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MEDIA RELEASE
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Agricultural trade appears unaffected by BC carbon tax: new study

British Columbia's carbon tax does not appear to have had a measurable impact on international agricultural trade, despite concerns it would greatly reduce the BC industry's competitiveness, according to new analysis commissioned by the Pacific Institute for Climate Solutions (PICS).

The report – *The Effect of British Columbia's Carbon Tax on Agricultural Trade* – written by Nicholas Rivers from the University of Ottawa and Brandon Schaufele from Western University, is the latest white paper from PICS, a collaboration of BC's research-intensive universities, hosted and led by the University of Victoria. Click here to read the paper, which the authors say is the first of its kind to use real data, rather than simulation models, to assess the tax's impact on the sector.

The research used a statistical model to estimate a relationship between trade in agricultural commodities and the BC carbon tax, using data from Statistics Canada, Industry Canada and Environment Canada from 1990 to 2011. The model compared agricultural trade by commodity in BC to that in other provinces to estimate the effect of the tax, and controlled for other factors that could influence trade, such as movements in international commodity prices and weather.

Co-author Schaufele says the data do not conclusively reveal changes in the overall pattern of agricultural trade that can be linked to the arrival of the BC carbon tax in 2008—a result that may be surprising to some.

"These results are counter to claims from industry representatives that the tax was devastating agricultural producers, which no doubt contributed to agriculture carbon tax exemptions being implemented in BC. "

Since 2012, BC commercial greenhouse vegetable and floriculture growers have received tax relief in the form of rebates that cover 80 per cent of the carbon tax paid on natural gas and propane used for greenhouse heating and carbon dioxide (CO_2) production. Effective Jan. 1, 2014, farmers were also exempted from carbon tax on the purchase of coloured gasoline and coloured diesel fuel for farm use.

The authors offer three potential explanations for the carbon tax's lack of discernable impact on agricultural trade patterns between 2008 and 2011: First, the tax had little effect because fossil fuels represent only a small proportion (on average four per cent) of agricultural production costs. Second, in terms of provincial trade, because agriculture is less carbon intensive than some other highly traded sectors (e.g. manufacturing), its comparative advantage may increase due to the limited impact of the tax. And third, the incremental rises in the carbon tax may have changed behavior, by stimulating process innovations or greater energy efficiency on BC farms.

The authors suggest the existing tax exemptions appear unnecessary based on the trade data, although they acknowledge that some agricultural subsectors are likely to be more exposed to the carbon tax than others. The report recommends further research using microdata at the individual farm level, over a longer time period, to obtain more precise results of on-farm impacts.

PICS executive director Tom Pedersen has welcomed the report's findings, saying it is further evidence that economic stability can co-exist with putting a price on carbon emissions.

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