

# THINKING OUTSIDE THE CLIMATE CHANGE BOX: CHANGING OUR NATIONAL CONVERSATION

Velma McColl

Canada cannot claim to be serious about addressing climate change until we make fundamental shifts in our energy, building and transportation infrastructure. Before we can finance those investments, we must openly debate the consequences of various carbon policy targets and tools. In Copenhagen in December, 191 governments will try to set the terms of a low-carbon future where 80 percent of greenhouse gases will be gone by 2050. The prospects of a global deal this year are minuscule. Closer to home, we're taking steps toward a North American deal on energy and climate change, but before we can proceed, we have to navigate some rough political waters in both Canada and the US.

Le Canada ne pourra sérieusement prétendre lutter contre les changements climatiques tant qu'il n'aura pas modifié en profondeur son infrastructure de l'énergie, du bâtiment et du transport. Avant de financer ces investissements, il faudra toutefois débattre ouvertement des conséquences des cibles et outils des différentes politiques sur le carbone. En décembre prochain, à Copenhague, 191 gouvernements tenteront d'établir les conditions frayant la voie à un monde à faibles émissions carboniques d'où 80 p. 100 des gaz à effet de serre auront été éliminés, cela à l'horizon 2050. Mais la probabilité de conclure dès cette année un accord international est évidemment infime. Plus près de nous, certaines mesures sont étudiées en vue d'un accord nord-américain sur l'énergie et les changements climatiques mais ici aussi la signature d'un tel accord ne se fera pas sans rencontrer d'importants écueils politiques, tant au Canada qu'aux États-Unis.

**F**inding ways to reduce greenhouse gas (GHG) emissions is a global and intergenerational challenge that tests our capacity to realize a dramatically different future, one where we will adapt to changes in the climate while arresting and reversing the impact over time. Without action, we face significant consequences for the physical and economic security of future generations. There is agreement on the need to respond, to realize a low-carbon world, but the path contains some hard political and economic realities that need to be openly acknowledged or the domestic and international policy paralysis of recent years will persist.

Canada's challenges in addressing climate change mirror the global dynamics. We have vulnerable Arctic territories and coastal regions where the challenge is no longer stopping but rather living with the inevitable changes in the physical environment. Politically, we pit regions, industries and energy sources (oil sands, coal, natural gas, hydro and renewables) against each other. We try to create new tech-

nologies or business models while struggling with how to preserve and grow our traditional manufacturing and resource economy and still reduce emissions.

**T**oday Canada, a resource-rich country searching for its place in the new global economy, continues to wrestle with its own energy and climate change approach. A dozen years after signing the Kyoto Protocol, we have still not set binding national targets or implemented effective policy instruments to reduce our GHG emissions. Three prime ministers and seven environment ministers, both Conservative and Liberal, have proposed plans, each released with fanfare and the promises of medium- and long-term reductions in greenhouse gases. But our record speaks for itself. Canada's emissions have grown by 30 percent. So what happened? For the last decade, despite our rhetoric, we fell into the old environment-vs.-economy duality and placed a higher priority on growing GDP,

including our energy and oil sands production, and on security, trade and fighting the deficit.

To be fair, there has been progress even if frustratingly slow. In the 1990s,

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Canada began tentatively rolling out programs and gradually built toward bolder initiatives. Since then, we have invested roughly \$3 billion federally and at least another \$3 to \$4 billion provincially in programs such as energy efficiency, renewable power, home retrofits, research, biofuels, green technology, consumer incentives and green municipal infrastructure. Municipal and business leaders across the country have lowered their emissions and adopted cleaner processes. Consumers have begun to take action. There are many examples of progress but it obviously hasn't yet been enough.

Never mind missing the Kyoto target: the hard reality is that Canada will not hit anything approaching 20 percent reductions by 2020 (our current target) or 80 percent by 2050 (the new international proposal) without our society finding ways to reduce energy consumption, introduce new technologies and finance massive investments to modernize our transportation, building and energy infrastructure. This means changing our personal, municipal and industrial assets and capital stock, much of which was built to last for decades.

If there is a glimmer of hope in all this, it is in the clusters of companies, researchers, professionals and environmental pragmatists who are re-imagining the future, trying to develop ways to change the energy we access, the cars we drive, the products we consume and the buildings where we live and work. But though these may be the shape of things to come, today they

matter only at the margins and get very little public or political attention.

And perhaps that, in part, is what's wrong with our national debate on energy and climate change. Today, our

benchmarks for success in solving an issue that will be part of the lives of our children and their children have been reduced to a confusing scorecard of ever-shifting global, federal and provincial targets. It's impossible for the public to tell what's happening and what options are better — or how they might be implicated. Unfortunately in Canada, our dysfunctional minority Parliament, the regional tensions in our federation and a cynical media make matters worse and often prevent promising but complex options from emerging. And the sharp partisanship of the last six years has poisoned rational debate and obscured public choices. While immediate actions are certainly essential, we need to recognize that transformation on the scale required means 5-, 10- and 20-year horizons to maximize results, which in turn require an injection of realism, some political cooperation and public patience.

This brings us back to tough financial and political choices facing governments, industry and consumers for the foreseeable future. If we are to move past the policy paralysis of the last decade, we might remember Albert Einstein's admonition that "we can't solve problems using the same kind of thinking that created them." This is as true for our political decision-making and public trade-offs as it is for the technical and scientific challenges of climate change.

Before looking at how the global and North American dynamics are shaping up this fall, let's take a closer look at some of the underlying public policy issues.

First, a comment on the level of effort required. The government has agreed that Canada's target will be a 20 percent reduction from 2006 levels by 2020, requiring the permanent elimination of GHG emissions from our economy. This requires us, across our society, to reduce our emissions by an average of 2 percent a year for the next 10 years consecutively — and the longer we wait to act, the higher that percentage goes.

To put this in perspective, the last 2 percent drop in annual energy use was during the 1970s OPEC crisis, and it was not sustained beyond a few years. And if our policy choice, as it is today, is to impose limits only on industry, a smaller number of players must achieve an even higher percentage of annual reductions.

Another issue is the role of regulations in responding to climate change. Over the past 30 years, policy makers have concentrated on tough regulations as a means of achieving a variety of environmental objectives. Experience shows that, once limits are set, industry will seek to avoid penalties, change its behaviour to comply, incorporate the costs and often, through innovation and efficiencies, achieve better results than the intent of the original regulation. These patterns bolster the case for a firm cap on GHG emissions.

However, global solutions of this magnitude require regulations *plus* additional policy instruments to incent or accelerate technology investments on the scope and scale required to meet a 2020 or 2050 target. We might call this environmental regulation 2.0. This brings economic or market-based instruments to bear, the ultimate objective of which is to get companies to "go beyond compliance," create financial flows to stimulate investment and anticipate a progressively stricter set of limits over the next 10 to 40 years. Simple enough in theory; breathtakingly difficult to execute.

Any economic instrument begins with a price for carbon. Which leads to two politically charged questions that we have deflected until now: How will we price carbon to get the desired results? And what impact will it have on consumers?

Experts have offered advice but no government has wanted to openly engage a public dialogue on these questions because the answer to the second is that consumers (read voters and taxpayers) will unavoidably pay more — either directly to governments or indirectly as an embedded cost of their fuel, products and purchases.

The dilemma is clear. Unless we diversify and de-carbonize our energy sources and replace high-emitting products with cleaner ones, we will not significantly reduce GHG emissions. And the corollary is that those energy sources and new products will cost more in the short term because they have a built-in environmental premium. Every political party that is promoting either cap and trade or a carbon tax knows — but is loath to broadcast — that over time it is not only industry but consumers that must pay the real environmental cost of energy.

The economics of setting a price for carbon are material, complex and far-reaching. Canadian bureaucrats and politicians have skirted the issue for a decade, except to offer a backstop price to industry a few years ago to help quantify investment risk. Since then we have struggled with which policy instrument to choose — either a carbon tax or a cap-and-trade system. Both raise another set of questions: Who collects the revenue? From whom? What will the money be used for?

Now that the US has chosen a cap-and-trade policy and a carbon tax is off the table, Canada's inevitable political choice appears to be a cap-and-trade system. It is now the preferred choice of all five federal parties and the

majority of provinces. British Columbia remains an outlier as the only jurisdiction in North America with a carbon tax. However, despite some underlying agreement, the path forward is still not clear.

Here is what is being put into practice across the country today. Alberta has chosen to set a price for emissions (\$15/tonne) for industry and redirect the revenues to technology through an arm's-length agency. Saskatchewan is headed in the same direction. Although the details are not finalized, Ontario and Quebec will adopt a carbon market to set the price with revenues circulating among emitters. British Columbia's carbon tax is broadly based, going to general revenues

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and returned to taxpayers as income tax deductions (currently \$15/tonne, rising to \$30 by 2012).

The current federal government has become increasingly supportive of a trading system, excluding for now a hard regulated cap on emissions, but adding a robust technology fund that would price carbon starting at \$15/tonne and rising over time. It is not yet clear whether government would collect and distribute the revenues but proceeds would go to technology, being reinvested by provinces and possibly sectors. This fund becomes an industry-financed mechanism for reinvesting in new capital stock, sparing government coffers.

This becomes an important fiscal policy point amplified by our recent return to multi-year deficits. Liberal leader Michael Ignatieff has committed to a cap-and-trade program — but has not yet answered the other questions on price, allocation and where revenues will go.

But as these various examples illustrate, cap-and-trade policies come in many shapes and sizes. Since policy development is not an abstract art but an applied science, all these steps and experimentation are good but we're still a few chess moves away from a coherent national or continental policy that addresses a price for carbon and what it means for the future costs of energy — or where we will achieve significant emissions reductions.

In Canada, we appear headed toward a modified cap-and-trade regime federally that sets the initial price for carbon through a technology fund and works cooperatively with provincial systems. An additional note is that the current US cap-and-trade proposal also sets an initial carbon price and promises both a floor and a ceiling to protect industry and consumers from price spikes in a potentially volatile new commodity market.

And here are the rough political waters facing us over the next couple of years. While the price protections seem wise for both consumers and industry, they do not allow the free market to set the price for carbon and therefore can be seen as government intervention. When government intervenes in this way, it can be denounced for placing a hidden tax on energy. This storm is already brewing in the US but it is unclear how the political tension will resolve itself south of the border or whether it will migrate north.

In Canada, we rejected a national carbon tax but haven't yet seen public reaction to a cap-and-trade regime that will also increase consumer costs on energy. Several academics, businesses

and environmentalists, mostly privately and a few publicly, still argue that the most efficient economic instrument to stimulate permanent changes in our lifestyles and economy is a broadly based carbon tax. But no federal politician is going to touch that one, particularly with an election campaign looming.

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The result of all this complexity has been paralysis. We have been caught in the negative feedback loop of low policy literacy among voters, an oversimplified presentation of trade-offs and lack of will among politicians and governments. Climate change is not going to get any less complex, so we're going to have to change the national conversation to break this deadlock.

The energy debate emerging in the US further illustrates the point. The House of Representatives moved forward with the *American Clean Energy and Security Act*, passing it in June. Commonly known as Waxman-Markey, the 1,200 pages touch on four broad themes — clean energy, energy efficiency, green jobs/economic transition and regulations on industry.

While the majority of the bill has support, it is the regulations (targets, allocation, cap and trade) that have quickly become contentious. Fierce regional lobbying resulted in significant concessions and, as a result, Waxman-Markey has a weak GHG target of 17 percent reduction from 2005 levels by 2020. Currently the bill gives away 85 percent of the initial allocation to industry, particularly the coal sector. This results in lower industrial emissions reduc-

tions than proposed under Canada's "Turning the Corner" framework.

Even these relatively weak proposals are sparking town halls and television campaigns across the US opposed to a "government tax on energy" that will hurt industry and consumers. As Canadian experience has also shown, any political commitment on climate

change is formed less along party lines than by the geography and energy make-up of any given state or province. In the US, Democrats from western energy-rich states found themselves more closely aligned with Republicans on the design of targets than with their California colleagues. In fact, eight Republicans voted for Waxman-Markey and 44 Democrats voted against. And the fight in the Senate is likely to be even tougher.

President Obama understands the challenges ahead, noting in an interview, "We did not get into this situation overnight; we're not going to get out of it overnight. By putting a framework in place that is realistic...that protects consumers from huge spikes in electricity costs while setting meaningful targets — what we are doing is changing the political conversation and the incentive structures for businesses in this country. "His view is that rather than "shoot for the moon and not [be] able to get anything done," he wants to use innovation and technology "to accelerate our progress beyond these targets."

It remains to be seen whether Obama can ultimately win the energy issue in the congressional trenches, particularly after the health care war. In the short term, the hopes of passing Waxman-Markey before Copen-

hagen have all but evaporated, possibly delaying regulations until after the 2010 mid-term elections, although it may be possible to get specific energy sections through before the end of the year.

If the US continues to delay passing or enacting specific GHG regulations, Environment Minister Jim Prentice will have a tough choice about whether to proceed with Canadian domestic regulations alone, committing to policies that may or may not be matched by our largest trading partner. Our electoral uncertainty and jockeying will not help us calmly consider environmental and economic options, but there continues to be a strong case that a comprehensive North American arrangement on energy and climate change is in Canada's long-term interests.

It seems that the only thing worse than waiting for the US to act on regulations is not waiting — even under President Obama. Climate change rules will affect energy exports and thousands of products that cross our borders. What the US decides on carbon pricing, emissions trading and equitable treatment of industry absolutely matters to Canada, and we need to be careful not to add another layer of environmental competitiveness and trade complexity to our relationship. But there is a broader way to think about our engagement with the US.

President Obama has been masterful at reframing green issues as a jobs agenda that will deliver a new and secure energy future for America. This changed US political discourse to position action on climate change as synonymous with economic growth. His commitment to invest \$150 billion over the next 10 years in technology change likely helps, making it a key part of the US economic recovery package.

On the international stage, the most recent communiqué from the G8



*Jason Ransom, PMO*

**Prime Minister Harper and President Obama share a light moment during their tête-à-tête in the Oval Office on September 16. The Clean Energy Dialogue was on the agenda of their conversation.**

called for “a shift towards green growth [as] an important contribution to economic and financial crisis recovery.” Leaders recognized the links between energy security, global energy markets and the long-term investment climate, noting G8 countries “are committed to promoting economic recovery together with a significant change

in investment patterns that will accelerate transition towards low-carbon, energy efficient growth models.” Those new growth models can create better policy options, including greater partnership between governments and industry in accelerating and financing the necessary transformation of our capital stock.

Canada has its own emerging technology story. In the last budget, the government invested its own \$2 billion in clean energy and green infrastructure — and some of those projects will be rolling out later this year. While it is too early to tell whether Canada can match the same multi-year green tech or infrastructure

commitment as the US, it is encouraging that we are finally turning our attention to the investment side of the climate change equation. We will also be featuring our clean technology initiatives in Copenhagen this fall and when Canada hosts the G8 in Huntsville next year.

We have already begun to engage the US on the technology side

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through the Clean Energy Dialogue, a forum created in February. The two governments have agreed to focus on practical measures and technology in three key areas: carbon capture and sequestration (CCS) for coal, natural gas and oil sands; a more efficient electricity grid for the flow of clean, renewable generation between our two countries; and joint research, development and deployment work on a variety of other breakthrough opportunities.

In mid-September, Prime Minister Harper and President Obama met in Washington. Energy and climate change were high on the agenda, with the leaders endorsing an action plan to create consistent regulatory frameworks for electricity and CCS, jointly engage technical and industry experts in research and deployment, and work toward a vision of a “low-carbon North America.” Our two countries should continue to broaden and deepen the conversation to include alignment of our regulations, a shared carbon price, the terms of a North American emissions trading system and avoiding protectionist measures specific to climate change.

As we turn to Copenhagen this fall, more than 190 countries will

seek a new global deal for creating a low-carbon planet, with fierce debates expected on whether and how to set new targets to 2020 and 2050, what actions countries will take and what policy instruments are needed. Since Kyoto, countries have struggled with the fact that climate change treaties also impact global trade, poverty and international

development, and this will likely further complicate negotiations.

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The developing world wants to continue on its current economic and emissions growth trajectory for the better part of the next decade, and then begin to drop between 2020 and 2030. Countries that historically emitted and developed their industries along a linear industrial age model (develop, consume, moderate, seek efficiencies) are now faced with converging and competitive dynamics with countries that can skip those steps and may move directly to low-carbon options without the burden of locked-in, high-emitting capital stock. To finance the transition of developing economies, countries are asking for a transfer of technologies

to modernize their infrastructure. Canadians might recognize this request as a global equalization payment.

In the developed/developing world dynamic, there is one bilateral relationship more significant than any other — China and the US. China is now an economic powerhouse that emits more greenhouse gases annually than any other country in the world. It is building power plants and infrastructure at a phenomenal rate. Before the US can pass any global deal through Congress, China must be in. The Obama administration recognizes this and has sent teams of diplomats and negotiators to China over the last year to find common ground, but despite constructive conversations so far they do not see eye to eye.

Unfortunately, the old economy-vs.-environment trade-offs are echoing through the halls of the international negotiations too. Today, it seems the chances of overcoming the stalemate are slim for 2009, although a negotiating framework may be produced to help achieve a new global treaty sometime in 2010.

A final thought — a silver lining in the global recession is that we are rethinking our economies and our lives. Entire sectors are being reshaped and restructured as the global economic ecosystem re-balances. Meanwhile, the rise in greenhouse gas emissions is causing the same magnitude of changes in our natural ecosystem. It seems clear that, before we will make the tough decisions to transform our domestic, North American and global energy systems, we are going to need real change in our political ecosystems as well.

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