduce emissions through a better presentation of the science behind international and domestic efforts. A better presentation of science will also serve to educate Canadians about the enormous possibilities of becoming a global leader in energy efficiency".

Liberal Party of Canada: "The most detailed assessments of climate change science have been carried out under the coordination of the Intergovernmental Panel on Climate Change (IPCC), which was jointly established by the United Nations Environment Programme (UNEP) and the World Meteorological Organization. The IPCC reports have become the primary scientific basis for policy debate on actions to reduce emissions. The IPCC reports are based on the collaborative work of a very large number of scientific experts from many countries and scientific disciplines. These experts come from academic research institutions and government research organizations. The Liberal government will ensure that these findings are reflected accurately in government information materials".

New Democratic Party: "The NDP accepts the overwhelming scientific consensus on climate change, as articulated by the United Nations Framework Convention on Climate Change. That's why the New Democrats are committed to the Kyoto Protocol and will keep working so our children and future generations can have better air to breathe and better water to drink. In contrast, the Liberals made big promises about reducing greenhouse gas emissions, but failed to act. Liberals promised to cut greenhouse gas emissions by 20%, but have allowed emissions to go up by 24%".

- 2. The Canadian Chamber of Commerce estimated that implementation of the Kyoto Protocol will cost \$30 billion, or 2.5% of the GDP by 2010. Other more alarmist specialists estimate the cost at \$75 billion. A document from the Liberal Cabinet that became public in 2002 predicts a loss of 200 000 jobs and a decrease of 1.5% in the GDP. How much do you believe implementation of Kyoto will cost?**

Bloc Québécois: "If we don't take firm measures when we are still able to do so, no one can predict the magnitude of the consequences that can strike us. The Bloc Quebecois believes that abiding to the Kyoto Protocol will cost much less than the possible consequences of climate change, such as the increase of extreme meteorological phenomena.

In fact, the Bloc Québécois believes that progress in reducing green house gases will give Quebec more economic advantages. With the Kyoto Protocol, it will become costly to pollute and adopting environmental practices, like many Quebec industries already do, will pay off".

Conservative Party of Canada: "The Conservative Party of Canada believes that a long term, global, and inclusive approach to reducing greenhouse gas emissions is the only tangible and workable solution to tackling the challenges of climate change. We agree with UK Prime Minister Tony Blair that a plan to address climate change must include China, India, and the United States. A Conservative government, in cooperation with the provinces and territories, would address the challenges of climate change by initiating a made-in-Canada plan to reduce greenhouse gas emissions. As part of that plan, we will encourage research and development into innovative energy conservation technologies and alternative energy opportunities. A Conservative government is committed to implementing a 16% federal tax credit for Canadians who use public transit passes for buses, light rail transit or subways. This program is universal, applicable to any transit rider from the student to the senior citizen. The program acts as an incentive to commute via public transit, and is a Made-in-Canada environmental solution which enables us to address the challenges of smog and climate change".

Green Party of Canada: "The cost of implementing the Kyoto Protocol will be determined by the foresight of governments in implementing a model that reflects the enormous potential of encouraging more efficient technologies and practices. Many of the cost estimates cited in the question neglect the role that a more comprehensive approach would play in reducing emissions through a variety of measures such as shifting taxes, subsidies and human resources towards "green collar" jobs detailed in the Green Party's Kyoto plan launched in December 2005. In fact, revenue neutral tax shifts alone - shifting taxes from income, employment and investment onto non-renewable energy resources - would help enable Canada to reach our Kyoto targets without any new spending. In fact, according to the Tellus Institute and MRG & Associates, implementing the Kyoto Protocol this way would bring economic benefits for Canada such as a cumulative net savings of \$4 billion and the addition of an estimated 52,000 jobs in addition to the added environmental and health benefits of cleaner air".

Liberal Party of Canada: "In April 2005, the Liberal Government released Moving Forward on Climate Change: A Plan for Honouring our Kyoto Commitment. The plan outlines the core mechanisms and strategies that the Liberal Government will use to implement the Kyoto Protocol. It is estimated that the approaches outlined will reduce greenhouse gas (GHG) emissions by at least 270 megatonnes annually by 2012. The associated federal investment in the

plan will be in the range of \$10 billion through 2012. The Liberal Government approach to climate change builds on previous approaches and incorporates transparency, ongoing evaluation and learning. We will make modifications and course corrections to our Plan over time, including an annual review and reallocation of climate change spending to ensure that investments are effective and cost-efficient and result in real and verifiable GHG emission reductions. As well, annual reports will be made to update Canadians on our progress, beginning in 2008.

Timely investments in innovative technologies for energy use and production not only have the potential to reduce our GHG emissions but also can open up economic opportunities. Canada's climate change-related investments to date have delivered energy efficiency, energy conservation and cost savings across the economy. It is estimated that Canadian industry is saving \$3 billion per year on fuel costs due to advanced energy management practices. Economy-wide savings in energy costs are about \$12 billion per year, relative to what costs would have been had energy efficiency improvements not taken place. Further action on climate change will see these economic benefits grow".

New Democratic Party: "There is increasingly greater evidence from Canadian and international studies that meeting the Kyoto Protocol target will actually create a significant amount of new economic activity and jobs. The NDP is committed to protect the environment. This is why we prepared a plan to implement the Kyoto Protocol. Our party's Kyoto plan, which is the first that shows how we can meet the climate change treaty's pollution goals within the treaty's timeframe. The plan would create at least 800,000 person years of work".

- 3. Studies confirm that the Kyoto Protocol will have a minimal effect on total greenhouse gas emissions over the next decades and will have no real influence on the evolution of the earth's climate change. We are also told that the Kyoto Protocol is the first in a long line of necessary steps to control global warming. Do you intend to continue this process by signing or supporting the signing of other international agreements to control climate change?**

Bloc Québécois: "For the Bloc Québécois, climate change is the biggest challenge facing humanity and there is an urgent need to act in a determined manner.

In this regard, the Bloc Québécois has very high expectations for the Conference on climate change. We would like to see countries agreeing to negotiate clear and binding objectives for the post-2012 period. The Bloc Québécois is pleased that the recent conference allowed this kind of expectations to be upheld.

The Bloc Québécois believes that Canada has to prove its political will and lead the way by committing to reduce emissions well below the 6% of 1990 levels in its post-2012 plans. The Bloc Québécois proposes that this time, the government works with the provinces to establish common reduction targets for the second stage of Kyoto. According to the difficulties that come up in the 2008-2012 period, the Bloc Québécois hopes that the government continues with a more territorial approach, which according to us, will be more effective and will allow each province to act locally in an adaptive manner".

Conservative Party of Canada: "The Conservative Party of Canada believes that international cooperation is an important component of addressing the long term challenges of climate change and should focus on both mitigation and adaptation strategies. We believe that one of the main flaws of the Kyoto Protocol is that it excludes many highly industrialized countries that contribute significantly to the world's total greenhouse gas emissions".

Green Party of Canada: "The Kyoto Protocol is the only existing international policy tool with clear targets to reduce greenhouse gas (GHG) emissions. It is therefore the only effective way to immediately reduce our dependence upon fossil fuels and embark on a new development path with the cooperation of businesses, the government and society. The Green Party would also look to develop trade, research and development opportunities with international partners including the EU, Asia, and US cities and states who have made significant strides towards lowering emissions affordably and effectively".

Liberal Party of Canada: "While scientists agree that the current warming trend cannot be stopped or reversed, they also agree that it can be slowed down to allow biological systems and human society more time to adapt. Should Canada and the rest of the international community fail to substantially mitigate climate change by reducing greenhouse gas emissions; the results will be catastrophic to the global environment and the international economy. In general, the faster the climate changes, the greater will be the risk of damage. One-third of the world's population (1.7 billion people) currently faces water scarcity; this figure could potentially double over the next 25 years as climate change leads to greater water shortages. As well, increased temperature will exacerbate the loss of 10-15 percent of the world's species in that same time

period. Other effects could include an increase in global precipitation and more frequent and severe weather events.

The Kyoto Protocol represents the first significant step taken by the international community to reduce global emissions and the Liberal Government is actively participating with international partners to ensure that continued action is taken towards this common goal. In November 2005, Canada hosted the historic United Nations Conference on Climate Change in Montreal 2005 from November 28 to December 10. This conference resulted in a major step forward in the international fight to protect the climate and achieve sustainable development. This conference brought together over 180 countries to create the Montreal Action Plan (MAP), a clear road map to the world's future approach to cooperation on climate change. The MAP will be an engine driving energy efficiency and innovations in clean technology that will promote economic growth without increasing polluting emissions.

In addition to setting the "rule-book" for the Kyoto Protocol making it fully operational for the first time, the MAP initiated discussions about the commitments for industrialized countries in the period beyond 2012, when the first period of the Kyoto Protocol ends. It also achieved what many claimed was unattainable - it launched a dialogue on long-term cooperative action on climate change that will involve ALL countries in the UN Framework Convention on Climate Change - including the United-States. Under Canada's leadership, we helped to achieve what many claimed was unattainable - a decision launching a dialogue on long-term cooperative action to address climate change by enhancing implementation of the Convention.

The Liberal government will continue to work directly with international partners to create mutually advantageous strategies to combat climate change. For instance, in December, the Liberal Government signed a Memorandum of Understanding with the Republic of Korea that will see both countries work together in support of new Clean Development Mechanism (CDM) projects. The Liberal government will continue to pursue opportunities to create international partnerships that directly benefit Canadian industries, Canada's environment, and mitigate climate change".

New Democratic Party: "The NDP is very concerned about climate change. The NDP believes the most imminent threat of our time is the looming crisis of climate change, which threatens to create human misery of such scope and natural disasters of such magnitude that it is time for us to keep our promise to the planet and act. That's why we've committed to introducing and passing a Clean Air Act that would undo the damage caused by Liberal neglect and set a firm target - by 2020, Canada's greenhouse gas emissions will be 25% below what they were in 1990".

4. How will Canada achieve the targets established under the Kyoto Protocol? Will implementation of the Accord be accompanied by draconian increases in gas taxes to convince Canadians to streamline their car travel? Will the state limit the number of vehicles per family? Will SUVs be prohibited? Will the state require Canadians to stop heating with oil in favour of electricity? In other words, what concrete measures can Canadians expect?

Bloc Québécois: "The current federal plan is problematic as it does not allow Canada to reach its Kyoto objectives. It applies the polluter-pay principle while multiplying the benefits given to the hydrocarbon industry. It is unbelievable that Canada hopes to meet its reduction targets without including the oil and gas industry, where emissions have increased by 99% between 1990 and 2010. Also the plan is unjust towards Quebec.

For many years, the Bloc Québécois has asked the government to change its approach. From the start, the Bloc Québécois has recommended to distribute reduction efforts on a territorial basis so that each province can be responsible for reducing emissions and can make a just contribution.

In its 2005-2006 election platform, the Bloc Québécois asks the government to sign an agreement with Quebec allowing it to opt out of all federal Kyoto programs with full compensation in order to implement its own regionally appropriate programs to address climate change issues.

Quebec's participation in a Canadian system of tradable permits and targets for large industrial emitters depends on the existence of a process that is just and transparent and which respects the following conditions:

- take into consideration the efforts of Quebec industries which have reduced their emissions by close to 10% since 1990;
- assign more significant reduction targets to oil and gas industries;
- compensation for Quebec's hydroelectric projects;
- apply the polluter-pay principle going beyond the ceiling price of \$15/ton.

The Bloc Québécois also demands the new government to put in place, within the means available, effective measures to control climate change including:

- strict rules for car manufacturing with the aim of improving fuel efficiency;
- rebates with the purchase of environmentally-friendly cars;
- funding for the development of renewable energy, in particular wind power;
- do away with fiscal advantages for oil producers;
- subsidies to organizations helping to achieve Kyoto goals;
- lower prices for public transport passes;
- mandatory eco-labelling for cars

Finally, the Bloc Québécois will ask Ottawa to call, as of 2006, a meeting with Quebec and the provinces in order to set up negotiations to distribute on a territorial basis the reduction efforts that Canada will adopt post-2012".

Conservative Party of Canada: "As mentioned above, the Conservative Party of Canada favours a plan that encourages research and development into innovative energy conservation technologies and alternative energy opportunities. The \$10-billion the Liberals have committed to spending on this plan is just a down-payment on the future billions if they attempt to fully implement this incoherent and ill-fated plan. Canada must curb its greenhouse gas emissions, but it is foolhardy and naïve to think that buying foreign hot air credits and burdening Canadian with other draconian measures will in any way achieve that end. We believe that the best contribution Canada can make to the global effort to curb climate change and reduce pollution is to focus our efforts on developing technologies and strategies aimed at improving energy efficiency and to encourage Canadians and industry to engage in a concerted national effort to increase energy conservation".

Green Party of Canada: "We've already discussed how taxes may be used to move energy consumption to sustainable options such as renewable energy sources, but the same can be said about transportation. By shifting taxes away from income and jobs and onto fossil fuels, producers and citizens alike will be encouraged towards innovative solutions through research and development, conservation as well as more responsible consumption patterns. Better more efficient infrastructure will also help Canadians make the switch to home heating and electricity that is ecologically and economically responsible. For example, compact fluorescent light bulbs use a quarter of the energy of normal light bulbs and last over seven times as long. Given 20 per cent of all electricity in North America is used for lighting alone we can reduce our energy usage by 75 to 97 per cent by changing over to the most energy-efficient lighting. That will free up more energy to be used to power the economy".

Liberal Party of Canada: "In order to meet our climate change objectives, the Liberal Government will use a full range of policy instruments, providing both the resources for significant progress on climate change and the framework for next steps. Budget 2005 provides specific funding using six key instruments:

Market mechanisms - The Liberal Government will introduce an innovative \$1-billion Climate Fund-a permanent, market-based institution for the purchase of emission reductions and removals on behalf of the Government of Canada, and the Partnership fund to help us work with provinces to determine strategic investments on the basis of mutual environmental priorities, as well as an additional tax incentives, which will allow Canadians to harness market forces in support of our climate change objective to encourage the most cost-effective projects to reduce greenhouse gas emissions while complementing the ongoing development of a market for emissions trading.

Targeted incentives - Budget 2005 reaffirmed the Liberal Government's commitment to quadruple the Wind Power Production Incentive to 4,000 megawatts and further extend this incentive to other renewable energy sources. Last fall we tabled legislation that will set aside \$1.04 billion has been set aside to assist low-income households - as well as public institutions such as hospitals and schools - to make them more energy-efficient. Prior to this, the Liberal Government will also quadruple the number of homes to be retrofitted under the EnerGuide for Houses Retrofit Incentive program from 125,000 to 500,000.

Tax measures - The Liberal Government will establish a new accelerated capital cost allowance that will only be considered for investments in green technology. This will increase the incentives for investment in efficient and renewable energy generation equipment.

Public infrastructure investment - The Liberal Government will make major investments such as the additional \$300 million we allocated to the Green Municipal Funds in Budget 2005 and the dedication of the \$5-billion gas tax transfer, over five years, to support sustainable infrastructure, and \$800 million we have allocated for public transit.

Investment in innovation - The Liberal Government will dedicate \$200 million for the development of a Sustainable Energy Science and Technology Strategy, and will extend existing measures to develop and commercialize leading-edge environmental technologies. We are also expanding Canada's clean energy production through the Wind Power Production Initiative (WPPI) and the Renewable Power Production Incentive (RPPI) to encourage the use of other renewable energy technologies such as small hydro, solar, biomass and landfill gas. Together WPPI and RPPI received \$297 (\$200 million and \$97 million, respectively) over five years in the last federal budget. Another \$295 million in tax incentives was provided to encourage investment in energy efficiency and renewable energy generation.

Regulation/voluntary action - The Liberal Government has pursued agreements with both the large final emitters and vehicle manufacturers to ensure concrete action on the largest sources of greenhouse gas emissions by collaborating on the establishment of real emission reduction targets. For example, the major emitters of greenhouse gases-the LFEs (Large Final Emitters) will be required to lower GHG emissions by 45 megatonnes annually. We also reached a deal with the auto sector that will see GHG emission reductions totaling 5.3 megatonnes each year. Under this agreement, by 2010, the smog-generating emissions produced by new vehicles will be down 90 per cent from the year 2000. By 2007, bus standards will require a reduction of 85 percent from current allowable levels of emissions of NOX and 95 percent for particulate matter levels.

The Liberal Government is committed to learning from past investments, and then reassessing and redirecting funding dedicated to the environment to those measures that best meet the above principles. Budget 2005 formalizes this process by launching a government review of all climate change programs. As a result of these evaluations, resources will be reallocated among existing measures and new measures that target climate change and act as incentives to new consumer and producer behaviour, consistent with the principles outlined above".

New Democratic Party: "Canada's NDP has a plan to help us do better. It shows how we can meet our Kyoto obligations in the timelines of that crucial treaty. It shows how we can create jobs and prosperity alongside sustainability, and shows how we can lead by example in the world - exporting solutions, not pollution, to help humanity develop in a sustainable way.

The NDP plan has five main components:

Energy efficiency: most of the jobs created are in the construction sector, through an ambitious yet proven plan to increase energy efficiency for homes and businesses. By increasing efficiency and retrofitting existing buildings, Canadians can live as usual but use energy better. Among the

innovative ideas are model building codes, loan guarantees to home-owners and using funds generated through selling emission credits to help businesses pollute less.

Renewable energy: to decrease reliance on fossil fuels, Canada must increase support for non-polluting renewable energy such as wind, solar and tidal power, and help coal-dependent provinces receive cleaner hydro power through new electricity grids. Among the innovative ideas are large increases in wind power use (about 10,000 turbines) and solar panels (on 100,000 rooftops, as was done in Japan). In addition, the energy created by large industries would be harnessed and used again through expanding the proven technology of co-generation.

Sustainable transport: in addition to the NDP's long-standing support for helping municipalities with public transit and improving rail, the plan shows proven ways to help transportation pollute less. These include finally bringing in mandatory vehicle emission standards, and joining with California and New England states to create larger markets for cleaner vehicles. New, cleaner cars would be made more affordable through GST rebates, ending the current practice of penalizing people who want to buy greener products.

Green purchasing: in order to help create markets for green businesses and energy, the NDP plan outlines how federal government purchasing choices for energy, equipment and buildings can pollute less.

Respecting taxpayers: The NDP plan would end current Liberal decisions to subsidize the fossil fuels they pretend to want to burn less of, and move those subsidies into renewable, non-polluting fuel. In addition, emission credits would be auctioned off - after fair notice - to large polluters to give an incentive to participate in the energy efficiency and renewable energy components of the plan. Proceeds of the market-based auction would be used to fund projects contained within the plan".

- 5. Increases in emissions are directly related to demographic growth, regardless of the country. That being said, targets set out in the Kyoto Protocol are absolute numbers that don't account for this determining factor. Given our strong demographic growth resulting from immigration, Canada will have to reduce the volume of emissions per inhabitant even more. On the other hand, some European countries experiencing demographic decline would be free to increase their emissions per capita. What do you intend to do to ensure that Canadians are not penalized due to the country's demographic growth?**

Bloc Québécois: "Even if demographic growth poses an additional challenge for Canada in this respect, the Bloc Québécois finds it essential that Canada respects the objectives it adhered to in 1997 in Kyoto.

Moreover, it is important to note that Canada is one of the largest GHG emitters in the world. In 2002, Canada produced 23 tons of GHGs per person compared to the OECD average of 13 tons per person. It also ranked 26th out of 29 countries in the OECD, taking into account the effect of demographic differences. This statistic shows Canada's real lag reducing GHGs. Therefore it is particularly urgent to begin action in this matter and start changing our lifestyles.

The negotiations for Canada's commitments for the post 2012 period will have to give special attention to demographic growth as well as many other key factors such as GDP, weather issues, and the particularities of each territory".

Conservative Party of Canada: "The Liberal government's obsession with oppressive, government imposed targets will hurt our economy and is not the right approach for Canada. By virtue of our climate, Canadians are both a major producer and consumer of energy. The best contribution Canada can make to the global effort to curb climate change and reduce pollution is to focus our efforts on developing technologies and strategies aimed at improving energy efficiency and to encourage Canadians and industry to engage in a concerted national effort to increase energy conservation. On the production side, cleaner burning fuels such as natural gas are important to bring into the North American market. The Conservative Party is interested in practical solutions that encourage Canadians to make choices that will improve our environment and not stunt economic growth. We are very excited about our plan to provide a 16 per cent federal tax credit for all Canadians who buy transit passes for buses, light rail transit or subways".

Green Party of Canada: "As stated above, the Green Party's plan will actually create jobs and boost the economy by improving efficiency and encouraging economic activity. However, penalties and progress must be seen in larger terms than economic growth in order for Canada to really improve our overall quality of life. In making a commitment to ensuring healthy ecosystems and communities, there will be winners and there will be losers. But overall, the Green Party plan to reduce emissions will benefit rather than penalize Canadian citizens through foresight, innovation and cooperation. The risks of maintaining the present course are far too great to do otherwise".

Liberal Party of Canada: "Proportionally, increases in greenhouse gas emission are not directly related to demographic growth; but instead, historically they are more closely linked to economic growth and industrial development. Canada is the world's third largest per capita emitter of these

gases, behind the United States and Australia. In terms of population growth, by increasing energy efficiency and lowering emissions through things like renewable energy production, Canada can lower its per capita emissions substantially in a manner that will accommodate its projected population growth. Our Climate Change plan will allow us to manage both the challenges and benefits of economic and population growth in a manner that spurs industry and new technology and creates employment and new business opportunities".

New Democratic Party: "There is huge potential in reducing emissions through energy conservation, energy efficiency and switching to green power. If realized, this will not only help the economy, it will more than offset any emission increases due to population increase".