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E-BRIEF

October 17, 2018

ENERGY AND NATURAL RESOURCES

The Rocky Road to Canada-wide Carbon Pricing

by
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- Several provinces and territories are not yet in compliance with the federal government's carbon pricing plan, set to come into effect on January 1, 2019. Ottawa intends to implement a minimum carbon price backstop in these non-compliant provinces and territories, and has promised that revenues will be returned to the jurisdiction where they are collected, but the choice of how to return these revenues is still in flux.
- Backstop revenues will be sizeable and the question of who controls these revenues matters. Options for returning backstop revenues include cash grants to provincial and territorial governments, targeted federal spending, and equal per-capita rebates to the jurisdiction's residents.
- This E-Brief recommends that the federal government disburse revenues according to the wishes of any province or territory that requests the backstop. If the backstop is imposed, rather than requested, revenues should be returned to the citizens of that jurisdiction on an equal per-capita basis. This approach ensures government accountability and is fair and flexible.

In March 2016, all provinces, territories and the federal government signed the *Vancouver Declaration*, a commitment to meet Canada's 2030 emissions reduction target, as established by the 2015 Paris Agreement. The Declaration also pledged to boost emissions reduction policies over time. The *Pan Canadian Framework on Clean Growth and Climate Change* implementation

The author thanks Farah Omran, Dale Beugin, Robin Boadway, Ben Brunnen, Grant Sprague and anonymous reviewers for comments on an earlier draft. She retains responsibility for any errors and the views expressed.

plan that followed features carbon pricing as a central component to achieving these goals and was signed by all provinces except Saskatchewan.

Now, as the federal government's plan for Canada-wide carbon pricing is set to come into effect on January 1, 2019, support is weakening. The carbon-pricing plan calls on provinces and territories to implement a minimum price on carbon dioxide equivalent (CO_2e) emissions by the January deadline. If they do not, Ottawa will implement the minimum price (the backstop) and could return any revenues collected to the province or territory of origin.

In recent months, the new Ontario government has scrapped its cap-and-trade program. Alberta, frustrated by the recent Federal Appeal Court decision on the Trans Mountain pipeline, is withdrawing its support for Ottawa's plan. Earlier this year, Saskatchewan launched a legal challenge that Ontario has since joined. Now, Manitoba has joined the pack, after cancelling its proposed carbon tax earlier this month.

The politics of carbon pricing may have changed, but the climate change challenge and Canada's emissions reduction target under the Paris Agreement have not. The economics are also unchanged – carbon pricing continues to be the most cost-effective option for achieving emissions reductions across the country.[1] As some provinces take a step back from carbon pricing, the federal government's minimum-price backstop is more important than ever. By reducing differences in carbon prices across provinces and emissions sources in the country, the federal plan ensures cost-effective emissions reductions and a more level playing field for business.

This E-Brief recommends that Ottawa proceed with implementing the federal backstop where required. In provinces and territories that request the backstop, the federal government should spend the revenues as instructed by these jurisdictions, giving them full discretion over the revenues raised within their borders. In the case of a non-compliant province or territory, backstop revenues should be returned to the citizens of that jurisdiction on an equal, per-capita basis.

The recommended approach ensures electoral and fiscal accountability. When the backstop is requested, the province and federal government share responsibility for imposing the carbon price and disbursing the revenues. When the backstop is imposed, the federal government has responsibility for implementing the carbon price. By returning the revenues as cash rebates to voters, the federal government makes clear its role in collecting and disbursing carbon-pricing revenues.

In contrast to other options, such as targeted federal spending or conditional grants, per-capita rebates limit federal intrusion in provincial and territorial fiscal matters. The backstop is an environmental measure that generates revenues, rather than a revenue measure per se. Returning the revenues to individuals rather than spending the proceeds in targeted ways helps to ensure the backstop is not interpreted as a tool for revenue generation. The approach is fair as it offers the same menu of choices to all provinces. Finally, the approach is flexible. If a non-compliant jurisdiction decides to align in the future, it gains full control over how to spend its carbon-pricing revenues.

1 Recent analyses support this conclusion. Rivers and Wigle (2018) estimate the costs of achieving a 10 percent reduction in emissions in the passenger transport sector using different policy measures. They find an average cost per tonne of avoided emissions using a carbon tax of $175. The average cost for alternative policies ranges from $200 to $1,000 a tonne. An analysis of policies adopted in Germany, the UK, the US and China, for example, finds that feed-in tariffs and capital subsidies had the highest cost per tonne of avoided emissions, while permit trading systems had the lowest cost per tonne (OECD 2013).

The Federal Government's Carbon-Pricing Plan

Ottawa's carbon-pricing plan aims to encourage cost-effective emissions reductions while providing some flexibility in its approach to provinces and territories.[2] They are free to choose a carbon tax or a cap-and-trade system whereby polluters must hold permits to pollute. Provinces and territories may also opt for a hybrid approach, but all policies must fully align with the federal government's benchmark requirements.[3] That benchmark calls for a minimum carbon price starting at $20 per tonne of CO_2e emissions in 2019 and increasing by $10 a tonne each year until reaching $50 in 2022. The carbon price must apply to a broad and common emissions base, with coverage consistent with that of BC's carbon tax regime (about 75 percent of emissions).[4] Jurisdictions that choose a cap-and-trade system must impose declining emissions caps sufficient to achieve targeted emissions levels comparable to what would occur if the minimum carbon price applied.

Under the federal plan, Ottawa intends to implement the backstop (in whole or in part) in any province or territory whose policies are not fully aligned with the benchmark requirements. The backstop consists of a carbon levy and an output-based pricing system (OBPS). The carbon levy targets fossil fuel combustion emissions, like those associated with transportation and home heating. Combustion and non-combustion emissions (with some exceptions) from large emitters are covered under the OBPS component of the federal backstop.[5] These polluters receive emissions credits based on their output and a sector-specific, emission-intensity performance standard. A facility must pay the carbon levy on excess emissions or cover the excess emissions using eligible offsets or surplus credits.[6] The OBPS design also helps to alleviate competitiveness concerns for facilities that are emissions intensive or trade exposed.[7]

While some provinces took an early lead on implementing carbon pricing, the decentralized approach has failed to deliver Canada-wide carbon pricing or a carbon price that rises over time.[8] The federal plan remedies this failure. It ensures that the minimum carbon price applies to emissions across the country and not just in jurisdictions that choose to implement carbon pricing. The plan also ensures that carbon prices rise over time, and in concert, across the provinces and territories.

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2 A uniform carbon price, applied broadly, encourages cost-effective emissions reductions, as agents seek out the cheapest options for avoiding the carbon price. It also helps minimize interprovincial emissions leakage.

3 See the *Greenhouse Gas Pollution Pricing Act* (part of *Bill C-74/Budget Implementation Act*, 2018) for details.

4 Dobson, Winter and Boyd (2018) find that the share of provincial emissions covered under the federal plan differs across provinces, depending on whether the backstop or benchmark is applied. Other factors, including the share of provincial emissions coming from non-combustion sources in the agriculture sector, are also important.

5 Large emitters are defined as industrial facilities with annual CO_2e emissions equal to, or greater than, 50 kilotonnes.

6 For a numerical example of how OBPS works, see https://ecofiscal.ca/2017/05/24/explaining-output-based-allocations-obas/.

7 Trade exposed businesses are those that compete with businesses from jurisdictions where carbon pricing related costs are lower. See, for example, Bataille, Dachis and Rivers (2009) and Canada's Ecofiscal Commission (2016).

8 See Snoddon (2016) for a discussion of the challenges of a decentralized, interprovincial approach to achieving Canada-wide carbon pricing.

Carbon-Pricing Compliance

Provinces and territories had until September 2018 to inform the federal government of their carbon-pricing plans.

BC's broad-based carbon tax and Quebec's cap-and-trade system, endorsed by the province's new recently elected government, both satisfy the benchmark requirements. Alberta's hybrid system, consisting of a carbon levy on transportation and heating fuels and an OBPS for large emitters, also complies with federal requirements, at least for 2019 and 2020.[9] Compliance beyond 2020 is questionable, however, given the province's withdrawal from the federal plan in protest over the Trans Mountain situation. Ontario no longer has a compliant policy given its decision to scrap the cap-and-trade program.[10] Manitoba has followed suit, cancelling its plan to impose a broad-based, $25-a-tonne carbon tax.

Several new carbon-pricing initiatives have been introduced in the past year, but most do not fully satisfy federal requirements in 2019 (or beyond) because either the carbon price is too low or emissions coverage is too narrow. The Northwest Territories' $20-a-tonne carbon tax starts on July 1, 2019 but compliance for 2019 is uncertain because the tax comes into effect only halfway through the year. Newfoundland and Labrador has an extension until November 2018 to submit a plan. A carbon tax is in the works but the province says it will not proceed if Ontario and Saskatchewan's legal challenge to the federal backstop is successful.

A stand-alone, cap-and-trade system has been established in Nova Scotia and both Saskatchewan and PEI have announced OBPS-type systems for large emitters. For Nova Scotia, compliance with the federal plan depends partly on yet-to-be determined emissions caps. Meanwhile, emissions coverage under both Saskatchewan's and PEI's OBPS plans is too narrow relative to the benchmark requirements.[11]

New Brunswick has adopted the OBPS component of the federal government's backstop and is allocating an increasing share of revenues from existing gasoline taxes to a climate fund. However, this approach is unlikely to satisfy the federal government's requirements. There is no new (or higher) carbon price, meaning the policy does not achieve any emissions reductions that would otherwise not have taken place. Nunavut's plan is still under construction. Finally, Yukon Territory is the only jurisdiction so far to request both components of the federal government's backstop.

Table 1 summarizes the assessment of provincial and territorial compliance for 2019.

9 Under Alberta's OBPS, large emitters must pay for emissions in excess of their annual facility benchmark or limit. Options for compliance include using banked credits, offset credits, credits acquired from other facilities or paying a carbon price.

10 An important aspect for Ontario is the treatment of already-purchased permits. Assuming all permits purchased to date by business in Ontario are "retired" to cover 2017/18 emissions and assuming relatively few permits have been banked for the future, then a reasonable possibility is that the federal government will treat Ontario in 2019 as if no carbon-pricing policies are in place.

11 Using 2015 emissions data, Dobson, Winter and Boyd (2018) estimate that Saskatchewan's OBPS-type system covers less than 10 percent of the province's emissions. Meanwhile, in PEI only one facility in 2016 would be covered by its proposed system. Emissions from this facility account for 2 percent of the province's total emissions. See Environment and Climate Canada (2018), Table 2.

Table 1: Assessment of Carbon Pricing Compliance for 2019, as of October 11, 2018

Compliant in 2019	Non-compliant in 2019	Uncertain
British Columbia	Prince Edward Island	Nova Scotia
Alberta	New Brunswick	Northwest Territories
Quebec	Ontario	Newfoundland and Labrador
Yukon Territory	Saskatchewan	
	Nunavut	
	Manitoba	

Source: Author's assessment of provincial policies and proposals.

Imposing the Backstop: How much revenue is at stake?

How much backstop revenue will the federal government collect? The answer depends on a number of factors. Revenues tend to be higher the broader the scope of emissions coverage. Revenues also depend on behavioural, investment and innovation responses to carbon prices, which tend to be greater the higher the carbon price and over the longer term. The extent to which emissions in large industrial facilities exceed the limits set under the federal government's OBPS also matters.

Table 2 shows some back-of-the-envelope revenue estimates for 2019. The exercise assumes the federal backstop applies in five provinces, all assumed to be non-compliant (Newfoundland and Labrador, PEI, New Brunswick, Saskatchewan and Ontario).

Columns 1 and 2 show revenues assuming the $20-a-tonne backstop applies to 100 percent and 70 percent, respectively, of a province or territory's 2016 emissions.[12] Both calculations overestimate backstop revenues for three reasons. First, actions taken by households and firms to avoid paying the carbon price are not taken into account. Second, the carbon levy is applied to all covered emissions, but in reality some emissions are covered under the backstop's OBPS component. In this case, the carbon levy is paid only on a facility's emissions in excess of specified limits. Third, the estimates do not take into account the possibility that non-compliant provinces have adopted policies that partially comply with federal requirements.

While no attempt is made to estimate the effects of behavioural responses on revenues, Table 2 presents revenue estimates under alternative assumptions with respect to revenues from OBPS-covered facilities and partial application of the federal backstop.

12 Not all emissions are subject to the carbon price under the federal plan. The illustrative calculations in Columns 1 and 2 assume 100 and 70 percent coverage, respectively. The federal plan aims for coverage around 75 percent. In reality, coverage could range from 60 percent to 90 percent, depending on the province (Dobson, Winter and Boyd 2018).

Table 2: Estimated Backstop Revenues, 2019

	1	2	3	4			
	100% Coverage (*$millions*)	70% Coverage (*$millions*)	70% Coverage, Excluding Federal OBPS-covered Emissions (*$millions*)	70% Coverage, Excluding Federal OBPS-covered Emissions & Assuming Partially Aligned Policy in Saskatchewan (*$millions*)	Backstop Revenue Per Person (*$*)	As Share of Provincial Own-Source Revenues (*percent*)	If recycled to Reduce PST rate (*percent*)
Newfoundland	216	151	148	148	280	2.3	10 → 8.8
Prince Edward Island[a]	36	25	25	25	166	2.4	10 → 9.1
New Brunswick	306	214	208	208	273	3.5	10 → 8.6
Ontario	3,212	2,248	1,889	1,889	133	1.5	8 → 7.4
Saskatchewan	1,526	1,068	972	534[b]	459	4.3	6 → 4.5
Total	5,296	3,746	3,242	2,804			

Notes: This exercise excludes Nunavut, Northwest Territories and Nova Scotia, whose cap-and-trade program is assumed to comply in 2019.

a To simplify, PEI's narrow OBPS is not taken into account.

b Saskatchewan's performance standard applies to large industrial emitters and is assumed to be compliant. Thus, backstop revenues are calculated as $20 a tonne applied to 70% of uncovered Saskatchewan emissions (50% of 2016 emissions).

Source: Author's calculations based on emissions data from Environment and Climate Change Canada (2018) *National Inventory Report 1990-2016: Greenhouse Gas Sources and Sinks in Canada* (www.canada.ca/en/environment-climate-change/services/climate-change/greenhouse-gas-emissions/inventory.html). Population data from CANSIM Table 510001. Provincial own-source revenues taken from provincial budget documents for 2018/19.

In Column 3, revenues are recalculated assuming that OBPS-covered facilities' emissions in excess of credits are zero.[13] Thus, no backstop revenues are generated from these facilities. To illustrate, about 16 percent of Ontario's emissions are attributable to large industrial facilities. Applying the carbon levy to 70 percent of Ontario's remaining emissions yields an estimated $1.9 billion in backstop revenues for Ontario as compared to the $2.2 billion shown in Column 2.

Suppose a provincial carbon-pricing policy is in place but only partially aligned with the federal requirements? In that case, the federal backstop applies partly in order to close the gap. Column 4 of Table 2 replicates the backstop revenue calculations from Column 3 except for Saskatchewan. For this province, backstop revenues are recalculated assuming a partially aligned policy is in place. Saskatchewan's OBPS-type system covers facilities emitting more than 25,000 tonnes of CO_2e per year, but there is no carbon price on emissions outside of this system. Assuming Saskatchewan's OBPS meets federal requirements, the federal carbon levy would apply to emissions not covered by this system. As Column 4 shows, partial application of the backstop significantly reduces the federal revenue estimate for Saskatchewan.[14]

Even Column 4's conservative estimates demonstrate sizable revenues are at stake – $2.8 billion in 2019. To put these dollar amounts in context, Table 2 shows Column 4's revenues in per-capita terms, as a percentage of provincial own-source revenues, and in terms of the provincial sales tax cut possible if revenues were recycled for this purpose. Backstop revenues collected in Saskatchewan, for instance, translate into $459 per person or about 4.3 percent of provincial own-source revenue. These revenues would be approximately enough to lower Saskatchewan's general sales tax rate from 6 percent to 4.5 percent.

A Proposal for the Allocation of Backstop Revenues

According to the federal government, backstop revenues will be returned to the province or territory where they are collected. Ottawa has plenty of options on how to do this.[15] They could be rebated to individuals, used to support clean technology investment in the province, split across several initiatives or returned as an unconditional cash grant to the province or territory. Which option contributes most to the goal of achieving cost-effective emissions reductions now and in the future?

This E-Brief recommends that when a backstop is requested, the federal government spend the revenues according to the wishes of the relevant jurisdiction. In the case of a non-compliant province or territory, backstop revenues should be returned to the citizens of that jurisdiction on an equal per-capita basis. This

13 Admittedly, one can think of the OBPS system working as follows: the federal government collects the $20-a-tonne carbon levy on all OBPS-covered emissions and then recycles most of these revenues back to covered facilities as credits, based on their performance. In this case, gross revenues are approximately equal to those in Column 2. Our interest, however, is in calculating the revenue that would be available to the federal government for other purposes.

14 Saskatchewan's OBPS is assumed to cover 50 percent of the province's emissions.

15 According to the *Greenhouse Gas Pollution Pricing Act* (part of the *Budget Implementation Act*, 2018), the backstop revenues collected by the federal government will remain in the province and will be disbursed: (i) to the provincial government; or (ii) to persons (prescribed or meeting prescribed conditions) in the province; or (iii) in some combination to the provincial government and persons.

approach has three main strengths. It contributes to improving government accountability, it helps to address fairness concerns and it is flexible.

Electoral and fiscal accountability are strongest when the government that spends the carbon-pricing revenues is also the one responsible for imposing the carbon price.[16] Suppose a province or territory requests the backstop, motivated perhaps by the desire to avoid the administrative costs of implementing its own carbon-pricing policy. The federal government implements the backstop but, from an accountability perspective, the two governments are jointly responsible for imposing the carbon price and should share the benefits from spending the revenues.

This E-Brief recommends that the federal government disburse the revenues in accordance with the province's wishes. The province has full discretion over the revenues. The federal government may benefit from its role as spending partner if voters associate the federal government with spending initiatives financed from carbon pricing revenues. This partnership approach also allows both parties to signal their joint commitment to carbon pricing and to cost-effective emissions reductions.

Full provincial discretion over backstop revenues could be achieved by other means. An agreement similar to income or sales tax collection agreements could be adopted, or the federal government could transfer the revenues to the lower level government as an unconditional grant. These options are more flexible from the province or territory's perspective, and may have lower administrative costs, than the recommended approach, but they also obscure the role of the province in implementing the carbon price. This weakens accountability as voters see the federal government as imposing a carbon price and the provincial government as providing benefits, financed by the carbon-pricing revenues.

Next, consider the case where the backstop is imposed in a non-compliant province or territory. Here, the federal government is responsible for imposing the carbon price. By pairing the backstop with cash rebates to voters, the federal government's role in the allocation of these revenues is clear. It is simultaneously demonstrating its commitment to cost-effective emissions reductions and, at the same time, accepting the fiscal and electoral responsibility for imposing the carbon price.

There are other options for returning carbon-pricing revenues. Revenues could be returned via targeted federal spending initiatives or as a grant to the non-compliant provincial or territorial government. The grant option weakens the link between responsibility for imposing the carbon price and for spending the proceeds, presumably to the benefit of the province and to the detriment of the federal government. Targeted federal spending and conditional grants are also more intrusive than the recommended option of per-capita cash rebates. These alternatives would most certainly be viewed as federal government interference in provincial or territorial fiscal matters and could escalate intergovernmental conflict.

Per-capita cash rebates offer two additional advantages. They limit the federal government's ability (real or perceived) to use backstop revenues in a punitive or capricious way. For instance, suppose the federal government opts to return revenues to select industries in a partially aligned province and to low-income households in a province with no carbon pricing policy. This approach will strike many as arbitrary and is difficult to justify on a principles basis. Attention would focus unproductively on the differential spending in

16 See Bird and Smart (2009) and Pincus (2008) for a discussion of grants and accountability in federal systems.

non-compliant provinces rather than on the importance of the backstop as a tool for achieving cost-effective emissions reductions. Adopting the same approach for all non-compliant provinces helps to avoid this. Rebating the revenues to individuals reinforces the environmental, rather than revenue generation, purpose of carbon-pricing measures (especially when compared to targeted spending). This may reduce the risk of a successful constitutional challenge to the backstop.[17]

The recommended approach is fair. First, the same menu of choices is available to all provinces and territories. Any province that decides to request the backstop knows that it will have full discretion over backstop revenues raised within its borders. If a province chooses not to align with the federal benchmark, it knows that backstop revenues will be returned to individuals in their jurisdictions, not spent in some arbitrary manner. At the same time, the approach helps to address concerns about the distributional impacts from carbon pricing. For instance, per capita rebates ensure that, as a share of household income, a poor household receives more than a similarly sized rich household.

Finally, the approach is flexible. As Table 2 demonstrates, the federal backstop is expected to generate a lot of revenue. Non-compliant provinces and territories may wish to align with Ottawa's carbon-pricing requirements in the future to gain control over these revenues. Under this proposal, if a province or territory requests the backstop, the province decides how the federal government will disburse the revenues on its behalf. Alternatively, if a province or territory decides to implement its own carbon-pricing policy, the proposal ensures that the jurisdiction assumes responsibility for implementing the carbon price and gets full control of the revenues.

Meeting the Challenge

Although the federal government's carbon-pricing plan takes effect on January 1, 2019, several provinces and territories are not in compliance with its requirements. Provinces may be stepping back from carbon pricing, but Canada still has a commitment to reduce emissions, and carbon pricing remains the most cost-effective option for doing so. The federal government has promised that backstop revenues will remain in the province and territories where they are collected, but the choice of how to return these revenues is still in flux.

This E-Brief recommends that the federal government proceed with its plan to implement the backstop where requested or required. For provinces and territories requesting the backstop, the federal government, in partnership with the province, should disburse all revenues according to its partner's wishes. In a non-compliant province or territory, Ottawa should impose the backstop but return the revenues as equal per capita rebates to residents. The recommended approach addresses accountability and fairness concerns and is flexible. Regardless of whether carbon-pricing compliance in Canada improves or deteriorates in the future, this proposal ensures cost-effective emissions reductions, a rising carbon price over time and a level playing field for business in Canada.

17 See Chalifour (2016).

References

Bataille, Chris, Benjamin Dachis, and Nic Rivers. 2009. *Pricing Greenhouse Gas Emissions: The Impact on Canada's Competitiveness*. Commentary 280. Toronto: C.D. Howe Institute. Available at: https://www.cdhowe.org/public-policy-research/pricing-greenhouse-gas-emissions-impact-canadas-competitiveness.

Bird, Richard M., and Michael Smart. 2009. "Earmarked Grants and Accountability in Government." Rotman School of Management Working Paper No. 1498775. November. Available at SSRN: https://ssrn.com/abstract=1498775 or http://dx.doi.org/10.2139/ssrn.1498775.

Canada's Ecofiscal Commission. 2016. *Choose Wisely: Options and Trade-offs in Recycling Carbon Pricing Revenues*, April 2016. Available at: http://ecofiscal.ca/wp-content/uploads/2016/04/Ecofiscal-Commission-Choose-Wisely-Carbon-Pricing-Revenue-Recycling-Report-April-2016.pdf

Chalifour, Nathalie J. 2016. "Canadian Climate Federalism: Parliament's Ample Constitutional Authority to Legislate GHG Emissions through Regulations, a National Cap and Trade Program, or a National Carbon Tax." *National Journal of Constitutional Law*. September. Available at SSRN: http://dx.doi.org/10.2139/ssrn.2775370.

Dobson, Sarah, Jennifer Winter, and Brendan Boyd. 2018. "The Greenhouse Gas Emissions Coverage of Carbon Pricing Instruments for Canadian Provinces." Working Papers 2018-07. Department of Economics. University of Calgary.

Environment and Climate Change Canada. 2018. *Overview of 2016 Reported Emissions January 2018. Facility Greenhouse Gas Reporting Program*. Ottawa: Government of Canada. Available at: https://www.canada.ca/en/environment-climate-change/services/climate-change/greenhouse-gas-emissions/facility-reporting/overview-2016.html.

OECD. 2013. "Effective Carbon Prices." Paris: OECD Publishing. Available at: https://doi.org/10.1787/9789264196964-en.

Pincus, Jonathan. 2008. "Six Myths of Federal-State Financial Relations." Committee for the Economic Development of Australia. 2008 Economic and Political Overview. Available at: https://www.ceda.com.au/Research-and-policy/All-CEDA-research/Research-catalogue/Six-myths-of-federal-state-financial-relations.

Rivers, Nicholas, and Randall Wigle. 2018. "An evaluation of policy options for reducing greenhouse gas emissions in the transport sector: The cost-effectiveness of regulations versus emissions pricing." Laurier Centre for Economic Research and Policy Analysis Working Papers 0107, revised 01 Jan 2018.

Snoddon, Tracy. 2016. *Carbon Copies: The Prospects for an Economy-wide Carbon Price in Canada*. E-Brief. Toronto: C.D. Howe Institute. September 15. Available at: https://www.cdhowe.org/public-policy-research/carbon-copies-prospects-economy-wide-carbon-price-canada.

This E-Brief is a publication of the C.D. Howe Institute.

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