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Opinion: Roger Martin and Alexander Wood

A new tool in addressing Canada's productivity challenge: carbon pricing



Jacques Boissinot/ The Canadian Press

With Canada having hosted the G8/G20, much needed attention should now be given to a number of challenges facing the Canadian economy in the coming years. The first is our woeful productivity performance, and the second is climate change .

The two will have an impact on our future prosperity, and both are – in ways that are not always well understood – linked.

Although Canada is a signatory to the United Nations Framework Convention on Climate Change, and successive federal governments have announced policy packages designed to address our international commitments on carbon pollution, we have – at least at the national level – never put in place a carbon-pricing policy. This despite the fact that many economists believe that such a policy is the one necessary element of any effort to reduce the carbon emissions that are at the root of climate change.

The explanation for that is quite simple: Pricing carbon translates into higher energy prices, at least from energy sources that are carbon-intensive. And politicians have yet to find the will or the way to call for higher energy prices.

But for those willing to look beyond the painful outcomes that higher energy prices are assumed to bring, what is becoming clearer is that the relationship between carbon pricing, energy prices and the economy is not necessarily a negative or even neutral one. A growing body of evidence is showing that pricing carbon can be good for the economy.

The logic underlying such an argument is fairly straightforward. Carbon pricing can help drive innovation in technologies and business models that promote resource efficiency, particularly in relation to energy. For a country such as Canada, which annually ranks among the most energy-inefficient economies in the world, this presents a huge opportunity. That is because there is an increasingly strong case for how improving resource efficiency translates into improvements in productivity, which is the Holy Grail of competitiveness for economies such as Canada's.

As Bank of Canada Governor Mark Carney and others have pointed out, the private sector in this country does not typically invest enough in new capital. This means its processes and practices are not always at the leading edge of efficiency and productivity, especially when compared with some of our trade competitors where such investment is the norm (the United States being the prime example). The result has been, in the words of economists at Toronto-Dominion Bank, a record on historical productivity growth that is "appalling."

With this in mind, we have recently sought to answer three key questions. First, can a carbon-pricing policy support the development of a vital and innovative green technology sector in Canada? Second, can it increase both the employment of Canadians and their productive output? Third, under what conditions is such a scenario likely?

As we lay out in our policy brief (available online at sustainableprosperity.ca), the answer to the first question is, "Yes, in theory."

The second question is more difficult. While it is clear that green technology can increase employment, and that energy efficiency can increase productivity, it is not clear that improved technology can accomplish both. A simultaneous increase in both employment and productivity might only be gained with significant increases in output, a possibility that has not been examined extensively.

The third question also demands further investigation. As a rule, increased factor prices initially result in reduced productivity: it takes more resources to produce the same level of output. An increase in the price of carbon can have a positive impact on productivity and prosperity only if it results in efficiency gains that outweigh the increased costs. And although the evidence is in no way conclusive, there are indications that this kind of dynamic is beginning to emerge in jurisdictions where carbon-pricing policies have been in place for some time.

Our research also shows that design matters. A key criticism of the experience with carbon pricing to date (especially with Europe's emissions trading scheme) is the volatility of the price of carbon, and the unpredictability that brings to investment decisions. Such experiences are informing the development on new carbon-pricing policies.

The various proposals around comprehensive climate/energy legislation being discussed in the U.S. Senate, for example, all feature some version of "price collar" for

the carbon allowances to be created, with a price floor and ceiling. Of course, if we look at a pricing policy built around a carbon tax, that kind of volatility is removed altogether.

Carbon pricing is not a silver bullet. It will clearly not solve by itself the sizable productivity challenge we face. But it can help. We believe that all possible policy tools that have a contribution to make in improving our national productivity can, and should be, considered. One such tool that has not been considered up to now is carbon pricing. This needs to change.

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