Citizens' Climate Lobby

Risks and Mitigation within Cap and Trade Policies

Purpose of this document: Citizens' Climate Lobby firmly believes that putting a price on carbon is essential to creating the incentives and economic responses needed to significantly reduce emissions and combat the risks of climate change. As Ontario has decided to move forward with a Cap and Trade policy, the relevant question is "what design features need to be included?" This document compares Cap and Trade policy against important criteria for deciding on a carbon pricing policy, highlights identified risks from the literature and points to mitigating design options. While carbon pricing is a complex topic, we aim to simplify the topic by focusing on clear, understandable decision criteria. Overall, this document is intended to be a succinct tool for citizens, political leaders, and policy staff alike.

Definitions used:

Cap and Trade: a policy program which sets a cap, or maximum limit, on tonnes of GHG allowed to be emitted. Sources covered by the program then receive authorizations to emit in the form of emissions allowances, with the total amount of allowances limited by the cap. These sources can design their own compliance strategy to meet the overall emissions limit, including the sale or purchase of allowances, implementation of efficiency measures, or other options.

Policy Risks and Mitigating Design Options:

Criteria	Cap and Trade Policy Approach	Risk	Mitigating Design Feature
Economic Efficiency: Does the policy target reductions at the lowest cost?	An inclusive Cap and Trade system will create a market price for carbon as some businesses decide to buy needed emission allowances. The cap is lowered over time to ensure that the incentive to reduce emissions is stable or growing.	Exempting industries or sectors can lead to emissions reductions at a higher cost then necessary, reducing efficiency and competitiveness.	Ensure thorough coverage by targeting the policy as upstream as possible.
Emission Certainty: How certainly will the policy reduce emissions?	The cap sets an absolute quantity of emissions, and therefore reductions can be more certain.	If offsets are included in policy, there is a significant risk of double counting or gaming within the system. This has found to be the case with many of the offsets used within the European ETS[1].	Legislate a steadily decreasing cap and do not allow offsets to be included into the systems design.

Political Inclusiveness: Is the policy able to be supported across political viewpoints?	Often industry preferred as a carbon pricing mechanism, leading to some centrist political support.	If not designed robustly, the policy risks repeal given leadership changes. This is particularly apparent where industry has passed on costs to consumers.	Create a system of transparency and buy-in by returning revenue to households. All retained revenues exclusively to clear public purposes, tracking such spending.
Clarity: Does the policy provide clear signals and incentives?	As price is set through ongoing market activity, the price is dynamic and changing over time. A shrinking cap will provide price support over time.	Over-allocation can lead to very low prices, reducing incentives to mitigate emissions[2]. In fact, prices may even fall for emissions, as has been seen in Quebec's market[3].	Legislate a steadily increasing floor price for the auction of all emissions permits combined with a steadily decreasing cap on emissions. This ensures that risks of over-allocation do not reduce incentives.
Urgency: Can the policy be implemented rapidly?	Due to administrative complexity, has traditionally required a longer term of implementation[4].	Length of time to implement policy allows for significant emissions to continue unabated.	Leverage existing administrative systems used for other emissions trading systems.
Emissions Coverage: Does the policy cover all emissions sources?	Coverage is dependent on how many emissions sources are included in the cap, with significant emissions usually captured from major emitting sources.	If exemptions to specific industries are created the policy will be less efficient as its coverage will be reduced.	Ensuring full coverage of the economy by not exempting industries.
Impact on low-income families: Does the policy address the cost of living effects on low-income households?	Revenues from permits can flow to government or industry, low-income households expected to bear a proportionally greater income impact.	Previous analyses have shown that free allocation of credits leads to pass through of opportunity costs, leading to windfall costs at the expense of consumers[5].	Ensuring that all permits are auctioned off without free allocations to reduce rent seeking behaviour. Additionally providing direct cheques to households can mitigate cost of living increases.
Regulatory Fairness: Does the policy treat all industries equally?	Can become more inclusive and fair if the cap is applied to the broadest mix of industries and fuels at the point of extraction or market entry.	Specific industries have often lobbied for special exempt status from the overall cap of the policy[6]	Ensuring fairness to all industries by treating them equally under the policy, and applying the cap as upstream as possible.
Accountability: Is the policy easily understood by the public?	Pricing and reductions produced indirectly through market transactions.	Given the indirect nature of revenue raising and emissions reductions, the policy can lose public confidence.	Legislating and predictable cap, and routinizing reporting of both revenue from auctions and reporting on emissions reduction progress is necessary.

Conclusions: While any price on carbon is better than none, the above analysis of the literature indicates that a *Cap and Trade Policy* has significant risks that need to be mitigated in its design if it is to achieve its policy goals of cost-effectively reducing carbon emissions in a market based mechanism. The highlighted risks need to be addressed if the policy is to be administratively and economically efficient while maintaining the transparency and integrity needed to maintain

At the same time we encourage a consideration of the benefits of a Carbon Fee and Dividend policy, as they it is ultimately:

- **Economically Efficient;**
- **Politically Inclusive; and**
- **Clear to the public**

For a full discussion and further information on Carbon Fee and Dividend, please see **https://citizensclimatelobby.org** or contact Cathy Orlando, Citizens' Climate Lobby Canada National Manager at cathy@citizensclimatelobby.ca

Endnotes

[1] For example, the Stockholm Environment Institute found that 80% of all offsets from Ukraine and Russia were problematic and did not represent genuine emissions reductions. At least three-quarters of offsets were considered problematic. See:
Anja Kollmuss, Lambert Schneider, & Vladyslav Zhezherin. (2015). Has Joint Implementation reduced GHG emissions? Lessons learned for the design of carbon market mechanisms. Stockholm, Sweden: Stockholm Environment Institute. Retrieved from http://www.sei-international.org/mediamanager/documents/Publications/Climate/SEI-WP-2015-07-JI-lessons-for-carbon-mechs.pdf

Additionally, there are numerous examples of offset projects under the EU's Emissions Trading System that have resulted in human rights abuses. The most notorious include the evictions of Indigenous peoples in Kenya and Uganda from their traditional lands to make way for forestry and tree plantation projects that would earn carbon credits. See:
John Dillon. (2015) Canada Falls Far Short of Pope Francis' Call for Ecological Justice (Policy Briefing Paper #42). KAIROS Canada.

2 Over allocation is most often the product of lobbying by industry groups to raise their respective allocations. In some cases, there have been documented instances of industries specifically emitting more to shift up their respective baselines. See:
Tim Laing, Misato Sato, Michael Grubb, & Claudia Comberti. (2013). Assessing the effectiveness of the EU Emissions Trading System (Working Paper No. 126). Centre for Climate Change Economics and Policy.

3 In Quebec the average price from August was $16.39 CAD a tonne for current emission, and $16.10 a tonne for future emissions illustrating a decrease in the carbon price, as opposed to a steadily increasing cost.
Guillaume Bérubé. (2015, August 25). Minister Heurtel announces the results of the fourth Québec-California carbon market auction. Retrieved from http://www.mddelcc.gouv.qc.ca/infuseur/communique_en.asp?no=3279

4) Avi-Yonah, R. S., & Uhlmann, D. M. (2009). Combating Global Climate Change: Why a Carbon Tax is a Better Response to Global Warming than Cap and Trade. Stanford Environmental Law Journal, 28, 3.

5 This is estimated in the hundreds of millions, see: Sijm, J., Neuhoff, K., & Chen, Y. (2006). CO2 cost pass-through and windfall profits in the power sector. Climate Policy, 6(1), 49–72.

6 For example, in Quebec's Cap and Trade aluminum plants and two oil refineries were exempted. See:
Why cap-and-trade schemes are little more than a cash grab. (n.d.). Retrieved September 13, 2015, from http://www.theglobeandmail.com/report-on-business/industry-news/energy-and-resources/why-cap-and-trade-schemes-are-little-more-than-a-cash-grab/article23894822/