



President Obama and Prime Minister Harper in a relaxed moment at the G8 summit at the presidential retreat at Camp David, Maryland in 2012. In their 17 bilateral meetings since 2009, there have been many conversations about the Canada-US Clean Energy Dialogue. PMO photo

Same Song, Different Harmony: Canada-US Climate Policy

David McLaughlin

Canada has aligned its 2020 greenhouse gas reduction target to match that of the United States. Both countries pledged in early 2010 to reduce GHG emissions by 17 per cent below 2005 levels by the year 2020. Canada is currently forecast to get only about halfway to that target. The United States is now projected to either achieve its target or come close as it takes significant new actions on curbing coal emissions. Why the difference in progress? Shared targets do not take into account different energy producing economies and electricity generating mixes. Despite the same emission reduction targets, alignment by Canada with the US has actually stalled progress domestically. Its purpose as a political goal to convey shared commitments has in practice meant that Canada will neither exceed nor move faster than American efforts. But the US is moving faster than anticipated. It is time to rethink this approach.

Copenhagen in the winter of 2009 was meant to be the place and moment where the world took decisive action against climate change. It turned out differently. Gathering at the United Nations 15th Conference of the Parties meeting, leaders could not agree on a coordinated binding approach to reduce greenhouse gas emissions to a point where 2 degrees Celsius of warming—the projected level at which dangerous climate change would occur—would be avoided. Instead, the resulting Copenhagen Accord only required countries to make voluntary pledges to reduce emissions by 2020. Each country would submit its commitment to the UN before the end of January, 2010. Canada duly did so. It submitted the same target as the United States of reducing emissions by 17 per cent below 2005 levels by 2020. Alignment was now policy.

Less than three years earlier, in the

spring of 2007, climate policy alignment with the US was not even on the radar screen. The federal government's *Turning the Corner* plan made no mention of matching our climate policy with that of the United States. Heavy industrial emitters would be regulated and fuel efficiency standards for automobiles and energy efficient light bulbs were to be mandated as part of achieving a new, non-Kyoto Protocol GHG target. That target was to be 20 per cent below 2006 levels. The table at right shows Canada's changing climate targets and how they equate to different baseline years. A diminution of ambition and effort is the result.

The rationale for alignment with US climate targets was both political and economic. President Barack Obama's election in November, 2008, with his commitment to climate change, offered a political lodestone for the government of Prime Minister Stephen Harper to show, first, it cared about the issue and, second, secure political cover in staying close to the new president's efforts. The economic dimension was already rearing itself in the global recession then beginning in the wake of the financial meltdown. Environmental concerns plummet as economic concerns rise among voters in both the US and Canada.

Why move more or faster than the US if they were not prepared to do the same? With the collapse of momentum around global climate talks, aligning with the US seemed a safe anchor for Canadian policy.

Embedded in this economic concern was the integrated nature of the Canadian and American economies. Competitiveness losses for emissions-intensive, trade exposed (EITE) sectors (which represent about 11 per cent of Canadian emissions) and companies in Canada over moving too fast to impose carbon reduction costs loomed large in the debate. Why move more or faster than the

TABLE 1: Canada's changing climate targets for 2020

Target 2020	Kyoto Protocol	Turning the Corner	Copenhagen Accord
Relative to 2005 Levels	N/A	N/A	6% Below
Relative to 2006 Levels	21% Below	20% Below	3% Below
Relative to 1990 Levels	17% Below	15% Below	3% Above
* Canada's Kyoto target for 2012 Official targets for each policy approach is in bold.			

US if they were not prepared to do the same? With the collapse of momentum around global climate talks, aligning with the US seemed a safe anchor for Canadian policy.

With alignment, Canada sidestepped away from its previous *Turning the Corner* plan, which proposed a possible cap-and-trade carbon emissions reduction scheme. Now, a sector-by-sector regulatory approach would be pursued. The first set of regulations reinforced the alignment approach with matching fuel efficiency standards for automobiles and later light trucks. Given the integrated automobile parts and manufacturing sector across the two countries, this made sense.

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Canada's next move in early 2012 was to regulate new coal-fired emission plants for electricity generation. Its motive was clearly stated in the Regulatory Impact Assessment published at the time: "The Government of Canada is also following an approach to climate change that is broadly aligned with that of the US." Coming into effect in July, 2015, the regulations apply a performance standard to new coal-fired generating units and old units that have reached their end of useful life. A cumulative reduction of 219 Mt in CO₂ reductions over the 20-year period from 2015-2035 (16,000 KWH to 4,000

KWH of capacity, appx) is projected with what turns out to be a somewhat tougher standard than the Environmental Protection Agency (EPA) announced in late 2013 that it is putting in place for US new builds.

So far—to 2012—alignment was not unduly hampering Canadian climate policy. However, this changed with President Obama's re-election in 2012 and his renewed commitment to act on climate change in his second term. Two new sets of EPA regulations dealing with carbon pollution from coal plants have followed in swift succession, setting standards for emissions from both new builds and existing coal-generated electricity facilities.

The difference is not so much in approach—both countries are relying on performance standards set by regulation rather than overt carbon pricing regimes—but in focus, scale, and impact. US efforts are focusing on its major source of carbon emissions; tackling both new *and* existing coal-generated plants; and taking it a long way towards achieving its 2020 target. Canada cannot say the same.

Table 2 illustrates the similarities and differences in climate policy approaches by the two countries.

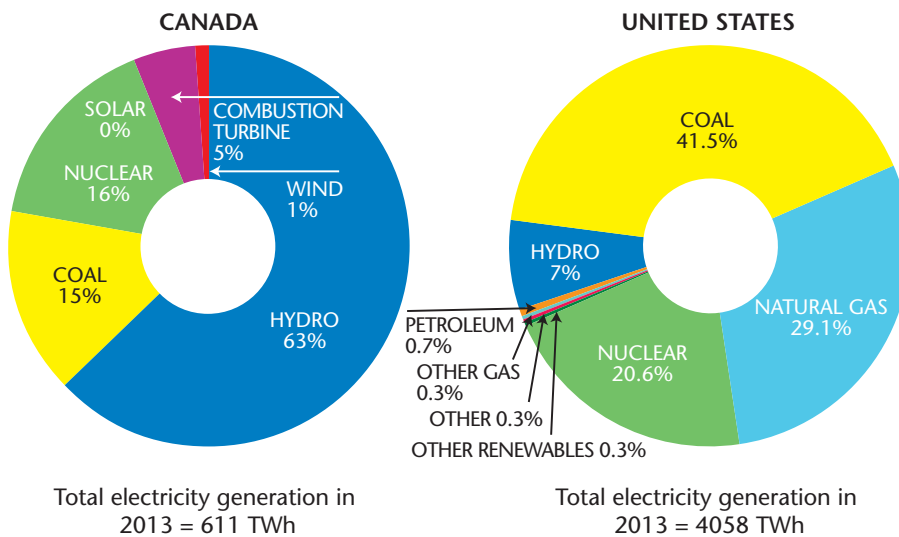
It is clear that Canada has adopted a broad definition of alignment but not necessarily harmonization. Alignment in targets is not proving to be harmonization in timetable, measures, or progress towards targets.

Three factors explain this. Canada simply does not match the US on our energy and electricity producing sectors profile, GHG

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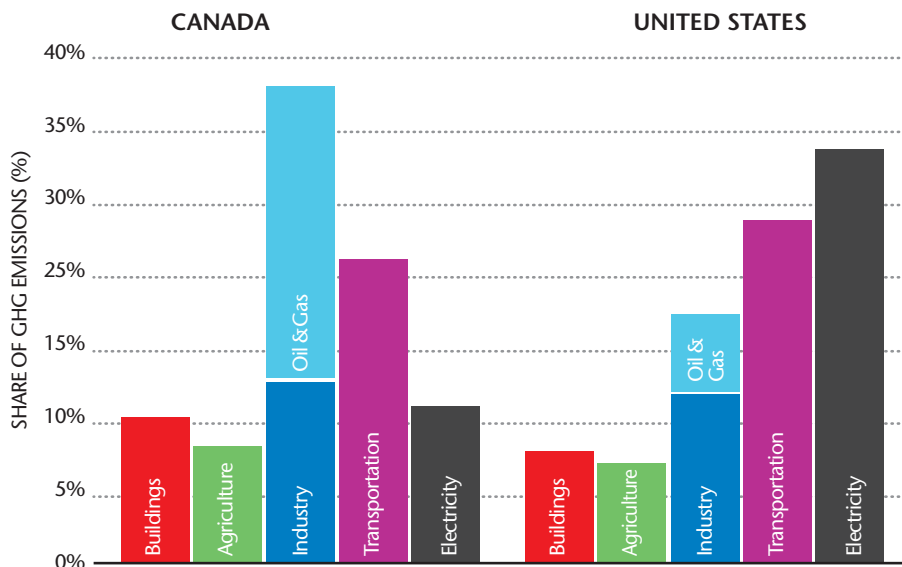
		APPROACH	SECTOR				PROGRESS
			AUTOMOTIVES	LIGHT DUTY VEHICLES	NEW COAL-FIRED PLANTS	OLD COAL-FIRED PLANTS	
Canadian Policy	TARGET: 17% BELOW 2005	• Sectoral • Regulatory	Same	Same	Higher ↑	Lower ↓	✗ 50% to Target
US Policy		• Regulatory • Subsidies	Same	Same	Lower ↓	Higher ↑	✓

FIGURE 1: Electricity generation in the US and Canada by fuel type 2013



Sources: US Energy Administration information, *Electric Power Monthly* and Statistics Canada CANSIM 127-0002. May, 2014

FIGURE 2: 2011 Emissions by sector, Canada and the US



Sources: Environment Canada and US Environmental Protection Agency as published by Pembina "Context for Climate Action in Canada" by P.J. Partington and Clare Demerse.

emissions sources and oil and gas sector growth, and the cost of reducing emissions. These differences were not enough to stifle alignment but have proved sufficient to stall harmonization. Let's take each in turn.

Canada's predominant generation fuel is hydro, accounting for 63 per cent of electricity generation in 2013 compared to only 7 per cent in the US. On the other hand, coal accounted for 41.5 per cent of generation in the US compared to only 15 per cent in Canada.

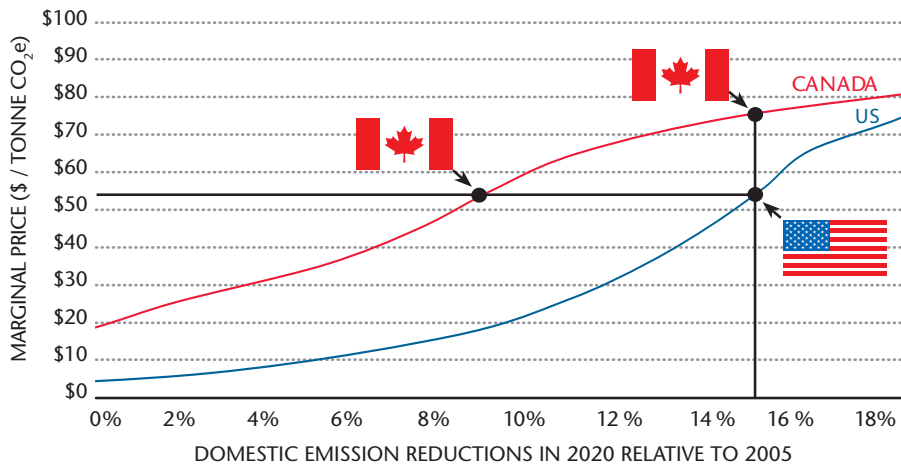
First, energy sources. Canada's predominant generation fuel is hydro, accounting for 63 per cent of electricity generation in 2013 compared to only 7 per cent in the US. On the other hand, coal accounted for 41.5 per cent of generation in the US compared to only 15 per cent in Canada. Still important in Canada, it proportionately contributes over two and half times as many emissions in the United States.

Second, GHG emission sources and oil and gas sector growth. While both countries share the same amount of emissions from transportation (28 per cent) and agriculture (10 per cent) a starker difference emerges on electricity and power generation emissions. In the US, 32 per cent of carbon emissions came from this sector compared to about 13 per cent in Canada as can be seen in figure 2.

Emissions from the oil sands sector are forecast to grow about 65 per cent from 2005 to 2020, virtually swamping growth in all other sectors of the economy. Put another way, emissions from the electricity sector are forecast to decline by 38 Mt while oil sands emissions are to rise by the exact same amount, cancelling any gains.

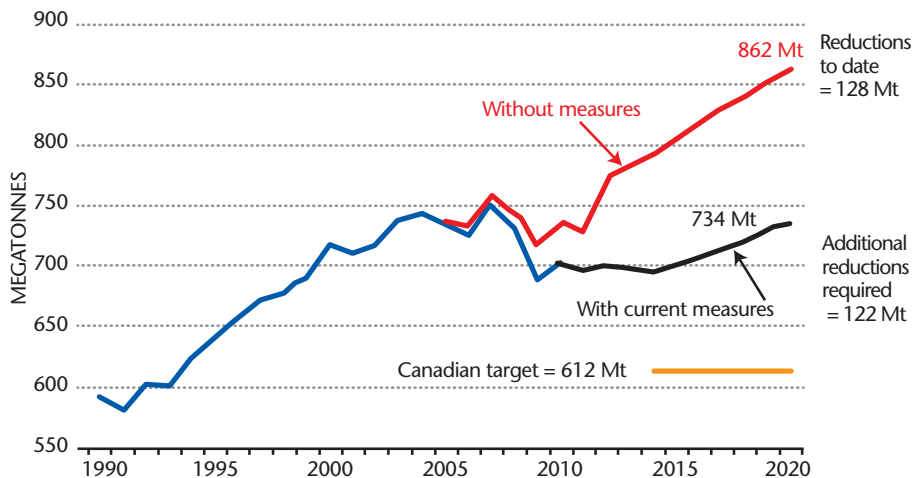
Figure 2 also shows the vast difference between the Canadian and American oil and gas sector emissions. That sec-

FIGURE 3: Canada harmonizes on carbon targets vs. price with US



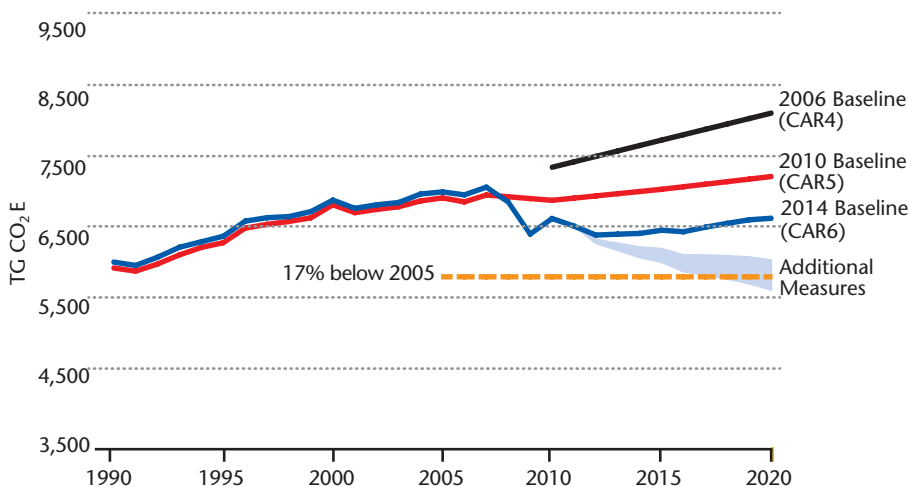
Source: National Round Table on the Environment and the Economy, Parallel Paths: Canada-US Climate Policy Choices "Figure 14c: Canada harmonizes on carbon targets vs. price with US, 2011, pg. 73.

FIGURE 4: Scenarios of Canadian emissions to 2020 (Mt CO₂e)²



Source: Environment Canada, Canada's Emissions Trends, 2013, pg 4

FIGURE 5: Comparison of gross GHG emission projections from previous US climate action reports



Source: United States Climate Action Report, 2014, pg. 20

tor accounts for almost a quarter of Canadian emissions but only about 6 per cent of American emissions. To compound matters, emissions from the oil sands sector are forecast to grow about 65 per cent from 2005 to 2020, virtually swamping growth in all other sectors of the economy. Put another way, emissions from the electricity sector are forecast to decline by 38 Mt while oil sands emissions are to rise by the exact same amount, cancelling any gains.

Taken together, the differing energy and emissions profiles and trajectories add up to the third factor: cost. With most of our energy and electricity production already clean and oil sands growth the single-largest emissions growth sector, the cost of removing a ton of carbon in Canada is higher than in the US. Many (although not all) of the low-cost reductions with a carbon price of \$50 per tonne or less are spoken for; to reduce carbon emissions from the oil sands likely requires very expensive technology such as carbon capture and storage with carbon prices exceeding \$100 per tonne. In short, Canada must make a trade-off between higher costs and more emission reductions or lower costs and fewer emission reductions.

The US is going after its biggest carbon emitting sector—coal power plants—while Canada will not move on its biggest and fastest growing carbon emitting sector—oil and gas and the oil sands—until and unless the US does so “in concert” (as the prime minister put it) with Canada.

Put these elements together and several conclusions are now obvious:

First, the US is going faster and further on emissions reductions than Canada. Combined with lower economic growth and resulting emissions during the recession, it has a much better chance of achieving its 2020 target than does Canada as figures 4 and 5 show.

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gest carbon emitting sector—coal power plants—while Canada will not move on its biggest and fastest growing carbon emitting sector—oil and gas and the oil sands—until and unless the US does so “in concert” (as the prime minister put it) with Canada. “The integration of our economies suggest our countries should be taking action together, not alone.”, stated Environment Minister Leona Aglukkaq. Regulations first promised in 2008 are nowhere in sight.

Third, however phrased, alignment, harmonization, or in concert is not proving a viable pathway to achieving targeted carbon emission reductions in Canada and is demonstrably shackling Canadian action.

The perceived competitiveness risks in acting by Canada—dampening economic growth in the oil and gas sector and imposing higher energy costs on businesses—has won out over acting to meet the Copenhagen target. The unanticipated economic cost of delaying those actions—manifesting itself in the Obama administration’s severe reluctance to approve the Keystone XL pipeline from Alberta to the Gulf Coast—was not taken into account. Canada continues to export

its unconventional crude oil at a discounted price to refiners than what it would have been able to gain with KXL in place.

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But policy is now firmly constrained by politics. A new federal government taking office next year with a determined view to achieve Canada’s 2020 target in just five years, would find itself in exactly

the same position as the Harper government inherited in 2006 when it had six years to meet Canada’s Kyoto target. Not enough time to meet targets at an acceptable economic cost. The cycle would simply repeat itself.

So, what is needed? A Canada-first climate policy with a realistic, GHG emission target extending beyond 2020. De-linking us from the United States opens up more viable options for reducing our own emissions on a realistic timetable. Dropping the 2020 target gives us more time to get those emissions reductions at a more acceptable economic cost.

This is heresy today to all sides of the climate debate: environmentalists, liberals, social democrats, and conservatives. But it is inevitable. Next year’s COP 21 climate conference in Paris falls just after the expected election here. Our next government cannot avoid a decision. **P**

David McLaughlin is Strategic Adviser on Sustainability at the University of Waterloo. He is a former President and CEO of the National Round Table on the Environment and the Economy. Eryn Stewart, Bachelor of Environment student, assisted with research for this article. david.mclaughlin@uwaterloo.ca

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