# **Carbon Pricing Next to the United States**

Dale Beugin and Christopher Ragan

### November 2016<sup>1</sup>

It seems pretty likely at this point that the United States is not imminently about to introduce a nation-wide price on greenhouse-gas emissions. What does this mean for Canada and our evolving system of pan-Canadian carbon pricing? Does the absence of carbon pricing in our largest trading partner mean we can't proceed with this policy at home?

## No, it does not.

#### American policy does matter for Canada...

Let's start with the basics. First, <u>competitiveness pressures</u> from carbon pricing are a real concern. When policy imposes higher carbon costs in Canada relative to other countries, there's a risk that economic activity or investment—not to mention the GHG emissions associated with them—might simply shift toward the jurisdiction with weaker policy. This "leakage" is neither economically nor environmentally helpful. If economic activity and GHG emissions simply relocate across the border, global emissions remain unchanged, despite the associated cost to Canada from the reductions in output and employment.

As our largest trading partner, the United States plays a big part in our economic competitiveness. Economic modelling drawn from a <u>recent Ecofiscal Commission report</u> illustrates this point. The figure below (Figure 5 from our report) compares outcomes under two carbon-pricing scenarios. Under the first, Canada goes it alone, pricing carbon at a rate that gradually rises to \$100 per tonne by 2027. Under the second, the United States implements a similar policy to Canada's. For each scenario, the analysis quantifies the actual reductions in Canadian GHG emissions plus the extent to which those emissions reductions in Canada are caused by their "leakage" across international borders. The result is clear: a harmonized Canada-U.S. climate policy would significantly reduce emissions leakage due to those competitiveness effects.

<sup>1</sup> A slightly modified version of this article first appeared in Maclean's magazine, on November 16, 2016.







Figure 5: Canadian Emissions Reductions With and Without U.S. Policy Harmonization

#### ... but our policies are *already* being designed to address competitiveness.

Here's the thing: this was all true a month ago, six months ago, and even several years ago. It is true that recent developments in the United States might lead to an unwinding of its <u>Clean Power Plan</u>. But an economy-wide carbon-pricing policy, of the kind that Canada is now working towards, was never imminent in United States. And that's exactly why Canadian provinces have been designing their carbon-pricing policies to protect the competitiveness of their business sector.

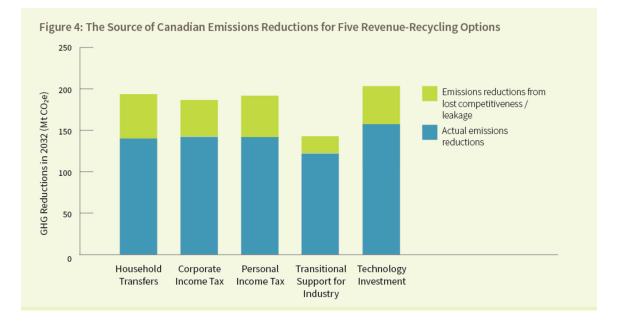
As Alberta, Ontario, and Quebec have all demonstrated, the key to leakage-proof carbon pricing is smart policy design. In each of these provinces, the policies will provide targeted support for sectors that are especially vulnerable to competitiveness pressures from a carbon price—the "emissions intensive and trade exposed" sectors. The policies do this by providing targeted financial support to firms based on their production. In Ontario and Quebec, this financial support takes the form of free permits that have value in the provinces' cap-and-trade system. In Alberta, the support to large emitters will be an "output based allocation" of permits as part of the Carbon Competitiveness Regulation effectively a subsidy to firms based on their output and also on their emissions intensity.

To see what is going on here, note that there are two problems that need to be addressed, and two instruments needed for the job. The first problem is to reduce GHG emissions, and the best instrument for this task is the carbon price itself. The second problem is to prevent firms from leaving our jurisdiction to set up operations elsewhere, and the best instrument



for this task is the targeted support, which creates an incentive to continue to produce and employ within the province. Together, the carbon price and the targeted support create incentives to reduce emissions by improving performance—but *not* by shrinking or shutting down production.

The figure below (Figure 4 from our same report) shows how providing this sort of targeted support can address competitiveness pressures and reduce leakage. Again, our modelling shows emissions reductions under alternative scenarios for how the carbon-pricing revenues are "recycled" back into the economy. In four of the scenarios, policy provides no targeted support to the "emissions-intensive and trade-exposed" sectors because the revenue is instead used to finance transfers to households, reduce personal or corporate income taxes, or make investments in cleaner technologies. In the absence of U.S. policy, a significant amount of leakage occurs in all these cases. Yet when the carbon-pricing revenues are used to provide support to the economy's emissions-intensive sectors, the competitiveness impacts drop by more than half.



#### With or without U.S. policy, there is a strong case for Canadian carbon pricing

So far, we've talked about the potential costs of continuing down Canada's carbon-pricing path, even if the United States lags in terms of its own policy. What about the benefits? The main point is that recent changes in the American political landscape don't change the fundamentals of carbon pricing policy.



First, reducing Canadian GHG emissions still contributes to international efforts to avoid costly climate change. As <u>Joel Wood</u> notes, every emissions reduction still counts—and still has economic benefits—even if international action on a large scale will ultimately be required to achieve climate stabilization.

Second, carbon pricing is <u>still a cheaper way</u> of reducing GHG emissions than other policies. Flexible, technology-neutral policy lets the market (rather than the government) identify the lowest cost paths to reducing emissions. It <u>also drives low-carbon innovation</u>, further reducing the long-term costs of emissions reductions.

Third, policy delay is still costly: waiting for the United States to catch up will only increase the cost of achieving deep emissions reductions at some point further down the road. In the absence of Canadian carbon-pricing policy, we'd be likely to continue investing in carbonintensive infrastructure and technologies, making it difficult and more expensive to change course later. Gradually and predictably phasing-in a carbon price now is much better for Canada's competitiveness than shocking the economy with sudden, aggressive policy later.

#### Let's do Canada's part... as cost-effectively as possible

The recent U.S. election changes the political dynamics, but not the underlying economics of carbon pricing for Canada. Nor does it change our need to design carbon-pricing policies in a heads-up manner. Smart, well-designed carbon pricing that addresses competitiveness concerns still makes economic and environmental sense. For now, keep calm, and carry on.

Dale Beugin is the Research Director of the Ecofiscal Commission. Christopher Ragan is an associate professor of economics at McGill University and is the Chair of the Ecofiscal Commission.

