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Recommendations for British Columbia's Proposed Cap-and-Trade Regulations

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Overview

The Pembina Institute appreciates the opportunity to comment on B.C.'s proposed cap-and-trade system to decrease industrial greenhouse gas pollution and increase investment in clean energy solutions. We also appreciate the effort that has gone into the cap-and-trade system to date, including the thought put into the trading and offsets consultation papers.

We support B.C.'s efforts to implement a cap-and-trade system in January of 2012 with other Western Climate Initiative (WCI) partners as long as it builds on positive steps already taken with the carbon tax.

Looking broadly at B.C.'s approach to putting a price on carbon pollution, we expect the combination of the carbon tax and cap-and-trade system to be:

- Effective in that it provides an adequate incentive to invest in clean energy.
- Comprehensive in that it applies to all sources of accurately measurable emissions.
- Fair in that it ensures households, communities and businesses throughout the province are treated equitably and given an opportunity to be part of the solution.
- Transparent in that the public and B.C. businesses will have confidence that the approach is going to be effective, comprehensive and fair.

With the combination of the carbon tax and the cap-and-trade system, B.C.'s carbon pricing approach will be exceptionally comprehensive — but there are opportunities for improvement in terms of effectiveness, fairness and transparency, for which we offer seven recommendations.

Recommendation	Recommendation helps the system be:		
	More effective	Fairer	More transparent
Maintain the carbon tax for at least the first compliance period	✓	✓	
Set price floors for auctioned & allocated allowances equal to the carbon tax	✓	✓	
Eliminate or further reduce reliance on offsets	✓		✓
Set allowance budgets in line with B.C.'s Climate Action Plan	✓	✓	✓
Distribute all allowances by auction		✓	✓
Use a portion of revenues to mitigate demonstrated competitiveness impacts	✓	✓	
Eliminate early reduction allowances	✓		✓

Why cap-and-trade when B.C. already has a carbon tax?

Having implemented the carbon tax in 2008, B.C. is in a unique position amongst WCI partners because it already has a significant price on carbon for most of the economy.¹ A real risk in replacing the carbon tax with a cap-and-trade system (as B.C. is proposing for industry) is that the cap-and-trade system could provide less incentive to invest in clean energy solutions.²

Our recommendations are designed to avoid this outcome so that the cap-and-trade system effectively builds on the starting point provided by B.C.'s carbon tax. Given the scale of the climate change challenge, it would be a huge lost opportunity for B.C. not to take a similar approach.

Assuming B.C. follows this approach, cap-and-trade through the WCI offers three potential advantages that justify pursuing it as a complement to B.C.'s carbon tax. By participating in a regional cap-and-trade system:

- B.C. would address two important gaps in the province's carbon tax — industrial process emissions and the emissions from imported electricity.
- B.C. can help kick start a broader effort to reduce greenhouse gas emissions. For example, a cap-and-trade system comprised of B.C., Ontario, Quebec, California and New Mexico would apply a carbon price to economies that are responsible for 891 million tonnes of climate pollution (21% more than Canada's emissions).
- B.C. can help increase the market demand for clean energy and energy efficiency solutions that B.C. businesses will be able to compete for. The same system comprised of B.C., Ontario, Quebec, California and New Mexico have a combined GDP of \$3 billion (almost 20% of the total from Canada and the U.S.).

The degree to which those benefits are realized depends in large part on the rules of the cap-and-trade system, which is why this consultation, and the details of the eventual regulations, are so important. If the rules effectively create an increasing incentive to reduce pollution and invest in clean energy solutions, the benefits will be considerable. If the rules fail to do this, the system will fall short of expectations.

¹ Based on the Pembina Institute's estimates, the carbon tax covers 76% of B.C. emissions. Of the industrial emissions that the cap-and-trade system is proposed for, 63% are currently covered by the carbon tax.

² Based on WCI modelling, allowance prices only reach \$30 per tonne by 2020 in the most likely scenario, whereas B.C.'s carbon tax is scheduled to reach \$30 per tonne in 2012.

Recommendations

1. Maintain the carbon tax for at least the first compliance period

B.C. is proposing to exempt industries covered by cap-and-trade from the carbon tax. With a functioning and effective cap-and-trade system this makes sense. But with the market in its infancy and many variables outside of B.C. controls, it does not. If the carbon price generated by the cap-and-trade system were lower than the carbon tax, there would be less incentive to reduce emissions than is currently the case. The government would also collect less carbon pricing revenue (e.g., in a scenario with a \$10 per tonne allowance price and a \$30 per tonne carbon tax, B.C. would lose at least \$317 million in revenue).

We recommend keeping the full application of the carbon tax for at least the first compliance period (2012 to 2014). Companies covered by the carbon tax and cap-and-trade would be rebated cap-and-trade costs up to the price of the carbon tax. The implications of this approach are demonstrated in the following three scenarios (all with a carbon tax of \$30 per tonne):

1. *Assume companies paid an average allowance and offset price of \$0 per tonne.* Companies would get no rebate because they would not have paid anything for allowances or offsets. The carbon tax would still provide an incentive to invest in clean energy solutions and generate revenue for the government.
2. *Assume companies paid an average allowance and offset price of \$30 per tonne.* Companies would get all of their carbon tax payments back, but they would still have an equal incentive to invest in clean energy solutions from cap-and-trade. Government revenues would depend on the allocation strategy and offset limits, but they could be equal to carbon tax revenues.
3. *Assume companies paid an average allowance and offset price of \$60 per tonne.* Companies would get all of their carbon tax payments back, but they would have a stronger incentive to invest in clean energy solutions from cap-and-trade. Government revenues would depend on the allocation strategy and offset limits, but they could be up to double carbon tax revenues.

This approach would provide greater price certainty while the market matures and ensure that the incentive to invest in clean energy solutions in B.C. isn't reduced as a result of cap-and-trade. It would also give B.C. the opportunity to ensure that the move to cap-and-trade wouldn't result in significantly reduced carbon pricing revenues.

2. Set price floors for auctioned and allocated allowances equal to the carbon tax

The trading regulation discussion paper (page 11) discusses the use of a reserve price for auctions. This is a wise approach and will be particularly valuable in the system's early years when there is a higher likelihood of too many allowances. B.C.'s carbon tax provides an intuitive floor price for all allowances auctioned by B.C. because the price schedule extending to 2012 was implemented in 2008, and has been available for all sectors to plan around. Setting a lower price floor would be a step back for carbon pricing in the province.

The intentions paper implies that allowances not auctioned would be given away for free. If the government chooses not to auction 100% of the allowances, the allowances allocated by some other formula should not be distributed for free. Such an approach would result in significantly less revenue for B.C. and be a regrettable step backwards from the fairness implicit in the carbon tax. A better approach would be to only allocate allowances by formula if the intended recipient is willing to pay a price equivalent to B.C.'s carbon tax.

By setting price floors for auctioned or allocated allowances equal to the carbon tax, B.C. will be doing as much as possible to enable the steps already taken with the carbon tax to percolate into the rest of the WCI cap-and-trade system. The previous recommendation (maintaining the carbon tax) is still important because if there are too many allowances in the system and other jurisdictions don't set comparable price floors, there is no guarantee that B.C. allowances would be purchased.

3. Eliminate or further reduce reliance on offsets

B.C. has asked for input into how the WCI's proposed offset limit (i.e. up to 49% of reductions from the cap-and-trade system coming from offsets) should be translated into a limit relative to compliance requirements. Our view is that the 49% limit is not stringent enough because it would undermine investment in B.C.'s industrial sector (by depressing the carbon price) and compromise the system's environmental integrity (by inevitably rewarding some non-incremental emission reductions). If the province is going to go to the effort of implementing a cap-and-trade system to reduce B.C.'s industrial emissions, at least the vast majority of reductions should come from those sectors.

Given the very serious documented problems with offsets³, our preferred approach would be to eliminate the use of offsets entirely. The lost flexibility could be addressed by making additional allowances available if auction prices significantly exceed expected levels. Those thresholds would need to rise to at least \$200 per tonne in 2020.⁴ If the thresholds were exceeded, the government could use a portion of the higher than anticipated revenues to invest in incremental emission reductions projects outside of the cap-and-trade system.

If B.C. does choose to allow some offsets, we would first recommend discounting the compliance value of offsets by at least 20% to provide a buffer to account for the inevitable non-additional offsets.⁵ We do not have a specific recommendation for an offset limit, but it should be set so that at least the vast majority of reductions should come from the capped sectors. Economic modelling for B.C.'s Climate Action Plan demonstrates the significant opportunities to reduce

³ See "A Realistic Policy on International Carbon Offsets" (Michael Wara and David Victor, 2008) or "Is the CDM fulfilling its environmental and sustainable development objectives? An evaluation of the CDM and options for improvement" (Lambert Schneider, 2007).

⁴ The \$200 per tonne is taken from "Climate Leadership and Economic Prosperity" (Pembina Institute and David Suzuki Foundation, 2009), an economic modelling study that analyzed the carbon prices needed to make deep cuts in Canada's greenhouse gas emissions.

⁵ Schneider (2007) found 20% of offsets from the Clean Development Mechanism were not additional.

emissions from the industrial sectors of the province, so the cap-and-trade system should be designed to turn those opportunities into reality.

4. *Set allowance budgets based on B.C.'s Climate Action Plan*

In general, the allowance budgets should be set in a way that allows B.C. to achieve its province-wide emissions reduction targets. Based on B.C.'s Climate Action Plan, existing and proposed in the plan are sufficient to achieve 73% of the reductions B.C. has targeted by 2020 (33% below 2007 levels). Of those reductions, 66% are achieved from industrial sectors.⁶ Assuming that proportion holds in a scenario where B.C. achieves its 2020 target, industry would be 58% below 2007 levels (14.6 million tonnes). We recommend applying a straight-line trajectory between anticipated 2012 emissions and that 2020 target of 14.6 million tonnes to ensure the industrial sector is making a fair contribution to B.C.'s efforts to reduce emissions.⁷ As the province's Climate Action Plan begins to look further into the future, a similar approach could be used for post-2020 allowance budgeting.

5. *Distribute all allowances by auction*

The WCI has recommended that a minimum of 10% of allowances be auctioned when the cap-and-trade system launches. Following this approach would be very problematic for three reasons:

- There would be a huge potential for windfall profits and/or unfair subsidies to industry if 90% of the permits were allocated to companies for less than their value.
- Every allowance allocated below market value would represent lost revenue for the government.
- The system would be more complex because government would need to decide which companies should receive non-auctioned allowances (and which should not).

We were pleased to see that B.C. left space to exceed the 10% minimum, and it will be important to act on the opportunity. Our recommended approach would be to auction 100% of the allowances to ensure the government is collecting a fair value for the allowances and the potential for windfall profits is eliminated. This should be relatively simple, because through the carbon tax, B.C. has already implemented an approach that is analogous to 100% auctioning.

As discussed in recommendation two, if any allowances are not auctioned, they should only be allocated through other means if the intended recipient is willing to pay a price equivalent to B.C.'s carbon tax.

⁶ The 66% is derived from high energy price scenarios in tables 8 and 11 in the province's Climate Action Plan. Relative to the 2020 reference case, industry is responsible for 65% of reductions. Relative to 2005 emissions, industry is responsible for 67% of reductions.

⁷ The 14.6 million tonnes of allowances would need to be discounted to reflect any industrial emissions included in B.C.'s greenhouse gas inventory, but not in the cap-and-trade system.

6. *Use a portion of revenues to mitigate demonstrated competitiveness impacts*

The intentions paper implies that carbon pricing will necessarily disadvantage companies that compete internationally and that some free allocation will be needed to deal with those competitiveness concerns. We disagree with both of these notions.

The blanket statement that carbon pricing will disadvantage companies that compete internationally (page 9) is false. Various studies show that carbon pricing can increase the international competitiveness of many sectors of the Canadian economy if revenues are used to reduce taxes that discourage economically desirable activities (e.g. income taxes).⁸

That said, there are specific energy-intensive and trade-exposed sectors that could be disadvantaged by high carbon prices to the point where it would be in their interests to shift production to other jurisdictions. Where those situations exist, free allocation does provide a form of protection, but as discussed in the previous recommendation, free allocation adds to system complexity and reduces transparency and government revenue.

A more transparent approach that would preserve the simplicity of the cap-and-trade system would be to auction the allowances and use the revenue to mitigate demonstrated concerns with some form of production subsidies. Ideally, those subsidies could be directed in ways that supplements the cap-and-trade system's incentive to reduce emissions.

7. *Eliminate early reduction allowances*

The B.C. government is proposing to allow early reduction allowances to companies that acted in advance of 2012. This proposal would be complex to administer, is flawed on a number of levels and is only being proposed because free allocation is being considered. If companies have to pay for their allowances, the issue is resolved because a company would automatically benefit from early action by not having to purchase as many allowances.

Providing early action allowances would be providing credit without a convincing case for doing so. Companies that have reduced emissions prior to the launch of the cap-and-trade system will have already benefited from reduced carbon tax and energy expenditures. They will continue to benefit from reduced energy expenditures in the future and by needing fewer allowances or offsets. It is not clear why they should be granted an additional credit for an action they deemed in their interests when they made it.

Including early reduction allowances would increase the total number of allowances, thereby resulting in less initial incentive to invest in clean energy solutions and more cumulative emissions between 2012 and 2020. The only case in which early reduction allowances might make any sense would be one in which the government promised that it would be providing free allowances, which it has yet to do and should refrain from doing.

⁸ See "Pricing Greenhouse Gas Emissions: The Impact on Canada's Competitiveness" (Chris Bataille et. al., 2009) and "Impacts of climate policy on the competitiveness of Canadian industry: How big and how to mitigate?" (Nic Rivers, 2010).

Based on the combination of concern with the rationale for the proposal and a simple solution — auctioning all allowances — that eliminates the need for the added complexity, we recommend not including early reduction allowances in B.C.’s cap-and-trade system.