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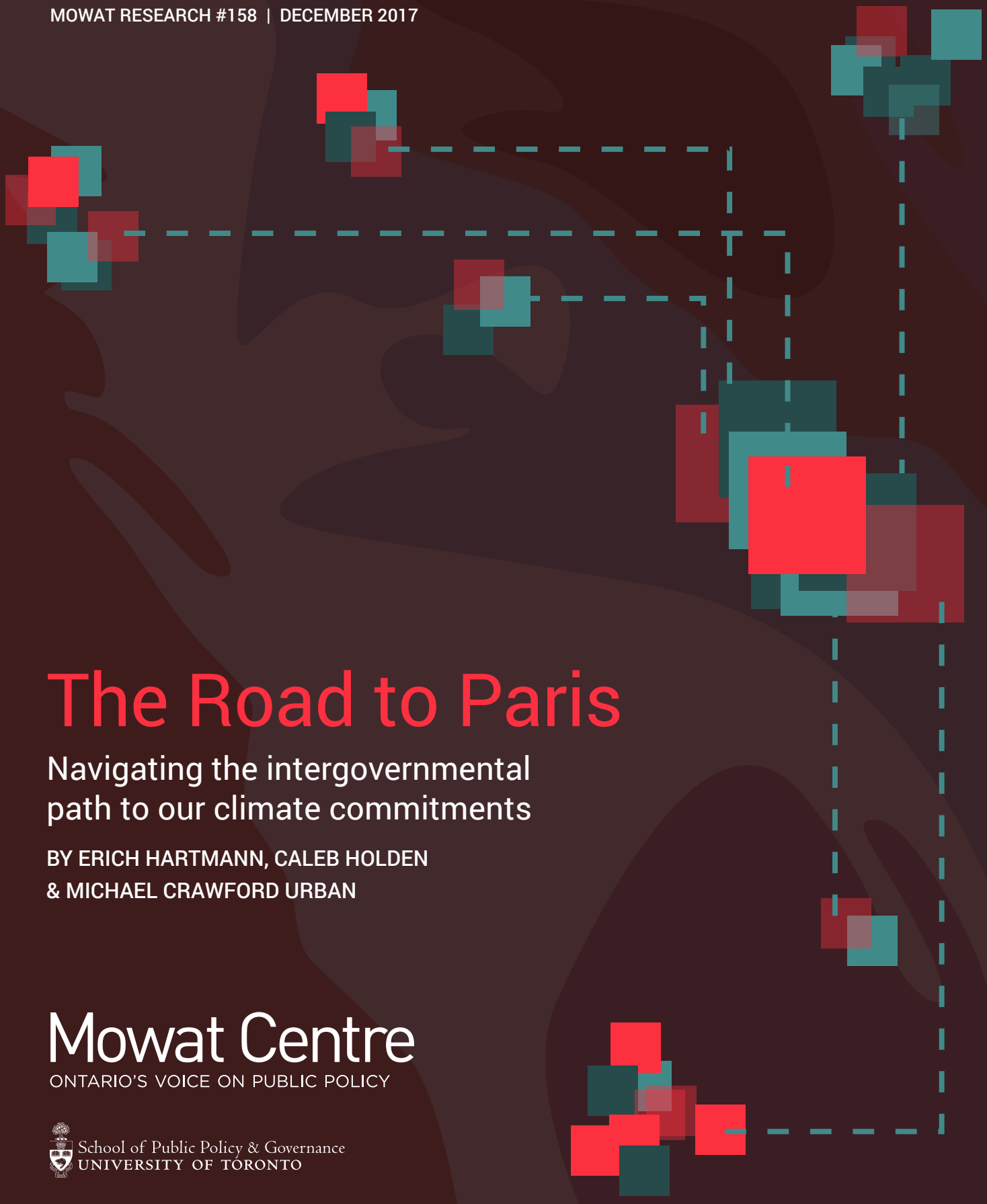

The Road to Paris

Navigating the intergovernmental path to our climate commitments

BY ERICH HARTMANN, CALEB HOLDEN & MICHAEL CRAWFORD URBAN

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Contents


While the broad intergovernmental agreement does constitute real progress in this direction, this progress is not, by itself, enough to meet Canada’s Paris targets

EXECUTIVE SUMMARY

Tackling the problem of climate change may well prove to be *the* policy problem of a generation and one that will require a monumental effort to be solved. In the Canadian context, the shared jurisdiction of environmental policy between federal, provincial and territorial (FPT) governments makes tackling the problem even more complex. Indeed, effectively responding to climate change will not simply involve "getting the policy right"; it will also require the successful alignment and optimization of 14 separate FPT governments' policies. To date, however, no framework for doing so has been developed. While the broad intergovernmental agreement that is the 2016 Pan-Canadian Framework on Clean Growth and Climate Change does constitute real progress in this direction,[1] this progress is not, by itself, enough to meet Canada's Paris targets.

True, the measures and commitments included in the Pan-Canadian Framework – carbon pricing chief amongst them – will play an essential role in any progress Canada makes towards its targets. Nonetheless, policies and initiatives that work alongside carbon prices to drive additional emissions reductions will also be critical. These "complementary measures" are particularly important as they can be precisely targeted to achieve specific policy outcomes that blunter tools may miss or achieve less efficiently. Control over many of those complementary measures, however, rests in provincial jurisdiction. As such, identifying the most strategic measures, and deploying them in a pan-Canadian context, will require significant intergovernmental cooperation.

Unfortunately, the history of Canada's federal-provincial-territorial engagement around climate change demonstrates that existing intergovernmental institutions are not up to the task of satisfactorily addressing the complex issues that characterize this policy space. In particular, past approaches have shown themselves largely incapable of successfully grappling with critical issues such as how to ensure equity between jurisdictions in the context of a necessarily asymmetric allocation of emissions reductions burdens.

The potential costs of getting this wrong are significant. On the one hand, Canada faces the possibility of missing its Paris targets entirely. On the other, Canadians face the possibility of an approach where blunt or poorly targeted policies seek to pry costly emissions reductions from areas where significant reductions have already been made while simultaneously leaving sweetheart deals for others. While neither of these scenarios has presented itself yet, the challenge of closing the gap between Canada's Paris targets and the likely results of the policies aggregated in the Pan-Canadian Framework remains significant.

1 A couple holdouts notwithstanding – at the time of this writing, the provinces of Saskatchewan and Manitoba had not adopted the Pan-Canadian Framework.

Therefore, we argue that an innovative approach – but one that also draws lessons from Canada's historical experience and from other jurisdictions – could enable a successful new effort. Specifically, we suggest a two-pronged approach. The first prong consists of the creation of evidence-based advice on how individual FPT climate change plans should contribute and combine to meeting the entirety of Canada's Paris commitments and how the burden of meeting those targets should be shared between jurisdictions.

The importance of this analysis notwithstanding, one thing that we already know for certain is that those provinces, particularly Alberta and Saskatchewan, whose economies are particularly emissions intensive, will need to bear a relatively greater emissions reduction burden. It is at this problem that the second prong of our approach is aimed, namely the deployment of the federal spending power to mitigate this uneven burden and to ensure equity between jurisdictions is maintained throughout this effort.

Enabling the two-pronged approach will require new approaches to governance as Canada's existing intergovernmental institutions are simply not up to the task. Currently, no single institution has the mandate or legitimacy to give specific, integrated, cross-jurisdictional advice to inform the development of an effective, efficient and fair pan-Canadian climate change framework. Only a permanent and independent institution, co-created by the FPT governments, will have the intergovernmental buy-in needed to solve this purview problem as well as the operational independence required to give the good, evidence-based advice to individual governments and FPT tables alike that is needed to solve this generational policy problem.

Key Arguments in this Paper

The following nine points provide a high level summary of the logic that underlies the analysis elaborated in this paper.

1

The Pan-Canadian Framework on Clean Growth and Climate Change will not be sufficient to meet Canada's greenhouse gas (GHG) emissions reduction targets.

2

Currently, there is no strategy for how to optimize Canada's 14 separate FPT climate change policies to ensure Canada's targets are met in an effective, efficient and fair manner.

3

The federal, provincial and territorial (FPT) governments must engage in collaborative policymaking to succeed in developing an optimal, pan-Canadian climate policy.

4

The federal government cannot meet Canada's climate targets on its own... and neither can the provinces and territories.

5

Previous attempts at collaborative climate change policymaking have foundered because of unilateralism, lack of buy-in and failure to address the uneven burden of climate change mitigation across provinces.

6

Canada's existing intergovernmental institutions are not up to the task of overcoming the problems that have previously dogged the climate change file, or that will collectively challenge FPT governments in the future.

7

Canadian decision-makers and policymakers will have to innovate and create new intergovernmental institutional frameworks to overcome the limitations of existing ones.

8

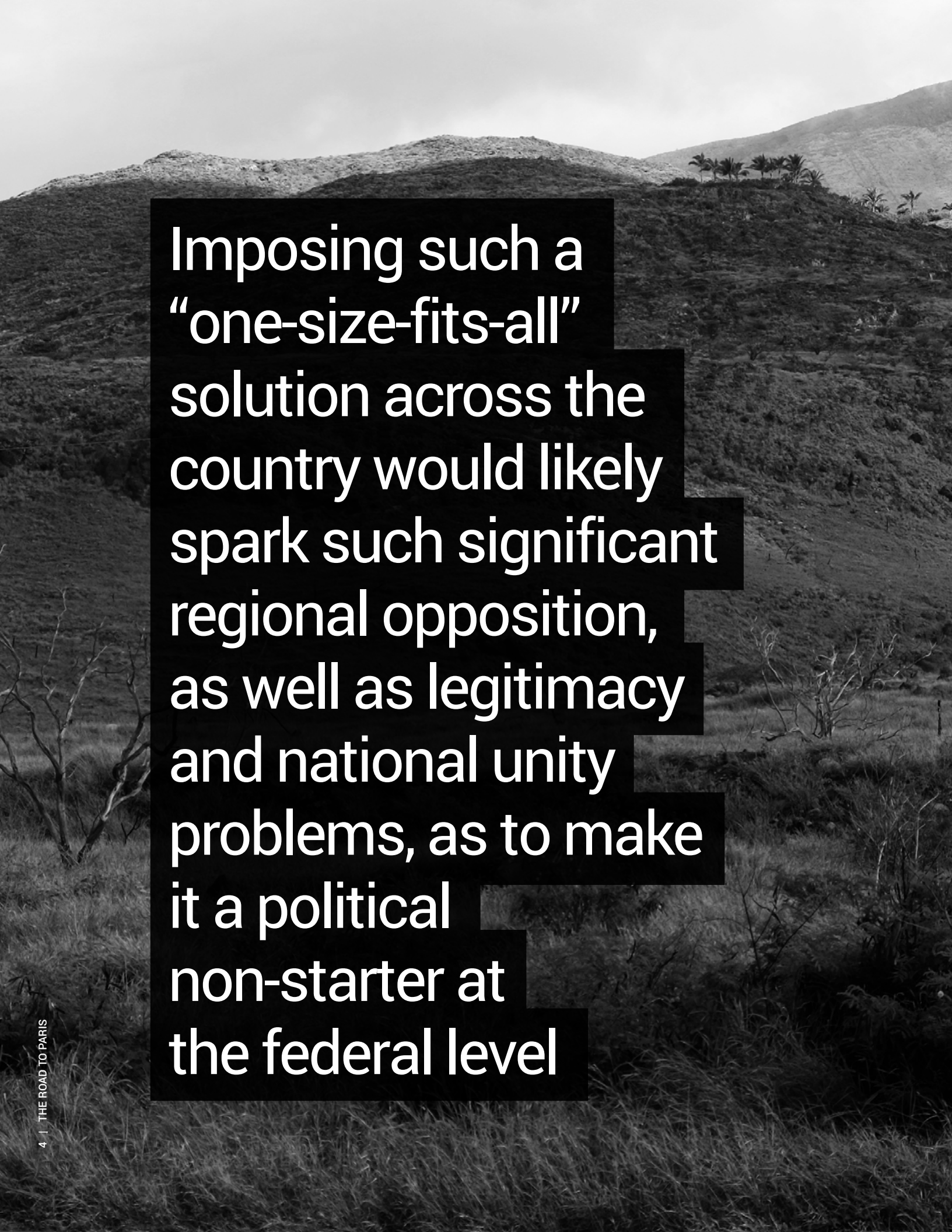
Only a permanent and independent institution, co-created by the FPT governments will be able to win the intergovernmental buy-in needed to successfully overcome the challenges faced by Canada's climate change policymaking.

9

The institution should be designed to:

» give evidence-based advice aimed at advancing Canada's 14 separate FPT climate change policies

» guide the deployment of the federal spending power so as to support cost-effective emissions reductions and share the burden of uneven economic impacts of emissions reduction policies equitably across jurisdictions.



Imposing such a "one-size-fits-all" solution across the country would likely spark such significant regional opposition, as well as legitimacy and national unity problems, as to make it a political non-starter at the federal level

1 INTRODUCTION

Tackling the problem of climate change may well prove to be the policy problem of a generation and one that will require a monumental effort to be solved. In the Canadian context, the shared jurisdiction of environmental policy between federal, provincial and territorial (FPT) governments makes tackling the problem even more complex. Indeed, effectively responding to climate change will not simply involve "getting the policy right"; it will also require the successful alignment and optimization of 14 separate FPT policies.

Under the terms of the Paris Accord, Canada has committed to reduce its greenhouse gas (GHG) emissions by 30 per cent from 2005 levels by 2030. In other words, Canada has committed to reduce its emissions from about 747 megatonnes (Mt) of carbon dioxide equivalent ($C0_2e$) to 523 Mt by 2030. For comparison, a "business as usual" emissions projection made in December 2016 – that took into account FPT policies and measures that had been legislated or provided with funding as of 1 November, 2016 – estimated that total Canadian GHG emissions would reach 742Mt by 2030 (see Figure 1).[2]

In this context, the Pan-Canadian Framework on Clean Growth and Climate Change (PCF) – the agreement reached on 9 December, 2016 between the federal government and all the provinces and territories except Manitoba and Saskatchewan – represents real progress. The PCF has three main parts. First, it aggregates participating governments' plans to reduce GHG emissions. Second, it establishes a national carbon price that can be applied flexibly by Canada's provinces and territories in various ways including broadly-based carbon taxes or cap-and-trade systems. Third, it creates the federal carbon backstop, a mechanism for ensuring a minimum national carbon price through a federal commitment to implement a carbon tax in any jurisdiction that does not implement a sufficiently broad and robust form of carbon pricing of its own.

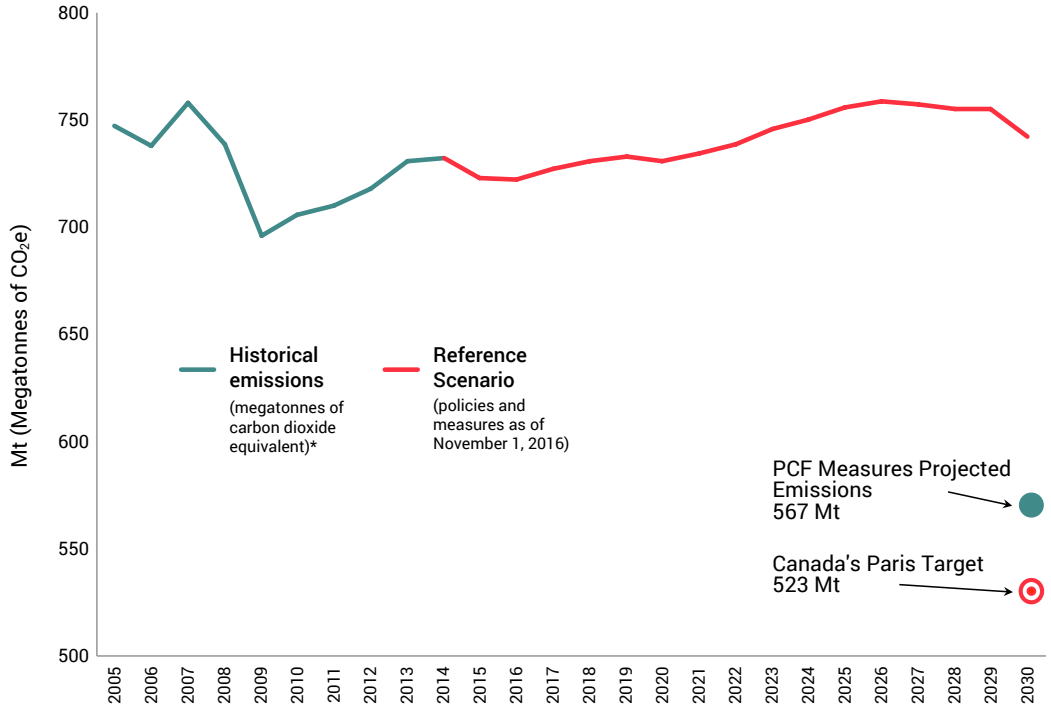
1

The Pan-Canadian Framework on Clean Growth and Climate Change will not be sufficient to meet Canada's greenhouse gas (GHG) emissions reduction targets.

2 Government of Canada. 2017. *National Inventory Report 1990-2015: Greenhouse Gas Sources And Sinks In Canada Canada's Submission To The United Nations Framework Convention On Climate Change, Part 1*. pg 7. http://unfccc.int/national_reports/annex_i_ghg_inventories/national_inventories_submissions/items/10116.php.

FIGURE 1

Greenhouse gas emissions and projections to 2030 with policies and measures as of November 1, 2016 compared to Canada's Paris target and PCF measures, 2005 to 2030



Source: Environment and Climate Change Canada. 2017. *Canadian Environmental Sustainability Indicators: Progress Towards Canada's Greenhouse Gas Emissions Reduction Target*. Government of Canada. http://www.ec.gc.ca/indicateurs-indicators/ default.sp?lang=en &n=CCED3397-1.

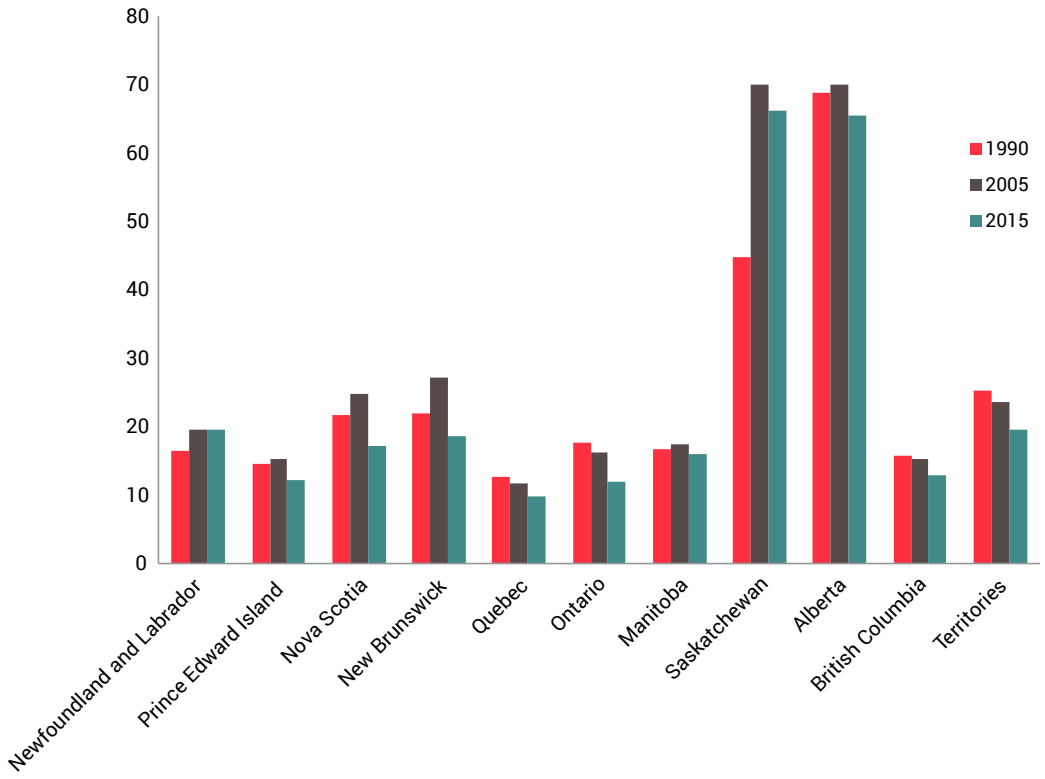
As is illustrated in Figure 1, however, the measures announced as part of the PCF are, by themselves, not enough to meet Canada's Paris targets by 2030 – and that's assuming that all these policies are implemented perfectly *without any backsliding*. Moreover, achieving Canada's significantly more ambitious 2050 target of 150Mt will be even more challenging and will require massive decarbonization efforts that must begin immediately, as "failure to act now means costs will likely rise as the pace of decarbonisation [required] increases."[3] Furthermore, the gap illustrated in Figure 1 – 44 Mt – is arguably a conservative estimate, with others suggesting the gap may in fact be higher.[4] Finally, given that many – if not most – of the policies contained in the PCF have been announced but not yet enacted or implemented, there is still a very real risk that they may be derailed by political paralysis or simply may not work as well as projected. Indeed, the federal Commissioner on the Environment and Sustainability found in its 2017 fall audit that "the

3 Government of Canada. 2016. *Canada's Mid-Century Long-Term Low-Greenhouse Gas Development Strategy*. pg 3. http://unfccc.int/files/focus/long-term_strategies/application/pdf/canadas_mid-century_long-term_strategy.pdf.

4 Sawyer, D. and Bataille, C. 31 March, 2017. *Taking Stock: Opportunities for Collaborative Climate Action to 2030; Policy Brief. 2: The Pan-Canadian Framework on Clean Growth and Climate Change*. EnviroEconomics. https://www.enviroeconomics.org/single-post/2017/03/31/Taking-Stock-Opportunities-for-Collaborative-Climate-Action-to-2030 Sawyer and Bataille argue that the gap is closer to 68Mt, though they also note that a number of recently announced policies not a part of the PCF could, if the best case scenario prevails, reduce this gap to 29 Mt. See also Smart Prosperity Institute. June 2017. *White Paper: Toward Canada's Climate Goals: The Policy Research Agenda for Getting to 2030 and Beyond 2017*. Smart Prosperity Institute. pg 2. http://institute.smartprosperity.ca/sites/default/files/whitepaperIce.pdf.

FIGURE 2

Per person greenhouse gas emissions by province and territories, 1990, 2005 and 2015 (tonnes per person)



Source: Environment and Climate Change Canada.2017. *National Inventory Report 1990–2015: Greenhouse Gas Sources and Sinks in Canada*. Government of Canada. http://www.ec.gc.ca/ges-ghg/default.asp?lang=En&n=83A34A7A-1and Statistics Canada. *Table 051-0001 Estimates of population, by age group and sex for July 1, Canada, provinces and territories, annual (persons)*. CANSIM. http://www5.statcan.gc.ca/cansim/a26?id=510001.

measures to reduce greenhouse gas emissions contained in this plan [the PCF] had yet to be implemented."[5]

This analysis has two important implications. First, it means that implementation of the PCF needs to begin and that additional measures beyond it are still required in order to close this gap between emissions reductions that can be expected under existing efforts and the level of reductions required to meet Canada's Paris targets. Even with the new measures – such as higher fuel standards – that have been announced since the signing of the PCF, no strategy has yet been announced – yet alone implemented – that would close the entirety of this gap (hereafter, the PCF-Paris gap).

Some have suggested that these additional measures could take the form of an increase in the minimum national carbon price that forms the central pillar of the PCF. While increases to this price will likely be essential, the analysis contained in this paper suggests that any attempt by Canada to reach its Paris targets exclusively through broadly-based carbon pricing will fail to achieve its objective.

5 Commissioner of the Environment and Sustainable Development. Fall 2017. *Report 1—Progress on Reducing Greenhouse Gases—Environment and Climate Change Canada*. Office of the Auditor General of Canada. http://www.oag-bvg.gc.ca/internet/English/parl_cesd_201710_01_e_42489.html#hd4c.

2

Currently, there is no strategy for how to optimize Canada's 14 separate FPT climate change policies to ensure Canada's targets are met in an effective, efficient and fair manner.

There are a variety of reasons for this conclusion with the most important being that the implementation of such a carbon-price-reliant approach to emissions reduction, even while allowing flexibility of implementation by PTs, is likely politically infeasible. For a country in which no jurisdiction has yet managed to implement a carbon price of more than $30 per tonne and in which carbon prices still remain politically controversial, it is difficult to believe that an approach that would require a price of at least $100 per tonne carbon price (and probably more) could be successfully implemented by 2030.[6] Indeed, as Mark Jaccard, Mikela Hein and Tiffany Vass suggest, "it is interesting to contemplate the electoral prospects of a government that increased carbon taxes by $15/t$CO_2$ each and every year".[7]

Additionally, unless accompanied by additional measures, such an approach would also fail to adequately take into account the significant regional differences which characterize Canada's economy. This is because, as is shown in Figure 2, emissions per person in the emissions-intensive provinces of Alberta and Saskatchewan are more than three times higher than in the next most emissions-intensive jurisdictions.

Thus, given this diversity, the imposition of a "one-size-fits-all carbon price" approach to emissions reductions would impose inequitably unbalanced burdens across Canada's different regions (see box below). Any approach that results in such an unbalanced impact presents problems from both a basic fairness perspective but also, given the importance of provincial cooperation to progress on this file, from a political one. Indeed, imposing such a "one-size-fits-all" solution across the country, at least in the current political context, would likely spark such significant regional opposition, as well as legitimacy and national unity problems, as to make it a political non-starter at the federal level.

> *"First Ministers discussed the Kyoto Protocol. They agreed that climate change is an important global issue and that Canada must do its part and must do so in such a way that no region is asked to bear an unreasonable burden."*
>
> First Ministers' Meeting Communiqué, December 1997[8]

6 See Sawyer, D. and Bataille, C. 31 March, 2017. *Taking Stock*. Moreover, this $100 per tonne price would actually be higher in nominal terms as it is indexed to inflation beginning at 2016 levels in Sawyer and Bataille's model. Their less favourable models set the price at $150 per tonne (with significant purchases of international reductions credits by Ontario and Quebec from California through their cap and trade regime) and $220 per tonne (without the purchase of any credits). Mark Jaccard and colleagues estimate the necessary price at somewhere between $200 and $215 per tonne, though their model does not account for some recent policy announcements. Jaccard, M. Hein. M. Vass, T. 2016. *Is Win-Win Possible? Can Canada's Government Achieve Its Paris Commitment . . . and Get Re-Elected?* School of Resource and Environmental Management Simon Fraser University. pg 23. http://rem-main.rem.sfu.ca/papers/jaccard/Jaccard-Hein-Vass%20CdnClimatePol%20EMRG-REM-SFU%20Sep%2020%202016.pdf.

7 Jaccard, M. et al. 2016. *Is Win-Win Possible?* pg 23.

8 First Ministers' Meeting. 12 December, 1997. *News Release – Joint Communiqué First Ministers' Meeting Ottawa, December 12, 1997*. Canadian Intergovernmental Conference Secretariat. http://www.scics.ca/en/product-produit/news-release-joint-communique-first-ministers-meeting-ottawa-december-12-1997/.

Thankfully, there are other options that can, at least in the short-to-medium term, work alongside carbon pricing to drive the additional emissions reductions that will be needed. These "complementary measures" have particular appeal as they can be precisely targeted to achieve particular policy outcomes that blunter tools like an economy-wide carbon price may miss. Critically, however, control over many of these additional policy tools rests under provincial jurisdiction. As such, identifying the most strategic measures and deploying them in a pan-Canadian context will require significant intergovernmental negotiation and cooperation.

It is important to emphasize that this effort will need to be pan-Canadian and will require significant intergovernmental cooperation to be successful. While some provincial governments have moved independently to reduce their GHG emissions these efforts, with a few notable exceptions, have been fairly limited. Ultimately, while some provincial leaders may possess personal convictions or inhabit a provincial political context characterized by significant popular support for emissions reductions, it is unrealistic to expect that provincial governments will be able to solve this policy problem on their own.

3

The federal, provincial and territorial (FPT) governments must engage in collaborative policymaking to succeed in developing an optimal, pan-Canadian climate policy.

There are a few reasons for this. Many jurisdictions, like the territories, Manitoba and the Maritime provinces produce too few emissions to be able to contribute much towards meeting Canada's Paris targets. Provinces with a demonstrated ongoing inclination to act, like Ontario, British Columbia and Quebec have already taken many of the easier steps available to them but now face much higher marginal reductions costs, growing political pushback and the prospect of their accomplishments being swamped by emissions growth in emissions-intensive provinces. For their part, provinces like Alberta and Saskatchewan confront the reality that any moves to reduce emissions will produce, and are already producing, important economic and political costs.

So, with unilateral federal action seemingly off the table due to concerns about its legitimacy and costly imprecision, and independent provincial action likely to be insufficient, intergovernmental cooperation seems to be the preferable way forward. Unfortunately, such intergovernmental cooperation on climate change mitigation has not seen much success in Canada historically. As we discuss in the next section, the history of Canadian intergovernmental climate change negotiations between 1998 and 2002 illustrate the structural and institutional obstacles that national action on climate change must overcome.

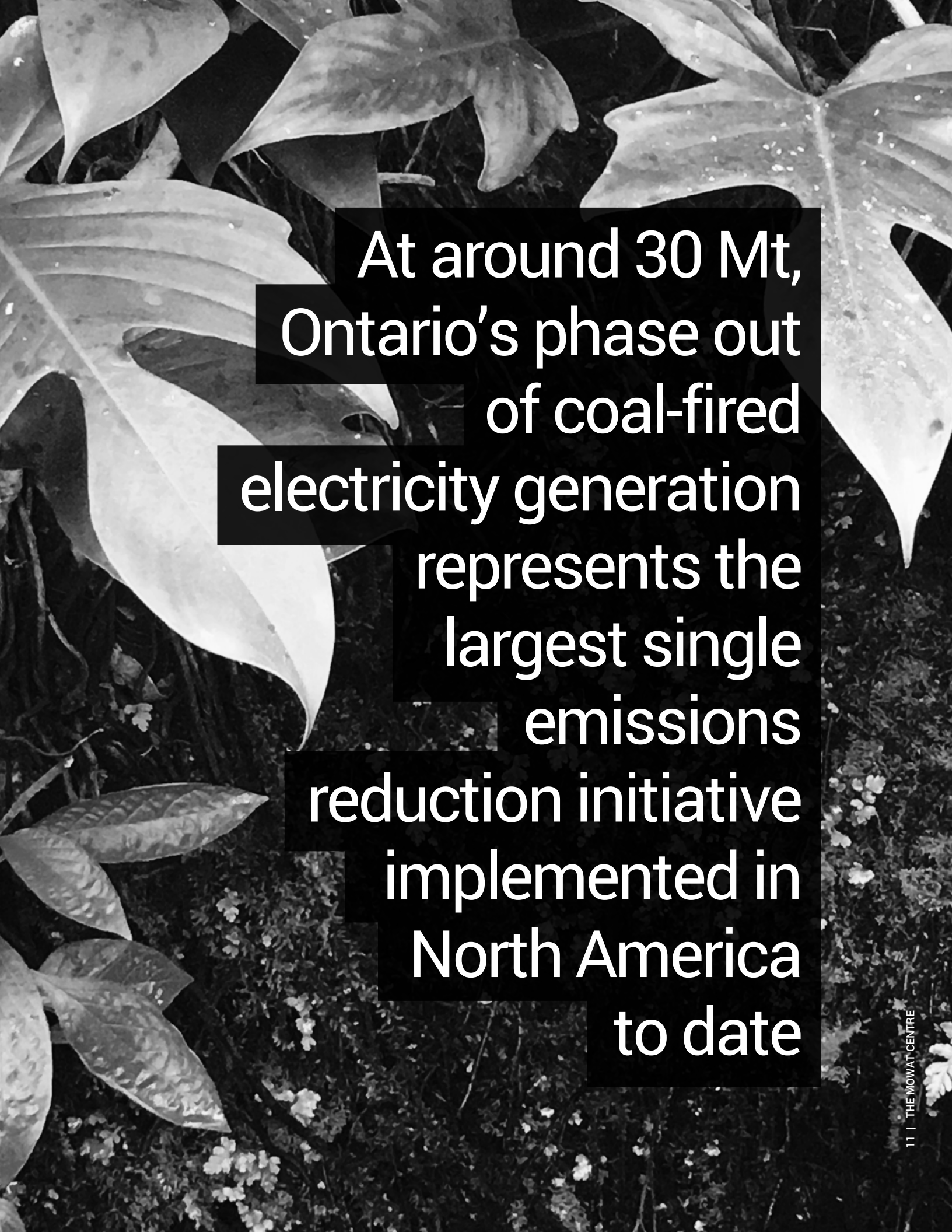
This all combines to create quite a policy challenge. Nevertheless, an innovative approach — but one that also draws lessons from Canada's historical experience of intergovernmental climate change negotiation and from other jurisdictions – could enable a successful new effort at overcoming this challenge. This approach would consist of two prongs:

» Use of the federal spending power to induce outsized participation by the emissions-intensive provinces through the provision of subsidies to alleviate the asymmetric costs that these jurisdictions face. These subsidies would be targeted at funding the best complimentary measures available as determined by the institution described in the second prong of our approach.

» The creation of a new pan-Canadian institution capable of filling the existing intergovernmental institutional vacuum that characterizes this policy area by providing the integrated, cross-jurisdictional advice needed to inform the development of an effective, efficient and fair pan-Canadian climate change framework.

For political reasons discussed in greater depth in subsequent sections, this policy development capacity will need to be independent of all 14 Canadian governments and capable of building and sustaining its own legitimacy on the basis of scientific expertise and evidence. Moreover, given that financial sustainability and political durability will be needed to ensure that the institution is able to do its work and to discourage unilateral defection by FPT governments, this institution will need to be co-created by all the FPT governments.

Finally, it is worth remembering that the potential costs of mishandling the climate file are significant. Bluntly, Canada easily could miss its Paris targets entirely. Alternatively, ambitious but poorly targeted policies could induce unnecessary economic hardship in jurisdictions where there are few reductions left to give while leaving much less costly reductions in emissions-intensive jurisdictions on the table. Closing the PCF-Paris gap is possible, but doing so will require overcoming a host of potentially divisive obstacles. Figuring out how to do so will be as essential to a successful outcome as any other aspect of the exercise.



At around 30 Mt, Ontario's phase out of coal-fired electricity generation represents the largest single emissions reduction initiative implemented in North America to date

2 THE POLICY PROBLEM

On 9 December, 2016, the Pan-Canadian Framework on Clean Growth and Climate Change (PCF) was announced with great fanfare following a First Ministers' Meeting in Ottawa. The PCF represents an aggregation of FPT plans (excluding Manitoba's and Saskatchewan's) to reduce GHG emissions. While both an important achievement from an intergovernmental cooperation standpoint and a good start in terms of actual progress on emissions reductions, it is widely accepted that the PCF is only a first step on the path to meeting Canada's Paris Accord targets.[9]

The limitations of the PCF provide a good window onto the dimensions of the policy problem that have confronted Canadian governments every time they have tried to tackle climate change. The first element of this problem is a substantive one, namely, that reducing GHG emissions to the extent required to prevent catastrophic climate change is a difficult task that will have far-reaching impacts and will require monumental efforts that likely involve transforming major sectors of our economy.[10] The fact that the PCF, as significant as it is, only begins to engage these challenges clearly illustrates this part of the challenge.

A second element of the problem is a structural one that stems from the difficulty presented by Canada's federal character. In short, the announcement of the PCF is not the same as achieving the planned reductions through the measures described in the framework. At one level, the PCF is a voluntary intergovernmental agreement which is unenforceable and which will only be effective to the extent that there is a sustained political will to adhere to it. Individual governments may still backslide away from their PCF commitments, especially as costs – both economic and political – mount.

The decision to create the federal carbon backstop indicates the federal government's recognition of this problem and represents an attempt to stop any province of territory from being able to defect from this effort. The legality of this essentially coercive measure has not been universally accepted, however, and its implementation may yet prove sufficiently politically costly as to limit its use to carbon price levels that, on their own, would be insufficient to meet Canada's Paris commitments.

9 Canada's Ecofiscal Commission. June 2017. *Supporting Carbon Pricing: How to identify policies that genuinely complement an economy-wide carbon price.* Canada's Ecofiscal Commission. pg iii. https://ecofiscal.ca/reports/supporting-carbon-pricing-complementary-policies/; Trottier Energy Futures Project. April 2016. *Canada's Challenge and Opportunity: Transformations for major reductions in GHG emissions.* Trottier Family Foundation; The Canadian Academy of Engineering; David Suzuki Foundation. https://www.cae-acg.ca/wp-content/uploads/2016/04/WEB-Trottier-Energy-Futures-Project-March31.pdf; Sawyer, D. and Bataille, C. 31 March, 2017. *Taking Stock.* Jaccard, M. et al. *Is Win-Win Possible?* 2016.

10 Trottier Energy Futures Project. April 2016. *Canada's Challenge and Opportunity.* Macdonald, A. 8 Sepember, 2017. *The Cost of a Cleaner Future.* The Conference Board of Canada.

Ultimately, Canada needs a well-coordinated cooperative national strategy to close the PCF-Paris gap. Crafting such a strategy, however, will require skilful and ongoing intergovernmental negotiation and collaboration over decades and across governments of every partisan stripe. In some respects, the creation of the PCF was the easy part in that it recognized existing FPT plans, including pre-existing moves by the largest provinces to put a price on carbon and affirmed other provinces' commitment to follow suit. Moving farther forward will become increasingly difficult, as the additional steps needed to achieve marginal emissions reductions will have to be wholly new and will need to be achieved after those emissions reductions that were the simplest – and the cheapest – have already been achieved.

In this section, we analyze the dimensions of the problem confronting policymakers. Our analysis is guided by an overarching assessment of the policy problem facing policymakers and of the characteristics that any solution to this problem must possess. This understanding is summarized graphically in Figure 3, and holds that, in order to meet Canada's 2030 and 2050 Paris targets, any national climate change mitigation strategy will need to combine at least the following three elements,[11] namely:

» **Effectiveness:** the ability to actually lower emissions

» **Cost-effectiveness:** the ability to lower emissions at a manageable cost

» **Political feasibility:** a level of political acceptability that will enable governments to agree to the strategy and for the strategy to garner sufficiently broad public support so that it is able to survive governmental turnover over time

11 Much inspiration for this understanding was taken from Canada's Ecofiscal Commission. June 2017. *Supporting Carbon Pricing.*

FIGURE 3
Elements of an Optimized Climate Change Mitigation Policy

*Government of Canada. 2004. *One-Tonne Challenge w/ Rick Mercer*. https://www.youtube.com/watch?v=UZC4SlbOH4w.

Using this understanding, we identify a set of features that any strategy will need to include in order to successfully close the PCF-Paris gap. Finally, we also explore the challenges – especially the structural challenges – that any such effort will face in as decentralized an institutional context as Canada. Ultimately, this analysis will help to demonstrate the importance of building a durable intergovernmental institution capable of buffering the many challenges that will arise over time and anchoring all of Canada's various governments to a cost-effective and politically feasible strategy for meeting Canada's Paris targets.

A Carbon Tax, but...

Achieving Canada's Paris targets will be difficult, and this difficulty will only be multiplied by the fact that there is still significant disagreement over how it would be best to do so. Some believe they already have the answer, namely carbon taxes.[12] Carbon taxes – alternatively, carbon-pricing schemes like cap-and-trade systems which accomplish much the same goal in much the same way – are attractive in abstract because, over the long term, they are the most efficient means of reducing emissions.

Carbon taxes seemingly also have the virtue of simplicity, given that Canada's constitution likely gives the federal government the ability to unilaterally implement an emissions reduction plan based on a national carbon tax. In fact, the federal government already seems to be moving part of the way in this direction with its decision to create a federal carbon backstop, a mechanism by which it has committed to implement a carbon tax in any province or territory that does not implement its own carbon price. Supporters of a carbon tax argue that the federal government could solve the entire climate change policy problem by simply extending the logic of the federal backstop and requiring that provincial carbon prices gradually rise to the levels required for Canada to meet its Paris targets.

Yet, while such an approach might have the virtue of apparent economic efficiency and simplicity, it could also be profoundly damaging. Yes, carbon pricing will be an important part of meeting Canada's Paris targets. In fact, numerous analyses suggest that a national carbon price floor that is significantly higher than the federal backstop described in the PCF will be integral to any successful effort aimed at reaching Canada's Paris targets.

Nonetheless, relying too heavily on an undifferentiated national carbon price risks not only leaving some critical potential reductions on the table in the short-to-medium term,[13] but will also likely prove politically infeasible. Recall that no Canadian jurisdiction has yet managed to implement a carbon price of more than $30 per tonne. Given that estimates of the carbon price required to reach our Paris targets range from a low of $100 per tonne to upwards of $200 per tonne, it is hard to see how any government could propose more than tripling the highest existing carbon tax (and indexing it to inflation) in only 12 years and remain in a position to implement it.[14] Indeed, existing research shows that in British Columbia, where the provincial carbon tax has had an objectively neutral financial impact on the vast majority of citizens, more than 70 per cent of citizens believe that it has made them financially worse off.[15]

Complementary Measures

Thus, it is not surprising then that many experts see complementary measures as an essential complement to carbon taxes. Complementary measures can be defined as initiatives that work alongside carbon prices to drive additional emissions reductions through a variety of mechanisms. For example, some carbon emissions – such as fugitive methane emissions – can be hard to measure making them hard to tax; complementary measures aimed specifically at supporting efforts to reduce these emissions can help to address this

12 Coyne, A. 19 May, 2017. "The federal carbon tax has become unnecessarily costly". *The National Post*. http://nationalpost.com/news/andrew-coyne-the-federal-carbon-tax-has-become-unnecessarily-costly.

13 Canada's Ecofiscal Commission. June 2017. *Supporting Carbon Pricing.* pg 9.

14 Jaccard, M. et al. 2016. *Is Win-Win Possible?* pg 23.

15 See Jaccard, M. et al. 2016. *Is Win-Win Possible?* pg 5-6.

problem. Other complementary measures can help to overcome barriers – such as a lack of enabling infrastructure – that would otherwise blunt the impact of a carbon tax in some sectors, at least in the short term.[16] Also, because they can be targeted much more specifically than can carbon pricing,[17] complementary measures can be applied with greater precision, or implemented alongside compensatory initiatives that would not be possible on a larger scale. Because of this, complementary measures can enable much greater short term reductions at significantly lower political, and sometimes financial, cost.

A good example of a successful complementary measure was the phase out of coal-fired electricity generation in Ontario during the first decade of the 21st century. As this example demonstrates, these measures can result in significant emissions reductions. In fact, at around 30 Mt, Ontario's phase out of coal-fired electricity generation represents the largest single emissions reduction initiative implemented in North America to date.[18] Another example of a complementary measure that can make a significant impact is the expansion of mass transit systems. Moreover, by reducing congestion and improving the liveability of cities, such measures can produce a host of additional benefits such as increased productivity and economic activity.[19] These "co-benefits," while not directly related to emissions reductions, can play a critical role by helping to build public support and a strong rationale for measures that might be difficult to justify solely on the basis of the emissions reductions they generate.

Complementary measures can take a variety of forms. Some of the most direct involve government legislation and regulation that proscribe certain activities (such as burning coal). Others consist of inducements designed to

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The federal government cannot meet Canada's climate targets on its own... and neither can the provinces and territories.

16 Canada's Ecofiscal Commission. June 2017. *Supporting Carbon Pricing*. pg iii-iv.

17 Note that when we use the term carbon tax or carbon pricing, we are referring to broad-based taxes or prices that apply generally to large proportions of the economy. Some complementary measures may in fact consist of carbon taxes or prices that are specifically targeted at a single sector or activity, but because of this specificity it is better, for the purposes of this analysis, to understand them as complementary measures.

18 Newfoundland and Labrador, Prince Edward Island, Nova Scotia, New Brunswick, Québec, Ontario, Alberta, British Columbia, Yukon, Northwest Territories, Nunavut, Canada. 2016. *Pan-Canadian Framework on Clean Growth and Climate Change: Canada's Plan to Address Climate Change and Grow the Economy*. pg 10. https://www.canada.ca/content/dam/themes/environment/documents/weather1/20170125-en.pdf. It is worth noting that Ross McKitrick (2013 and, with Aliakbri, 2017) argue that in many cases, such as Ontario's phase out of coal-fired power plants, GHG emissions reductions can be achieved more effectively through the purchase of carbon offsets on the international market. Setting aside the debate as to whether the assumptions underlying their analyses are correct – such as, for instance, the price at which it is reasonable to expect to be able to purchase these credits – we accept that the purchase of offsets will likely form a part of any successful strategy for emissions reductions in Canada. However, given the volume of credits that would need to be purchased on an ongoing basis to offset Canadian emissions entirely if no specific efforts were made to reduce emissions between now and 2050, as well as the unpredictable movements in the price of such offsets during that period and the vulnerability that such uncertainty imposes, it seems safe to assume that domestic efforts at emissions reductions will also need to form a significant portion of any effort to meet Canada's Paris targets. See McKitrick, R. 11 April, 2013. *Environmental and Economic Consequences of Ontario's Green Energy Act*. Fraser Institute. pg 10. https://www.fraserinstitute.org/studies/environmental-and-economic-consequences-ontarios-green-energy-act and McKitrick, R. and Aliakbri, E. January 2017. *Did the Coal Phase-out Reduce Ontario Air Pollution?* Fraser Institute. pg 7. https://www.fraserinstitute.org/sites/default/files/did-the-coal-phase-out-reduce-ontario-air-pollution.pdf.

19 It is estimated, for instance, that congestion costs the Greater Toronto and Hamilton Area economy more than $11 billion a year. See Dachis, B. July, 2013. *Cars, Congestion and Costs: A New Approach to Evaluating Government Infrastructure Investment.* C.D. Howe Institute. http://www.cdhowe.org/pdf/Commentary_385.pdf.

encourage and support specific activities. Direct subsidies or payments made by the government, such as those extended to buyers of electric vehicles (EVs), fall into this category. More broadly, public investments aimed at supporting or encouraging larger economic or societal shifts to less carbon-intensive ways of doing things represent another category of complementary measures. For example, even with generous subsidies to purchasers, widespread adoption of EVs is unlikely to occur until a reliable network of charging stations is established. While the private sector may eventually build such a network, governments could accelerate the adoption of EVs by funding a first generation network of charging stations. Finally, sometimes members of the public desire to help reduce emissions through their own actions but are obstructed by the high costs involved in financing projects.[20] By ensuring that helpful information is easily obtainable, and by adjusting incentive structures through programs like preferential loans and grants for home heating retrofits, governments can help to enable individuals to contribute to emissions reductions efforts.

Whatever specific form they take, complementary measures generally achieve emissions reductions by activating one of three mechanisms:

1] **Gap-filling:**
Actions that help reduce emissions that are not well-covered by carbon pricing

2] **Signal-boosting:**
Interventions that enhance the effectiveness of carbon pricing by reducing barriers to behaviour change[21]

3] **Benefit-expanding:**
Enabling measures that require justification on the basis of a combination of emissions reductions and other additional benefits[22]

Finally, it is also important to recognize that complementary measures are not without their risks. One of the most important of these is that as initiatives proliferate, it becomes very easy to spend a lot of money without achieving significant results. Indeed, the uncoordinated design and implementation of complementary measures, especially when undertaken in conjunction with carbon-pricing schemes, can result in significant waste either because governments end up paying for the same reductions two or three times over or through a simple failure to prioritizes projects with the best return on investment.[23] Thus, while complementary measures will likely represent a critical component of any successful emissions reduction strategy, their inclusion must be handled with care.

20 Broadbent Centre and Mowat Centre. 2015. *Step Change: Federal Policy Ideas Toward a Low-Carbon Canada.* Broadbent Centre and Mowat Centre https://mowatcentre.ca/wp-content/uploads/publications/112_step_change.pdf.

21 The building of charging stations for EVs represents a good example. If a carbon tax increases the cost of gasoline but there are no easily accessible charging stations for EVs, it is unlikely that individuals will switch to EVs even if doing so were cheaper.

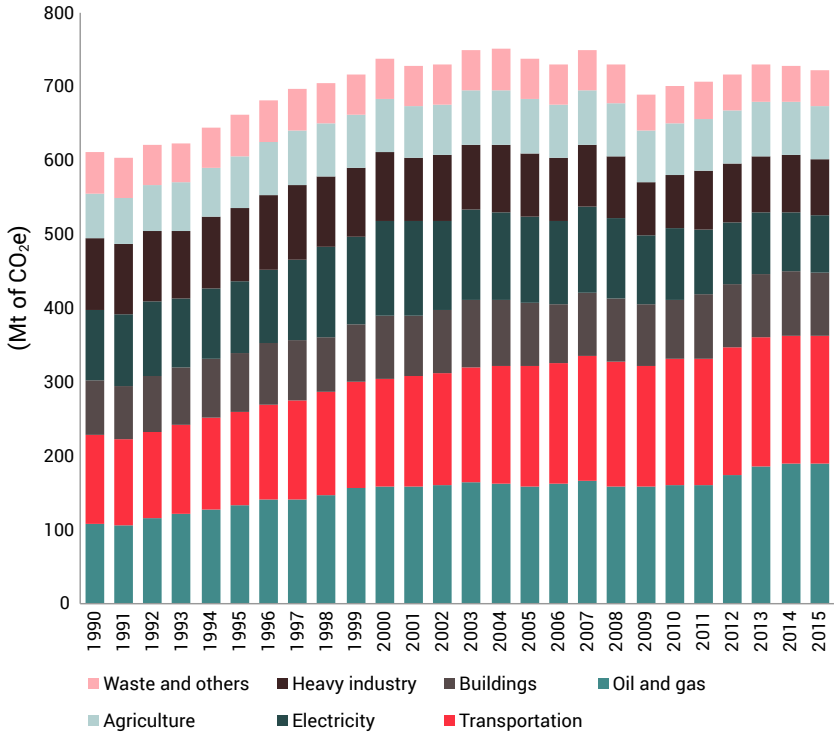
22 Canada's Ecofiscal Commission. June 2017. *Supporting Carbon Pricing.* pg 8.

23 Canada's Ecofiscal Commission. June 2017. *Supporting Carbon Pricing*; Sawyer, D. and Bataille, C. 31 March, 2017. *Taking Stock*. Executive Summary.

Political and Intergovernmental Questions

While a carbon tax may or may not fall within federal jurisdiction, most attempts at reducing emissions through complementary measures will almost inevitably engage what are clearly provincial jurisdictions. Provincial jurisdiction over electricity generation – which currently produces 11 per cent of Canada's carbon emissions and which will need to be significantly decarbonized if many other emissions reductions measures, such as the adoption of EVs, are to have their full impact (see Figure 4) – represents a prime example. But, with provincial action alone unlikely to close the Paris-PCF gap, any optimal plan that includes complementary measures will require intergovernmental cooperation between FPT governments.

FIGURE 4
Greenhouse gas emissions by economic sector, Canada, 1990 to 2015



Source: Environment and Climate Change Canada. 2017. *National Inventory Report 1990-2015: Greenhouse Gas Sources and Sinks in Canada*.

While the jurisdictional Key Argument in favour of cooperation is powerful, the fact that a collaborative approach is the one likely to enjoy the greatest political legitimacy – and, consequently, durability – is even more important. Given the long time horizons involved in sustaining meaningful climate policy, politically durable approaches will be essential. The importance of that point is currently being underscored in real time in the United States.[24] Indeed, while efforts will surely be made to reduce the negative impact of the emissions reductions measures, successfully meeting Canada's Paris targets will inevitably entail significant costs for citizens, at least in the short-to-medium terms. Given the magnitude and importance of the task, and the significance of the public education and persuasion required,[25] aligning all of Canada's sovereign governments on the importance and direction of a coordinated emissions reduction strategy will be critical.

24 Friedman, L. and Plumner, B. 9 October, 2017. " E.P.A. Announces Repeal of Major Obama-Era Carbon Emissions Rule". *The New York Times*. https://www.nytimes.com/2017/10/09/climate/clean-power-plan.html?_r=0.
25 The Canadian Press. 18 November, 2016. "Many Canadians unaware of 'magnitude of challenge' in reaching 2050 climate goals". *Global News*. http://globalnews.ca/news/3075335/many-canadians-unaware-of-magnitude-of-challenge-in-reaching-2050-climate-goals/.

Politically, such a collaborative approach may also be the only feasible path forward. The ongoing negotiations required to achieve Canada's 2030 targets and to set the foundation for the 2050 targets will require difficult compromises by all involved. Nonetheless, the bargain produced by these negotiations is likely to be the one with the greatest chance of survival simply because it will have been forced to accommodate each jurisdiction's competing interests. In fact, without negotiations to force these compromises, it may not be possible to frame a bargain that sufficiently balances the interests of Canada's diverse regions while still achieving Canada's targets.

Moreover, given that each PT government represents its own independent political power centre, it is critical to ensure that each one of these governments shares ownership of the agreement, thereby reducing the number of potential rallying points for political opposition to it. Having all 14 Canadian governments involved will also spread the political risk associated with the strategy and will help make it easier for wary governments to participate.

Finally, and perhaps most importantly, by providing all these buttresses, the involvement and agreement of all 14 Canadian governments will also ensure the survival of this strategy despite inevitable governmental turnover. Given that any plan to close the PCF-Paris gap will need to operate over the course of decades, unless this bargain can withstand the rotation of political perspectives in power that is natural in a democratic state, it will not be successful.

Institutional Structures

If one accepts that intergovernmental cooperation is needed to reach Canada's Paris targets, it becomes essential to consider how this cooperation can be best designed. This is especially important given the potential for ineffective or inefficient policies that could stem from combining carbon pricing and complementary measures as described earlier. Moreover, it is also critical given the poor track record that Canadian governments have when it comes to cooperation on climate change policy – a track record described in greater detail in the next section.

Nonetheless, while an intergovernmental approach may be necessary, this does not mean achieving such an agreement will be easy. Intergovernmental negotiations are often fraught and negotiations focused on Canada's response to climate change are no exception. These sort of negotiations need to overcome numerous challenges including concerns about the relative fairness of any initiative between provinces, reluctance of various political players to address the issue, players who are focused on other priorities, and jurisdictional wrangling.

One important mechanism for overcoming the challenges that are inherent to these negotiations is to address the weakness in Canada's existing intergovernmental institutions. Currently, there is no institution in Canada either mandated or possessing the legitimacy to assess how individual FPT plans contribute to meeting Canada's collective Paris commitments and to provide advice on how the burden of meeting those targets should be shared or mitigated.

We believe that institutional engineering to address this shortcoming can make a major contribution to Canada meeting its Paris targets. The dimensions and structure of the initiative we are proposing are outlined in the final section of this paper. This design has been developed after close examinations of previous intergovernmental Canadian climate change negotiations and the lessons that can be drawn from them as well as an analysis of the particular challenges of the current situation. For reasons that will become clear over the course of this paper, this analysis has concluded that in order to be successful, any institution constructed to enable Canada to close the PCF-Paris gap will need to:

» Be co-created by all of Canada's governments to ensure buy-in.

» Have the purview to provide advice on how the policies of Canada's various governments – both individually and as a group – should be shaped to most effectively interact with each other.

» Be independent, arm's length, politically neutral, objective and evidence-based in its approach.

» Be permanent, expert-lead, and possess significant in-house technical expertise.

» Have diverse geographical representation on its board, but weighted towards the federal government and emissions-intensive provinces.

» Be resilient to unilateral exit by any of the participating governments.

» Maintain strong connections to decision-makers to ensure the relevance of its advice.

» Enjoy the confidence of the participating governments such that its research can serve as a common evidentiary foundation for their discussions and shared decision-making.

» Serve as a common centre for the development of advice and policy coordination for the 14 governments involved.

» Publish most, if not all, of its research publicly.

» Have the ultimate goal of informing and complementing, not supplanting, intergovernmental negotiation and decision-making with respect to climate change policy.

We recognize that the intergovernmental institutional structure just described would be sufficiently ambitious as to probably make it unique in the history of Canadian intergovernmental institutions, should it be constructed. Consequently, we recognize that this proposal calls out for careful and additional justification.

The failure of Canada's previous efforts at negotiating such a strategy, a failure that is analyzed in the next section, provides an important additional source for this justification. Moreover, and more immediately, we believe that the creation of this new institutional structure is also justified by the unique set of obstacles that confront Canada's governments as they grapple with the challenge presented by climate change, with the most significant of these being the regional diversity of Canada's economy.

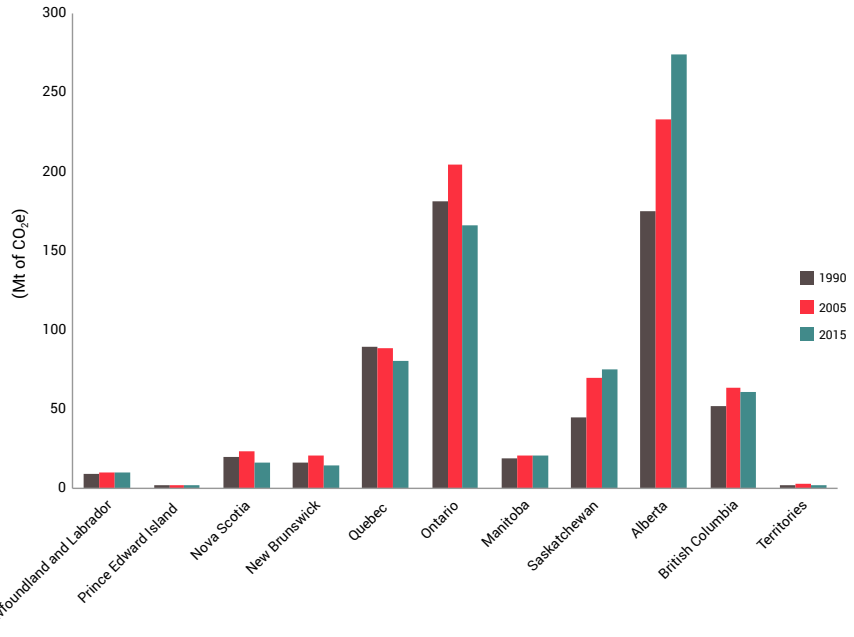
Burden Allocation and Mitigation

As shown in Figure 2 in the Introduction, there are significant differences in the emission intensities of the economies of Canada's provinces and territories. These differences derive primarily from the different types of economic activities that predominate in these jurisdictions. This economic diversity inevitably means that different jurisdictions will face different burdens as Canada works to achieve its Paris targets. Allocating these burdens in an equitable fashion represents one of the most significant challenges facing Canada's climate change policymakers and one of the central justifications for creating a new institution to support intergovernmental climate change negotiations.

In addition to the differences in the emission intensities of their economies, provinces and territories also come to the table from different phases and levels of ambition with respect to existing climate change mitigation initiatives. This too will impact how burdens will need to be allocated in order to ensure equity because it has an impact on these jurisdictions' capacities to further reduce their emissions and the costs associated with doing so. For example, almost 99 per cent of Quebec's installed electricity generation capacity comes from hydroelectric sources.[26] As such, its capacity to make further reductions in this sector will be extremely limited.

FIGURE 5

Greenhouse gas emissions by province and territory, Canada, 1990, 2005 and 2015



Source: Environment and Climate Change Canada. 2017. *National Inventory Report. 1990-2015: Greenhouse Gas Sources and Sinks in Canada*.

Because of this divergence, and despite that fact that emissions will need to be reduced across the country, it seems clear that for Canada to reach its targets the greatest reductions on a per person basis will need to come from the most emissions-intensive provinces. Indeed, with Alberta producing 38 per cent per cent of Canada's emissions (see Figure 5), and with the other larger economies like Ontario, Quebec and British Columbia already operating at such significantly lower levels of carbon intensity (see Figure 2), the emission reduction arithmetic simply does not work any other way.

26 Hydro-Québec. 2017. "Hydro-Québec Production". *Hydro-Québec Production*. http://www.hydroquebec.com/generation/.

Given that closing the PCF-Paris gap already represents a difficult and costly task, this asymmetry in impacts across jurisdictions only further underlines the importance of doing so as efficiently as possible. Clearly, identifying which jurisdictions have the greatest emissions reductions capacity and allocating responsibility for these reductions accordingly will be critical for efficiently achieving Canada's targets. But equally important will be the steps that must be taken to ensure equitable mitigation of the negative economic impacts that will be associated with achieving the outsized reductions that will inevitably be required of the emissions-intensive jurisdictions. In fact, we believe that the only politically realistic path to meeting Canada's Paris targets will require a careful balancing of emissions reductions that are the most effective and cost-effective with the need to equitably share the burden of the negative economic impacts that these reduction efforts will have across jurisdictions.[27]

As is discussed in the next section, previous Canadian emissions reduction efforts have found it difficult to even acknowledge the need to discuss the allocation of these unequal burdens. This is perhaps because those involved feared that doing so risked devolving into acrimonious and unproductive zero-sum bargaining in which each jurisdiction will compete to minimize its own responsibilities and associated costs. Achieving agreement in such a competitive situation could be very difficult if not impossible. Nevertheless, it is hard to see how any intergovernmental agreement on a strategy for how Canada can close the PCF-Paris gap can be reached without the solid foundation of accountability that an agreement on how to allocated the burdens associated with such a strategy would provide. Indeed, as is discussed in the next section, Canada's previous experiences with unsuccessful emissions reductions, and Europe's opposite experience, seem to support this conclusion.

27 Indeed, in the communiqué from the 1997 FMM, First Ministers agreed that "climate change is an important global issue and that Canada must do its part and must do so in such a way that no region is asked to bear an unreasonable burden". First Ministers' Meeting. 12 December, 1997. *News Release*.

Federal Leadership

If this foregoing analysis is correct, it raises the question of how to square this circle. If broad intergovernmental buy-in is necessary for the development of a successful strategy, but the discussions between governments necessary to devise a workable strategy risk igniting a divisive zero-sum debate that could scuttle negotiation of that strategy, what is the way forward? We believe that the only way out of this trap is through federal leadership which alleviates the zero-sum nature of the situation.

As already discussed, federal action that unilaterally imposes costs on the provinces is unlikely to be sufficiently effective, cost-effective or politically feasible to close the PCF-Paris gap. By helping to reduce the costs associated with accepting responsibility for emissions reductions, however, the federal government is uniquely well-positioned – through the use of its spending power – to reduce the zero-sum nature of the burden allocation bargaining that must occur between jurisdictions.

While federal leadership of this sort may seem like an obvious solution, it is one that has eluded Canadian climate change policymakers for almost three decades. In fact, as is discussed shortly, previous attempts by the federal government to provide climate change leadership have failed repeatedly due to a lack of willingness to collaborate effectively with PT governments. The current government's approach, and the

fact that all but two of Canada's provincial governments signed on to the PCF, seems to indicate that some lessons have been learned. Nevertheless, moving beyond the PCF will get progressively more difficult and will increasingly engage provinces' and territories' core interests. In order for federal leadership to remain a positive contribution to this process, the federal government will need to ensure that it learns lessons from previous climate failures and works hard to avoid the pitfalls that scuttled earlier efforts.

The Key Argument So Far

With this analysis of the policy problem confronting Canada's 14 governments now complete, it is worth pausing for a moment to quickly review the critical elements of this problem and the ways in which a new collaborative intergovernmental structure could help to resolve them. To summarize, we believe that the solution to this policy problem must:

» Balance effectiveness, cost-effectiveness and political feasibility.

» Include a central role for carbon pricing, but also a significant role for complementary measures.

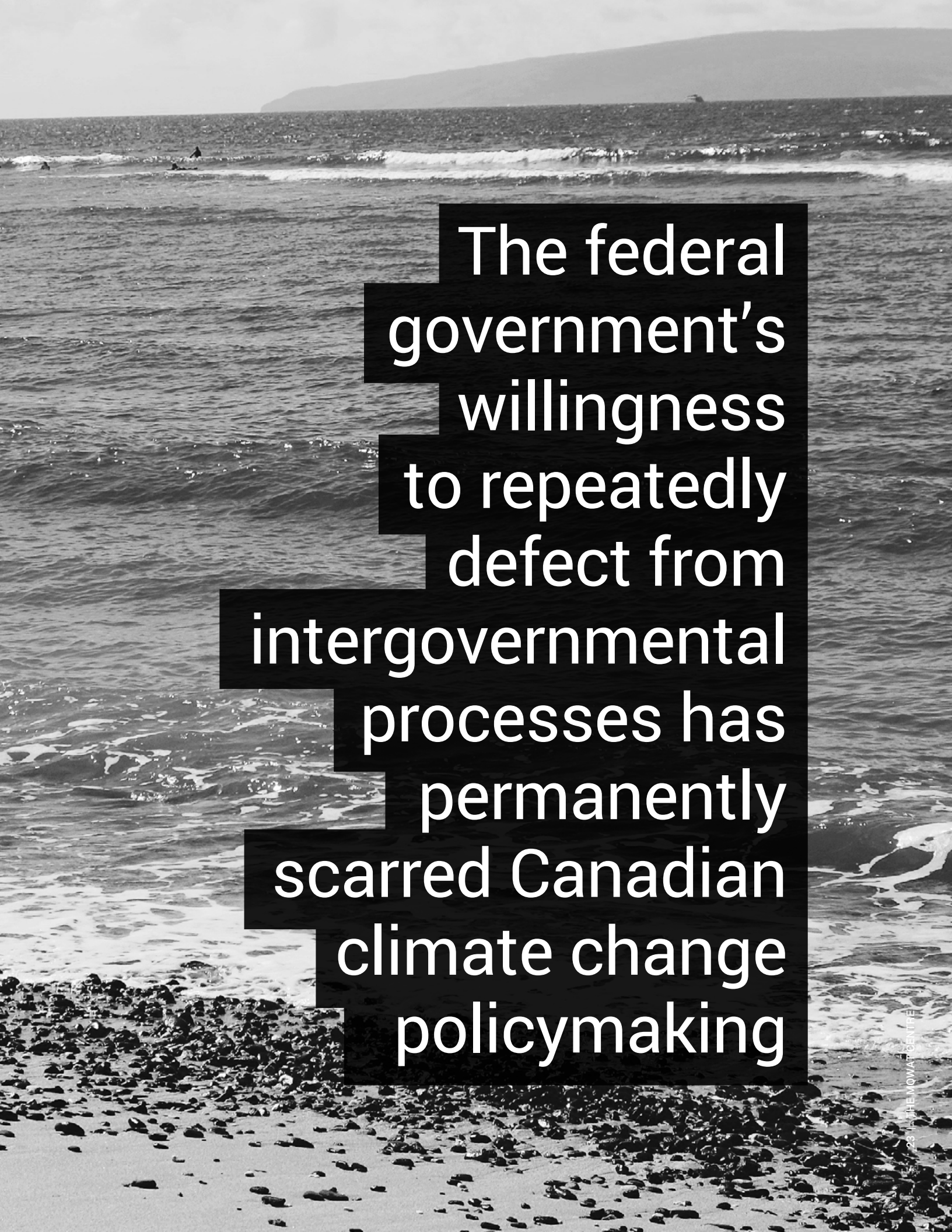
» Be based on an intergovernmental effort involving all 14 Canadian governments.

» Include an allocation of responsibility between the provinces and territories for specific emissions reductions that add up to the total required to close the PCF-Paris gap.

» Be coordinated and supported by an independent, expert-led intergovernmental institution capable of providing evidence-based advice and a common evidentiary basis for FPT discussions and decision-making.

» Include a significant role for the federal government with respect to mitigating the asymmetric economic impacts of emissions reduction policies across jurisdictions to enable climate change discussions to avoid zero-sum bargaining between provincial and territorial governments.

These various elements, as well as ideas for how they can be brought together to build an effective intergovernmental climate change institution, are all explored in greater depth in subsequent sections. Before diving into this more detailed exploration, however, it makes sense to first look backwards at previous efforts at intergovernmental climate change cooperation. These efforts are largely a history of failure, but at the very least, offer today's policymakers important lessons and examples of approaches to avoid.



The federal government's willingness to repeatedly defect from intergovernmental processes has permanently scarred Canadian climate change policymaking

3 LESSONS OF HISTORY

The history of Canadian environmental policymaking suggests that intergovernmental relations are an imperfect, though necessary, means of advancing climate change mitigation efforts. This section seeks to draw lessons from this history by examining the key moments in Canada's first period of climate change policymaking. Prior to the PCF, this period – which stretches from the run up to the United Nations Conference on Environment and Development (the Rio Conference) in 1992 to the conclusion of the National Climate Change Process and Canada's ratification of the Kyoto Protocol in 2002 – covers the most significant attempts at intergovernmental climate change policymaking in Canadian history.

Though ultimately unsuccessful in terms of crafting an effective strategy for meeting Canada's Kyoto targets, efforts during this period represent a sustained attempt at incorporating disparate FPT viewpoints within a negotiating process backed by technical expertise.[28] By identifying the key failings of these efforts, we can better inform contemporary discussions on how to generate successful intergovernmental collaboration aimed at closing the PCF-Paris gap.

28 The Kyoto Protocol is an international treaty that extended the original 1992 United Nations Framework Convention on Climate Change (UNFCCC). Canada withdrew from the treaty in 2012.

While previous studies of this process ascribed its failure to the inherent weakness of intergovernmental relations and the shortcomings of the institutions and actors involved, a review of the period also illuminates three important lessons:

» **Collaborative policymaking on emissions reduction requires clear, commonly-held objectives**

Canada's earliest efforts at climate change policymaking flowed from international agreements, which resulted in their introduction into Canada through federal channels. This discouraged provincial and territorial ownership of the objectives, thereby undermining intergovernmental negotiations and contributing to a failure to generate collaborative action.

» **The federal government posseses a unique capacity to make or break a Canadian climate program and must proceed accordingly**

The federal government is uniquely positioned to cultivate provincial buy-in and climate change collaboration through financial incentives and institutional backing. Conversely, unilateral federal action will have lasting detrimental consequences for intergovernmental trust and accountability.

» **A burden-sharing arrangement is a necessary precondition to a successful pan-Canadian climate policy framework**

Regional asymmetries in the economic impacts of emissions mitigation efforts are unavoidable and will remain a central issue that any climate change mitigation strategy will need to address. Without a willingness to discuss this issue and develop an agreement on how to equitably share the burdens associated with emissions reduction across jurisdictions, climate initiatives will not succeed.

Early Climate Policy 1988-1992

Limited Progress Without a Common Objective

The history of Canadian action on climate change coincides with the issue's emergence on the international stage. In 1988, scientists, policymakers, non-governmental organizations and United Nations' agencies held a meeting in Toronto entitled, "The Changing Atmosphere: Implications for Global Security." This "Toronto Conference" helped to increase the international salience of climate issues and offered some of the earliest GHG emissions reductions targets, including Canada's first commitment to reduce emissions by 20 per cent of 1988 levels by 2005.[29]

Soon thereafter, in early 1990, the federal government circulated drafts of Canada's Green Plan, which unveiled a new commitment to stabilize GHG emissions at 1990 levels by the year 2000.[30] Importantly, the Plan's lengthy development process had earned it opponents at both levels of government. Federal conflicts arose between the Department of Environment and the Ministries of Finance, International Trade, and Energy, Mines and Resources over the economic implications of these targets.[31] Provincial and industry-level opposition to the plan, based on concerns over its projected economic impact, was led by Alberta, which characterized an imposed federal target as akin to a new National Energy Program.[32]

29 National Round Table on the Environment and the Economy. 2012. *Reality Check: The State of Climate Change Progress in Canada*. Ottawa. pg 29. http://collectionscanada.gc.ca/webarchives2/20130222165457/http://nrtee-trnee.ca/wp-content/uploads/2012/06/reality-check-report-eng.pdf.
30 In absolute terms, this changed Canada's commitment from 470 Mt CO_2e in 2005 to 590 Mt CO2e in 2000. *National Round Table on the Environment and the Economy*. 2012. Reality Check. pg 29.
31 Hoberg, G. and Harrison, K. 1994. "It's Not Easy Being Green: The Politics of Canada's Green Plan". *Canadian Public Policy/Analyse De Politiques* 20(2) pg. 123.
32 Hoberg, G. and Harrison, K. 1994. "It's Not Easy Being Green" pg. 124.

Simultaneously, Canadian environment ministers were developing a second document, the Draft National Action Strategy on climate change. The strategy called for action to be undertaken "jointly by governments and all other sectors of the economy" reflecting displeasure with insufficient provincial involvement in the Green Plan's development. Critically, the document also specified that GHG stabilization by 2000 was "a national target and does not pertain to specific regions or sectors."[33] The final version of the Green Plan reflected an overdue attempt by the federal government to address provincial concerns. Earlier proposals including direct regulations and a fuel tax had been abandoned in favour of a voluntary document that was vague on how to implement the stabilization target.[34]

Informed by this experience, the federal government's development of Canada's position prior to the 1992 Rio Conference included greater provincial consultation. A Provincial-Territorial Advisory Committee was established and select provincial ministries were allowed to attend negotiating sessions.[35] Canada's re-commitment to its 1990 stabilization target at the Rio Conference, however, raises the question of whether these actions had any meaningful impact on federal decision-making.

While the negotiations at Rio dominated headlines, another important development also occurred in 1992. Energy and environment ministers approved the Comprehensive Air Quality Management Framework, which formalized an annual Joint Meeting of Ministers (JMM) from FPT governments with the aim of establishing a "national consensus" on climate change issues.[36] Unlike the earlier limited provincial consultations, these meetings acknowledged principles of co-jurisdiction and cooperation between equal partners. Over the ensuing decade the JMM became a centrally important body in an increasingly interconnected process of policy negotiation.

Overall, this early period represents an incomplete transition towards the sort of multilateral decision-making required by an area of shared constitutional jurisdiction. Intergovernmental action had been limited in this area over the previous two decades,[37] but as climate change gained international salience provincial governments, recognizing that any significant effort at emissions reduction would generate important economic impacts for them, began to assert an increased role. During this period, however, the federal government's preference for unilaterally developing policy in an international context and then attempting to reconcile the provinces to that policy after the fact contributed to repeated bouts of provincial opposition.

33 Quoted in Smith, H. 1998. "Canadian Federalism and International Environmental Policy: The Case of Climate Change," *Working Paper – Institute of Intergovernmental Relations.* Queen's University. pg 7. Available at: http://www.queensu.ca/iigr/sites/webpublish.queensu.ca.iigrwww/files/files/WorkingPapers/Archive/1998/1998-5HeatherSmith.pdf.

34 McIlroy, A. 28 March, 1990. "'Green Plan' drops fuel tax idea." *The Montreal Gazette.* B1.

35 Smith, H. 1998. "Canadian Federalism and International Environmental Policy". pg. 8.

36 Smith, H. 1998. "Canadian Federalism and International Environmental Policy". pg. 7.

37 For a good summary of Canadian environmental policy in 1970s and 1980s see Simmons, J. 2016. "Federalism, Intergovernmental Relations, and the Environment" in VanNijnatten, D. (ed) *Canadian Environmental Policy and Politics*; 4th Edition. Don Mills: Oxford University Press Canada. 130-145.

The Road to Kyoto 1993-1997

From Disparate Objectives to Unilateral Action

Uncertainty around Canada's climate targets intensified after the 1993 election. While the federal Liberal platform included the stronger targets that Canada had agreed to at the Toronto Conference, this commitment did not translate into a coherent political strategy once the party formed government.[38] Meanwhile, Canada's formal commitment to the Rio Conference target remained the central topic shaping domestic negotiation on climate policy.

The federal government entered the newly established JMM process hoping to develop a National Action Plan on Climate Change (NAPCC) that would provide options for reaching the stabilization target in time for the first Conference of the Parties (COP1) to the United Nations Framework Convention on Climate Change (UNFCCC) in 1995. While the JMM offered the potential for greater input from provincial governments, it did not address the underlying issue that provinces had yet to accept the 1990 stabilization target. Old conflicts quickly re-emerged, as industry leaders, the federal minister of natural resources and the Alberta government all advocated for a program based on voluntary measures.

In 1994, the federal environment minister attended consecutive JMMs with the intention of having the provinces commit to binding reduction measures. Provinces were split on the matter. Alberta led the opposition, citing its continued concern over negative economic impacts.[39]

Two central problems dogged the federal government's strategy at these meetings. First, the federal government largely ignored provinces' resistance to legislative commitments absent a detailed assessment of their potential economic impacts. Second, the federal government was itself divided, with the federal environment minister dismissing voluntary measures as inadequate, while the minister of natural resources suggested that "the voluntary approach is a meaningful and substantive way to make progress in addressing climate change."[40]

When the NAPCC was officially unveiled in 1995, however, it was clear that proponents of the voluntary approach had prevailed. The document advanced the Climate Change Voluntary Challenge and Registry Program (VCR), a voluntary sector-based initiative that lacked binding legislative measures, thereby accepting a lowest common denominator approach to salvage the appearance of consensus. This result highlights the precarious and challenging position in which the federal government found itself, namely poised between domestic negotiations that insisted upon strategies that took provincial economic impacts as their starting point and international climate agreements which gave specific emissions reduction targets priority.

38 Corcoran, T. 1 June, 1994. "Goodbye Carbon Tax, Hello Sanity". *The Globe and Mail*. B2.

39 Stillborn, J. May 2003. "Canadian Intergovernmental Relations and the Kyoto Protocol: What Happened, What Didn't". *Paper prepared for the Canadian Association of Political Science Annual Conference*. Halifax, Canada. pg. 3. https://www.cpsa-acsp.ca/paper-2003/stilborn.pdf.

40 Quoted in Macdonald, D. and Smith, H. March 2000. "Promises made, promises broken: Questioning Canada's commitments to climate change." *International Journal*. 55(1) 107-124. pg. 112.

By 1996-97, emissions modelling suggested that most countries, including Canada, would miss the targets accepted at the Rio Conference.[41] Indeed, in 1995, COP1 had acknowledged that more attention would need to be focused on mandatory country-specific targets for progress to be made. These issues underlay discussions at the COP3 meeting in Kyoto in December 1997.

In preparation for the Kyoto meeting the JMM met in Regina for a final attempt to craft a common position. With the exception of Quebec, all provinces agreed to extend the target for emissions stabilization at 1990 levels from the year 2000 to 2010, a decision that again aligned with the preferences of the emissions-intensive provinces. Almost as quickly as this consensus had been reached, however, the federal government reversed itself and announced at the Kyoto conference that Canada would commit to a 3 per cent reduction below 1990 levels by 2010.[42]

The Canadian delegation returned from Kyoto to face a First Ministers' Meeting (FMM) at which several premiers publicly rebuked the federal government's unilateral decision, declared its behaviour unacceptable and showed little interest in ratifying the Kyoto Protocol. More importantly, defection from the original target agreed upon at Regina enabled those provinces with economic concerns to frame their opposition as a matter of principle instead of self-interest.[43]

41 Rusk, J. 13 December, 1996. "Emissions target won't be reached, ministers concede". *The Globe and Mail*. A4.
42 By the end of the COP3 at Kyoto, the target had moved again to an even loftier 6% below 1990 levels. Harrison, K. 2007. "The Road Not Taken: Climate Change Policy in Canada and the United States." *Global Environmental Politics*, 7(4) 92-117. pg. 104. The specific motivation for this move is unclear. Some point to the Prime Minister's personal displeasure with Canada's growing reputation as an environmental laggard, while others have cited a desire to match or even exceed the United States' Kyoto commitments. See Stillborn, J. 2003. "Canadian Intergovernmental Relations and the Kyoto Protocol". pg 4. and Harrison, K. 2007. "The Road Not Taken". pg 101.
43 Greenspon, E. 12 December, 1997. "Provinces let down at Kyoto, Klein says deal on emissions 'not acceptable'." *The Globe and Mail.* A1.

The Joint Communiqué concluding this December 1997 FMM highlights three elements that remain centrally important to the current climate change agenda. First, it recognized the importance of a "thorough understanding of the impact, the costs and the benefits of [Kyoto's] implementation." Second, it called for "full participation... in the implementation and management of the Protocol" by PT governments. Finally, it agreed that "no region is asked to bear an unreasonable burden" in mitigating climate change.[44] Together, these commitments reflect the federal government's belated recognition of the challenges ignored by its unilateral defection from the agreed-upon Kyoto target. Furthermore, these commitments also present a clear articulation of the provincial concerns that would underlie subsequent negotiations focused on designing a national emissions reduction strategy.

Overall, the period before the adoption of the Kyoto Protocol was characterized by two trends. First, the federal government consistently failed to address provincial skepticism towards its preferred emissions stabilization targets. This failure permanently tainted negotiations and left the federal government to try repeatedly to garner post hoc provincial acceptance for targets agreed to without their consent. In response, federal efforts often overcompensated for these earlier failings by sacrificing meaningful progress towards emissions reduction. As a result, an important gap opened up between Canada's international commitments and the actual domestic compromises arrived at by FPT governments.

44 First Ministers' Meeting. 12 December, 1997. *News Release*.

The National Climate Change Process 1998-2002

Burden Sharing's Costly Delay

In an attempt to distance intergovernmental climate change negotiations from their controversial Kyoto defection, the federal government integrated the energy and environment JMM into a broader National Climate Change Process (NCCP) in early 1998. This new process reflected awareness of both a need for meaningful intergovernmental partnership and the practical requirements associated with meeting Canada's Kyoto targets.[45] The NCCP also represented a robust expansion of the institutional framework underpinning climate policy discussions. For instance, sixteen issue tables were convened to solicit responses from over 450 experts on how Canada could achieve its emission reduction goals.[46]

The NCCP also created complementary institutions to manage the flow of information and the growing number of stakeholders involved. A National Air Issues Coordinating Committee – Climate Change (NAIC-CC) was placed under the jurisdiction of the National Air Issues Steering Committee that had emerged out of the 1992 Comprehensive Air Quality Management Framework. Under NAIC-CC, working groups were created to address specific challenges, such as provinces' longstanding, but previously unaddressed, demands for regional impact measurement.

Noticeably absent, however, was an assessment of how to allocate specific emissions reduction responsibilities across provinces in a way that would minimize their respective economic burdens. Given the diversity in population and the emissions-intensity of PT economies, the development of such a framework should have been a paramount concern. Nevertheless, while burden sharing had been previously referenced tangentially, it had yet to be confronted explicitly. Subsequent research suggests that this omission was an intentional move by the federal government.[47] Federal officials hoped to advance their preferred option of sector-based allocation of emissions reduction responsibilities. Viewing provincial consensus on a fair burden allocation framework as an unlikely outcome, these officials instead sought an agreement that would garner enough support that any holdout provinces would be forced by sheer momentum into signing on to a national deal.[48] Crucially, it was also understood that differences in reduction costs would likely require federal interventions – i.e. financial transfers – aimed at equalizing the impact of emissions reductions across provinces.[49]

Nevertheless, the NCCP's new institutional structures were designed with the genuine objective of keeping provincial actors engaged in the process. For instance, a new National Climate Change Secretariat (NCCS) was established to bring greater intergovernmental representation to the existing federal Climate Change Secretariat. The new NCCS was co-directed by the federal

45 Macdonald, D. Monstadt, J. Kern, K. 2013. *Allocating Canadian greenhouse gas emission reductions amongst sources and provinces: learning from European Union, Australia and Germany*. University of Toronto. pg. 53.
46 Stillborn, J. 2003. "Canadian Intergovernmental Relations and the Kyoto Protocol". pg. 6.
47 Macdonald, D. et al. 2013. *Allocating Canadian greenhouse gas emission reductions amongst sources and provinces.* pg. 53.
48 Macdonald, D. et al. 2013. *Allocating Canadian greenhouse gas emission reductions amongst sources and provinces.* pg. 53.
49 Macdonald, D. et al. 2013. *Allocating Canadian greenhouse gas emission reductions amongst sources and provinces.* pg. 53.

5

Previous attempts at collaborative climate change policymaking have foundered because of unilateralism, lack of buy-in and failure to address the uneven burden of climate policy across provinces.

government and an Alberta representative, and supported by a staff of ten provincial and federal officials. This joint makeup reflected a dual objective: by offering Alberta a co-director position, the federal government hoped to both diffuse Alberta's continued opposition and to lock the province into participating for the duration of the process.

The idea behind this strategy was that by affording the provinces greater equality and a central role in the decision-making process, it would be more difficult for them to criticize the resulting policy framework. Regardless of this motivation, however, the announcement of the NCCS reflected a potential shift in Alberta's position. While Albertan officials and industry leaders had emerged as early opponents of both the Green Plan and initial versions of the NAPCC, their willing participation in the NCCS initially appeared to suggest a belief that this collaborative process could produce a result that addressed emissions-intensive provinces' underlying concerns.[50] Unfortunately, these hopes were short lived.

To understand Alberta's newfound willingness to participate in the NCCP – and its subsequent quick return to opposition – it is important to consider that while the process was designed to afford greater equality to the provinces, it still lacked a truly shared objective. Critically, it is now clear that Alberta entered the NCCP believing that the purpose of the process was "to see merely whether the [Kyoto] target could be met."[51] This contrasted with the views of more supportive participants, who took the need to implement Kyoto for granted and saw the NCCP as the means to this end.

As negotiating began in 1998, this new institutional framework was immediately tested. Provincial concerns over competitiveness, budgetary strain and autonomy emerged across the country. By August, old patterns began to re-appear, with the federal environment minister musing that Canada would ratify Kyoto regardless of Alberta's objections, a move that Alberta's minister described as "a suicidal course."[52] Additionally, the federal government's decision to omit burden-sharing discussions soon proved costly. At the March 2000 JMM, Quebec walked out of negotiations arguing that allocating emissions reductions by sector would favour western interests and harm its pulp-and-paper industry. Quebec preferred allocating targets by provincial population and total emissions. To keep Quebec in the process, the October 2000 JMM created the Emissions Allocation and Burden Sharing Working Group (EABSWG) to analyze "possible approaches to provincial/territorial or sectoral allocations of any Canadian target, and how any resulting burden would be shared."[53] Beginning in late 2001, the burden-

50 Stillborn, J. 2003. "Canadian Intergovernmental Relations and the Kyoto Protocol" pg. 6.

51 Macdonald, D. et al. (2013). *Allocating Canadian greenhouse gas emission reductions amongst sources and provinces*. pg. 51.
52 Stillborn, J. 2003. "Canadian Intergovernmental Relations and the Kyoto Protocol". pg. 7.
53 Macdonald, D. et al. 2013. *Allocating Canadian greenhouse gas emission reductions amongst sources and provinces*. pg. 48.

sharing working group began a study of equitable cost allocation models and the feasibility of a European-style burden-sharing agreement for Canada (the European Union had, by this point, developed an effective burden-sharing model which is discussed in a box on page 53).[54]

Despite this progress on burden sharing, the following two years saw escalating tensions between the FPT governments as premiers came to believe that the process was not delivering the information on the projected impacts on PT economies that they had been demanding since 1990. This tension culminated in 2002 in a confrontation between the federal and Alberta governments. That February, Alberta released a study of Kyoto's regional impacts that questioned national data on how ratification would impact Alberta's economy. Simultaneously, Environment Canada officials began to suggest that the JMM process had been compromised, and that federal regulation might be required to ensure Canada met its Kyoto targets.[55] Prompted by the release of a federal discussion paper that outlined how such regulation might be implemented, Alberta withdrew from the JMM process, citing that "the federal government was locked into achieving an outcome that [Alberta] did not agree to."[56] A few months later, the Prime Minister announced that Canada would ratify the Kyoto Protocol and proceeded to begin negotiations at the industry level, all but abandoning provincial input. This move effectively signalled the end of the NCCP's goal of ratification through intergovernmental consensus building.

54 Macdonald, D. et al. 2013. *Allocating Canadian greenhouse gas emission reductions amongst sources and provinces.* pg. 54. It is one of great losses of this period that the NCCP would fail before the EABSWG had time to issue its final report.
55 Macdonald, D. et al. 2013. *Allocating Canadian greenhouse gas emission reductions amongst sources and provinces.* pg. 54.
56 Macdonald, D. et al. 2013. *Allocating Canadian greenhouse gas emission reductions amongst sources and provinces.* pg. 54.

Lessons Learned

The climate policy negotiations between FPT governments that lasted from 1990 to 2002 were unsuccessful in their primary objective: they did not deliver agreement on the federal government's original – or any alternative – target for GHG emissions, nor did they generate intergovernmental consensus on ratification and implementation of the Kyoto Protocol. Despite this failure, it is important not to ignore this episode's instructive potential as the best example of a sustained attempt at intergovernmental climate change policy- and decision-making in Canadian history.

Three key lessons from this period stand out as directly applicable to the contemporary national context. First, while emissions reduction strategies took many forms during these years, they continuously failed to produce a set of shared objectives from which FPT governments could advance negotiations. Even as new institutional arrangements were developed to generate greater intergovernmental collaboration, they repeatedly aimed at generating retroactive consensus around existing targets. Conversely, the PCF includes a commonly-held objective, namely Canada's 2030 Paris target, that all 14 FPT governments have already endorsed. Thus, while not complete or irreversible, significant progress on this critical dimension has already been made.

Second, the federal government must recognize the negative impacts of its overly ambitious unilateral actions. From the initial introduction of the 1990 stabilization target, to its unilateral commitment at the Kyoto Conference, the federal government's willingness to repeatedly defect from intergovernmental processes has permanently scarred Canadian climate change policymaking. These actions have resulted in national targets that lacked legitimacy in the eyes of PT partners and have reduced the willingness of these partners to cooperate with their federal counterparts in the future. While the current climate change policymaking process has been characterized by greater collaboration than previous efforts, the federal government is still the primary architect of the PCF. Ensuring that the intergovernmental process in which the PCF is embedded remains genuinely collaborative, even after potential changes in political leadership, will require that the federal government resist defecting from this process when the going inevitably gets tougher.

Finally, governments will need to reckon with the challenge of how best to allocate the burden of emissions reductions efforts so as to ensure fairness in terms of the distribution of negative economic impacts across jurisdictions. Indeed, the repeated failure to adequately address this burden-sharing issue over three decades of Canadian climate change policymaking suggests that existing intergovernmental institutions are ill-equipped to address this difficult issue and suggests a need for a new approach.


Currently, there is no governmental institution in Canada either mandated, or equipped with the legitimacy, to assess how individual FPT plans contribute to meeting Canada's Paris commitments

4 TOWARDS A BETTER INTERGOVERNMENTAL INSTITUTION

The Canadian experience of climate change policymaking to date clearly demonstrates both the need for broad intergovernmental buy-in and the importance of engaging proactively with burden-sharing considerations. As such, ineffective intergovernmental collaboration and the failure thus far to substantively engage the challenges that stem for the inevitably asymmetric burdens that emissions reductions will impose across jurisdictions represent two of the largest obstacles facing efforts to meet Canada's Paris targets.

In this section of this report, we propose a model for how to overcome these obstacles. This two-pronged approach is founded on an intergovernmental institution designed, on the one hand, to support intergovernmental negotiations with impartial, fact-based evidence and advice and, on the other, to facilitate the effective deployment of the federal spending power to help alleviate the asymmetry in the economic impact inherent to emissions reductions efforts in Canada.

Structures of Ability and Responsibility

As discussed in the first section of this report, for Canada to meet its Paris targets, its various governments will need to successfully balance effectiveness, cost-effectiveness and political feasibility. While the bottom-up approach employed to formulate the PCF represents progress, significant obstacles remain. To successful overcome these obstacles, all governments will need to benefit from evidence-based advice, and be informed by a common set of facts and data, capable of supporting decisions on how to allocate the burden of responsibility for specific emissions reductions and how to most effectively mitigate the resulting asymmetry in economic impacts of this allocation. Currently, there is no governmental institution in Canada either mandated, or equipped with the legitimacy, to assess how individual FPT plans contribute to meeting Canada's Paris commitments, or to support integrated intergovernmental decision-making directed to this end. Bluntly, Canada's existing intergovernmental approaches and institutions are simply not up to the task.

As was discussed earlier, it is highly unlikely that the federal government will be able to unilaterally impose a nationwide policy solution. Although the federal government does seem to possess the, albeit untested, constitutional authority to unilaterally enact emissions reduction policies that could theoretically meet Canada's Paris targets, doing so would not be advisable for a variety of reasons already discussed.

This is not to imply that the problem can be solved absent federal involvement and leadership. While individual provinces have made important contributions to emissions reductions, provinces – even collectively – have not been able to achieve sufficient emissions reductions on their own nor are they likely to be able to do so. Historically, in fact, "in the absence of strong federal leadership, provinces have tended to move slowly and disparately,"[57] in the area of environmental policy. Even acting collectively as premiers, "the COF [Council of the Federation – which comprises all the provincial and territorial premiers] has been unable to overcome the deep divisions amongst provinces that are rooted in their distinct economic and political contexts to bring about any meaningful coordination of climate policy."[58] This is because provinces do not have the right tools at their disposal for coercing or incentivizing each other, especially if their respective interests are incompatible. Consequently, on their own, provinces will likely also be unable to generate sufficient emissions reductions. Ultimately, to solve what is at its core an intergovernmental problem, Canada must turn to intergovernmental institutions.

6

Canada's existing intergovernmental institutions are not up to the task of overcoming the problems that have previously dogged the climate change file, or that will collectively challenge FPT governments in the future.

57 Collins, E. March 2017. "Coming into Its Own? Canada's Council of the Federation, 2003-16." *IRPP Insight*. 15. pg. 12. http://irpp.org/research-studies/insight-no15/.

58 Snoddon, T. and VanNijnatten, D. November 2016. "Carbon Pricing and Intergovernmental Relations in Canada." *IRPP Insight*. 12. pg. 9. http://irpp.org/research-studies/insight-no12/.

The Current Institutional Context

When it comes to addressing Canada's most pressing intergovernmental policy issues, all the important conversations begin and end with the FMM. The FMM is the locus of executive power at the centre of all intergovernmental negotiation which "resolves conflicts on the highest level and gives direction to the network of lower level meetings."[59] With respect to addressing climate change, FMMs have already played a key role, including in the Kyoto process and in the brokering of the PCF. Given the difficult policy problems that remain on the road ahead, the First Ministers' table will need to continue to play an important role. If those solutions are to endure, however, a key limitation to the FMM as it currently stands will need to be addressed.

Currently, negotiations at FMMs are seldom, if ever, exercises in collective problem-solving. Nor, as was illustrated in the preceding section, are they informed by a common fact-base explicitly designed to optimize policy outcomes for all 14 Canadian governments. Each government comes to the table informed by its own self-interest – and sometimes its own facts – and seeks to exercise whatever raw political power it can to achieve the best possible outcome for its constituents. That approach is not unjustified, inappropriate or unexpected. Nonetheless, intergovernmental negotiations informed solely by jurisdictional self-interest will find it very difficult to meaningfully quantify how the burden of meeting emission reduction targets should be shared on an ongoing basis, and how to mitigate or equitably redistribute the asymmetric costs associated with emissions reductions.

59 Bolleyer, N. 2009. *Intergovernmental Cooperation: Rational Choices in Federal Systems and Beyond*. Oxford: Oxford University Press. pg. 71.

Despite the failure to explicitly address this issue, a lack of recognition of the asymmetric burden that emissions reductions will impose across provinces is not in itself the problem. It is well understood that resource-intensive economies – Alberta and Saskatchewan in particular – will face higher costs on a per person basis from emissions reductions efforts due to the higher carbon intensity of their economies.[60] Notably absent from the Canadian institutional landscape, however, is an institution with broad intergovernmental buy-in mandated to advise on policies for quantifying how the burden of meeting emissions reduction targets should be shared on an ongoing basis and how to alleviate the asymmetry in the distribution of costs associated with emissions reduction.

At first blush, the Canadian Council of Ministers of the Environment (CCME) – the minister-led intergovernmental forum for collective action on environmental issues – would appear to be a natural candidate to take on this task. The CCME is "the primary institution of intergovernmental environmental agenda-setting and negotiations."[61] Functionally, the CCME operates quite differently from the First Ministers' process. The CCME is more formalized than one generally finds in other areas of shared policy jurisdiction.[62] In addition, FPT governments participate as equals at the CCME, with the chair rotating annually.[63] These practices stand in stark contrast to FMMs, which are ad hoc and convened exclusively by the federal government, and presided over by the Prime Minister. FMM agendas are also tightly controlled by the federal government, and the results of FMMs are prone to unilateral federal decisions.

Despite these advantages, however, CCME remains an FPT ministerial table, at which "ministers remain first of all part of their particular government."[64] As such, ministerial allegiances lie with their respective Cabinets and constituents, leaving them less able or interested in engaging in joint problem-solving.

The CCME is also supported by a small but permanent, jointly-funded secretariat. The secretariat plays an important coordination function, helping to align the efforts of the legion FPT officials tasked with harmonizing all manner of environmental regulations across jurisdictional borders. While superficially promising in this regard, the CCME Secretariat is not actually the right institutional fit for advising on policies for overcoming the asymmetric costs that emissions reduction policies will impose on Canada's governments. While the secretariat has access to a great deal of technical expertise in the area of environmental regulation, functionally, the CCME is "an administrative mechanism, not a policymaking institution."[65]

7

Canadian decision-makers and policymakers will have to innovate and create new intergovernmental institutional frameworks to overcome the limitations of existing ones.

60 M.K. Jaccard and Associates. 18 October, 2009. *Final Report: Exploration of two Canadian greenhouse gas emission targets: 25% below 1990 and 20% below 2006 levels by 2020*. Vancouver: David Suzuki Foundation; Pembina Institute. http://www.pembina.org/pub/1910.
61 Inwood, G., Johns, C. O'Reilly, P. 2011. *Intergovernmental Policy Capacity in Canada*. Montreal and Kingston: McGill-Queen's Press. pg. 182.
62 Snoddon, T and VanNijnatten, D. 2016. "Carbon Pricing and Intergovernmental Relations in Canada". pg. 18.
63 Inwood, G., Johns, C. O'Reilly, P. 2011. *Intergovernmental Policy Capacity in Canada*. pg. 183.
64 Bolleyer, N. 2009. *Intergovernmental Cooperation*. pg. 143.
65 Inwood, G. et al. 2011. *Intergovernmental Policy Capacity in Canada*. pg. 185.

To sum up this institutional panorama so far, as elected representatives with the main responsibility for negotiating Canada's collaborative FPT approach to meeting its Paris targets, both FPT First Ministers and Environment Ministers will inevitably play key decision-making roles. But while their involvement will be necessary, their political responsibilities make it difficult for them to actually build the strategy for reaching these targets themselves. Moreover, the existing institutional apparatus for informing these decision-makers is insufficient. Overall, Canada's existing intergovernmental institutions are not equipped to deal with the core problem at hand: designing an optimal collaborative intergovernmental Canadian climate change policy framework.

Ultimately, Canadian decision-makers and policymakers will have to innovate and create new intergovernmental institutional frameworks to overcome the limitations of its existing ones. This new approach will have to balance the need for the broad intergovernmental buy-in needed to achieve political acceptability and durability, on one hand, and the need for policies that are both effective and cost-effective on the other.

While constructing such an institution will be challenging, both history and the foregoing analysis suggest that it is essential as previous efforts have all foundered. Unilateral federal approaches will fall short on buy-in, voluntary compliance initiatives will fall short on effectiveness, bottom-up approaches will yield insufficient results, and all of the above will lack the access to the neutral advice on how to satisfactorily address the key issue of an asymmetric distribution of burdens across jurisdictions and how to overcome it.

The field of climate change policy does not suffer from a shortage of information. Vast swaths of data, facts, assessments and recommendations litter the policy landscape at all levels. National assessments of climate change policy also exist. Invariably, however, these nationwide assessments are conducted on a jurisdictionally-neutral basis, thus offering an assessment of what Canada's governments are doing in aggregate. This type of national approach necessarily combines the actions of the individual FPT governments. This means that assessments of how well all of those individual policies are, or are not, working together, and advice on how they should be collectively optimized, are missing. That no intergovernmental institution currently exists to produce assessments and advice of these types represents a major policy gap.

In the lead up to the PCF, FPT governments demonstrated some recognition of this deficiency. In an attempt to address it, they turned to a mechanism often used to achieve intergovernmental buy-in: the working group. The Working Group on Specific Mitigation Opportunities (or MWG) – created as part of the Vancouver Declaration on March 3, 2016 – was tasked by First Ministers to identify options for "how and where to reduce emissions."[66] Despite the promise contained in the MWG's mandate, the working group was immediately hamstrung by the "purview problem."

In developing options, working groups are usually limited to presenting "options from a jurisdictionally-neutral, national perspective."[67] This type of approach precludes at the outset

66 Government of Canada. 22 December, 2016. "Economic analysis of the Pan-Canadian Framework". *Canada's Action on Climate Change.* https://www.canada.ca/en/services/environment/weather/climatechange/climate-action/economic-analysis.html.
67 Specific Mitigation Opportunities Working Group. 2016. *Final Report.* Environment and Climate Change Canada. https://www.canada.ca/content/dam/eccc/migration/cc/content/6/4/7/64778dd5-e2d9-4930-be59-d6db7db5cbc0/wg_report_specific_mitigation_opportunities_en_v04.pdf.

the possibility of providing either advice to governments individually or advice on how the policies of individual governments should be shaped to interact most effectively with those of other governments. Confinement of purview in this regard is endemic to intergovernmental working groups and FPT relations more broadly, "where consensual decision making tends to produce lowest-common-denominator results."[68] This represents a key limitation of working groups as a tool for providing comprehensive policy advice to inform tough decisions. They do not have enough operational independence to surmount the purview problem.

The time-limited nature of working groups also limits their effectiveness. Non-participation by even a single government in the time-limited setting of a working group can undermine its mandate and create considerable uncertainty. An institutional solution that is resilient to periods of non-participation by individual governments will be essential for creating predictability for decision-makers. Predictability is "essential when facing an uncertain environment such as the intergovernmental arena, which is much less structured by formal rules and established routines than the individual government units are internally, since interaction is foremost voluntary."[69] A permanent institution would represent a much more enduring institutional response capable of anchoring governments to a common objective on an ongoing basis. The predictability and resilience a permanent institution would be able to provide will be especially warranted in the context of climate change given that it will require the sustained attention of governments as far out as 2030 and 2050.

68 Macdonald, D. 20 June, 2017. *Why Canada Needs a Climate-Change Burden-Sharing Agreement*. University of Toronto, School of the Environment. pg. 1.
69 Bolleyer, N. 2009. *Intergovernmental Cooperation*. pg. 29.

Features of a New Institution

Only a permanent, co-created and independent body will have the ability to garner the intergovernmental buy-in needed to solve this purview problem and the operational independence to give good, evidence-based advice to individual governments and FPT tables alike. If designed well, it could also have the resilience to survive periodic bouts of non-participation by various FPT governments.

The best way to create such an institution will be for the FPT governments to come together to jointly create one that is tasked with developing cross-cutting, evidence-based advice to inform the development of a pan-Canadian approach to achieving Canada's Paris targets. To do this right, the institution will have to balance neutrality and the need for intergovernmental buy-in. Achieving such a balance will require the institution's creators to carefully consider how to give this balance effect through the institution's design.

The FPT co-creation of an independent yet intergovernmental body to solve a large policy problem is not entirely uncharted territory in the arena of Canadian intergovernmentalism. The Canadian Institute for Health Information (CIHI), established in 1994, was jointly created by FPT governments to address the "deplorable state" of health information in Canada.[70] The organizational design of CIHI provides a useful roadmap for how to enable independence while maintaining an intergovernmental character and provides useful examples of how accountability, legitimacy and relevance can be entrenched in an intergovernmental organization. Naturally,

70 Wilk, M. 1991. *Health Information for Canada: Report of the National Task Force on Health Information*. Ottawa: National Health Information Council. http://www.statcan.gc.ca/pub/4220352-eng.pdf.

8

Only a permanent and independent institution, co-created by the FPT governments will be able to win the intergovernmental buy-in needed to successfully overcome the challenges faced by Canada's climate change policymaking.

while intergovernmental collaboration in climate change policymaking poses unique challenges, many of CIHI's key design features can provide useful lessons.

The first lesson CIHI provides is the accountability structure needed for an independent body in an intergovernmental setting. As Paul Brown observes, "accountability requires a 'locus of authority,' a centre of definitive power and responsibility."[71] For many organizations that operate at arm's length from government, that locus of authority is still a FPT Cabinet, reporting through a responsible minister to whom they are answerable.

As a body that is both at arm's length and intergovernmental, CIHI does not report to a specific minister, cabinet, jurisdiction or FPT table. Instead, CIHI is incorporated as an independent, not-for-profit corporation, funded by FPT ministries of health. As such, its work and the mandate of its permanent secretariat are guided by a board of directors, which is composed of sector experts. The directors of the board are the primary locus of authority who in turn owe their fiduciary duty to the corporation.[72] The primary benefit of this model in the intergovernmental context is that it allows for independence from undue influence from any single government.

This independence must be balanced with consideration for how an institution's many governmental stakeholders should have their perspectives respected. In the case of CIHI, both balanced geographical representation and expert composition of the board are important features for creating "a balance among health sectors and regions of Canada."[73] FPT governments are able to provide lists of nominees for membership positions on the board, but board members are not direct governmental representatives. They are instead experts in the fields of health or health information who represent the perspectives, challenges and interests of the regions, not governments.

This geographically varied and expert-led board has also enabled CIHI to maintain its ongoing relevance by ensuring that its board is well-connected to a diverse set of stakeholders and networks across the country. The support and cooperation of these stakeholders and networks represents a valuable resource in ensuring that CIHI's work is informed by the sector it seeks to serve and its products and services are useful to this sector. Recognizing the importance of these connections, CIHI has proactively sought to nurture them on an ongoing basis.

71 Brown, P. 1983. "Responsiveness versus Accountability in Collaborative Federalism: The Canadian Experience." *Canadian Public Administration* 26(4) 629-639. pg. 634.

72 Burke-Robertson, J. 2002. "Duties of Directors". in Broder, P (ed) *Primer for Directors of Not-for-Profit Corporations: Rights, Duties, and Practices*. Ottawa: Industry Canada. 14-30. pg. 14. https://www.ic.gc.ca/eic/site/cilp-pdci.nsf/vwapj/Primer_en.pdf/$FILE/Primer_en.pdf.

73 Canadian Institute for Health Information. 2016. *Board of Directors' Governance Handbook 2016*. Toronto: Canadian Institute for Health Information. pg. 10. https://www.cihi.ca/sites/default/files/document/governance-handbook_2016_en_web.pdf.

We believe that the proposed intergovernmental climate change institution should be similarly constituted to combine an independent and intergovernmental character. Its board of directors should be composed of experts and should not serve as direct government representatives. Particular consideration should be given, however, to how the board's membership gives effect to regional representation.

For example, given that emissions-intensive provinces, such as Alberta and Saskatchewan, will bear a greater share of the burden associated with emissions reductions, consideration should be given to providing those provinces with outsized representation on the board. Similarly, since a significant aspect of the institution's mandate will be to advise on the use of the federal spending power as a means to mitigate the unbalanced burdens associated with emissions reduction policies, the federal government should also be given substantial representation on the board. An outsized weighting of the perspectives of the federal government and emissions-intensive provinces in the formation of a Canadian emissions reduction strategy would be more likely to keep these important players at the table, thereby helping to imbue this new institution with the broad support that it will need to successfully complete its work.

In the quest for institutional resilience in an intergovernmental setting, FPT co-funding can also serve as a powerful tool. CIHI, which receives funding from all FPT governments, serves as a good example of the benefits of such co-funding arrangements, especially when compared to the example provided by the erstwhile Health Council of Canada (HCC).

CIHI and HCC were both intergovernmental bodies in the health care policy space. Both were deemed to meet important needs for their clients and key audiences (see box). A key vulnerability of the HCC, however, was that it was funded solely by the federal government, and thus subject to the whims of a single decision-maker. In 2013, the federal government decided to wind down funding for the HCC. In contrast, if the federal government were ever to decide to stop funding CIHI, the continuation of PT funding for its Core Plan could sustain the existence of the organization, albeit with a reduced footprint.

> *"...the majority of CIHI's clients feel that CIHI's products and services have met important needs for their organization."* [74]
>
> *"The Health Council's key audiences believe that HCC responds to important needs and that HCC's national scope and perspective are significant."* [75]

While an important lesson in the resilience co-funding can provide, CIHI's revenue model is not the perfect template for the proposed climate change institution. The revenue CIHI derives from provinces and territories comes almost exclusively from the purchase of goods and services. The proposed climate change institution, however, would play an advisory role and therefore would not sell anything. As such another intergovernmental co-funding model must be sought.

74 KPMG. 2010. *Evaluation of the Canadian Institute for Health Information: Executive Summary*. Ottawa. pg. 3. https://www.cihi.ca/sites/default/files/evaluation_sum_nov2010_en.pdf_0.pdf.
75 KPMG. 2013. *Evaluation of the Health Council of Canada: Final Report*. Toronto. pg. 22.

Thankfully, an alternative model exists. As was discussed earlier, the CCME is supported by a permanent secretariat, located in Winnipeg. It is co-funded through transfer payments from all 14 governments made on a prorated basis. By adopting a similar model for the proposed climate change institution, FPT governments could help to ensure that the institution possesses the resilience necessary to sustain it should some governments periodically decline to participate. Most importantly, multiple sources of funding can ensure that no single government is able to terminate the institution, a fact that can help to discourage, and reduce the impact of, unilateral exit by individual participants.

Creating a New Institution

Ultimately, the final structure and composition of this proposed institution, including the process for appointing the board, should be defined by a joint decision of the FPT governments. It may be deemed appropriate for example, for regional representatives of other jurisdictions, in addition to Alberta, Saskatchewan and the federal government, to have a strong voice on the board. To arrive at an institutional design informed both by policy considerations and the need for intergovernmental buy-in, the CCME is the FPT table best positioned to devise a well-balanced solution. In addition to being the primary institution for intergovernmental environmental agenda-setting and negotiations, the CCME uses "consensus decision-making as one of its fundamental operating principles."[76] While consensus is not the best model for formulating advice to inform tough decisions on burden sharing, using consensus to design the proposed institution could insure that it has the broad intergovernmental buy-in that will be necessary to ensure its resilience and relevance right from the outset.

76 Canadian Council of Ministers of the Environment. 2014. "Consensus". *About*. http://www.ccme.ca/en/about/consensus.html.

Armed with the independence to give neutral, fact-based advice and the purview to direct that advice where it is needed, this proposed institution will be well-positioned to furnish a shared set of facts and data in support of the needed discussion of how Canada's various jurisdictions should share the burdens entailed by emissions reductions. The institution's aim should not be to supplant intergovernmental negotiation and decision-making, but rather to better inform it. To that end, the proposed climate change institution should be mandated to achieve two broad strategic goals:

1] Assess how individual FPT plans contribute to meeting the entirety of Canada's Paris commitments and the capacity of individual jurisdictions to reduce their GHG emissions beyond these plans. Given this information, the institution shall also advise on how the burden of meeting Canada's Paris targets could best be shared between jurisdictions on an ongoing basis.

2] Guide the deployment of the federal spending power through the allocation of federal subsidies to those complementary measures deemed to best combine the goals of reducing emissions and equitably sharing the negative economic impacts of emissions reduction policies across jurisdictions.

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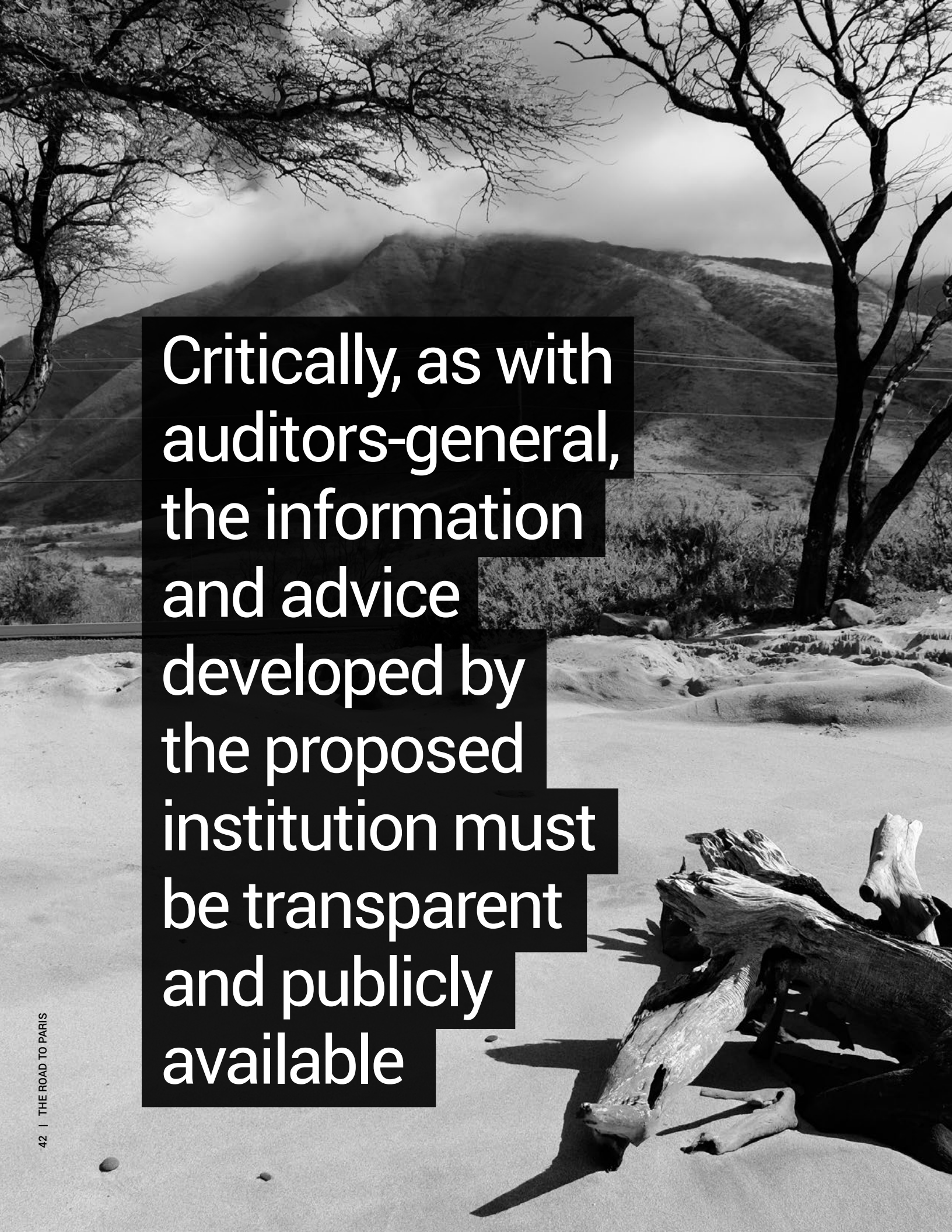
The institution should be designed to:

- **give evidence-based advice aimed at advancing Canada's 14 separate FPT climate change policies**
- **guide the deployment of the federal spending power so as to support cost-effective emissions reductions and share the burden of uneven economic impacts of emissions reduction policies equitably across jurisdictions.**



Critically, as with auditors-general, the information and advice developed by the proposed institution must be transparent and publicly available

5 TASKS AND RESPONSIBILITIES OF THE NEW INSTITUTION

In the preceding section we outlined a vision for the proposed climate change institution's mandate as well as the institutional structure that would best enable it to advance this mandate. In this section, we explain how this proposed institution should actually discharge this mandate given this proposed structure.

The way in which the first of the new institution's two broad strategic goals (see box) would be accomplished is fairly straightforward. Stated simply, the proposed institution would publicly publish periodic assessments of how Canada is progressing towards its emissions reductions targets and how various jurisdictions' efforts are contributing to this progress. Such reporting could also include assessments of which provinces have capacity to produce greater reductions and provide high level estimates of the costs that would be associated with doing so. Additionally, the institution could work directly with individual governments to evaluate and advise on potential complementary measures and use its expertise to assist them in optimizing the effectiveness and cost-effectiveness of their individual efforts.

Strategic Goals of the Proposed Institution

1] Assess how individual FPT plans contribute to meeting the entirety of Canada's Paris commitments and the capacity of individual jurisdictions to reduce their GHG emissions beyond these plans. Given this information, the institution shall also advise on how the burden of meeting Canada's Paris targets could best be shared between jurisdictions on an ongoing basis.

2] Guide the deployment of the federal spending power through the allocation of federal subsidies to those complementary measures deemed to best combine the goals of reducing emissions and equitably sharing the negative economic impacts of emissions reduction policies across jurisdictions.

While providing a national perspective on Canada's progress towards its Paris targets – as well as an assessment of how each jurisdiction was contributing to this progress – would fill a gap in the Canadian climate change policy landscape, this alone would not constitute a transformative policy innovation. Rather, the transformative potential of the proposed institution actually lies in the combination of this first strategic objective with the second, namely, guiding the deployment of the federal spending power as a means of smoothing the imbalance in economic impacts between jurisdictions as they work to reduce emissions. It is to a discussion of how this would be accomplished that the bulk of this section is devoted.

This section proceeds as follows. We begin by outlining the lines of business of the proposed institution, that is, those tasks and functions that will form its day-to-day operations on an ongoing basis. Next, we discuss the potentially transformative effect a well-designed deployment of the federal spending power could have on the Canadian climate change policy landscape. We then discuss the ways in which such a federal transfer would need to be designed in order to give it its greatest chance of achieving this potential. Finally, we close by outlining the procedure we envision the institution following as it progresses through one complete cycle of its work.

Lines of Business

The first aspect of how the proposed institution will discharge its mandate that needs some explanation concerns the question of what the institution will actually do on a day-to-day basis. We envision this new institution pursuing three primary lines of business: (1) forecasting and reporting, (2) research and policy analysis, and (3) connecting, convening and coordinating.

FORECASTING AND REPORTING

In order to meet its first strategic goal, the new institution will need the capacity to create robust, publicly available data on which to base its advice – and by which it can itself be held accountable. The new institution's ability to assess how individual governments can and should contribute to meeting Canada's Paris targets will hinge on its ability to reliably and accurately model the emissions reduction impacts of various policies and projects. Thus, building its forecasting capacity should be the new institution's first order of business.

As the new institution matures as an organization, it may be worth assessing its potential role in Canada's GHG emissions data and reporting regime. As part of its obligations under the UNFCCC, Canada is required to submit a National Inventory Report (NIR) of GHG emissions and sinks. Currently, the collection, refinement and review of Canada's data for the NIR is led by Environment and Climate Change Canada (ECCC). The networks involved in creating this submission are both wide and deep (see sidebar). Without a compelling Key Argument to the contrary, we believe it will be preferable to leave the current system in place and not insert this new institution into a process that is already working. If this recommendation is accepted, the proposed institution would thus act as both a consumer and analyst of ECCC's GHG emission data, rather than a primary producer of it.

Critically, as with auditors-general, the information and advice developed by the proposed institution must be transparent and publicly available. Similarly, the new institution must also be free to initiate and publish studies that it identifies as relevant and important, rather than passively waiting for requests from FPT governments. Freedom in these regards will be instrumental in giving effect to its neutrality and independence, but also its intergovernmental character in that it must expressly and dutifully serve all 14 of Canada's FPT governments. As such, its leadership should actively pursue opportunities to not only brief governments on their work but also communicate with them in advance of publication to minimize potential surprises and to give governments ample opportunity to react and respond.

RESEARCH AND POLICY ANALYSIS

To effectively leverage its forecasting function into the formulation of policy advice, the proposed institution will also need to develop its research and policy analysis capacities. In order to maintain neutrality in the formulation of its policy advice, however, the new institution should stop short of providing specific policy recommendations. The policies Canada's governments have chosen to reduce emissions are wide-ranging and include carbon taxes, cap-and-trade regimes and myriad complementary measures. In the future, optimal emissions reduction policy frameworks may lean more or less heavily on some of these tools, or perhaps others. An overly prescriptive approach by the new institution with respect to specific policy instruments, however, could harmfully politicize its advice and undermine its credibility and effectiveness.

Canada's National Inventory Report

Environment and Climate Change Canada (ECCC) leads the process for preparing and submitting Canada's national inventory of GHG emissions and sinks to the UNFCCC. This process requires contributions from a vast array of contributors and "the methods used to prepare the emission and removal estimates are consistent with internationally accepted Intergovernmental Panel on Climate Change methodologies and reference documents."[77] In order to meet international standards, ECCC seeks to draw upon "the best available technical and scientific expertise and information, data and measurement."[78] ECCC "is involved in many agreements with data providers and expert contributors in a variety of ways, ranging from informal to formal arrangements."[79] Data providers and contributors include other federal departments, Statistics Canada, industry associations, consultants, universities and bilateral agreements with provincial and territorial governments.[80]

77 Government of Canada. 13 April, 2017. *Greenhouse gas emissions indicators: data sources and methods, chapter 3.* Environment and Climate Change Canada. https://www.ec.gc.ca/indicateurs-indicators/default.asp?lang=En&n=391052E4-1&offset=3&toc=hide.
78 Government of Canada. 2017. *National Inventory Report 1990-2015: Greenhouse Gas Sources and Sinks in Canada; Canada's Submission to the United Nations Framework Convention on Climate Change: Part 1.* Gatineau. pg. 35.
79 Government of Canada. 2017. *National Inventory Report 1990-2015: Greenhouse Gas Sources and Sinks in Canada; Canada's Submission to the United Nations Framework Convention on Climate Change: Part 1.* Gatineau. pg. 36.
80 Government of Canada. 2017. *National Inventory Report 1990-2015: Greenhouse Gas Sources and Sinks in Canada; Canada's Submission to the United Nations Framework Convention on Climate Change: Part 1.* Gatineau. pg. 36.

The most important research and policy role for the proposed institution to play will be to present governments with policy options, along with information about their likely costs, benefits and associated economic impacts. It should avoid prescriptive recommendations as the final decisions on which policy levers and approaches to employ will inevitably, and properly, be taken by the elected decision-makers who are ultimately accountable for those decisions to their electorates. Again, the institution's aim should not be to supplant intergovernmental negotiation and decision-making, but to support and inform it by providing independent information from a national perspective that is currently lacking.

Building on a Solid Foundation

The National Round Table on the Environment and the Economy

From 1988-2012, the National Round Table on the Environment and the Economy (NRTEE) occupied a central role informing sustainable development policy within Canada. Established by the federal government in response to the United Nations World Commission on Environment and Development, the NRTEE consisted of 24 rotating members from the public, private, non-profit and academic sectors, appointed by Cabinet on three-year terms and supported by a permanent secretariat.

In 1993, the NRTEE's role expanded through its formal establishment as a corporation under the National Round Table on the Environment and Economy Act. The Act mandated the NRTEE to play "the role of a catalyst in identifying, explaining and promoting... principles and practices of sustainable development."[81] To achieve this goal, NRTEE undertook non-partisan research and analysis, facilitated cooperation between governments and the private sector to integrate sustainable practices into policymaking and educated the public on policy changes deemed necessary for a sustainable future.

This broad mandate empowered the NRTEE to address a diverse range of topics. Whether providing medium- and long-term recommendations for transitioning Canada to a low-carbon economy, sector-based studies of water and forestry resources or comprehensive examinations of specific policy instruments such as carbon pricing, NRTEE reports were recognized as exhaustively researched, non-partisan publications that could be equally valuable to government officials, industry stakeholders and the public at large.[82]

In 2012, the Government of Canada wound-up the NRTEE by eliminating its operational funding, prompting a prolonged political dispute over the government's rationale for doing so and over the institution's worth.[83] Regardless of the motivation behind the decision, the original purpose of the NRTEE includes the following key lessons that should inform the design of the proposed climate change institution.

1] Impartial Convener

On an issue such as climate change mitigation, the ability to convene experts and stakeholders across disciplines is a prerequisite for informed policy recommendations. Past NRTEE members have repeatedly identified the NRTEE's primary strength as its ability to connect leading voices from all parts of Canadian society and to relay their messages to government officials in an informal manner without sacrificing legitimacy.

2] Connection to Central Decision-Makers

For the majority of its existence, the NRTEE reported to the Prime Minister, but also to the Ministers of Finance and Environment.[84] This degree of access gave it significant influence in a policy field beset by many competing voices.

3] Solutions-Focused Advice

While other climate scientists and government reporting agencies have the technical ability to produce and analyze forecasts, few institutions hold the influential position that the NRTEE occupied at the crossroads of government, industry and the academy. This placement ensured that NRTEE publications could move beyond a forecasting role to offer policy recommendations without concerns over ulterior motives often associated with privately funded institutions. It is noteworthy, however, that an overly prescriptive approach with respect to advice on specific policy levers may have contributed to the NRTEE's undoing. Indeed, advice that instead presents a range of the options for achieving a specific outcome may be a more effective model.

81 Canada. *National Round Table on the Environment and the Economy Act.* R.S.C. 1993, c. 31, s. 4.
82 Horne, M. 28 March, 2013. "Farewell to the National Round Table on the Environment and the Economy." Blog. *Pembina Institute*. http://www.pembina.org/blog/705.
83 The Canadian Press. 15 May, 2012. "Environment Panel's End Blamed on Support for Carbon Tax." *CBC News | Politics*. http://www.cbc.ca/news/politics/environment-panel-s-end-blamed-on-support-for-carbon-tax-1.1164935.
84 NRTEE's reporting relationship to the Prime Minister (or Finance Minister designate) lasted from its inception until the Harper Government changed its reporting responsibility to the Ministry of Environment. Boutras, S. 2009. "A Child of Bruntland: The Institutional Evolution of the National Round Table on the Environment and the Economy" in Meadowcroft, J. and Toner, G. (eds). *Innovation, Science, Environment Special Edition: Charting Sustainable Development in Canada, 1987-2007*. 156-180. pg. 169.

CONNECTING, CONVENING AND COORDINATING

The proposed institution must also strive assiduously for ongoing relevance, especially in a policy space where it may be seen, rightly or wrongly, as in competition with established bureaucracies and existing institutions. Thus, the ability of its leadership to build and maintain strong relationships with all governments will be a key factor in its success. The institution's leadership should collaborate with and seek input from all governments to gain a window onto their priorities and ensure that the institution's work is meeting their needs. As demonstrated by the example of NRTEE, a strong connection to senior decision-makers would be ideal. In the sphere of climate change policy, this means First Ministers and Environment Ministers. Given its independence, the new institution should be free to provide all governments with direct, unvarnished advice and should thus have direct access to decision-makers.

Connecting diverse groups is another mechanism the new institution should employ to establish and maintain relevance. As noted by former NRTEE chair Stuart Lyon Smith, "the main strength of government-funded policy advisory bodies lies in their convening power."[85] This new institution should seek to connect government decision-makers, experts and stakeholders in the development of their information and advice. It should also connect experts to decision-makers in order to assist them in identifying high-impact emissions reduction projects.

Finally, one big challenge faced by complementary measures, either when used in conjunction with a carbon price or even on their own, is their potential to overlap or interact inefficiently with other emissions reduction measures. When complimentary measures are designed without taking into account the impacts of carbon prices or other measures that are affecting the same activities being targeted by the complimentary measures, governments can end up paying for the same reductions many times over. Doing so can exacerbate the negative impacts of such measures by raising their costs.[86] In its advice to governments, this new institution will need to integrate potential interactions with other policies in its evaluation of potential projects in order to ensure that the goals of effectiveness and cost-effectiveness are achieved. By serving as a central point of information and advice, the new institution should be able to ensure that all governments are kept informed of each other's plans so that such potential inefficiencies can be rooted out before projects are launched.[87]

85 Government of Canada. 2013. Reflections from Past Leaders of the NRTEE. *National Round Table on the Environment and the Economy*. pg. 4. http://tcan.ca/sites/default/files/files/NRTEE%20reports/NRTEE-Reflections-from-past-leaders-of-the-nrtee.pdf.

86 Sawyer, D. and Bataille, C. 31 March, 2017. *Taking Stock*. pg 3.

87 In an even more ambitious form of coordination, Dave Sawyer and Chris Bataille suggest that by building 'bridges' that would enable the trading of carbon allowances between jurisdictions and sectors within Canada, the overall cost of meeting Canada's Paris targets could be significantly reduced – they claim by 36 per cent. Sawyer, D. and Bataille, C. 31 March, 2017. *Taking Stock*. pg. 7-8. While consideration of such an approach is beyond the scope of this paper and our plans for the new institution, it does represent a plausible potential extension of the institution's competencies.

Guiding the Federal Spending Power

The proposed institution's capacity to effectively carry out the functions outlined above will be essential to its ability to achieve its second strategic goal, namely to guide the deployment of the federal spending power so as to support cost-effective emissions reductions and mitigate the uneven economic impacts of emissions reduction measures across jurisdictions. More specifically, all of these lines of business will need to be leveraged to support the last function discussed in this paper: administration of a climate change mitigation transfer.

We suggest that the deployment of the federal spending power should come in two forms. First, all jurisdictions should have access to a prorated amount of 'baseline' federal funding designed to subsidize complementary measures aimed at reducing GHG emissions in each province and territory. Second, the federal government should also provide a second 'selective' envelope of funding that the new institution would disburse with the aim of selecting only those projects that best balance the goals of cost-effective emissions reductions and equitable sharing of the economic burdens associated with emissions reductions across jurisdictions. No jurisdiction would have an automatic claim on any portion of this funding as it would be awarded only to those projects which best met the combined criteria of cost-effectiveness and advancing a fair sharing of burdens.

Such a two-pronged approach fits well within a familiar tradition of Canadian intergovernmental policymaking. Indeed, for decades, the federal government has been able to play a policy leadership role by virtue of the fact that, structurally, it has access to more money than it needs to discharge its own constitutional responsibilities. This ability is referred to as the federal spending power, and with it "the Government of Canada does have substantial capacity, especially through the power of the purse, to influence and bring about national policy outcomes."[88] Perhaps the most familiar example of this ability is the use of federal transfers in the 1950s and 1960s to induce the provinces into adopting universal hospital and medical care across the country. In this case, the federal spending power can and should be used to effectively induce greater emissions reductions and to address the imbalance in the burdens that will be borne by different regions due to the inevitably asymmetric economic impact of emissions reduction measures.

Federal Spending Power

The federal government occupies a much larger share of tax room than it needs to carry out its own constitutional responsibilities. This excess revenue relative to its needs results in the federal government having the means to spend in areas outside its jurisdiction, often through transfers to the provinces. This provides the federal government a role in setting priorities in areas it otherwise might not have access to.

As has been argued throughout this report, closing the PCF-Paris gap will require greater action from the federal government than is currently contemplated. The plan to distribute funds collected from the federal carbon backstop, coupled with the five-year Low Carbon Economy Fund (LCEF), are positive but insufficient steps

88 Cameron, D. and Simeon, R. 1 January, 2002. "Intergovernmental Relations in Canada: The Emergence of Collaborative Federalism." *Publius: The Journal of Federalism* 32(2) 49–72. pg. 50.

towards achieving Canada's Paris targets. The LCEF in particular, although instructive in this case for its example of excluding non-participants from receiving funding to incentivize ongoing participation and its division into two tranches, is too small and time-limited – $2 billion over five years[89] – to serve as an enduring solution.

Rather, a much larger and ongoing infusion of federal money is needed to fund the substantial investments in complementary measures that will need to be made in parallel to Canada's various carbon-pricing regimes. Moreover, achieving the deep emissions reductions necessary to meet Canada's 2050 targets will require significant investments in complementary measures across multiple sectors of the economy. For example, the pathway to meeting the 2050 targets will include a significant and costly transformation of Canada's energy options, including "reduced use of fossil fuels for end uses, decarbonisation of the electricity supply, [and] increasing the use of biomass/ biofuels."[90]

Critically, this additional federal funding must not be used to compensate provinces for investments that have already been made or policies that have already been enacted. To both close the PCF-Paris gap and to support the deep decarbonization efforts necessary to meet Canada's 2050 target, efforts must be forward-looking. Investments must be aimed at new projects and policies to induce additional emissions reductions beyond what is currently contemplated by existing government policies.

In addition to inducing significant new emissions reductions, for pan-Canadian climate change policy to succeed, the federal spending power must also be employed to substantively address the asymmetric economic impacts across jurisdictions associated with emissions reductions measures. Failure to do so has previously contributed to the inability of Canada's governments to agree on a pan-Canadian approach to effectively addressing climate change.

Negotiations around emissions reduction policies are challenging because they are imbued with longstanding anxieties. As was discussed earlier, for example, much of the blame for the failure to ratify the Kyoto Convention lies with the fact that FPT governments had never, "fully addressed the basic challenge which it had inherited from the NEP – Alberta's and Saskatchewan's fears that it was essentially a wealth-redistribution program."[91] The failure of the Kyoto process could perhaps have been avoided with use of the federal spending power, but at the time, "the federal government did not use all the powers it had available to make costs more equal."[92]

The federal spending power should be the primary tool the federal government uses to address the asymmetric burden provinces will bear in achieving Canada's Paris targets. Financial compensation to make the distribution of these costs more equitable will be necessary to meeting those targets. It is also the most effective way to induce the additional emissions reductions that are required *in the places they are most needed* without confrontationally stepping on jurisdictional toes.

89 Government of Canada. 25 October, 2017. Low Carbon Economy Fund. *Environment and Climate Change Canada*. https://www.canada.ca/en/environment-climate-change/news/2017/06/low_carbon_economyfund.html.
90 Trottier Energy Futures Project. April 2016. *Canada's Challenge and Opportunity*. pg. 8.

91 Macdonald, D. 20 June, 2017. *Why Canada Needs a Climate-Change Burden-Sharing Agreement*. pg. 4.
92 Macdonald, D. 2013. *Allocating Canadian Greenhouse Gas Emission Reductions Amongst Sources and Provinces*. pg. 60.

The second 'selective' funding envelope will be especially important in this respect. By setting aside a substantial proportion of the federal funding for complementary measures that balance cost-effective emissions reductions with the goal of interregional equity in burden sharing, this transfer could enable targeted inducement of emissions reduction projects in the very emissions-intensive jurisdictions where these reductions are most needed. To that end, the new institution should leverage its forecasting function to develop a "capacity to reduce" measurement to inform decisions on how that element of funding would be most strategically allocated.

This "capacity to reduce" measure would be based on modelling of the emissions reductions that each jurisdiction would likely achieve at various carbon prices as well as the associated economic costs. Additionally, the "capacity to reduce" measure would also identify, albeit at a high level, the potential complementary measures available to each jurisdiction, the emissions reductions that these measures would likely produce, the costs associated with implementing them and the wider economic impact these measures could be expected to have.

Given the nature of their economies, it is highly likely that the emissions-intensive provinces would have both the highest capacity to reduce overall and, more specifically, would also host many of the most promising potential complementary measures – from both an effectiveness and cost-effectiveness perspective. When combined with this envelope's other goal, namely to support fairness between jurisdictions in terms of burden sharing, a disproportionate percentage of this second envelope's funds would thus likely flow to the emissions-intensive provinces. This feature of the new institution's design will be critical to helping alleviate the asymmetric impact of climate change mitigation across jurisdictions, enabling Canada to overcome some of the biggest obstacles that have previously blocked progress on this file.

Finally, in the Canadian context, where neither order of government has the power to substantively coerce the other, non-participation in the proposed institution should also disqualify a jurisdiction from receiving funding from the climate change mitigation transfer. Lack of access to a carrot can be a useful proxy for a stick. Given that one of the critical benefits that this new institution is meant to provide consists of the broad political cover for taking potentially unpopular decisions that national unity between FPT governments can provide, it is essential that all governments be as strongly incentivized to participate as possible. Thus, the opportunity cost of not participating in the proposed climate change institution – not being part of the solution framework that this institutional arrangement is designed to enable – should be made as high as possible and disqualification from receiving the benefit of the federal climate change mitigation transfer is an important part of doing that.

Governance of the Federal Transfer

The final design element to address with respect to the proposed federal transfer concerns its governance. Specifically, insofar as the final approval of project funding is concerned, the fundamental question that must be answered is who is empowered to make the final decision. Two potential options present themselves.

Should it be decided that the board of the proposed institution should have final approval of project funding and allocation, this would have implications for both how those decisions are made, and the design of the transfer itself. To avoid the potential for bias – or the appearance of bias – funding decisions would need to be made according to a transparent set of criteria that are clearly understood and agreed to by all governments at the time of the institution's creation. Federally created foundations, such as the Canada Foundation for Innovation or Genome Canada, could serve as useful examples of how an independent organization can achieve maximum impact while prudently managing public funds and delivering value for money.

If such a design were adopted the proposed institution would represent a unique model as an independent yet intergovernmental organization with the power to make decisions on project funding. Given the institution's intergovernmental character and the proposed asymmetric composition of its board – skewed towards emissions-intensive provinces – delegation of project approval to an expert subcommittee would be advisable as it would reduce the potential for bias towards board members' home jurisdictions.

The foundations model could also be instructive in terms of the design of the transfer. Should the board be empowered to approve projects itself – that is, without requiring elected decision-makers to approve their recommendations – administering the transfer from a sequestered fund that is depleted and periodically replenished would provide maximum independence to the institution. Under such a scenario, democratic accountability would still be maintained through the need for periodic replenishments of the institution's funding.

Alternatively, if empowering the proposed institution to make final decisions on project funding approvals is too ambitious an approach, Australia provides a workable model of how an independent institution can play a neutral and evidence-based advisory role on the allocation of funds. The Australian Commonwealth Grants Commission (CGC), an independent and expert-led agency which administers the country's equalization program, advises the federal government on how to allocate funds under that program. While Australia's Commonwealth government makes the final decision on the program's funding allocations, "the CGC's recommendations are generally adopted because they come with a seal of neutral fiscal expertise."[93] Transposing such an arrangement to our proposed institution would mean that the institution's board would be assigned an advisory role on the allocation of funds, with final decision-making authority regarding the transfer resting with another body that would be composed of elected decision-makers, such as the federal government, the CCME or an FMM.

93 Béland, D. and Lecours, A. 2012. Equalization at Arm's Length. *Mowat Centre*. pg.1. https://mowatcentre.ca/equalization-at-arms-length/.

Lessons from the European Union

Burden Allocation, the Triptych Model, and the Climate and Energy Package

The European Union (EU) offers a comparator that is both structurally similar to Canada's and that holds the principle of equitable burden sharing at its core. Thus, it offers helpful lessons in how capacity-based financial compensation can contribute to successful consensus-based climate change policymaking.

The Triptych Model (1997)

European countries began to develop voluntary emissions reductions targets after the Toronto Conference with ministerial-level meetings between European environmental and energy ministers occurring as early as 1990. Early attempts at burden-sharing agreements between member states were not successful and were rejected on three separate occasions. In each case, powerful states such as the United Kingdom and Germany took issue with the imposition of a top-down approach in which policies were being driven by EU-level bureaucrats.[94]

Eventually, the "Triptych model" provided the breakthrough needed to overcome this stalemate. Developed at Utrecht University in early 1997, this approach took its name from its separation of the bulk of member state emissions into three distinct categories: the power sector, internationally operating energy-intensive sectors, and other domestic sectors.[95] The model offered analysis of each category at the national level and their prospective growth rates based on forecasted metrics for population growth, climate, fuel mix, standard of living, economic structure and existing efficiency standards. This data could then be used to study the differential impact of assumptions such as reductions in coal-based power or the adoption of industry-wide efficiency standards and a convergence in living standards across EU member states.

94 Haug, C. and Jordan, A. 2010. "Burden sharing: distributing burdens or sharing efforts?" in Jordan, A. Huitema, D. van Asselt, H. Rayner, T Berkhout, F. (eds). *Climate Change Policy in the European Union: Confronting the Dilemmas of Mitigation and Adaptation?* Cambridge: Cambridge University Press. 83-102. pg. 84.

95 Phylipsen, G. Bode, J. Blok, K. Merkus, H. Metz, B. 1998. "A Triptych sectoral approach to burden differentiation; GHG emissions in the European bubble". *Energy Policy* 26(12) 929-943.

The flexibility built into the Triptych model was a crucial element in its original adoption. Rather than using the forecasted reductions for each of the three categories to impose sector-based targets on a given member state, the numbers were taken in aggregate to determine national allowances. This meant that states were free to direct their own emissions reductions initiatives according to their own internally determined priorities, so long as national totals remained within their aggregate allowance.

The Climate and Energy Package (2008)

The subsequent decade saw major changes in EU climate policy as ten new countries joined the Union and the European Trading System (ETS) – the EU's carbon cap-and-trade system – entered into force, creating an emissions trading market for 40 per cent of all EU emissions. By 2008, the impending UNFCCC meeting in Copenhagen necessitated a new burden-sharing agreement to allocate the remaining 60 per cent of Europe's emissions.

The European Commission spearheaded negotiations focused on a new target of a 20 per cent reduction in emissions below 1990 levels by 2020.[96] The Commission made the decision early on to abandon the Triptych model, partly because the ten newest entrants into the EU presented the challenging combination of below-average standards of living and higher emissions profiles (mostly due to reliance on coal as an energy source) that would have required significant revisions to the model.

Instead, negotiators sought to address equity concerns by identifying a window of +/- 20 per cent from their current emissions levels, which no single member state would be allowed or required to exceed.[97] Targets were negotiated based on GDP per person within this band with the crucial addition of financial compensation to increase the likelihood of political agreement. A specialized solidarity fund totalling ten per cent of ETS allowances was earmarked for transfer from high to low GDP per person states as well as several other exceptions aimed at help certain vulnerable sectors and member states adjust.[98] Together, these concessions amounted to a significant redistribution of member states revenues towards those countries perceived to be entering the policy agreement from a relatively worse-off position and were essential to achieving acceptance of a binding European emissions reduction target.

96 Macdonald, D. 2013. *Allocating Canadian Greenhouse Gas Emission Reductions Amongst Sources and Provinces*. pg. 77.
97 Haug, C. and Jordan, A. 2010. "Burden Sharing". pg. 88.
98 Volger, J. 2011. "EU Policy on global climate change: the negotiation of burden sharing" in Thomas, D. (ed). *Making EU Foreign Policy: National preferences, European norms and common policies*. New York: Palgrave MacMillan.

The Institutional Assessment and Advisory Cycle: A Potential Model

With this analysis now complete, the only remaining task is to briefly describe the process through which the new institution would discharge its mandate. We envision this process being repeated at regular intervals. A cyclic approach of this type would have the virtue of breaking up the large total of emissions reductions required to close the PCF-Paris gap into smaller more manageable chunks and would also allow for regular reassessment of progress and course corrections. While the length of each business cycle, and the quantity of emissions reductions identified as a target for that cycle, would likely need to be set by political decision-makers, ideally the institution itself would be able to provide authoritative advice on these matters. Should a "deplete-and-replenish" funding model be adopted, the timelines of that cycle could be harmonized with the institution's business cycle.

The first step that the institution would take in each cycle would be to conduct a high level assessment of the overall capacity of each jurisdiction to further reduce its emissions. This capacity assessment would be accompanied by a high level estimation of the carbon prices and the costs and economic impacts associated with various levels of reduction ambition within that context. Ideally, these assessments and estimations would be carried out using a model similar to the EU's Tryptich model (see box). The advantage of models like the Tryptich is that they group potential emissions reductions in a way that helps to identify more clearly the economic costs associated with these reductions. In so doing, information about sectors of special concern such as the electricity sector and energy-intensive trade-exposed (EITE) industries can be generated so that it can be used to craft specific policies tailored to these sectors as appropriate.

Once an assessment of the emissions reduction capacity of each jurisdiction was completed, this information would be made publicly available and provided to decision-makers. Individual briefings would be offered to all jurisdictions and, if deemed appropriate, the institution could play a role in convening decision-makers for a discussion in a more neutral setting than typically offered by a federally-run FMM. Armed with this information, decision-makers would then have the task of agreeing on a national emissions reduction allocation plan for that assessment cycle that met the emissions reductions totals required for Canada to remain on course to meet its Paris targets.[99] Once such a plan was agreed, the various jurisdictions would work with the new institution to develop their own plans for meeting the jurisdiction-specific reductions targets agreed to in the national plan.

Throughout this process the new institution would work to disburse the baseline federal funding to all jurisdictions by using their expertise to support and advise on optimal emissions reductions measures in each jurisdiction. In the case of this first envelope of 'baseline' funding, the institution could work with each jurisdiction to select, develop and assess the likely impact of these projects so that they adhere to the principles of effectiveness and cost-effectiveness. Projects could be undertaken by governments alone or in conjunction with partners from the private sector or broader public sector.

99 This description of the institution's business cycle assumes that at the time of its creation, decision-makers will have also outlined an emissions reduction trajectory or pathway along which the institution would align its planning.

Assessment and Advisory Cycle

Additionally, provinces and territories would apply to the institution for additional federal support from the second 'selective' funding envelope. As discussed earlier, considerations related to interregional fairness would be given significant weighting for this component of funding. As such, applications to this 'selective' funding envelope would be evaluated against both a project's estimated ability to achieve substantial cost-effective reductions and its ability to help improve interregional equity in the economic impacts of Canada's climate change mitigation efforts. Once all project applications had been submitted the institution would determine which projects to fund or – should political decision-makers wish to retain final authority for disbursement of funds — recommend for funding.

Depending on the cost-effectiveness of the full suite of programs selected and jurisdictions' successes in securing funding for projects, jurisdictions could potentially fulfill all their emissions reductions obligations under the national plan through this process. If this is not the case, the institution would also be able to provide advice to jurisdictions on what additional projects they ought to fund in other ways to meet their emissions reductions obligations.

6 CONCLUSION

Tackling climate change presents Canadian decision-makers with a once-in-a-generation policy challenge. It combines significant economic costs with shared constitutional jurisdiction between the FPT governments as well as scientific complexity and the natural human tendency to resist acting on problems for which the negative consequences are not immediately apparent while the costs of doing so are. Given this unique combination of formidable obstacles, it is perhaps not surprising that Canada has consistently made climate change mitigation commitments and then failed to take the steps necessary to meet them.

In this context, one can fairly ask: Why would any government want to create and fund an organization, as we are suggesting, whose primary purpose is to publicly tell them that what they are doing to solve this problem is not enough? Given Canada's abysmal record on the climate change file to date, however, we believe that the time to try something new and bold is now. While an impressive first step, the progress Canada's governments have made recently, progress that has been skilfully gathered together under the umbrella of the PCF, is still insufficient to both close the PCF-Paris gap or to set the stage for meeting Canada's even more ambitious – an ultimately much more important – 2050 Paris targets.

To be fair, Canadian governments' abilities to take the steps necessary to address climate change are constrained by a number of difficult and interrelated problems, with two of these problems figuring especially largely. First, decision-makers currently lack the common evidence-based understanding of how their jurisdiction's efforts fit and could fit into the larger entirety of Canada's approach to addressing climate change. Without such a comprehensive, multi-jurisdictional perspective governments will not be able to engage in the type of informed, long-term planning that is needed to transcend the distractions of day-to-day politics and to collaboratively address this collective problem.

Second, while a comprehensive understanding of how the various provinces and territories could work together to achieve effective and cost-effective emissions reductions sufficient to meet Canada's Paris targets is lacking, one thing that is clear is that different jurisdictions will face asymmetric negative economic impacts should Canada seriously seek to do so. A failure to confront this "elephant in the room" has played an important role in scuttling previous climate change mitigation efforts and will do so again. Bluntly, Canada's governments need to find a way to significantly reduce emissions in emissions-intensive provinces without voters in these provinces bearing an inequitably – and ultimately

politically unacceptably – high proportion of the economic burden required to meet Canada's overall targets.

The obvious and simple options that present themselves for resolving this challenge are not compelling. For provinces and territories, the option of going it alone on the climate change file are either sub-optimal or unpredictable. Emissions-intensive provinces, for example, would face significantly higher costs for achieving their share of Canadian emissions reduction targets if they were to act independently and it seems unlikely that sufficient political will exists in these provinces to do so.[100] Some other provinces may have a stronger willingness to reduce emissions, but this willingness will only go so far and could be easily undermined if citizens were to foresee their hard won emissions reductions being swamped by emissions increases in other jurisdictions that had opted out of worrying about Canada's Paris targets. Finally, it seems highly unlikely that any federal government would have the political legitimacy to unilaterally impose a climate change mitigation policy on the provinces in a manner capable of achieving the emissions reductions necessary to meet Canada's Paris targets.

In this paper, we have provided an alternative collaborative option. We have proposed building an intergovernmental institution capable of providing the common evidentiary foundations required for an intergovernmental negotiation on how best to cooperatively achieve Canada's emissions reductions targets. Moreover, by providing a vehicle for the deployment of the federal spending power, this institution also offers a means of ensuring that no province or territory faces the prospect of an unfair burden of negative economic impacts as the price for action. This level of federal commitment, which has not yet been forthcoming on this issue, will be essential to overcoming this policy challenge.

The creation of this new climate change institution offers an innovative way of addressing the two central obstacles that our analysis identified as blocking necessary progress on climate change mitigation in Canada. Naturally, there are still many details that would need to be worked out and some may complain that yet again, the federal government is being asked to step up and write a cheque. But as Canada's history of massively missed emissions reduction targets clearly demonstrates, bold action is needed, and needed soon, if Canada is to have any chance of meeting this new target. The PCF is a good start, but it is not enough. Truly meaningful progress on climate change mitigation – likely the policy challenge of this generation – is going to require levels of effort, innovation and cooperation from all of Canada's governments commensurate to its seriousness, levels which have not yet been forthcoming. We hope that this will soon change.

100 Government of Canada. 2009. *Achieving 2050: A Carbon Pricing Policy for Canada.* National Round Table on the Environment and the Economy. pg. 33. http://neia.org/wp-content/uploads/2013/04/carbon-pricing-advisory-note-eng.pdf.