

B.C.'s carbon tax is driving down emissions

BY TOM PEDERSEN AND LEE THIESSEN, VANCOUVER SUN JUNE 4, 2013



B.C.'s thirst for gasoline has declined 7.7 per cent since its peak in 2004.

Photograph by: Phil Carpenter, Postmedia News Files, Vancouver Sun

Now that the election has come and gone, it's time to take a good hard look at one of British Columbia's signature legislative initiatives: our revenue-neutral carbon tax. Despite what you might have heard from some campaign quarters, the tax is doing its job - it is helping to reduce greenhouse gas (GHG) emissions while keeping income and corporate taxes low. Per capita consumption of all petroleum fuels has dropped an impressive 16 per cent in B.C. since the tax was introduced in 2008, and the scaremongering didn't come to pass - the provincial economy has grown faster than the Canadian average in that time.

It is fair to acknowledge that consumption of gasoline has been declining across Canada for nearly a decade, and in the U.S. the per capita distance driven has also trended down.

Statistics Canada data show that B.C.'s thirst for gasoline has declined 7.7 per cent since its peak in 2004, a record unmatched by any other provincial jurisdiction in the country.

So why are we using less gasoline? And why is the downward consumption trend steeper in B.C.? There is little doubt that an aging population, increased digital connectivity and increasing aversion to personal vehicle ownership among young urbanites contribute to declining use of cars and thus gasoline consumption. But these factors aren't unique to this province. Something sets B.C. apart.

Perhaps it's because we get how critical it is to curb global warming and we've voluntarily chosen to trade in our V8 SUVs for hybrids. B.C. does, in fact, have twice the rate of uptake of hybrids relative to the rest of the country. But turning over vehicle stock takes a long time, so such altruistic behaviour is unlikely to account for our declining consumption.

Researchers are now focusing on a different explanation, and it's very simple: Our carbon tax is having a positive effect. The tax took effect on July 1, 2008, and at an initial \$10 per ton of carbon dioxide emitted, it added just two cents to the price of a litre of gasoline. Part of the tax's good design was that it was scheduled to rise by \$5 per ton each July 1, a ramped increase that pushed the tax to \$30 on July 1, 2012. That added seven cents to a litre of gasoline, small potatoes when the price at the pump hovers around \$1.40, but big potatoes in its impact.

Economists Nicholas Rivers and Brandon Schaufele at the University of Ottawa have found that the seven cent per litre carbon tax in B.C. has induced a downward demand-response for gasoline that is almost five times greater than would occur for an equivalent market price jump. The explanation for this impressive response likely lies in the high visibility of the tax. Although the precise behavioural mechanism is not yet known, it is clear that drivers care deeply about fuel prices.

By announcing scheduled increases four years in advance, a market signal was sent to consumers that the price at the pump was going to keep going up. The media reinforced that message, probably inadvertently, by consistently reporting the impact of the carbon tax solely in terms of its effect on gasoline prices, even though gasoline combustion accounts for only 20 per cent of taxed carbon emissions in B.C. The simple expectation that prices were to keep going up appears to have set the

demand-response that resulted in a sharp decline in average fuel consumption in B.C.

On the broader scale, data released by the federal government in mid-April show that B.C.'s total GHG emissions for 2011 were down 1.4 per cent relative to 2010, while over the same period in the rest of Canada, emissions were slightly higher. Since 2007, emissions in both B.C. and the rest of Canada have declined roughly comparably, but such a comparison is misleading because it overwhelmingly reflects Ontario's policy decision to decommission its coal-burning electricity generation facilities, an option not available to this province. B.C.'s GDP growth has been slightly higher than the Canadian average since 2007, which puts the lie to the contention advanced by some that carbon taxes harm an economy. Based on the B.C. experience since 2008, revenue-neutral carbon taxes do no such thing.

But we still have work to do to maintain the downward trend in fossil-fuel consumption. If we continue to hold the quantum of the carbon tax at \$30 per ton, we will very likely fall well short of our legislated 33-per-cent reduction in emissions by 2020, relative to 2007. The new government must look carefully at B.C.'s internationally applauded climate policies and make adjustments if we are serious about meeting that target. Carbon economists tell us that \$30/ton of carbon dioxide emitted is a good start - but it's only a start.

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