

Achieving Compliance in Manitoba's Approach to Carbon Pricing

by Sara Hastings-Simon | April 18, 2018

Summary

In recent weeks, Manitoba has signed onto the Pan-Canadian Framework on Clean Growth and Climate Change (PCF) and released its "Made-In-Manitoba Climate And Green Plan" in the 2018 provincial budget¹. The plan details the province's approach to carbon pricing as required under the PCF as a combination of a carbon tax and output based pricing system for large emitters with additional emission reductions to come from complementary policies. With the price rising to only \$25 in 2022 the plan is clearly not in compliance with the federal stringency requirements for a carbon tax.

However, assessing the approach under the broader federal stringency test for a carbon price, we propose Manitoba could pursue their desired strategy, and with some important adjustments, be in compliance on the basis of the federal stringency test for cap-and-trade. In this note we show that Manitoba's plan is best understood as a cap-and-trade system, and evaluate its carbon pricing plan under the corresponding stringency test. We find that by ensuring the plan reaches the projected emission reduction through a permit system that would act as a backstop, and an affirmation of the previous 2030 target, the plan could be in compliance with the federal test for a carbon price under the PCF. However, Manitoba must also consider how to send the long term signals necessary for emissions reductions through 2030 and beyond.

Long term signals in carbon pricing as a keystone of climate policy

Carbon pricing is an economically efficient policy tool to reduce carbon emissions. Well-designed carbon pricing provides a predictable, long-term signal to businesses, protects competitiveness, drives efficiency and innovation and spurs job creation. The carbon pricing framework, introduced under the PCF, currently requires the price on carbon raising \$10/tonne/year until \$50/tonne in 2022 (or the equivalent for a cap-and-trade system).

¹ Made-In-Manitoba Climate And Green Plan, Budget 2018
http://www.gov.mb.ca/finance/budget18/papers/E_Climate_Green_Plan_r.pdf

However, this needs to be seen as a first step. To reach Canada's 2030 and mid-century climate targets, we need to see increasing levels of ambition post-2022.²³⁴ Businesses and individuals are making many investment and purchasing decisions today with a time horizon of more than four years, and therefore need clarity on this post-2022 future to make the appropriate decisions today. In the absence of these signals opportunities for emission reductions will ultimately come at a higher cost, or simply be lost, leaving Canada unable to reach its 2030 and mid-century targets.

Cap-and-trade vs carbon tax and the federal stringency test

Under the PCF, the carbon pricing requirement is flexible in that it allows for provinces to choose from two options to apply the price, either a carbon tax or a cap-and-trade system⁵. Both can have the same effect — by applying a price on carbon they reduce emissions. But the approaches differ in their design — a carbon tax simply fixes the price for carbon, and with a cap-and-trade system the emission level is set and the resulting price on carbon is determined in the market based on what is needed to reach that emission level.

In the absence of all other policies a cap-and-trade system with an equal level of stringency as a carbon tax will result in a price at the same level of the tax. However a price signal from a cap-and-trade system can also be combined with complementary measures such as regulations, standards or direct support to target specific emissions reduction opportunities. For example, these could include a phase-out of coal-fired power, or subsidies and support for emission reduction technology such as electric vehicles or energy efficiency upgrades⁶.

In this case the complementary measures in the form of regulations and standards (which themselves have an effective price) are responsible for delivering some of the emission

² Joshua MacNab, Erin Flanagan, Maximilian Kniewasser, Sara Hastings-Simon, *Putting a price on carbon pollution across Canada: Taking stock of progress, challenges, and opportunities as Canada prepares its national carbon pricing benchmark* (Pembina Institute, 2017), <http://www.pembina.org/pub/carbon-pollution-pricing-canada>

³ Dave Sawyer and Chris Bataille, *Taking Stock: Opportunities for Collaborative Climate Action to 2030, Policy Brief 2: The Pan-Canadian Framework on Clean Growth and Climate Change* (EnviroEconomics, 2017) <https://www.enviroeconomics.org/single-post/2017/03/31/Taking-Stock-Opportunities-for-Collaborative-Climate-Action-to-2030>

⁴ Jeffrey Rissman, Robbie Orvis, Brianne Riehl, Benjamin Israël, Bora Plumptre, *Enhancing Canada's Climate Commitments: Building on the Pan-Canadian Framework* (Pembina Institute and Energy Innovation, 2018) <http://www.pembina.org/reports/eps-enhancing-canadas-climate-commitments.pdf>

⁵ Environment and Climate Change Canada, *Pricing Carbon Pollution in Canada: How it will work*, https://www.canada.ca/en/environment-climate-change/news/2017/05/pricing_carbon_pollutionincanadahowitwillwork.html

⁶ Sara Hastings-Simon, *Making sense of climate policy: Options to reduce carbon emissions* (Pembina Institute, 2018) <http://www.pembina.org/pub/making-sense-of-climate-policy>

reduction. As a result a cap-and-trade system combined with these measures would result in a lower carbon price than a carbon tax with the same level of stringency — the effective price under the cap-and-trade only needs to deliver a portion of the emission reduction with the others coming from the complementary measures directly. But it is not sufficient to simply have complementary measures in place. Any provincial system must ensure they are actually delivering the emissions reductions expected through a binding cap on emissions to provide a common measure across different types of complementary approaches.

The PCF recognizes this complexity, as well as the fact that it may be most efficient for provinces to create climate policies that combine a price on carbon with complementary measures,⁷ for example by targeting market failures that prevent emissions reductions⁸. The stringency test set out in the PCF provides provinces the flexibility to design the policy package that works best for them, selecting between a carbon tax or cap and trade system, while ensuring that all provinces are meeting the requirement by comparing the price under a carbon tax to the combination of the cap-and-trade and any complementary measures implemented in the province:

- The federal carbon price stringency test is straightforward with a price starting “at a minimum of \$10 per tonne in 2018, and rise by \$10 per year to \$50 per tonne in 2022.”
- The cap-and-trade stringency test has two parts —requiring provinces to have a long term target and a binding cap that corresponds to the effort the price option implies. This is set forward as: “(i) a 2030 emissions reduction target equal to or greater than Canada’s 30 percent reduction target [vs 2005 historical emissions] and (ii) a cap-and-trade system with declining (more stringent) emission caps (to at least 2022) that correspond, at a minimum, to the projected emissions reductions that would have resulted from applying the direct carbon price that year (e.g., the reductions that would have resulted from a \$10 per tonne direct price in 2018).”

When understood as a tax, Manitoba’s proposed fixed \$25 price clearly fails the price stringency test. **However, we propose a solution whereby the province’s proposed carbon pricing system — conditional to an affirmation of the previous 2030 target and the creation of a permit system that would act as a backstop — could pass the cap-and-trade stringency test.** We further explore this solution in the next section.

⁷ David Roberts, Putting a price on carbon is a fine idea. It’s not the end-all be-all. *Vox*, April 22, 2016 <https://www.vox.com/2016/4/22/11446232/price-on-carbon-fine>

⁸ Ecofiscal Commission, *Supporting Carbon Pricing: How to identify policies that genuinely complement an economy-wide carbon price* (Ecofiscal Commission, 2017) <https://ecofiscal.ca/reports/supporting-carbon-pricing-complementary-policies/>

Evaluating Manitoba's pricing plan

How does Manitoba's Climate and Green Plan stack up against the requirements for provinces to price carbon under the PCF?

The plan has four core elements:

1. A fixed price on carbon of \$25/t as of Sept 2018, staying at that level through 2022, with an output based pricing system to be designed for large emitters.
2. A carbon savings approach with "emissions accounting and reporting with designated five-year carbon savings account periods. Each account period will be given a specific amount of cumulative emissions reductions to achieve. Any shortfalls in achieving the cumulative emissions reductions target must be carried over and added to the next account period's target",
3. A set of complementary regulations and subsidies that target specific emission reduction opportunities⁹.
4. A previously announced 2030 target of emissions reduction of 33% vs 2005 levels¹⁰.

While Manitoba describes their plan as complying with the federal carbon pricing requirement as a carbon tax and asks for leniency, it clearly fails that stringency test of a price rising to \$50 in 2022. Manitoba recognizes this gap but makes two related arguments for leniency based on its calculations.

1. The Manitoba \$25/t carbon tax delivers more emissions reductions cumulatively over the 2018-2022 period than the federal carbon tax.
2. The Manitoba carbon tax combined with complementary measures delivers more emissions reduction cumulatively over the 2018-2022 period than the federal carbon tax.

Looking at each of these arguments in detail we find that leniency is not justified but that with some important changes to the plan it can be in compliance with the federal stringency test for cap-and-trade¹¹:

The cumulative emissions reduction comparison for the two taxes (the federal requirements and the proposed provincial tax) falls short as the federal stringency test clearly applies to each year of carbon pricing, not a cumulative impact. One important reason for this is cumulative

⁹ including 5% biodiesel mandate, Efficiency Manitoba, organics diversion, heavy-duty truck retrofits, coal phase out, ozone recovery from appliances, electric bus conversion, low carbon government, sustainable agricultural practices, and displacing propane in Churchill.

¹⁰ Manitoba's Climate Change and Green Economy Action Plan (2015) <https://www.gov.mb.ca/sd/annual-reports/sdif/mb-climate-change-green-economy-action-plan.pdf>

¹¹ The underlying calculations/assumptions for emissions reductions are not provided in the Manitoba budget document, as a result all analysis here is based on those numbers as provided by Manitoba.

impacts cannot consider the overall trend — a key part of carbon pricing and emission reduction policy, when we consider the level of effort must continue to increase post-2022 to meet 2030 and mid-century targets for emissions. Flexibility on compliance would be at odds with the intention of the federal policy and once the Manitoba price falls below the federal compliance price of \$30/t in 2020 the approach is clearly not in compliance.

The second argument, made on the basis of comparing the carbon tax and complementary measures including the “carbon savings account” is a bit more complex. The price still falls short, but one could consider how the policies proposed relate to the compliance requirements for cap-and-trade. The cap-and-trade stringency test has two parts: (i) requiring a binding cap implemented with permits that corresponds to the effort the price option implies and that provinces have a (ii) long term target to 2030. Manitoba’s plan can be measured against the cap-and-trade requirements. Doing so shows that with some important improvements Manitoba plan’s could be in compliance as follows:

The data provided by Manitoba doesn’t allow for a direct evaluation of the cap (i) as only cumulative — not yearly — emissions reduction are given in the recent 2018 budget. But looking at an extrapolated yearly compliance¹² it appears that the trajectory could be in compliance (see Figure 1) as the Manitoba plan trajectory is below the federal backstop requirement through 2022. But in order to be in compliance this projection must be enforced by a binding cap with a permit system. The binding cap enforced by a permit system is critical as it ensures that emission reductions will be achieved as planned and provides a backstop in case of incorrect projections or failure to implement complementary measures that assist in achieving the necessary emissions reductions. This is important, given a history of legislated targets without enforcement mechanisms being missed, similar to many jurisdictions across Canada¹³. A question remains as to if the proposed carbon savings account — the method for imposing the cap — will be in line with cap-and-trade requirements. The plan indicates that the implementation of this savings account is still being designed. As described, the approach is very reminiscent of a cap-and-trade with a “safety valve” so with proper legislation and regulatory design it could be made to be in compliance. As long as Manitoba’s projections are correct this cap would not impose any additional emission reductions as the total emissions should remain below the cap, but importantly it would provide a backstop to ensure emissions reduction in the case where projected emission reductions from complementary policies do not materialize.

¹² Assumes federal carbon tax emission reductions are linear in price and Manitoba overall emissions reductions grow linearly over time.

¹³ Government of Manitoba, Province Responds to Auditor General's Report on Managing Climate Change, October 25, 2017, <http://news.gov.mb.ca/news/index.html?item=42372>

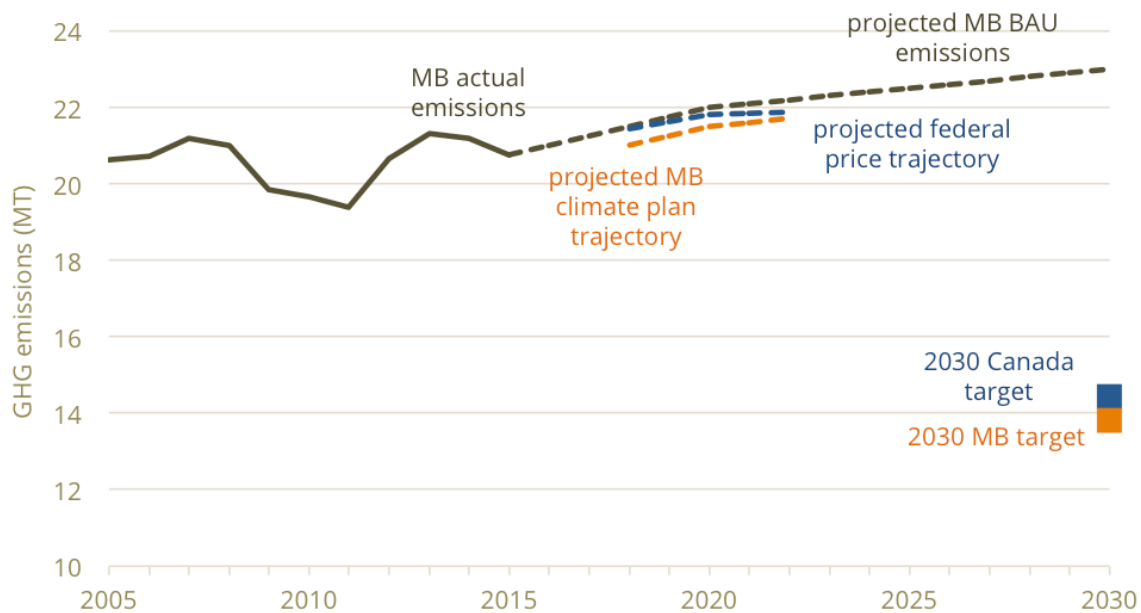


Figure 1. Manitoba’s projected emissions under different climate policies

With an affirmation of the previous 2030 target of 33% reduction Manitoba’s plan would meet the other requirement of a cap-and-trade system under the PCF (see Figure 1). However, the significant gap to the 2030 target shows the challenge that Manitoba faces — the level of ambition must continue to rise through 2030 and beyond. A rising carbon price or a falling cap can signal that intention and send the signals to companies and individuals to make decisions today to prepare to meet that target in the future, ensuring that these can be reached at lower cost.

Conclusion

The federal requirement for carbon pricing is flexible in its design, allowing provinces to design systems that work best for their own economies and realities. However, providing the flexibility in design means the federal government must be strict in their compliance rules. Manitoba has put forward a “made in Manitoba plan” — using complementary policies along with a price they predict will achieve the necessary emission reductions required for compliance under an emissions cap. To be in compliance with the federal carbon pricing requirement Manitoba’s projected emission reductions must be made binding through a cap-and-trade approach — but as long as Manitoba is correct in its calculations this should act as simply a tracking measure, providing an important backstop only in the case where predicted emissions reductions fail to materialize. Beyond PCF compliance, the province should also consider how they will start to

send the right signals today to ensure companies and individuals make decisions that place Manitoba on the path to meeting future targets.