

CANADA'S **ECOFISCAL** COMMISSION Practical solutions for growing prosperity

# THE WAY FORWARD

A Practical Approach to Reducing Canada's Greenhouse Gas Emissions April 2015

# CANADA'S ECOFISCAL COMMISSION

# **WHO WE ARE**

A group of independent, policy-minded Canadian economists working together to align Canada's economic and environmental aspirations. We believe this is both possible and critical for our country's continuing prosperity. Our Advisory Board comprises prominent Canadian leaders from across the political spectrum.

We represent different regions, philosophies, and perspectives from across the country. But on this we agree: ecofiscal solutions are essential to Canada's future.

#### **OUR VISION**

A thriving economy underpinned by clean air, land, and water for the benefit of all Canadians, now and in the future.

#### **OUR MISSION**

To identify and promote practical fiscal solutions for Canada that spark the innovation required for increased economic and environmental prosperity.

For more information about the Commission, visit **Ecofiscal.ca** 

## A REPORT AUTHORED BY CANADA'S ECOFISCAL COMMISSION

**Chris Ragan, Chair** McGill University

**Elizabeth Beale** Atlantic Provinces Economic Council

Paul Boothe Western University

Mel Cappe University of Toronto **Bev Dahlby** University of Calgary

**Don Drummond** Queen's University

**Stewart Elgie** University of Ottawa

**Glen Hodgson** Conference Board of Canada Paul Lanoie HEC Montréal

**Richard Lipsey** Simon Fraser University

Nancy Olewiler Simon Fraser University

France St-Hilaire Institute for Research on Public Policy

This report is a consensus document representing the views of the Ecofiscal Commissioners. It does not necessarily reflect the views of the organizations with which they are affiliated.

# ACKNOWLEDGMENTS

Dominic Barton Jean Charest Karen Clarke-Whistler Jim Dinning Peter Gilgan Michael Harcourt Bruce Lourie

Janice MacKinnon Preston Manning Paul Martin Jack Mintz Peter Robinson Bob Rae Lorne Trottier Annette Verschuren Sheila Watt-Cloutier Steve Williams

We also acknowledge the support and contributions of the Commission's staff: Adam Baylin-Stern, Dale Beugin, Annette Dubreuil, Linda Montreuil, Jessie Sitnick, Vincent Thivierge, and Jennifer Wesanko, as well as Hidemichi Yonezawa for his modelling work. Finally, we extend our gratitude to McGill University and the University of Ottawa for their continued support of the Commission.

Canada's Ecofiscal Commission recognizes the generous contributions of the following funders and supporters:



IVEY foundation



La fondation de la

LA FONDATION DE LA FAMILLE J.W. MCCONNELL





OF

Fondation familiale Trottier Family Foundation



**Max Bell Foundation** 





For most Canadians, "doing nothing" in response to climate change is simply not an option. Canadians already bear significant economic costs associated with the climate impacts from rising greenhouse gas (GHG) emissions; almost all regions and economic sectors are vulnerable. However, most provinces and the country as a whole are not on track to achieving existing emissions-reductions targets for 2020, let alone the deeper reductions required over the longer term. Achieving meaningful reductions will require the design and implementation of more-stringent policies.

Delaying such policy actions will mean higher future costs for Canadians. Getting moving now allows policy to begin reducing GHG emissions and then ramping up to yield more significant reductions over time. In this way, households will have the ability to adapt their behaviour, and businesses will have the flexibility to adopt and develop technologies required to transform our energy system. Falling behind the rest of the world can lead to competitiveness challenges in a global economy that increasingly recognizes the economic value of low-carbon activities.

The question we now face in Canada is *how* to move ahead in the most practical and cost-effective way. This report offers a clear way forward—through provincial carbon pricing.

The report explores two central issues. First, why provincial carbon pricing is the most practical way to move forward on achieving meaningful, low-cost reductions in GHG emissions. Second, which details and fundamentals of policy design need to be considered as provinces take their next steps.

These ideas are explored by drawing on analysis and evidence from economic theory, from policy experience both internationally and in Canada, and from new economic modelling. Three key policy criteria are emphasized throughout the report: (1) policies are *effective*  if they achieve the required level of emissions reductions; (2) policies are *practical* if their designs reflect local economic contexts and priorities; and (3) policies are *cost-effective* if emissions reductions are achieved at least cost.

The report concludes with four recommendations for Canadian policymakers.

### Recommendation 1:

# All provincial governments should move forward by implementing carbon-pricing policies.

Making national progress on reducing GHG emissions is necessary, and the longer progress is delayed, the more it will cost Canadians. Provinces have the jurisdictional authority and policy momentum to make important headway on this issue now by adopting carbon-pricing policies, which achieve emissions reductions at the lowest cost.

Carbon pricing is increasingly emerging as a central policy instrument for reducing GHG emissions, with support from a broad range of influential entities, such as the World Bank, the Organisation for Economic Co-operation and Development, the International Monetary Fund, and the Canadian Council of Chief Executives. The analysis presented in this report demonstrates the considerable economic benefits of carbon pricing relative to other policies in every Canadian province. Carbon pricing provides emitters with the flexibility to identify least-cost ways to reduce emissions. It also generates revenue that governments can use to drive additional environmental or economic benefits. And, over time, carbon pricing will also drive more innovation, further reducing costs.

Independent provincial carbon-pricing policies offer a practical way forward. Coordination of these policies may be desirable down the road, and different paths to that coordination, including a role for the federal government, are possible. However, it makes good sense to lead action from the provinces. These policies already exist in some provinces and there is momentum building in other provinces to follow suit. The Council of the Federation has now signalled that provincial carbon pricing has a role to play in a provincially led national energy strategy. Furthermore, provinces have unique economic structures, emissions profiles, and political contexts, to which carbon-pricing policies can be customized. Using provincial policies can ensure that carbon-pricing revenues remain within the province in which they are generated, avoiding both real and perceived challenges of a centralized system. Moving forward with provincial policies now allows Canada to make crucial progress on the necessary and inevitable transition toward a cleaner, loweremissions economy.

#### **Recommendation 2:**

# Provincial carbon-pricing policies—existing and new—should increase in stringency over time.

Carbon-pricing policies are not automatically environmentally effective; stringency is essential. A more stringent policy has a higher carbon price. A carbon tax with a very low price is weak policy, as is a cap-and-trade system with a very high cap. Similarly, a policy with a high carbon price that covers only a small fraction of emissions is weak policy. To achieve the required economy-wide emissions reductions at least cost, and to produce the necessary incentives for innovation, any carbon-pricing policy needs to be stringent.

What is the "right" level of stringency? Our modelling analysis uses the provinces' current 2020 targets as a convenient, though arbitrary, benchmark. With the exceptions of Nova Scotia and Newfoundland and Labrador, no Canadian province is projected to meet its emissions-reductions targets for 2020; in this sense, current policies are insufficiently stringent. These targets, in any event, are only relevant for the short term. Much deeper reductions will be required over the next few decades. Even those provinces now pricing carbon lack policies stringent enough to achieve their stated targets. The dynamics of stringency are also important. Ramping up the stringency of policies over time will avoid unnecessary shocks to the economy, but will nonetheless encourage households and businesses to change their behaviours. The sooner policies are put in place, the more time is available for the carbon price to increase smoothly, rather than abruptly. An economic environment with a predictable escalation in price is conducive to long-range planning.

Existing provincial policies vary in terms of stringency. British Columbia's carbon tax is the most stringent, and appears to have driven notable emissions reductions. The price of carbon in B.C. is now static at \$30 per tonne, however, with no increases since 2012. Quebec's comparatively new cap-and-trade system has a lower carbon price, but its cap on emissions is scheduled to decrease steadily each year. Alberta's system with flexible regulations has led to minimal emissions reductions, partly due to its limited stringency.

#### **Recommendation 3:**

#### Provincial carbon-pricing policies should be designed to broaden coverage to the extent practically possible.

Broad coverage creates incentives for emissions reductions throughout the economy. Coverage also matters for minimizing the costs of any given amount of emissions reduction. The more emitters (and emissions) are covered by the policy, the more incentives exist to realize all available low-cost reductions. Carbonpricing policies should thus be as broad as possible. The most costeffective policy would impose a uniform price on all GHG emissions, irrespective of their source. Specific sectoral exemptions not only introduce inequities, but also raise the overall cost of the policy.

The British Columbia carbon tax and the Quebec cap-and-trade system both have reasonably broad coverage. Alberta's flexible regulation, however, creates no incentives for emissions reductions from small emitters, including buildings, vehicles, and small industrial sources. And only a very small fraction of emitters actually pays the price on carbon. This narrow coverage contributes to the limited effectiveness of Alberta's existing policy.

#### **Recommendation 4:**

Provinces should customize details of policy design based on their unique economic contexts and priorities; they should also plan for longer-term coordination.

While consistency of provincial carbon prices is a desirable goal, other dimensions of policy design can remain customized to provincial contexts.



Revenue recycling, in particular, provides an opportunity for diverse provincial policy choices. Some provinces may choose to reduce existing business or personal income taxes, as in British Columbia. Others may prefer to use the revenue to invest in the development of new technology, as in Quebec and, to some extent, Alberta. Carbonpricing revenue could also be used to finance investments in critical public infrastructure, to address competitiveness risks for exposed industrial sectors or to ensure fairness for low-income households. Different provinces with different contexts and priorities are likely to make different choices. This flexibility is a key strength of the provincial approach to carbon pricing. Over the longer term, consistency of the carbon price across provinces is desirable for two reasons. First, such consistency improves overall cost-effectiveness by ensuring incentives exist for realizing all potential low-cost emissions reductions, whatever their location. Second, a common price avoids policy-induced challenges of interprovincial competitiveness. When policy is equally stringent across provinces, all firms face a level playing field.

While a consistent carbon price across Canada is eventually desirable, it is not critical in the short term. Nor should the pursuit of such a common price be an obstacle to effective and timely provincial action. Canadian provinces have a long history of differential policies. By developing effective provincial policies now, and thereby beginning to mobilize markets toward low-carbon innovation, provinces can make crucial headway on an important challenge.