

Carbon Pricing Plan Background

Office of the Third Party

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Note:

The purpose of this document is to provide the political and policy context for the Third Party's Carbon Pricing Plan, which is available on the Third Party's website. This document should not be considered as a substitute for the Carbon Pricing Plan and should be read alongside it.

CONTEXT

Paris Conference (2015)

- International agreement to reduce greenhouse gas (GHG) emissions to keep warming below 2 °C, with a stretch goal of below 1.5 °C.
- Emission reduction target of 30% below 2005 levels by 2030.

Pan-Canadian Framework on Clean Growth and Climate Change (2016)

The Framework is a follow-up from the Paris Agreement and Vancouver Declaration, with a GHG reduction target of 30% below 2005 levels by 2030. It was agreed to by the Federal Government and all provinces except Saskatchewan (Environment and Climate Change Canada, 2016).

4 pillars of the Framework:

- Pricing carbon pollution (price floor of \$10/tCO₂e in 2018 + \$10/tCO₂e/a = \$50/tCO₂e in 2022¹), either through a direct carbon price (tax, levy, etc.) or a cap and trade system.
- Complementary measures to reduce emissions
- Measures to adapt to climate change and build resilience
- Actions to promote innovation, clean technology, and jobs

The Framework includes a specific commitment from PEI to introduce a carbon price.

Federal Carbon Pricing Backstop

The Pan-Canadian Framework provides that “(the) federal government will introduce an explicit price-based carbon pricing system that will apply in jurisdictions that do not meet the benchmark” (Environment and Climate Change Canada, 2016, p. 50). As such, the federal government has elaborated on how this backstop will be implemented (Environment and Climate Change Canada, 2017a, 2017b, 2018). The basic approach will include:

- A carbon levy applied to fossil fuels; and
- An output-based pricing system for industrial facilities that emit above a certain threshold, with an opt-in capability for smaller facilities with emissions below the threshold (Environment and Climate Change Canada, 2017b, p. 5).

There are very few industrial emitters in our province of a scale that would be covered under the output-based pricing system – possibly only the Cavendish Farms plant in New Annan. Therefore, we should be primarily concerned with the first carbon levy. To date, the federal government has maintained that the carbon levy will follow the specifications outlined in the Pan-Canadian Framework (see above).

Taking action: A climate change action plan for Prince Edward Island (2018)

This plan, published by the PEI government, is the provincial response to the Pan-Canadian Framework. It does not include a price on carbon pollution, although there is a commitment to adopt the federal backstop for industrial emitters (Prince Edward Island, 2018) even though, as noted, this would have little effect. A decision from the Federal Government is expected in the fall of 2018 on whether or not to approve the plan. It is unlikely to be accepted (see Pan-Canadian Framework, p. 50).

¹ A note on units: the standard unit of measure for greenhouse gas emissions is carbon dioxide equivalent (CO₂e) and it is generally measured in tonnes (t); a = annum or year (i.e. /a means per year).

Although it does not include the required price on carbon pollution, there are some positive measures included in the plan, such as the installation of a province-wide electric vehicle charging network, the continued expansion of biomass heating in public buildings, and carbon sequestration initiatives. The basics of this plan should be maintained, though with the addition of a carbon pricing model (as is the focus of the rest of this document), and that future consideration should be given to strengthening the plan.

Political context

Both the Liberal and Progressive Conservative parties of PEI have recently taken positions opposing the introduction of a price on carbon pollution. The Conservatives have aligned themselves with the leaders of Saskatchewan and Ontario in their intention to initiate a Supreme Court case to challenge Ottawa's jurisdiction to impose a carbon tax. The Office of the Third Party issued a [press release](#) on 13 July 2018 clarifying our overall position on and in support of carbon pricing.

POLICY CONSIDERATIONS

Principles for a GHG reduction policy

The following general principles were outlined by the OTP in the 13 July press release:

- creating the most effective and economically efficient means to reduce carbon emissions;
- ensuring that any revenues generated are returned directly to Islanders or go to create programs and incentives to reduce emissions; and
- protecting lower- and middle-income Islanders from any additional economic burden.

For comparison, the Ecofiscal Commission of Canada presented three similar criteria for carbon pricing policies (2015, p. iii):

1. policies are effective if they achieve the required level of emissions reductions;
2. policies are practical if their designs reflect local economic contexts and priorities; and
3. policies are cost-effective if emissions reductions are achieved at least cost.

Revenue neutrality

'Revenue neutrality' (or 'fiscal neutrality') has been used by different people in different ways to describe how revenues from a carbon fee can be used. Here are a few interpretations:

- When all revenues go directly back to people (e.g. a pure fee-and-dividend model).
- When none of the revenues go into government's general revenues, but are allocated to specific (climate related) programs (e.g. Alberta model).
- When all revenues are used to reduce other taxes (e.g. BC model).

(See UNFCCC, n.d.; Tombe, 2015; c.f. Haley, 2018)

After the Pan-Canadian Framework was signed, the PEI government initially promoted a 'fiscally neutral' approach along the lines of point (2). The Official Opposition challenged the position, arguing for revenue/fiscal neutrality in line with point (3).

Why carbon pricing?

- Strong consensus that carbon pricing is the most efficient and cost effective way to reduce emissions (Ragan, et al., 2015; Krupnick, et al., 2010; High-Level Commission on Carbon Pricing, 2017; McKittrick, 2016; Tombe, 2015; Dobson, et al., 2017)

- Straightforward to implement
- Broad coverage (industry, transportation, households, etc.)
- Market incentivizes innovative solutions
- Individual responsibility
- Can easily be adapted to local (provincial) circumstances (e.g. through exemptions, revenue recycling)

Canada’s carbon pricing model should put us on the right track to reduce emissions National Energy Board modelling predicts that a stable \$50/tCO₂e carbon price basically holds emissions flat, increasing price (beyond \$50/tCO₂e) will reduce emissions, and that increasing price plus green technology adoption further reduces emissions (National Energy Board, 2017, e.g. Figure E.S.2).

Pricing mechanism

- What is needed to meet Pan-Canadian Framework requirements
 - Price on GHG emissions
 - Broad coverage (all/most sectors, not just CO₂)

Revenue recycling options

‘Revenue recycling’ refers to the way in which revenues generated by a carbon price are used. It is generally assumed that revenues should not simply be added to the government’s general revenues, but should be used in ways that either mitigate the negative effects of the price (e.g. supports for low-income households) or be directed to specific programs related to GHG reductions. Table 1 contains a list of some of the main types of revenue recycling policy options.

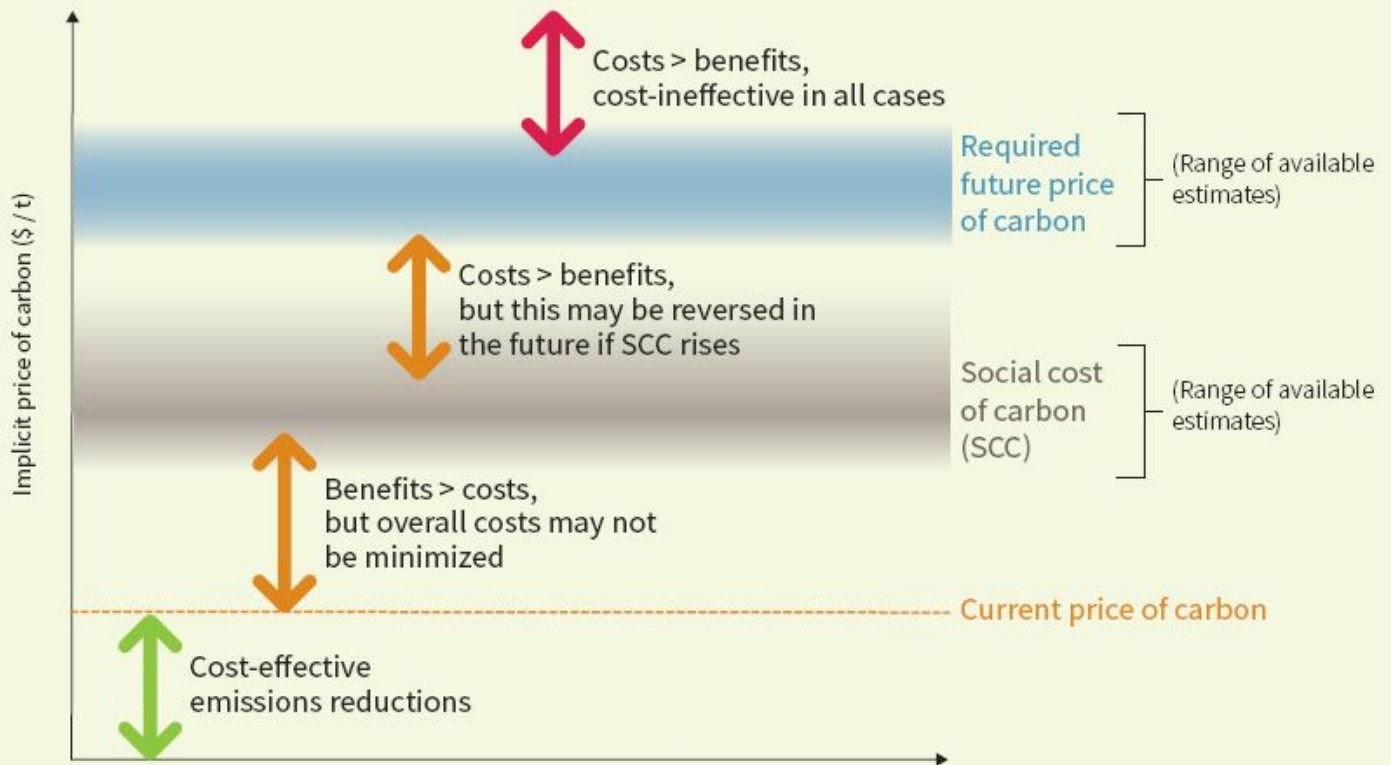
Table 1: Summary of revenue recycling policy options

Policy	Advantages	Disadvantages	Comments
Tax rebates or dividends to consumers	Helps counter the cost pressures of a tax. Provides incentives for consumers to reduce costs, while still receiving the rebate (free money). Revenue neutral.	Leaves less money for programs. May reduce the market incentive of carbon pricing.	AB returns ~28% of carbon levy revenues in to low/middle income households in rebates.
Tax cuts (income or business)	Helps counter the cost pressures of a tax. Revenue neutral.	Potentially no incentive to re-raise taxes when emissions fall and carbon pricing revenues dry up. May reduce the effect of carbon pricing.	BC relies primarily on this tool in a revenue-neutral model. AB uses ~10% of carbon levy revenues to fund a small business tax cut.
Output-based subsidies/pricing: a modified and limited cap-and-trade system applied to industry	May be effective for high-polluting industries Reduces competitive disadvantages and	Likely too complex for small emitters.	Key part of the AB model and Federal Backstop.

	leakages to jurisdictions without carbon prices		
Purchase subsidies and rebates (e.g. former electric vehicle incentive program, rebates for heat pumps)	Can help make alternatives more cost-competitive and encourage transition to more efficient technologies.	Typically expensive. Not always accessible to low-income persons. Not revenue neutral.	Some disagreement as to whether these policies are effective or needed in context of carbon pricing (see Loveys, 2017; Demerse, 2017; Ragan, et al., 2017).
Demand-side management	Energy efficiency is typically far more cost-effective than new (and old) generation. Can have wide-ranging benefits: saves people money, reduces poverty, improves health, etc. Can be (partially) funded by rate-payers.	May require significant capital expenditure in short term. Can increase energy rates. Typically requires regulatory oversight as a utility. This may present benefits. Not revenue neutral.	The PEI Energy Corporation now has responsibility for demand side management (formerly with MECL). (see Haley, 2018)
Regulatory approaches (e.g. former mandated renewable energy targets, vehicle emission standards, building codes)	Can be used to target specific areas that are less responsive to price signals or market failures.	Significant administrative burden (developing standards, inspections, enforcement).	
Direct government involvement (e.g. building and/or operating generation assets, government fleets)	Can be effective, especially in situations of market failure. Can help lower the cost of new technologies.	Can involve significant risk and cost. The ultimate cost is passed on to taxpayers. Not revenue neutral.	In PEI, the organization of the electrical grid needs to be considered. Major reforms would be disruptive and likely expensive.

A key consideration when deciding on the right mix of policies is the cost of reducing emissions. In promoting a cost-effective approach, strong consideration should be given to selecting measures that minimize the cost of reducing carbon emissions. The figure below provides a useful summary.

Figure 8: Benchmarking implicit carbon prices



The extent to which a policy is cost-effective depends on how its implicit carbon price compares with key benchmarks, including 1) the current, explicit price of carbon (i.e., the rate of a carbon tax, or market price of permits in a cap-and-trade system); 2) the SCC; and 3) the carbon price required in the future to achieve necessary emissions reductions. As there is uncertainty associated with available estimates for the last two benchmarks, these have been signified by the grey and blue shaded areas rather than a line. Note: This figure is not to scale.

(Ragan, et al., 2017, p. 34)

Complementary policies, alternatives, and other issues

The Pan-Canadian Framework as well as many analysts recommend using carbon pricing as the primary policy mechanism for reducing emissions, but also point to the value of implementing additional policies that work with and support the carbon price to enhance GHG reductions (Environment and Climate Change Canada, 2016; Ragan, et al., 2017, 2015; Haley, 2018; Loveys, 2017; High-Level Commission on Carbon Pricing, 2017). The Pan-Canadian Framework includes these as one of its four pillars. It is argued that carbon pricing, while the most effective policy for reducing emissions, can be made more effective by pairing it with policies that address its shortcomings (Ragan, et al., 2017). Others argue that carbon pricing is most effective as a standalone policy (McKittrick, 2016) or that it should be accompanied strictly by corresponding cuts in taxes (Tombe, 2015). Complementary policies can also be a way to provide compensation to specific people or economic sectors to mitigate the financial impact of a carbon price, without resorting to exemptions that reduce the effectiveness of the pricing mechanism (OECD, 2018).

Canada's Ecofiscal Commission (Ragan, et al., 2017) divides complementary policies into three categories:

- *Gap-filling* policies apply to GHG emissions not covered by the carbon price

- *Signal-boosting* policies can address market problems and thereby enhance carbon pricing
- *Benefit-expanding* policies achieve both GHG mitigation and other objectives

Considerations for complementary policies in PEI:

- Reducing impact on low-income or rural households
- Reducing impact on vulnerable sectors like agriculture
- Avoiding differential impacts between rural and urban communities
- Avoiding increasing the administrative burden involved in policies and programs (PEI is small, so administrative burdens tend to be larger than in other provinces). Options for addressing this include:
 - Favouring supplementary benefits delivered through a dividend and tax rebates over new programs;
 - Partnering with neighbouring provinces to share services;
 - Others...
- Phasing out contradictory policies (e.g. home heating oil tax exemption)
- How thin to spread the revenues; maybe focus on key programs
 - Carbon tax paid by high number of tourists may increase revenues
 - Federal funds are also available for various types of GHG reduction programs

There may be other related policy options that do not strictly complement carbon pricing, but that may be useful in reducing emissions nonetheless, as long as they don't work against the carbon price. Some of these, as relevant to PEI, are outlined below (this is not an exhaustive list).

Clean energy

- Renewable energy mandate in legislation (put renewable targets back in Renewable Energy Act) - or develop mechanism focused on total emissions (i.e. nuclear is no-emission but not renewable)
- Direct supports for clean energy may be considered, though they would likely be expensive. If significant amounts of money are allocated from carbon pricing revenues to energy generation the policy would not be revenue-neutral. However, funds from other sources (e.g. general revenues, federal programs) could be used to develop more clean energy generation.
- Further considerations: centralized vs. decentralized generation; intermittency and storage; Maritime Electric regulatory environment; etc.

Government operations

Outside of the carbon pricing policy, the provincial government could take additional measures to reduce emissions, including:

- Transitioning the government fleet to electric vehicles;
- Improving the energy efficiency of government buildings;
- etc.

These sorts of actions may not be large-scale emission reductions, but they would help provide leadership and move the provincial culture toward greater sustainability.

Buildings

- The 2015 National Building Code and National Energy Code are in the process of being adopted province-wide.
- Energy efficiency programs through Efficiency PEI are currently being expanded, but may be able to be improved further.

Independence of Efficiency PEI

Efficiency PEI should be sufficiently independent of government and adequately resourced so that it is free of political influence. This will ensure it can make the best choices for improving energy efficiency in the province, without being limited by political motivations (Haley, 2018). A fixed portion of the revenues from the carbon price could be disbursed directly to Efficiency PEI so that it could have greater predictability of revenues (i.e. it would be less dependent on provincial and federal budgets and negotiations). It could be given more authority to design its own programs to meet the policy objectives set by government.

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