



Student Essay Contest 2007 Winners

Who should have the greatest responsibility for
reducing Canada's greenhouse gas emissions:
governments, industries or individuals?

February 2008

Canada*West*
F O U N D A T I O N

STUDENT ESSAY CONTEST

The second annual Canada West Foundation Student Essay Contest invited students attending western Canadian post-secondary institutions to write an essay in response to the following question: Who should have the greatest responsibility for reducing Canada's greenhouse gas emissions: governments, industries or individuals? A \$5,000 cash prize for the best essay was the incentive.

Our thanks are extended to the 150 students from across the region who submitted essays.

The Canada West Foundation congratulates Kaija Belfry of the University of British Columbia for the winning essay that appears in this document. Congratulates are also due to Tyler Bryant of Simon Fraser University and Francois de Soete of the University of British Columbia; their essays have received honourable mention and also appear in this document.

The three essays present readers with some very interesting answers to the question of who should bear the greatest responsibility for addressing climate change and are a valuable addition to this critical debate.

The question for the next round of the Canada West Foundation Student Essay Contest is: **"Should Canadians switch to a system of proportional representation?"** Contest details can be found at the end of this document.

Funding for the Student Essay Contest has been provided by the Canada West Foundation Founders' Endowment Fund. Many thanks to Dr. Kari Roberts for managing the 2007 Canada West Foundation Essay Contest.

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Who SHOULD have the greatest RESPONSIBILITY for REDUCING Canada's greenhouse gas emissions: governments, industries or individuals?

WINNING ESSAY

You Alone Can't Save the World

By Kaija Belfry

When I was a little girl, my fourth grade teacher told our class that, when it came to the environment, one person could make a difference. We should recycle, avoid paper towels and turn off the tap while brushing our teeth. Some fifteen years later, now a grad student studying environmental issues, I heard this familiar refrain from the keynote speaker, Justin Trudeau, at a youth conference I attended in Toronto in May 2006. While I do not mean to disparage either Mr. Trudeau or my grade four teacher, this claim is unreasonable.

In an era when our most basic, banal activities—including driving, lighting our homes, and even eating—contribute to the substantial build-up of greenhouse gases in the atmosphere, can a single individual, or corporation for that matter, have a significant impact? Climate change is a collective problem and it will require a collective solution. Individuals and corporations cannot be expected to take on this mammoth problem, if our collective institutions—governments—fail to support us in this endeavour.

The focus on individual action by government and environmentalists suggests that there are specific things that we, as individuals, can do by ourselves to prevent climate change. This is, of course, somewhat true. Each of us has the power to decrease our own environmental impact by, for example, switching to lower energy light bulbs, choosing to take the bus when possible and turning off the lights and heat when not at home. But will this be enough? Even if most of us made a significant effort to go green, it seems illogical to suggest that we could combat climate change ourselves when so much of our society is organized around fossil fuel consumption.

My own life provides a good case in point. My grad student poverty keeps my emissions low in Vancouver (I can't afford a car and use public transit daily). If, however, I want to visit my boyfriend in Cochrane, Alberta, I have no choice but to use high carbon transport. Normal passenger trains are unavailable from Vancouver to Cochrane, so I must fly or drive. Once I arrive in Cochrane,



Kaija Belfry is a PhD student at the University of British Columbia. Originally from Prince Edward Island, she left home in 1999 to work as a House of Commons Page in Ottawa. As a result of that and subsequent experiences, she has had numerous opportunities to observe Canada's political system in action and believes strongly in the role of government in finding solutions to collective problems. A 2003 Globe and Mail article describing the rate of decline in arctic ice sparked her concern about climate change. Profoundly disturbed by the evidence presented, she went on to complete a Masters degree in Development Studies at Dalhousie University with a thesis focused on Renewable Energy Policy. She now studies business-government relations on climate policy in Canada at the University of British Columbia.

near Calgary, there is no public transit from Cochrane to the library at the University of Calgary, which is only half an hour away by car. Am I to blame for my high emissions during these trips? For that matter, are all the people of Cochrane derelict

in their environmental duty for living away from the city where many work?

Such a suggestion seems both extreme and unfair, but it is the logical extension of the focus on individualism in climate change policy. While changing individual habits will be important in mitigating climate change, if the overall structure of society supports carbon-based activities (our governments build new highways regularly but high-speed trains remain unlikely), how can the individual be expected to decrease the country's emissions substantially?

I cannot help but feel that corporations labour under the same paradox. Over 40% of Canada's emissions come from "large final emitters" such as the resource extractors and electric utilities and, consequently, these organizations must decrease their emissions if Canada is going to tackle climate change. Companies must be willing to invest in new technologies and change the manner in which they do business. Some companies have already begun this process through projects such as General Electric's Ecomagination program. These sorts of voluntary actions will undoubtedly be important in reducing emissions.

Yet, can we expect companies to act independently, out of sheer altruism, when such action often incurs greater cost? Charles Lindblom once wrote that the market was like a prison. He meant that market forces imprison the policy choices of governments due to the importance and structure of the economy in capitalist

democracies. It could equally be said, however, that the market imprisons industry: generally, the company that substantially increases its costs above those of its competitors will suffer and the company's CEO may face a shareholder revolt. Is it fair, then, for governments to rely completely upon voluntary initiatives in our quest to decrease greenhouse gases?

Lindblom argued that the economy had an inducement structure: companies respond to the inducements within the system. This could explain why, when major changes in economic activity are required, individuals and sometimes industry have turned to government to create the inducements necessary to allow all companies to adapt on an equal footing. Otherwise, we're expecting corporations to act against their economic interest, which seems a little unfair to me.

Governments can help change the inducements within society through a number of mechanisms, including spending, voluntary programs and regulatory implements. Spending includes funding for capital projects. In many areas of Canada, greater spending on public transit, for instance, is definitely required. Government voluntary programs refer to government-led initiatives that lack any enforceable commitments, like the late One-Tonne Challenge, as well as negotiated voluntary agreements between government and industry. The latter is also often non-binding. Regulation, on the other hand, can be broadly defined as state-created rules

backed by penalties and may include certain taxes. Successive Canadian governments have generally focused on voluntary initiatives, with some spending programs, preferring not to take any steps perceived as heavy-handed.

While many individuals and corporations support the government's focus on voluntary initiatives, I argue that the state's unwillingness to employ all the tools at its disposal has led to unfair expectations being placed on individuals and corporations. How can I decrease my carbon footprint when our transport systems are so limited? How can a corporation make serious adjustments at considerable cost, if its competitors are not forced to do the same? The structure of our society creates inducements for certain activities while penalizing others.

It is time for government—our collective voice—to begin changing those inducements and stop expecting that we should voluntarily take action that undermines our own material good. After all, climate change will penalize all of us.

Who SHOULD have the greatest RESPONSIBILITY for REDUCING Canada's greenhouse gas emissions: governments, industries or individuals?

HONOURABLE MENTION

Hoping for the Best but Planning for the Same: The Crucial Role of Government in Reducing Greenhouse Gas Emissions

By Tyler Bryant

Wishful thinking is not a sound foundation upon which to address one of the most important environmental, political, social, economic and technological challenges in human history. Unfortunately, emissions abatement strategy in Canada has heavily emphasized wishful thinking as a policy option. Hoping for individuals and businesses to change their actions and use less energy from fossil fuels has been a policy failure and is clear evidence that wishful thinking will not work.

Canadian emissions have been rising since the signing of the Kyoto Protocol in 1997 and show few signs of leveling-off, let alone falling. Federal and provincial policies to reduce emissions concentrate on insignificant incentives, idle threats of regulation and voluntary programs like the One-Tonne Challenge. These policies provide no certainty and only hope that individuals and businesses change their actions. Predictably, this lack of leadership

and off-loading of responsibility to businesses and individuals has not had any real impact upon emissions abatement and clearly demonstrates that government must be the leader in implementing emissions reduction programs.

Some would suggest that because individuals and businesses produce and consume fossil fuels, they should be responsible for the environmental damage of their actions. Making the polluters responsible for their emissions makes the most moral sense but, so far, the polluters aren't paying. The reason they are not paying is because there is no framework to do so. Real policies are the only way to implement a framework where the polluters are responsible for their emissions. Otherwise, it is unfair to criticize individuals and businesses for behaving in ways that are independently advantageous within our current legal and social framework. It is nice to think of a world in which individuals behave with more environmental altruism



Tyler Bryant is a student of Public Policy at Simon Fraser University. He is interested in resource, climate and development policy and is finishing his thesis on restructuring British Columbia's electrical supply sector. Tyler plans on working with the federal government as a policy analyst and doing development work in South Asia, particularly Bangladesh.

and businesses attempt to maximize social benefits instead of profits. Unfortunately, we cannot hope for this to happen with an impending crisis that will have significant short, medium and long-term costs.

Individuals and business have failed to reduce their emissions for many reasons that they should not be blamed for. It is wrong to assume that the average person will have even a basic understanding of energy and waste flows in our economy. I don't think that individuals should be responsible for failing to understand that turning on an extra light potentially contributes, in some small way, to more fossil fuels being combusted. We have designed a system where the outputs of our consumption are removed from the inputs. Nobody wants a coal plant burning in the middle of the city so political institutions and markets have helped to shield us from our waste. Similarly, it is a stretch to assume that individuals will understand abstract concepts like tonnes of carbon emitted from their automobiles. As a result, individuals are, for the most part, disconnected from the visual and environmental consequences of their energy consumption.

Businesses will not reduce their carbon emissions if it does not make economic sense for them to do so. It is unrealistic to expect business to begin adopting costly abatement measures without adequate returns for shareholders. And businesses are not moral agents. Governments have always had the responsibility to regulate businesses in order to ensure that they are not responsible for more social costs than benefits. For example, business didn't voluntarily begin abating sulfur emissions to combat acid rain in the North-Eastern United States nor did business voluntarily decide to stop producing ozone-depleting CFCs. Government provided the regulatory

leadership for firms to stop emitting pollutants. Reducing pollution became economically feasible once government implemented financial penalties for polluting.

Individual and corporate behaviour can be changed using a portfolio of various policies that regulate the most polluting behaviour and penalize carbon emissions at the margins. Imagine a policy framework where technological standards are tightened and continually evaluated to ensure that low efficiency consumer goods are phased-out quickly and high efficiency goods are adopted as soon as they become economically feasible. Making high efficiency technologies economically viable would internalize the cost of environmental damages from carbon emissions into the price of the good or service.

Regulating the most carbon intensive behaviour so that it is more environmentally benign is another crucial responsibility of government. This could mean capping emissions and using market mechanisms to efficiently ensure compliance or by simply prohibiting the most carbon intensive processes. Unsurprisingly, jurisdictions with the most pronounced emissions abatement have used various forms of regulation and taxation.

It is important not to confuse the means and the ends of climate abatement. The ends of abatement, from a policy perspective, are people and businesses behaving in ways that emit less total carbon into the atmosphere. Because we are the agents for change does not imply

that we also bear the responsibility to act. We need to be bound by a useful policy framework that guides our actions; otherwise we will not behave in ways that will reduce our aggregate emissions. This framework for human behaviour may be pessimistic but it is a safer alternative to thinking wishfully that individuals will just start behaving in a more environmentally conscientious way.

Governments need to provide the right policy framework that binds actions with environmental consequences. Incorporating real policy levers like regulations and taxes is the only way to do this and government is the only institution with the legitimacy and authority to implement these measures. Therefore, the greatest responsibility to reduce emissions falls on government to design and implement a policy portfolio that promotes real changes in the way people and businesses use fossil fuels. Hoping that individuals and businesses both have the ability to understand the effects of their actions on emissions and then make a complete shift in the way they act is a model for failure and is potentially dangerous. We must not give up hope for individuals and businesses to pollute less but we must also plan for individuals and businesses to pursue a business as usual approach.

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HONOURABLE MENTION

Escaping the Greenhouse Gas Prisoner's Dilemma: A Government Solution

By Francois de Soete

When dealing with a problem like greenhouse gas emissions, individuals and industries alike can help. Only governments, however, can make sure that individuals and industries do help. That is, individuals and companies can decide to collectively reduce greenhouse gas emissions, but without mechanisms that ensure compliance, this type of collective action becomes a prisoner's dilemma and some will inevitably "free ride" on the emission cutting efforts of others. The federal government, in consultation with key industries and provincial governments, must therefore take the greatest responsibility for reducing Canada's greenhouse gas emissions by not only implementing an emission reduction strategy that protects Canada's international competitive advantages, but also by ensuring domestic compliance.

Placing the heaviest burden of responsibility for reducing greenhouse gas emissions on individuals seems at first glance appropriate, given that greenhouse gas emissions are a staple of personal consumption and industries to a large extent respond to demand. This line of thinking suggests

that we are collectively responsible for changing our consumption patterns, which would ideally also force industries to reduce output. While we must all do our share to reduce emissions, such efforts can only come to fruition when government-enforced compliance mechanisms are put in place. Without enforcement, collective efforts lead to a prisoner's dilemma, where each of us is better off by reaping the benefits of reduced greenhouse gas emissions without contributing to the reduction process.

The international arena illustrates just how problematic collective action is without effective enforcement mechanisms. Despite existing international environmental regulations, a handful of "pollution havens" (states that deliberately minimize environmental regulations within their borders to entice foreign capital) spur a "race to the bottom." That is, the absence of a supranational government enables individual states to host foreign-based high-pollution production facilities. Not only do such states contribute nothing to broader international pollution reduction efforts, but they also gain a

Francois de Soete graduated Summa Cum Laude with Bachelor of Arts degrees in History and Political Science, and went on to complete a Master of Arts degree in Political Science. Francois is now a Ph.D. Candidate at The University of British Columbia, where his academic interests focus on environmental ethics and political philosophy.

competitive advantage in terms of international capital flow. This leads other states to reduce their own environmental standards in order to attract foreign capital, and a race to the bottom thus ensues.

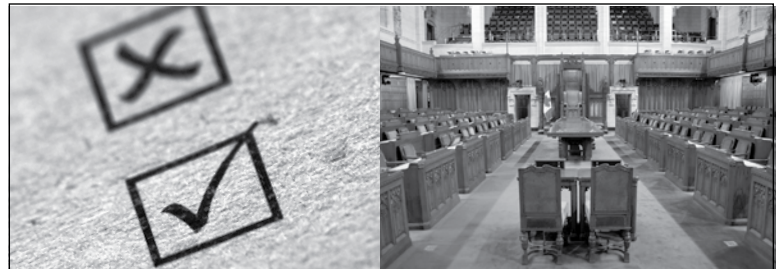
In the Canadian context, then, individuals and industries may collectively aim to reduce greenhouse gas emissions, but the strategic challenges in collective action efforts place an onerous burden on Canadians without any guarantee that everyone will do their share. Further complicating matters is the fact that reduced greenhouse gas emissions would constitute a public good that cannot exclude those who do not contribute to it—and this type of public good can emerge without the cooperation of any one individual's

efforts. As such, free riding becomes the most profitable course of action.

Government intervention is the only way to eliminate this kind of collective action dilemma. Government intervention must, however, strike a fine balance. On the one hand, weak regulations and oversight can instigate defection and free riding, thereby rendering Canadian emission reduction efforts ineffective. On the other hand, excessive regulations can motivate Canadian industries to relocate abroad to countries with less stringent environmental regulations, thereby only reducing greenhouse gas emissions produced in Canada while actually increasing greenhouse gas emissions produced by Canada.

Government regulations must therefore neutralize the threat of free riding by subjecting individuals and industries to appropriately proportional restrictions, while not impinging upon Canada's competitive advantage in the international arena. The federal government is obviously the only Canadian institution capable of achieving this balance since it not only can pass legislation that applies to all provinces, but more importantly, it can negotiate international regulations that will reduce Canada's greenhouse gas emissions in proportion to reduction efforts by other countries.

Placing the burden of responsibility on the government to reduce greenhouse gas emissions does not, however, preclude individual responsibility. Each of us can reduce personal consumption patterns and thereby contribute directly by reducing greenhouse gases and indirectly by motivating a corresponding decrease in production. More importantly, however, since the government response is so critical for implementing effective reduction strategies, each of us can provide our government with the necessary mandate to implement appropriate regulations and oversight by making it clear that reducing greenhouse gas emissions is in fact a priority.



CANADA WEST FOUNDATION 2008 STUDENT ESSAY CONTEST

\$10,000 IN PRIZES

2008 Essay Contest Question:

Should Canadians switch to a system of PROPORTIONAL representation?

A **\$5,000 cash prize** will be awarded to the winning essay by a **graduate** student and a **\$5,000 cash prize** will be awarded to the winning essay by an **undergraduate** student.

The 2008 Canada West Foundation Essay Contest is open to students attending a post-secondary institution in BC, Alberta, Saskatchewan, or Manitoba as of December 1, 2008.

Undergraduate students: the essay must be between 750 and 1,000 words in length.
Graduate students: the essay must be between 1,250-1,500 words in length.

The essay must be submitted to the Canada West Foundation via email no later than December 1, 2008. The essay must be sent as a standard Microsoft Word file. The author's first and last name, mailing address, phone number, post-secondary institution and field of study must appear at the beginning of the essay. PLEASE INDICATE IF YOU ARE IN AN UNDERGRADUATE OR GRADUATE PROGRAM.

The best essays will be published electronically by the Canada West Foundation. The winning essay and runners-up will be chosen by a panel of judges.

Essays should be emailed to:

CanadaWest
FOUNDATION

Kari Roberts
Senior Policy Analyst
Canada West Foundation
roberts@cwff.ca

See Canada West Foundation website (www.cwff.ca) for full contest details.

Given that greenhouse gas emissions have implications for issues that range from Canadian healthcare to national sovereignty in the Canadian Arctic, reducing greenhouse gas emissions is without a doubt one of Canada's most pressing issues—our government must take responsibility, for it alone can lead us out of the greenhouse gas prisoner's dilemma. ■

About the Canada West Foundation

Our Vision

A dynamic and prosperous West in a strong Canada.

Our Mission

A leading source of strategic insight, conducting and communicating non-partisan economic and public policy research of importance to the four western provinces and all Canadians.

Canada West Foundation is a registered Canadian charitable organization incorporated under federal charter (#11882 8698 RR 0001).

In 1970, the One Prairie Province Conference was held in Lethbridge, Alberta. Sponsored by the University of Lethbridge and the Lethbridge Herald, the conference received considerable attention from concerned citizens and community leaders. The consensus at the time was that research on the West (including BC and the Canadian North) should be expanded by a new organization. To fill this need, the Canada West Foundation was created under letters patent on December 31, 1970. Since that time, the Canada West Foundation has established itself as one of Canada's premier research institutes. Non-partisan, accessible research and active citizen engagement are hallmarks of the Foundation's past, present and future endeavours. These efforts are rooted in the belief that a strong West makes for a strong Canada.

More information can be found at www.cwf.ca.

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