

H. Bell  
30-05-18  
emad**ECONOMIC SCENE**

# *Does a Carbon Tax Work? Ask British Columbia*

**By Eduardo Porter**

March 1, 2016

VANCOUVER, British Columbia — Ted Cruz says climate change is not happening. Donald Trump says he doesn't believe in it. Marco Rubio, whose hometown, Miami, is projected to be largely underwater within the not too distant future as ice caps shrink and the sea level rises, argues that government efforts to combat it will “destroy our economy.”

But those views are not widely shared by conservatives elsewhere around the world. Indeed, not that long ago in a not too distant country, a right-leaning party that shares many of the antitax, pro-business beliefs of Republicans in the United States did exactly what its unbelieving candidates so fear.

In 2008, the British Columbia Liberal Party, which confoundingly leans right, introduced a tax on the carbon emissions of businesses and families, cars and trucks, factories and homes across the province. The party stuck to the tax even as the left-leaning New Democratic Party challenged it in provincial elections the next year under the slogan *Axe the Tax*. The conservatives won soundly at the polls.

Their experience shows that cutting carbon emissions enough to make a difference in preventing global warming remains a difficult challenge. But the most important takeaway for American skeptics is that the policy basically worked as advertised.

British Columbia's economy did not collapse. In fact, the provincial economy grew faster than its neighbors' even as its greenhouse gas emissions declined.

"It performed better on all fronts than I think any of us expected," said Mary Polak, the province's environment minister. "To the extent that the people who modeled it predicted this, I'm not sure that those of us on the policy end of it really believed it."

---

**You have 4 free articles remaining.**  
**Subscribe to The Times**

---

The tax, which rose from 10 Canadian dollars per ton of carbon dioxide in 2008 to 30 dollars by 2012, the equivalent of about \$22.20 in current United States dollars, reduced emissions by 5 to 15 percent with "negligible effects on aggregate economic performance," according to a study last year by economists at Duke University and the University of Ottawa.

The tax made fuel more expensive: A gallon of gas, for example, costs 19 United States cents more. It encouraged people to drive somewhat less and be more careful about heating and cooling their homes. Businesses invested in energy efficiency measures and switched to less polluting fuels.

Despite the price increases, voters warmed to the tax. Last year only 32 percent of British Columbians opposed the tax, down from 47 percent in 2009.

Perhaps most surprisingly, so did big business. And for good reason. As it turns out, a carbon tax is the most efficient, market-friendly instrument available in the quiver against climate change.

"We were not very happy when it was first announced," said Jock A. Finlayson, head of policy at the Business Council of British Columbia. Now, "within the business community there is a sizable constituency saying this is O.K."

Christopher Knittel, an expert on energy economics at the Massachusetts Institute of Technology, said a properly calibrated carbon price in the United States could effectively replace all the climate-related regulations businesses hate so much, including renewable fuel mandates and President Obama's Clean Power Plan.

That would create a clear incentive for businesses and consumers to use less fuel, invest in efficiency and switch to cleaner energy. The only other necessary action, in Professor Knittel's view, would be more government support for research and development to accelerate the quest for new energy technologies.

Here in British Columbia, however, it wasn't the efficiency argument alone that won people over. The pioneering legislation provided critical political cover by ensuring every single carbon tax dollar would be returned to families and businesses through a variety of breaks.

That "is the thing that saved us," said Carole Taylor, the provincial minister of finance at the time the tax was introduced. "If I had said, 'Give us the carbon tax and trust us,' I knew it would have been a failure."

The corporate income tax was cut to 10 percent from 12 percent, to stimulate a flagging economy in 2010. Though it is back to 11 percent, it is still the lowest among Canada's provinces. The bottom two personal income tax rates were also cut. Low-income families got a tax credit.

All in all, the government will return about 1.7 billion Canadian dollars to businesses and families this year, more than the 1.2 billion dollars it expects to collect through the carbon tax, which amounts to roughly 5 percent of the province's total tax revenue.

According to the World Bank, about 12 percent of the world's global emissions of greenhouse gases are subject to a carbon price — either a tax or, more commonly, a levy under a regime of cap and trade like that in California and Europe, in which permits to emit are auctioned among companies.

With few exceptions, British Columbia's tax is the steepest and broadest in existence. While that sets British Columbia apart as a leader on the cutting edge, it is also part of its problem. For the policy to work best, it needs the rest of the world to catch up.

Local leaders now recognize that they probably have to do more. Carbon emissions started rising again after the province froze the tax at 30 Canadian dollars in 2012. An advisory panel to the Ministry of the Environment recently laid out the problem: British Columbia is missing its goal of cutting greenhouse gas emissions by a third from 2007 to 2020. On its current path, the province will also miss its target of an 80 percent reduction by 2050.

This is not entirely British Columbia's fault. True, the tax might have been too low. Spending some of the money on green initiatives might have curbed emissions faster. But its experiment has battled a harsh headwind: a collapse in the prices of oil and gasoline.

Look at it this way. A study by Michael Greenstone and Thomas Covert of the University of Chicago and Professor Knittel concluded that at current battery prices, for an electric vehicle to be cheaper to run than a gas-power car, oil would have to cost \$350 a barrel. Last year, it averaged \$50. To make up the difference would require a carbon tax of \$700 a ton of carbon dioxide.

Nobody in British Columbia is talking about going that far. But to hit its long-term target, the advisory panel concluded that the tax must start increasing again in 2018, at a rate of 10 Canadian dollars a ton a year, perhaps all the way to midcentury.

And that's where the support from business starts to break down. If British Columbia were to proceed on its own without providing some form of protection to its energy intensive industries, Mr. Finlayson argued, they would simply lose markets to producers outside its borders that pay no carbon tax.

Cement makers, for instance, argue that imports from China and the United States grew from 5 to 40 percent of the market as the carbon price was introduced and raised gradually to 30 Canadian dollars. Teck, the Canadian mining company, says that alone among its competitors it pays 50 million Canadian dollars in carbon taxes. Rather than seeing the tax burden rise further, said Marcia Smith, senior vice president for sustainability, Teck wants the gap narrowed.

The advisory panel recommends unspecified adjustments to protect such trade-exposed industries. Still, the Business Council of British Columbia opposed an increase.

“Keep the B.C. carbon tax in place at the current level over the balance of the decade,” it recommended. “Post-2020, policy makers should review the tax in light of actions by other jurisdictions to narrow the existing gaps with B.C. in carbon pricing.”

British Columbia could do with some help from its neighbors. Four other provinces have carbon prices either pending or in place, though they are generally much lower. If more embraced a carbon tax, they would mitigate many of the concerns over competitiveness.

The new Canadian government, headed by Justin Trudeau, seems ready to come on board, imposing some pan-Canadian minimum price. If the United States embraced a carbon tax as part of a comprehensive overhaul of its tax system, the path would be much easier.

That, however, would require Republicans in Washington to recognize that the threat of climate change is not simply a left-wing fantasy. If they do, British Columbia underscores there is a market friendly way to do something about it.

*Correction: March 1, 2016*

*An earlier version of this article gave an incorrect attribution for a study of Canada's carbon tax. It was by economists at Duke University and the University of Ottawa, not the University of Ontario.*

Email: [eporter@nytimes.com](mailto:eporter@nytimes.com); Twitter: [@portereduardo](https://twitter.com/portereduardo)

A version of this article appears in print on March 2, 2016, on Page B1 of the New York edition with the headline: British Columbia's Carbon Tax Yields Real-World Lessons