

CARBON PRICING F.A.Q.

September 2017

Why is the Saskatchewan Environmental Society supportive of a carbon price?

Carbon pricing is one way to take action on climate change. We are very concerned about climate change, and the effect it will have on people's livelihoods here in the province:

- According to NASA, the average surface temperature has risen about 1.1 degrees Celsius since the late 19th century.
- Most of this warming has occurred in the last 35 years: 16 of the 17 warmest years on record have occurred since 2001.
- In 2014, Saskatchewan had the most dangerous forest fire season on record leading to the evacuation 13,000 people from northern communities.
- In 2011 and 2014 southeast Saskatchewan faced unprecedented and costly flooding from extreme rainfall events in over one hundred communities.

Every region of the world has to do their part to address what many call the largest challenge of the 21st Century. Saskatchewan's approach to climate change, outlined in the White Paper on Climate Change released October 2016, fails to offer an approach that will achieve Saskatchewan's emission reduction obligations under Canada's current commitments for the Paris Agreement. SES estimates this obligation to be a reduction of 26 Megatonnes (Mt) per year by 2030 (this is 30% below 2005 emission levels of 69.5 Mt). Saskatchewan's plan to achieve these reductions, including Boundary Dam Carbon Capture & Storage (CCS) technology and a commitment to double the percentage of renewable electricity generation, will lead to approximately 7 Mt in greenhouse gas reductions by 2030 – 19 Mt short of where our province needs to be. The Saskatchewan Government has also taken little effective action towards reaching the emission reduction target of 20% below 2006 levels it set for itself. This target means our provincial emissions would need to be 54.7 Mt by 2020, yet our current emissions are 75.5 Mt.

Carbon pricing is a good way to make sure people in all areas of the economy are facing a price incentive to reduce emissions, rather than just targeting one sector. It is a fair way to price pollution, ensure that businesses that use energy efficiently and invest in solutions pay less, and is widely regarded as one of the most cost-effective ways to reducing emissions. That means that for every dollar spent, more money goes toward actually fixing the problem and is not lost to administrative costs in the process.

Carbon pricing also has the advantage of being flexible as it leaves people and industries free to choose to reduce emissions in whichever ways best suits individual processes, abilities and circumstances for households and businesses, while not forcing specific technologies, actions or outcomes.



Does it work?

Carbon pricing can work well if designed properly. There is well-documented evidence that tells us people and businesses respond to price signals. In fact, many economists note that the carbon pricing regime in B.C. would be even more effective if the price had risen each year since 2012 (where it has been frozen at \$30/tonne).

To accurately judge whether a carbon pricing policy works, we have to compare real emission levels to emission levels that would have occurred in absence of the policy. This is difficult to do because we don't actually know what would occur in absence of a carbon pricing policy. This is why statements such as "B.C.'s emissions have risen, so carbon pricing doesn't work" aren't accurate, because the comparison is not being made with what would have occurred in absence of the policy.

Various studies¹ have been done on emissions reduced under provincial carbon pricing policies in places that have had them for a few years – B.C. and Quebec for instance – and this research estimates carbon pricing has reduced emissions between 5% to 15% in those regions (relative to emissions levels without the policy).

But won't it cost us?

Any approach we take to reduce emissions will cost us, but not acting on climate change will cost us more. Canada's own National Round Table on the Environment and the Economy has estimated climate change costs for Canada could escalate to between \$21 billion and \$43 billion per year by 2050. Climate change is already costing us in Saskatchewan. For example, Provincial Disaster Assistance costs have risen 20 fold in the course of just 12 years – an indication of a sharp rise in severe weather events.

Other approaches to pursue emission reductions have been shown to be more costly - due to administrative, monitoring and enforcement costs as well as in inefficiencies and dead weight losses resulting from prescribed technologies or approaches - and several approaches actually have an associated implicit carbon price much higher than the proposed federal carbon tax. For example, in Saskatchewan where carbon capture and storage has been the preferred method of reducing emissions from coal, the Office of the Parliamentary Budget Officer has found the implicit cost of CCS technology at Boundary Dam to be \$60 per tonne of CO₂.

It could be argued that carbon pricing is the most fiscally responsible approach to climate change.

¹ Studies include Impact modelling and analysis of Ontario cap and trade program (Sawyer D., Peters J. and Stiebert S., 2016), The Quebec carbon cap & trade regulation: Impacts and solutions for industry (Ouyed M., 2015), British's Columbia's revenue-neutral carbon tax: A review of the latest "grand experiment" in environmental policy (Murray B, & Rivers N., 2015), Climate Leadership: Report to Minister (Leach A., Adams A., Cairns S., Coady L., & Lambert G., 2015), Canada's second biennial report on climate change (Government of Canada, 2016), Frugal Cars or Frugal Drivers? How Carbon and Fuel Taxes Influence the Choice and Use of Cars. (Anteweiler W., & Sumeet G., 2016), Comparing Stringency of Carbon Pricing Policies (Beugin D., Dion J., Elgie S., Olewiler N., Ragan C., 2016).



What will the cost be?

Much of the debate around carbon pricing has focused on what the cost to the economy would be, particularly for regions that are emissions-intensive and trade-exposed (EITE). Canada's EcoFiscal Commission estimates that approximately 18% of Saskatchewan's economy falls into this EITE category.

Carbon pricing can be designed to mitigate the economic impact on industries that fall into this EITE category. For instance, free emission credits can be granted upfront to these industries, or these industries can be subject to an emission-intensity standard per unit of output (as opposed to an absolute emissions standard). Alternatively, output-based subsidies can be provided to encourage increased production. All of these approaches have the potential to minimize the impact of a carbon price on competiveness.

The output-based allocation system for large industrial emitters that the Government of Canada has indicated it would like to pursue is modelled after Alberta's carbon pricing scheme, and designed to mitigate impacts to competitiveness and employment. Output-based allocations means that facilities will be allocated sector-specific emission 'rights' based on the top 25% of performers in that sector. In the Government of Canada's proposed scheme, carbon will only be priced at any level above the sector-specific intensity standard, but all emission reductions below the standard will count as surplus credits. This creates incentive for continual emissions reductions, as large emitters can always generate revenue through emission reductions.

In Alberta – to minimize competitiveness concerns and carbon leakage – large emitters are granted sector-specific subsidies per unit of output that can be used to offset the price. These subsidies are also tied to the top 25% of performers, meaning that large emitters in the top 25% are likely to be better off than they would be without a carbon price. As they are still contemplating how to recycle revenues back to the Saskatchewan economy, it is unclear at this stage if the Government of Canada will mimic this portion of Alberta's plan in their "backstop" option.

Some research² has shown that Saskatchewan would do well under a hybrid climate policy system like the Government of Canada has proposed. For instance, Chris Bataille and Dave Sawyer (2016) model the effect of an intensity standard and output-based allocation system on Saskatchewan, and find the potential to reduce greenhouse gas emissions by 33% and increase GDP by 4.23% by 2030. This outcome depends on Saskatchewan joining a national cap and trade scheme, where firms outside of the province could pay to achieve reductions in Saskatchewan. The resulting revenues could be an economic boost for Saskatchewan.

² Bataille, Chris & Dave Sawyer. 2016. Canadian Carbon Pricing Pathways: The economic and emission outcomes of leading policies. Final report September 15, 2016. Available online at: http://www.enviroecoomics.org/single-post/2016/09/06/Assessing-Canadian-Carbon-Pricing-Pathways.



Studies³ in B.C. have shown that the carbon tax in that province had negligible effects on the economy overall, despite some evidence that certain emissions-intensive sectors face challenges.

Earlier this year, the Conference Board of Canada held a Reshaping Energy Conference focused on western Canada. They found that the impact of a carbon price would be \$2 to \$3 billion per year, a negligible cost to Canada's \$1.8 trillion dollar economy.

Ultimately, the true economic impact of a carbon pricing policy will depend on how revenues are recycled. The Government of Canada has indicated they are still open to feedback on this. By refusing to implement their own system, Saskatchewan is surrendering control over just how big an impact a carbon pricing scheme could have on our economy.

What about agriculture?

Agriculture is responsible for about 17% of our provincial emissions in Saskatchewan. However, most of these emissions (~75%) comes from methane associated with cattle production and nitrous oxide associated with agricultural inputs and fertilizers. The proposed federal government carbon price doesn't impact these emission sources.

Additionally, gasoline and diesel fuel used by registered farmers in certain farming activities are exempt from the proposed carbon price.

Does the Government of Canada have jurisdiction to enact a carbon price?

Several law professionals across Canada - Natalie Chalifour for one, an associate professor in the Faculty of Law at the University of Ottawa - have remarked that in their professional opinion, the federal government has constitutional authority to implement a carbon price. Federal jurisdiction in this matter can be found in Section 91 of the Canadian Constitution where a carbon price could be justified under criminal law, taxation and the Peace, Order and Good Government (POGG) provision. As the carbon price does not count as a true tax – because the revenues are returned to the Province or the people of the province – jurisdiction will likely be pursued under the POGG provision. The National Interest power under POGG gives the federal government jurisdiction to legislate when an issue spills outside provincial boundaries and requires national intervention to address it. One of the 'tests' the courts use to rule involves asking whether the failure of even one province to cooperate could create adverse consequences for the residents of another province or territory, or the federal government's interests. If the answer to that question is yes, appropriately circumscribed federal intervention is justified.

³ Murray, Brian and Nicholas Rivers (2015) "British Columbia's revenue-neutral carbon tax: A review of the latest "grand experiment" in environmental policy." Energy Policy. 86, pp. 674-683. DOI: http://dx.doi.org/10.1016/j. enpol.2015.08.011.