

Canada's Climate Challenge: How Getting to 2020 will be Tough, Very Tough

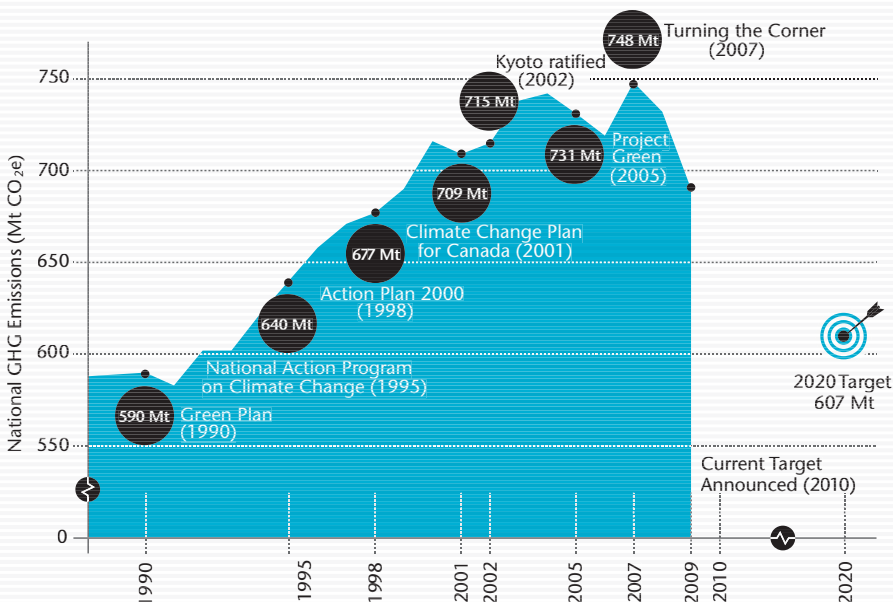
David McLaughlin

The world came to Copenhagen three years ago to agree on a new global climate pact and the world left without one. But a residue of global action on climate change remained – at the country level – and Canada signed up to reduce our emissions by 17 below 2005 levels by 2020. Projections now show Canada with a striking increase in carbon emissions in the years ahead, principally due to growth in the oil and gas sector led by oil sands. That means stabilizing emissions will be difficult on its own while reducing those emissions from what they would have been will be even tougher. Which is why debate over a Canadian energy strategy and the future of pipelines has become so central to making progress on an effective climate policy not just in Canada but in the United States as well. Right now, provincial governments are doing the heavy lifting in meeting the climate challenge but it's still not enough. If we are serious about achieving our climate policy goals, a new approach across Canada is needed. Now.

For 25 years, Canada has wrestled with getting climate policy right, setting eight different climate targets and adopting three major policy approaches to get there. None has succeeded. The first targets were set in 1988; the last in 2010. Except for the high-water mark contained in the Kyoto Protocol, our collective ambition has been a declining one. From a projected greenhouse gas emission target of 470 megatonnes of CO₂e by 2005 (fixed in 1988), our current target is now hoping for 607 MT of CO₂e by 2020, 15 years later. The political and economic realities of meeting national targets continue to overwhelm our global commitment to do more.

Today, Canada's emissions stand at 692 MT, an increase of about 17 percent from 1990 levels, but down about 6 percent from 2005 levels. The last couple of years have seen a stabilizing rather than reduction of emissions, mostly due to slower economic growth and industrial output causing those

TIMELINE OF FEDERAL APPROACHES TO CLIMATE CHANGE AND EMISSIONS TRENDS



Source: Reality Check: The State of Climate Progress in Canada, NRTEE, 2012

emissions. This is better than the alternative, but nowhere near sufficient to meet our 2020 target. As economic growth occurs, so do emissions. All projections show Canada with a striking increase in carbon emissions in the years ahead, principally due to growth in the oil and gas sector led by oil sands. That means stabilizing emissions will be difficult on its own while reducing those emissions from what they would have been will be even tougher.

Energy is the biggest driver of emissions. This covers oil and gas, electricity, and buildings. Transportation – cars, trucks, and buses – is next. So, how we produce and use energy is at the core of any carbon emissions strategy to reduce dangerous climate change. That's why debate over a Canadian energy strategy and the future of pipelines has become so central to making progress on an effective climate policy not just in Canada but in the United States as well.

This makes climate change a political economy story, not just an environmental one. Where emissions come from matters and in a federation like Canada, it matters a lot. The biggest source and growth of emissions resides in Alberta's oil and gas sector. In 2009, Alberta accounted for over a third of Canada's total emissions,

eclipsing Ontario and Quebec. And with significant financial wealth being generated from higher production and exports of Alberta oil sands, the challenge becomes clearer. Alberta alone will not get Canada to its 2020 target, but without Alberta it's impossible.

Looking ahead to 2020, the principal source of emissions growth is clear: oil and gas outstrips all others. This is due to expected increases in oil sands production. Transportation emissions will also rise as we drive more with more vehicles on the road. But not all emissions will rise. Electricity emissions, in fact, have been falling and are forecast to fall further. That sector will see a significant decrease of about 25% between now and 2020 as we move off coal-fired electricity production, add renewables to the grid, and use electricity more efficiently. With the more direct connection between electricity generation and consumer pricing, the incentive to reduce electricity use – plus generate it more cleanly – is having an impact.

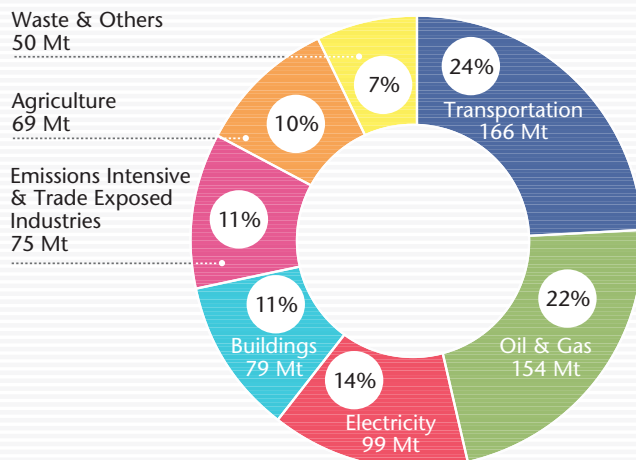
Like the heat-trapping greenhouse gases themselves, climate policy in Canada has had its own life cycle. At times the federal government has led the charge – Kyoto in 1993 under the Liberals and the *Turning the Corner* plan in 2007 under the Conservatives. Both, however, were overtaken by events. Now, the Conservative gov-

ernment has pulled Canada from the Kyoto Protocol and ditched its own climate plan in favour of its current policy of alignment with the United States. While the Liberal government had signed Kyoto, it put very little action policy actions in place to reduce emissions and meet the ambitious target to which it committed Canada. The Conservative government has at least put some actions in place that will result in some emission reductions by 2020.

But as federal government actions have ebbed, provincial actions have flowed. Political and policy vacuums at the federal level in the early to mid-2000s were significantly filled by provincial governments. To understand whether Canada can achieve its 2020 climate target, an understanding of provincial policies and their contribution must be undertaken.

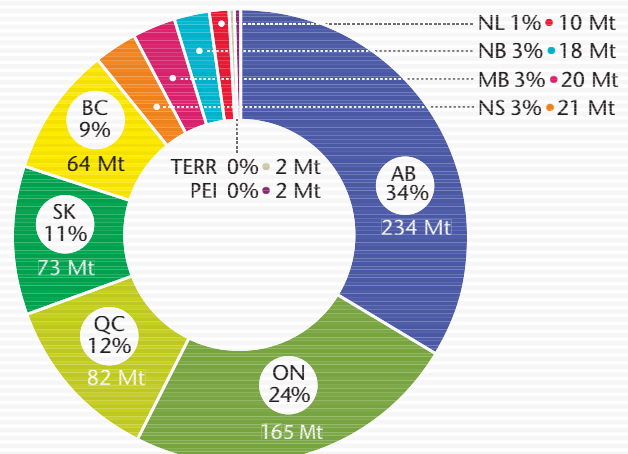
Shortly before its doors were closed by the federal government's March budget, the NRTEE undertook original research into where Canada really stood en route to the 2020 target and exactly how much both federal and provincial actions were contributing. Ironically, that work was commissioned by the federal minister of Environment. It was released in June, 2012. The following is based on that research and shows that while progress has been made, it is not nearly enough to meet Canada's climate policy goals.

EMISSIONS BY ECONOMIC SECTOR



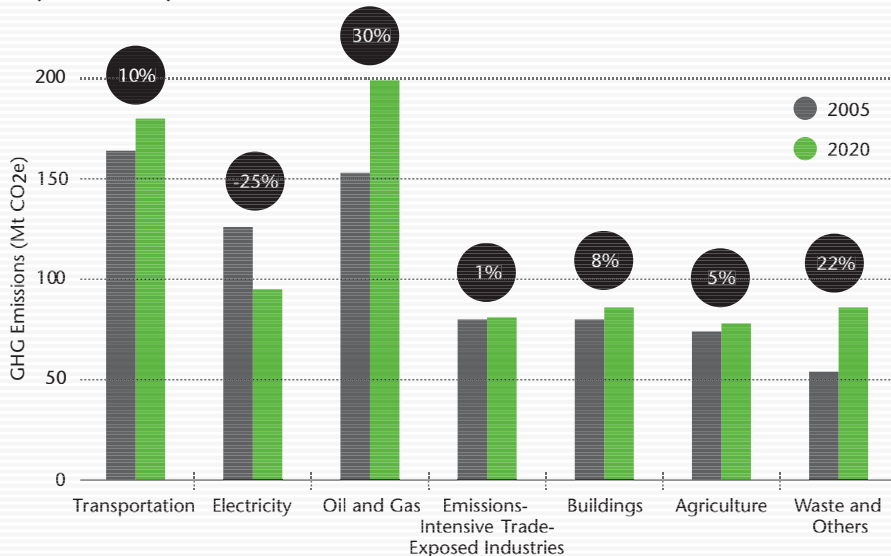
Source: Environment Canada, 2010 data.

PROVINCIAL AND TERRITORIAL CONTRIBUTIONS TO CANADA'S TOTAL EMISSIONS (2009)



Source: Reality Check: The State of Climate Progress in Canada, NRTEE, 2012

FORECASTED CHANGE IN EMISSIONS BY ECONOMIC SECTOR (2005-2020)



Note that the sectoral breakdown in this chart is taken from Environment Canada's Emissions Trends Report, not the National Inventory Report as in the rest of this chapter.

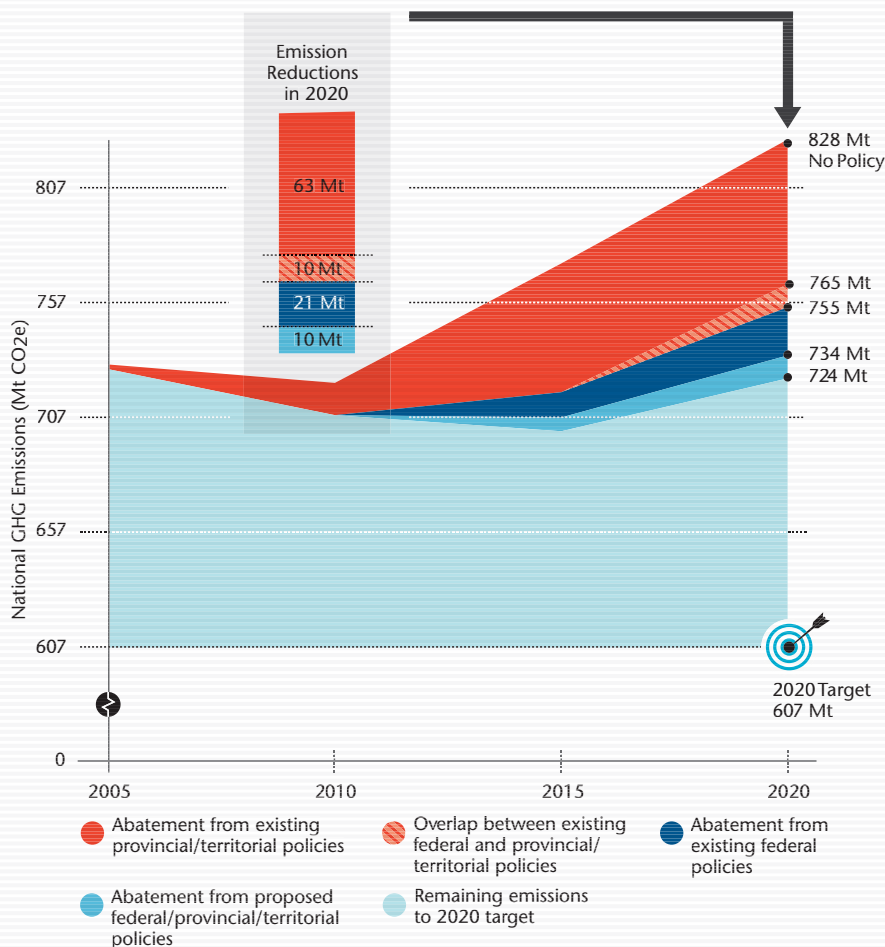
Source: Reality Check: The State of Climate Progress in Canada, NRTEE, 2012

The figure below illustrates the main findings from the report. It forecasts what emission reductions will occur due to existing and proposed government policy measures – federal and provincial – and it shows the ‘gap’ to the 2020 target.

Overall, it shows that Canada can expect to be about halfway to the target by 2020. Put another way, unless new climate policy actions are put in place soon, Canada will miss its 2020 target by just over 50 percent. Instead of being at 607 MT in 2020, emissions will likely be at 724 MT, a gap of 117 MT. Since the report canvassed all possible measures in the climate pantry of governments, so to speak, this conclusion is inescapable.

Every province has a climate change action plan. And every province has its own emissions reduction target. The means to do so are as varied as the sources of emissions among them. Some use forms of carbon pricing, like BC, Alberta and Quebec; all have energy efficiency measures; many are focusing on renewable energy development; elimination of coal-fired electricity in Ontario is a major contributor. While not coordinated, collectively, these provincial actions add up to a significant contribution to national emissions reductions.

EMISSION REDUCTIONS UNDER EXISTING AND PROPOSED FEDERAL, PROVINCIAL, TERRITORIAL POLICIES

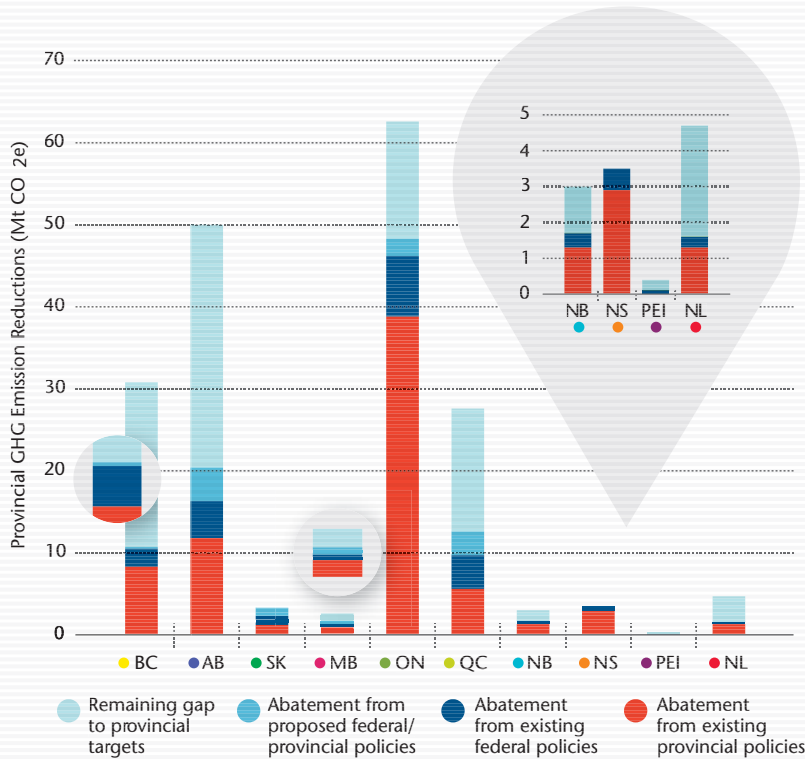


Source: Reality Check: The State of Climate Progress in Canada, NRTEE, 2012

The federal government, meanwhile, has adopted a sector-by-sector regulatory approach, setting performance standards for some industries and products. It has eschewed any form of economy-wide carbon pricing, including the cap-and-trade system for large final emitters it announced as part of its *Turning the Corner* plan.

The NRTEE report examined, for the first time, the contribution by each level of government to GHG emission reductions by 2020. The results were revealing. Looking at both *existing* and *proposed* policy measures by governments (which encompassed everything being considered across the country), the report showed that provincial reductions will account for approximately 75 percent of Canada's emission reductions in 2020; the federal government the remainder. Provincial governments are doing the heavy lifting so far in meeting the climate challenge.

DETAILS ON 2020 EMISSIONS REDUCTIONS AND GAP TO TARGET



Source: Reality Check: The State of Climate Progress in Canada, NRTEE, 2012

Before applauding provincial governments, it is also worth assessing what progress they are making in achieving their own climate policy goals. Here, the picture is less rosy. As the figure shows, only one province – Nova Scotia – appears to be on track to meeting its 2020 target.

Federal policy measures have an effect across the country so they are counted in each province's total, too, just as provincial measures collectively add up to reduce national emissions. This is important since, in theory, if every province just met its own targets, Canada would be well on its way to achieving the overall 2020 target. But coordination of climate policies has never taken root in the country nor has any attempt at climate burden-sharing been attempted. The result is policy fragmentation and inadequate progress.

Time is not on our side here. The longer the country waits to put effective climate policies in place, the closer we get to the target date but the further we get from the target itself. And the cost of getting those emission reductions grows as a consequence.

Canada's governments are no differ-

ent than any other engaged in climate policy. They want the most emissions reductions at the least economic cost. That means less impact on the economy in terms of reduced growth, investment and jobs. It also means at the lowest carbon price possible. Cost-effective climate policy should also be the goal of our governments.

The NRTEE considered the challenge from this perspective in closing the gap to 2020. What would be the most cost-effective means of reducing that additional 117 MT by that time? To do so, all existing and proposed actions to date were grouped into three carbon price per ton bands of low (\$0-\$50), medium (\$51-\$100), and high (over \$100). Then, potential emission reductions to fill the gap were added on, again grouped by carbon price band.

The results show clearly that most of the effort so far has been in the low carbon price band of under \$50 per ton. To meet the target, much more effort in the higher price bands will be required, with over 40 percent of the additional emission abatement having to come from measures costing more than \$100 per ton.

The reason for the higher costs is two-

fold: first, higher carbon prices are needed sooner to incent the technology development and behavioural change required to move off of high-emitting activities to lower ones; second, most of the additional abatement needs to come from the oil and gas sector and that means a real focus on carbon capture and storage, which is expensive. Following on, it is not hard to see that this means most, if not all, of the additional actions need to occur in Alberta.

Climate change is a long-term problem requiring actions now to get results later. It is a classic 'tragedy of the commons' problem where ownership resides with everyone and no one in particular. All have a responsibility to act but no one action is sufficient. This has been the calculus behind Canada's climate policy challenge for two decades now. Targets are set, policy is proclaimed, and actions languish. The results can be seen here.

For Canada to make substantial progress to meeting the 2020 goal, a major new climate policy push would be required. A "C-3" approach among governments that is more collaborative, coherent, and considered is best:

- Better *collaboration* between the federal and provincial governments on policy approaches so national and regional actions work better together.
- More *coherent* policy actions by both levels of government, including looking at how a base carbon-pricing regime, topped up by provincial policies, could more cost-effectively achieve targets.
- More *considered* policy actions based on improved and shared data, forecasting, progress reviews, and outcomes reporting.

In climate terms, 2020 is just around the corner. Getting there will be tough, very tough, based on progress to date. If we are serious about achieving our climate policy goals, a new approach is needed across Canada. Now. **P**

David McLaughlin is the former president and CEO of the National Round Table on the Environment and the Economy. Previously, he was chief of staff to the minister of Finance of Canada.