

Canada's Fair Share in a Climate Constrained World

*An analysis of Canada's climate obligations under
the Greenhouse Development Rights Framework.*



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Executive Summary
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Executive Summary

Later this year the world will come together in Copenhagen in a desperate attempt to finalize a new global climate agreement. As recent science makes clear, the stakes could not be higher. Climate change poses a grave threat to us all, and to the world's most vulnerable people in particular. And though time is running out, we have thus far failed to rise to the challenge.

Tackling the climate crisis will require an unprecedented and mammoth effort – both in the scale of the response that the science tells us is necessary, and in the level of international political cooperation that will be required. Frankly, the situation demands an emergency global mobilization, one that must come even while billions of people in developing countries are still struggling to escape poverty.

In Canada, climate change policy has been dominated by short-term approaches that have systematically sacrificed responsible commitments in favor of sectoral interests. The result is that, while many Canadians are responsible global citizens and want their country to play a constructive role on the world stage, Canada's record on climate change has been entirely undistinguished. Frankly, Canada has been part of the problem, not part of the solution.

This is a situation that Canada must quickly put behind it. The pre-Copenhagen negotiations have not been going at all well, and Canada can hardly claim to be helping. Indeed, its actions are often cited as evidence that a much stronger compliance regime is necessary. Moreover, Canada, which has long hidden behind the laggard policies of previous US administrations, must now contend with a popular and capable American president who intends to act boldly in the face of the economic, ecological and security threats posed by climate change. In this context, Canadians badly need to take a hard, fresh look at the climate challenge, and at their place in the necessary global response.

1.1 Canada and the global climate negotiations

The global climate negotiations are now in a make-or-break year, and resolving the issue of climate justice – the obligations that wealthy, industrialized countries have to help developing countries adapt to climate change and transition to a low-carbon future – will be critical to the success of any new agreement. In this context, Canada will inevitably be called upon to do its “fair share” to stabilize the global climate.

But what exactly would this mean?

Under the Kyoto Protocol, Canada committed to reduce its GHG emissions to an annual average of 6% below the 1990 level, from 2008 to 2012. It has, of course, completely failed to meet this commitment. Indeed, it has never seriously attempted to do so, preferring instead to temporize, and to rapidly develop its ample supply of highly-emitting “nonconventional” fossil-fuel resources. As a result, Canada's current greenhouse-gas emissions are now 22% above 1990 levels and 29% above Canada's Kyoto target.

In the face of this rather dismal record, the Canadian government in 2007 announced a greenhouse-gas reduction target of 3% below the 1990 levels by 2020. It's not much, and as Canada's climate mitigation policies have been repeatedly shown to be inadequate to this target, there's no evidence that it is intended seriously.

By contrast, the most recent report of the authoritative Intergovernmental Panel on Climate Change (IPCC) called for industrialized countries like Canada to adopt GHG reduction targets of 25% to 40% below 1990 levels by 2020 in order to prevent global average temperatures from rising more by than 2°C relative to the pre-industrial level, which is the commonly-accepted threshold for dangerous levels of climate change.

The low end of this range is now widely considered to be unacceptably lax,¹ even though it is far more ambitious than current Canadian policy. Thus many groups have chosen it as a place to stand and from which to argue for new, more stringent Canadian emissions reduction targets. The Pembina Institute and the David Suzuki Foundation, for example, have recently shown that a 2020 target of 25% reductions in Canada's emissions from 1990 levels is entirely feasible, and would not by any means damage the Canadian economy². And judging by the support that Bill C-311, *The Climate Change Accountability Act*, (which sets the same target) recently won in the House of Commons, a strong majority of Canada's federal Parliamentarians agree.³

But even if Canada were to succeed in cutting its emissions by one quarter, would that mean it was contributing its "fair share" to the global effort to tackle climate change? The answer is no.

1.2 The Greenhouse Development Rights Framework

The Greenhouse Development Rights (GDRs) Framework is a system for quantifying the foundational principles of the UN Framework Convention on Climate Change – that all countries must respond in accordance with their "common but differentiated responsibilities and respective capabilities" – in order to provide a coherent method for determining what level of contribution different countries should make to the global mitigation and adaptation effort. GDRs is designed to support the aggressive, science-based reductions in overall greenhouse-gas emissions that are necessary to avoid dangerous levels of climate change while, at the same time, preserving the right of all people to reach a dignified level of sustainable human development free of the privations of poverty.

The Framework uses a Responsibility and Capacity Index (RCI) to set a country's mitigation obligations as fractions of a global mitigation requirement. "Capacity" is defined as the sum of all individual income in a country excluding income below a "development threshold" of \$20 per person per day. "Responsibility" is defined as a country's cumulative emissions since 1990, excluding emissions that correspond to consumption below the development threshold.

1.3 Canada's GHG obligations under the GDRs Framework

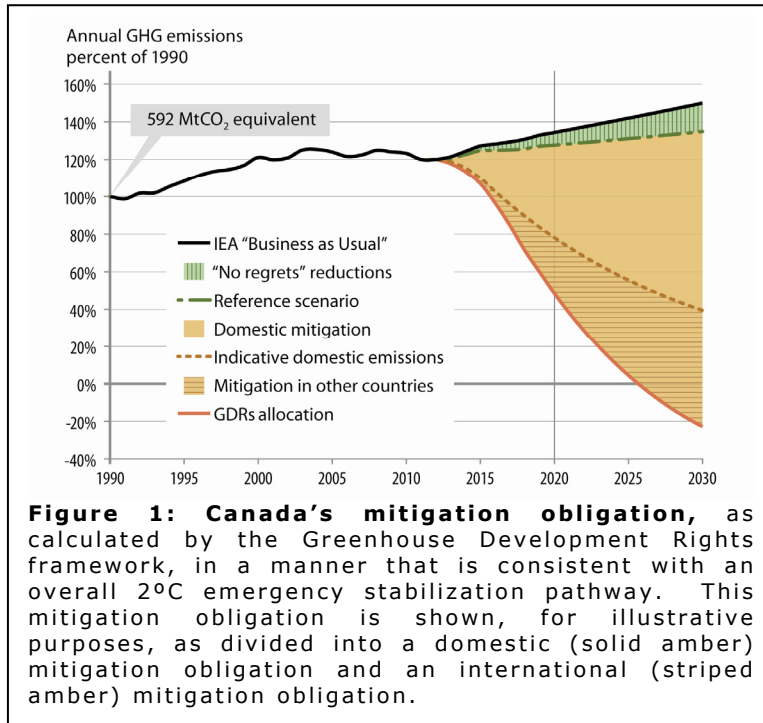
Under the GDRs Framework a wealthy country like Canada has three related obligations: 1) to rapidly reduce its own domestic emissions; 2) to provide its share of the financial and technology support necessary to enable developing countries to make their own rapid low-carbon transitions;

and 3) to support the vulnerable people and communities who will be most impacted by climate change (think New Orleans, or Bangladesh), as they try to adapt to a new, less hospitable world.

More specifically, Canada's faire share obligations within GDRs are:

- 2.7% of the global mitigation requirement or about 470 megatonnes CO₂-equivalent, by 2020 (according to uncertain but conventional business-as-usual emissions projections)
- 2.7% of the global adaptation burden, whatever we finally agree it to be.⁴

On the mitigation side, these obligations translate into emissions reductions targets (see Figure 1)



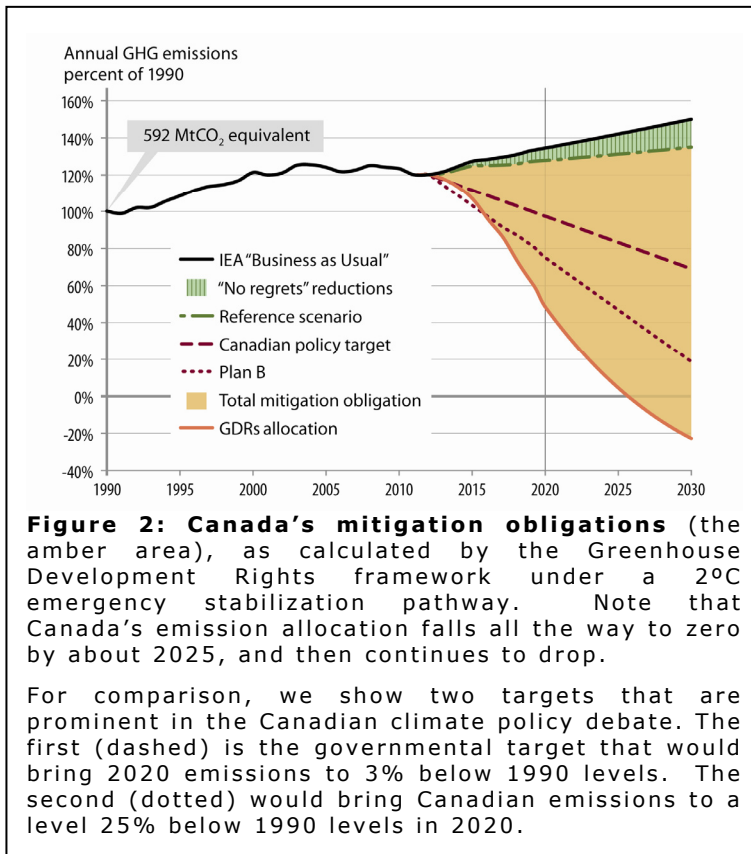
of approximately 50% below 1990 levels by 2020, passing below 100% by 2025. Of course, mitigation obligations of this size cannot be discharged entirely within Canada's borders.* They should, instead, be understood as a share of a global reduction obligation.

Thus Canada's "fair share" under the GDRs Framework will require it to pursue emissions reductions far beyond anything previously contemplated. Indeed, the gap between the GDRs

obligation and the national climate target, as it is conventionally understood, is so large as to make the GDRs number seem politically implausible. However, our analysis clearly demonstrates that obligations on this scale for countries with high capacity and substantial responsibility like Canada are absolutely vital to the creation of a viable and effective international climate regime. They will drive ambitious domestic reductions that ensure wealthier countries free up sufficient environmental space for poorer countries to develop, and equally ambitious international reductions – enabled by technological and financial support from industrialized countries – that ensures this development occurs along a low-carbon path.

* The GDRs framework does not, in itself, specify what fraction of a country's obligation should be met domestically, and what fraction internationally. Here we set the domestic reduction so that it is large enough to put Canada on a path that would reduce its domestic emissions by 90% relative to 1990 in 2050. See Figure 3, below. This domestic reduction could be changed, for example to 80%, but this would *not* change the size of Canada's total mitigation obligation.

How does this compare to Canada’s existing domestic policy targets? See Figure 2, where the



dashed line corresponds to Canada’s current official policy objective of reducing emissions to 20% below 2006 levels by 2020 (the equivalent of 3% below 1990 levels). The dotted line corresponds to what we might call “Plan B.” It is supported by a number of opposition parliamentarians as well as key environmental groups – a net reduction of GHG emissions by 25% relative to 1990 levels by 2020.

Compared to this target, the GDRs allocation (solid line) is clearly challenging, but it reflects the level of ambition required if Canada is to do its “fair share” under an emissions trajectory that is truly consistent with the 2°C

objective.

1.4 Key Recommendations

We recommend:

- That Canada adopt a realistic, science-based approach to the current climate negotiations and reject partial solutions that will fail to deliver a rapid and sustained decline in domestic and global greenhouse-gas emissions.
- That Canada take a moment to stand in the shoes of developing countries and recognize that, to this point, prosperity and development have never come without increased greenhouse-gas emissions and the North must lead by example. The Global South, with its lesser responsibility and its vastly greater need, cannot reasonably be asked to put aside its wariness and pioneer the greenhouse transition.
- That Canada insist on transparent metrics of capacity and responsibility as the best foundations for a new climate agreement; that it set out to help bridge the international divide that is derailing the current negotiations; that it become a genuine partner with the Global South by recognizing that future economic growth must be based on accelerated

de-carbonization and social justice; that it work to ensure the next global climate regime is one that protects and promotes true sustainable development.

- That Canada straightforwardly offer to pay its “fair share” of the global climate change burden, by accepting not only its obligation to rapidly reduce its own domestic emissions but also its obligations to support international mitigation and adaption efforts.
- That Canada adopt ambitious mitigation targets, on the scale of those indicated by the Greenhouse Development Rights analysis, and seek to help establish the international financial and technology-transfer frameworks that will be needed to make such targets achievable in practice.
- That Canada stand firmly on the side of scientific and ethical realism.

¹ This realization has recently been codified in the official position of the Climate Action Network International. See *Climate Action Network – International Position on an Annex I aggregate target1*, April 7, 2009, http://www.climateactionnetwork.org/climate-change-basics/by-meeting/bonn-i-mar-apr-2009/CAN-A1aggregate_target_position7Apr09-FINAL.pdf

² See *Deep Reductions, Strong Growth: An economic analysis showing that Canada can prosper economically while doing its share to prevent dangerous climate change*, a report by the Pembina Institute and the David Suzuki Foundation, December 4, 2008.

³ Matthew Bramley, “Successful vote on Bill C-311, the Climate Change Accountability Act,” Pembina Reacts, April 1, 2009.

⁴ A good place to start is the UN Secretariat’s estimate of 49 to 171 billion \$US in 2030 adaptation costs, made its 2007 report *INVESTMENT AND FINANCIAL FLOWS TO ADDRESS CLIMATE CHANGE*. See Table IX-65 on page 177. See http://unfccc.int/files/cooperation_and_support/financial_mechanism/application/pdf/background_paper.pdf