

Striking a Balance Between a Healthy Economy and Low Carbon Emissions

Issue

The Government of Alberta has announced their Climate Leadership Plan, which is comprehensive and ambitious in its goals. Government needs to strike a balance between achieving its emission reduction goals and preserving the competitiveness of the economy using pragmatic, flexible and innovative solutions.

Background

On November 22, 2015, Premier Notley unveiled the Climate Leadership Plan, based on recommendations put forth by the Climate Change Advisory Panel. The plan is one that covers all sectors, is far reaching, comprehensive and includes the following pillars to achieve the reduction of greenhouse gas emissions (GHG): implementing a new carbon price on greenhouse gas emissions; ending pollution from coal-generated electricity by 2030; developing more renewable energy; capping oil sands emissions to 100 megatonnes per year; and reducing methane emissions by 45% by 2025.

We also recognize through the panel's report that Alberta's emissions are challenging to reduce for three primary reasons. First, our population and economic growth rates, as well as our incomes, have grown faster than other provinces, and emissions tend to be correlated with population, income and wealth. Second, our large, anchor industries are emissions-intensive and consist of long-lived assets (oil sands plants, gas plants, chemical production, refineries, etc.) which can improve performance over time, but not as rapidly as other sectors with shorter asset lives¹. According to Canada's Ecofiscal Commission, 18% of Alberta's economy would qualify, under internationally recognized standards, as being both emissions-intensive and trade-exposed (compared to 2% in B.C. and Ontario and 1% in Quebec)². Finally, our choice of fuels for electricity generation drives emissions. The Climate Change Advisory panel's policy architecture is expected to reduce emissions from current trends by approximately 20 Mt by 2020, and approximately 50 Mt by 2030. This would roughly stabilize emissions, by 2030, just above current levels at approximately 270 Mt. However would not meet the targets set under the Paris Agreement to reduce emissions in Canada to 30 percent below 2005 levels by 2030.

On October 3, 2016, the Government of Canada proposed its pan-Canadian approach to pricing carbon pollution in order to achieve its commitment under the Paris Agreement. Under the new federal plan, all Canadian jurisdictions will have carbon pricing in place by 2018. For jurisdictions with an explicit price-based system, the carbon price is set to start at a minimum of \$10 per tonne in 2018, and rise by \$10 per year to \$50 per tonne in 2022.

¹ Climate Leadership Report to the Minister: <https://www.alberta.ca/documents/climate/climate-leadership-report-to-minister.pdf>

² <https://ecofiscal.ca/reports/provincial-carbon-pricing-competitiveness-pressures>

Since Alberta's economy is particularly sensitive, there is concern that unduly aggressive actions taken to reduce emissions in Alberta may not lead to real emissions reductions. Instead investment may just shift to other jurisdictions without stringent GHG policies, negatively affecting Alberta's economy and not ultimately impacting global greenhouse gas emissions due to carbon leakage. Insuring that our economy and small businesses remain vital and competitive is imperative as small businesses makes up 95% of all businesses in the province and are responsible for 35% of all private sector employment in the province. Government needs to strike a balance between achieving its emissions goals and preserving the competitiveness of a "vital lynchpin" of the economy³.

The measure most anticipated to have an adverse effect on small business is carbon pricing. To mitigate the effects of the increased cost to run businesses the government has announced a tax cut from 3% to 2% for small business and a commitment of \$645 million in incentives through Energy Efficiency Alberta. The small business tax deduction is in place for the first \$500K of active income, meaning a 1% rate cut is a maximum benefit of \$5000, which will not be sufficient for businesses that may be facing major costs from the new carbon levies. Initial energy efficiency programs have indicated items such as free installation of residential energy efficiency products and rebates for residential energy efficient appliances, lighting and insulation. The only incentives mentioned for business include high-efficiency retrofits of lighting, heating, cooling and hot water systems for business, non-profits and institutions, which are not believed to be significant enough to offset the costs of the new carbon pricing model.⁴ In an effort to achieve cost neutrality for the business sector as a whole, levies paid by the business community should be returned through Energy Efficiency Alberta programs or other tax reduction measures to preserve the business climate while also encouraging the goal of reducing carbon emissions.

There are many businesses, industries and municipalities that are looking to reduce their carbon footprint by converting to natural gas as an alternate energy source. While still a source of GHG emissions, in comparison with other fuel sources natural gas is less carbon intensive, relatively clean-burning, abundant, safe, reliable and efficient. Burning natural gas gives off much fewer toxic emissions than coal or oil and for the same amount of energy produced; gas emits 30% less carbon dioxide when burned than oil, and as much as 45% less than coal⁵. Despite this known benefit, natural gas still has significant carbon pricing applied. When looking at the chart below, the unit of measure is different for natural gas, as its energy content is typically measured in Gigajoules (GJ), whereas other fuels are measured in litres. We do know that one GJ of natural gas has the same amount of energy as 27 litres of diesel, 39 litres of propane, 26 litres of gasoline or 277 kilowatt hours of electricity. Taking these conversions and applying the levies to the same units of energy, there is very little difference between the costs for the various fuel types. Moving towards natural gas conversions, as in the case of fleet vehicle conversions, while still implementing a carbon levy in this manner seems to be counter-productive given the costs and the benefit that natural gas has over the other fuel types. As natural gas is the obvious alternative to coal and has been used to power transit and fleet vehicles in various municipalities, it seems that only when a less carbon intensive and cost effective solution is available to take the place of natural gas should a levy be placed on this energy source.

³ http://www.albertacanada.com/files/albertacanada/SP_EH-SmallBusProfile.pdf

⁴ <https://www.alberta.ca/energy-efficiency-alberta.aspx>

⁵ <http://naturalgas.org/environment/naturalgas/>

Carbon levy on major fuels

Type of Fuel	January 1, 2017	January 1, 2018
Diesel	5.35 ¢/L	2.68 ¢/L
Gasoline	4.49 ¢/L	2.24 ¢/L
Natural Gas	1.011 \$/GJ	0.506 \$/GJ
Propane	3.08 ¢/L	1.54 ¢/L

The Climate Leadership Plan is partially built on the premise that new technology and innovations will achieve the transition to a lower carbon economy. In keeping with this train of thought businesses should be rewarded for innovative solutions that keep their carbon footprint small. Businesses that face a levy issued against them because of their use of carbon may be motivated to take steps to be more energy efficient, but with the right incentives they could also be motivated to mitigate their total output of carbon into the atmosphere. If the goal is a low carbon and low emissions economy, conceivably rewarding companies for using innovative approaches to accomplish this goal should be recognized and encouraged. This measure will drive innovation, create new jobs in the economy and will have the ultimate goal of shifting the behavior of businesses to be more efficient and environmentally conscious.

An additional consideration should be measuring the total net contribution of GHG and rewarding those companies and industries who aim to mitigate their output. For example, the greenhouse industry, while consuming large amounts of natural gas, also grows plants that absorb carbon dioxide from the atmosphere. Compound the carbon absorption with innovations like green carbon capture and the environmental impact in the form of GHG is very low. Taking the final net carbon footprint as a benchmark for levies will serve the dual purpose of keeping industries competitive and innovative while also promoting tangible and measurable emissions reductions.

The goal of any climate policy is to change behavior and drive businesses and consumers to make choices that support low or zero carbon products. The provincial government must allow for the most effective way to encourage these new patterns of behaviour. There must be a recognition that a mix of pragmatic, flexible regulations and meaningful incentives may be effective in the initial transition to a low carbon economy and a reliance solely on carbon levies may actually not result in sustainable behavioural change and measurable results. Government should recognize that providing incentives through tax credits to emerging alternative energy innovations may provide more wide spread and supportable long term acceptance of a low carbon economy. Flexibility to allow businesses to use innovative solutions while using market driven solutions to fill the gaps between conventional and renewable forms of energy must be encouraged. Offering equal tax incentives between emerging technologies and those alternative energy sources already established, like solar and wind, will insure that the government is not dictating “winners and losers”. Alternatives and solutions must be driven by consumers and businesses and not dictated by government to ensure the best overall result.

The balance between preserving the economy while converting to low carbon emissions requires policies that are effective while also politically palatable. If policies and programs are applied ineffectively or seem to be incomplete and unduly punitive their chances of being successful and leading the charge to change behaviour will be unsustainable. Climate change is not possible in a single political cycle and needs buy in

from society and government as a whole. Any policy implemented needs to be meaningful, pragmatic, sensible and flexible in order to achieve the final goal of emissions reductions and environmental preservation.

Additionally, when measuring the success of the Climate Leadership Plan all costs (direct and indirect) need to be considered so that the real impact on business and the economy can be assessed and policy adjusted to strike the balance between a healthy economy and reduction of emissions.

The Alberta Chambers of Commerce recommends the Government of Alberta:

1. Not exceed other jurisdictions on carbon pricing and regulations and maintain competitiveness with neighbouring or like jurisdictions in Canada and the United States that have similar investment interests.
2. Communicate the goals of the Climate Leadership Plan; the timelines for benchmark goals to be met; how it will be measured and amendment or modifications plans if the goals and timelines are not met.
3. Ensure there is cost neutrality within the business sector and that carbon levies collected from the business community are available and cycled back to the business community through other tax reduction measures or energy efficiency Alberta initiatives.
4. Only implement a levy on natural gas when a less carbon intensive and cost effective solution is available.
5. Implement options to measure net carbon impact of a company and its activities and only apply levies to the net amount, taking into account the measures used to mitigate the total carbon footprint, including absorption of carbon dioxide and technologies such as green carbon capture.
6. Provide pathways for market driven solutions through tax incentives to all emerging technologies for carbon reductions to allow consumers and businesses the freedom to drive the choices towards preferred lower carbon options.
7. Measure both the direct and indirect cost impacts of the carbon levy.