

eco•fis•cal policy /ekō'fiskəl/ adj.

An ecofiscal policy corrects market price signals to encourage the economic activities we do want (job creation, investment, and innovation) while reducing those we don't want (greenhouse gas emissions and the pollution of our land, air, and water).

VISION

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

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](https://ecofiscal.ca)

LETTER FROM THE CHAIR AND EXECUTIVE DIRECTOR

On October 8, 2018, the Intergovernmental Panel on Climate Change released its latest report, affirming that humanity has about a decade to limit global warming to 1.5 degrees Celsius. A few hours later, William Nordhaus received a Nobel prize in economics for his work on the economics of climate change, including the idea that a universal price on carbon is the most efficient way to address climate change.



In other words, the best that science has to offer is telling us we must take urgent action on climate change, while the best that economics has to offer is telling us we have a key solution at our fingertips.

At the Ecofiscal Commission, we continue to make the case for that solution. Until recently, our main audience has been policy-makers. However, with the conversation now shifting to the public realm, we are seeing much misunderstanding about how carbon pricing works.

That's why we published a new carbon pricing paper in April for a broader audience. Without wading into political debates, we wanted to set the record straight in digestible, easy-to-understand terms. To help spread that message, we put out short videos, created a popular "fast facts" section on our website for journalists and curious citizens, boosted our social media presence, and hosted a Reddit "Ask Me Anything" session.

That doesn't mean we favoured retweets over research in 2018. Far from it. Our deep dive into environmental risk in July blazed new territory, advancing an increasingly important policy conversation about liability gaps and environmental risk.

In the fall, we returned our focus to municipal issues. Our report on pricing solid waste appeared to make an impact, particularly in Calgary, with City councillors and staff telling us it created space to consider different approaches to meeting the city's waste targets. Our newest commissioner, the University of Calgary's Dr. Lindsay Tedds, contributed her considerable expertise in municipal policy to the writing and promotion of the report. Meanwhile, our new online course on market-based tools for municipal officials proved very successful.

Over the past four years, we've built a reputation for credible analysis on ecofiscal issues—and it showed in 2018. Our staff and commissioners kept busy with plenty of speaking engagements and were regularly called on by government officials for advice and the media for their insights.

As we move into the final year of the Commission's mandate, we'll continue to shape the conversation around ecofiscal measures in Canada. In the debates leading up to the fall federal election, we'll work hard to ground those discussions in real evidence. But that's just one item on an ambitious agenda.

As always, we extend our sincere thanks to the funders who have made this journey possible and to the commissioners, board members, and supporters who contribute so much to our work.

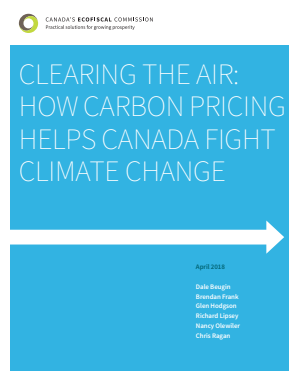
Chris Ragan, Chair, Canada's Ecofiscal Commission
Director, Max Bell School of Public Policy, McGill University

Dale Beugin, Executive Director

CLEARING THE AIR

Most economists see carbon pricing as a powerful and cost-effective tool to reduce greenhouse gas emissions. However, it's a different story when it comes to the public.

According to a 2018 survey we commissioned, most Canadians are open to the idea of carbon pricing. However, the majority don't understand what carbon pricing is, and nearly half aren't sure how well it works.



That's why we decided to revisit the topic with *Clearing the Air: How carbon pricing helps Canada fight climate change*, released in April. Aimed at the broader public instead of policy-makers, the online essay lays out the facts and evidence in clear, digestible, jargon-free terms.

The essay unpacks how carbon pricing, done right, changes household and business behaviour, reduces greenhouse gas emissions, and provides an incentive to develop and adopt low-carbon technologies. Furthermore, we emphasize that by unleashing market forces, carbon pricing will achieve these outcomes at a lower economic cost than other emissions-reduction policies, supporting both a sustainable and prosperous economy.

To spread those messages further, we undertook a number of other communication activities. Our YouTube video "Climate change is costing us. Carbon pricing works." received more than 70,000 views. The chair of Abacus Data led a webinar, walking participants through the results of the survey.

The new "fast facts" on our website is proving to be a useful resource for journalists. Meanwhile, our Reddit "Ask Me Anything" event with Commission chair Chris Regan and

executive director Dale Beugin attracted a wide range of questions from policy-makers and engaged voters alike.

Clearing the Air also garnered significant media attention, with coverage by *CBC*, *CTV*, *BNN*, *Maclean's*, *The Star*, the *Globe and Mail*, *Calgary Herald*, *National Post*, and more.

With a federal election looming and provinces like Saskatchewan, Alberta, and Ontario pulling away from carbon pricing, public debate is heating up. That debate is healthy and necessary, but it should be based on facts and evidence. With *Clearing the Air*, we aimed to set the record straight.



Steve Williams speaking at the Bridging Divides event

BRIDGING DIVIDES

On June 6, over 150 people gathered in Calgary for Ecofiscal's Bridging Divides conference. The sold-out event, held in partnership with the Max Bell and University of Calgary Schools of Public Policy, brought together policy experts, academics, environmentalists, lawyers, and business leaders for frank discussions about energy policies that are good for both the economy and the environment.

“It is a matter of profound disappointment to me that science and economics have taken on some strange political ownership—why the science of the left wing is different than the science of the right wing.”

Steve Williams, President & CEO, Suncor Energy

According to the Abacus Data poll we commissioned,

60%

of Canadians want governments to take more action to combat climate change

78%

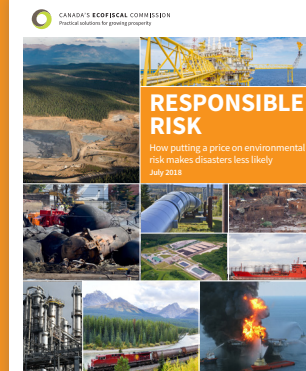
are open to the idea of carbon pricing

“The Ecofiscal Commission report should be required reading for all politicians, carbon price skeptics and the wider population.”

Deborah Yedlin, University of Calgary Chancellor, Calgary Herald

RESPONSIBLE RISK

Many sectors that drive Canada's economy come with environmental risks. In 2013, a train carrying crude oil derailed in Lac-Mégantic, Quebec, killing 47 people and releasing much of the oil into the local soil and waterways. The following year, the largest tailings-pond failure in Canadian history spilled 24 million cubic metres of mining sludge into lakes and rivers in inland B.C.



According to a 2016 B.C. Auditor General's report, unfunded liabilities for mine remediation and reclamation totaled more than

\$1 billion

While these kinds of accidents are rare, they can be costly. Unfortunately, existing rules in this country sometimes don't hold firms fully accountable for environmental damages they cause, creating **liability gaps**. For example, if a mining operation goes bankrupt, taxpayers may be left to foot the bill for remediating the abandoned site. And while an oil company may have to cover clean-up costs after a pipeline spill, they may not pay the full costs of longer-term impacts to wildlife, ecosystems.

To help close those gaps, governments can impose stricter regulations or establish liability rules that clearly lay out a firm's responsibilities for environmental damage. But in our July report — *Responsible Risk: How putting a price on environmental risk makes disasters less likely* — we argue that policy-makers should also make greater use of **financial assurance** policies that require companies to commit funds against potential environmental harm.

These policies give companies economic incentives to reduce risk, while creating flexibility in how they choose to do it. They also ensure enough funding is available for compensation and clean-up costs if a disaster does happen.

Through a detailed case study of the mining sector, *Responsible Risk* compares different financial assurance

“It's not about ignoring risks or about eliminating risk. It's about managing it — and a good way to manage risk is to put a price on it.”

Dale Beugin, Executive Director, Ecofiscal Commission

1. Covers the cost of damage
2. Provides incentives to reduce risk
3. Is cost-effective

Jason Dion explains how financial assurance can be used to minimize risks.



Reducing risk (deterrence)



Paying for damages (compensation)



Minimizing costs (economic activity)

approaches: cash reserves, third-party insurance plans, pledges of assets, and other instruments. It also outlines several recommendations for pricing risk.

Because different firms operate in different contexts, we stress the benefits of customizing policies rather than taking a one-size-fits-all approach. We also stress that financial assurance policies are meant to help manage risk, not eliminate it. Canada's resource sector plays an important role in our economy, and a balanced approach is necessary to ensure pricing policies don't unduly interfere with economic output.

As well as attracting coverage in the *Globe and Mail* and industry magazines, our report provided opportunities for us to have many productive, behind-the-scenes conversations with governments, industry associations, and other key stakeholders. In doing so, we were able to demonstrate how using market-based tools can help prevent disasters and limit the economic burden on the Canadian public.

CUTTING THE WASTE

Canadians are some of the world's biggest waste producers — and most of what we toss ends up in landfills. That creates environmental, financial, and political headaches.



Landfills emit roughly 20 per cent of all Canadian methane emissions, contributing significantly to climate change. Meanwhile, as those landfills reach capacity, municipalities are forced to expand existing facilities or build new ones.

What's the solution? As we explain in *Cutting the Waste: How to save money while improving our solid waste systems*, market-based policies can provide incentives to divert more waste — and produce less of it in the first place.

Cutting the Waste discusses common problems: the high cost of recycling certain materials, how landfills don't charge the full cost of disposal, and the fact that many Canadians pay a set amount for municipal waste collection, regardless of how much garbage they generate.

We assess how well a variety of waste management approaches in Canada perform. And we present recommendations for improving policy at multiple levels of government, emphasizing market-based policies that drive efficiency across the entire solid waste system.

At the municipal level, we make the case for curbside **pay-as-you-throw** programs that charge residents based on how much garbage they actually create. We also advocate for landfill tipping fees to more accurately reflect the full cost of disposal, including environmental costs. These give consumers more incentive to divert more waste and make more eco-friendly buying decisions.

At the provincial level, we recommend extended producer responsibility programs that create incentives for manufacturers to think more sustainably about what they produce and how they package it.

Calgary is currently exploring ways to improve its solid waste management system, which made it an ideal case study in our report. In addition to examining the city's progress and current



plans, we propose policy options to consider moving forward, including stronger pricing incentives that charge residents not just for the size of garbage bins they use but also how frequently they put them out for collection.

In short, those who make more waste should pay more. Better policies like these can make solid waste management more efficient by striking the optimal balance between waste disposal, diversion, and prevention. As a result, they create systems that both help the environment and save money.

The City of Saskatoon estimates the combination of pay-as-you-throw and organics collection could extend the life of its landfill by an additional 23 years — saving taxpayers about

\$5 million each year

A pay-as-you-throw program in Beaconsfield, Quebec, helped reduce landfilled waste by

50%

ECOFISCAL EDUCATION

Well-designed user fees can help cities reduce traffic, cut water use, and improve solid waste management. At the same time, they can generate revenue to fund critical infrastructure projects and create incentives for residents to make more sustainable choices.

Chris Ragan explains the benefit of using market-based tools in municipalities.



“I learned a lot from this course and I hope more classes similar to these will be offered in the future.”

Course participant, Municipal market-based tools for sustainable development

However, many municipalities across Canada aren't sure how best to leverage these kinds of instruments. In response, we developed *Municipal Market-based Tools for Sustainable Development*, with support from the McConnell Foundation.

The online course consisted of five educational modules. Each one included a live, two-hour webinar led by public policy experts and senior municipal leaders with real-world experience. They offered guidance on how to select, design, and implement market-based tools, with plenty of opportunity for

BACK BY POPULAR DEMAND

With support from the Ivey Foundation, the Ecofiscal Commission once again offered its professional development course this year, *Designing market-based instruments for the environment*. Hosted in Ottawa on October 2nd and 3rd, the sold-out event brought together 30 federal and provincial government directors, advisors, and policy analysts. Led by Ecofiscal commissioners Nancy Olewiler and Don Drummond, participants learned the fundamentals of designing, developing, and implementing ecofiscal policies. Attendees also left with a practical tool for identifying and assessing the best economic instrument to address a specific environmental issue.

discussion. A series of self-directed follow-up exercises reinforced key concepts.

The instructors brought a broad range of perspectives, representing large cities, suburban centres, and small towns. In Module 2, for example, the director of mobility pricing for Vancouver's TransLink program delved into how market-based tools can address traffic congestion. In Module 4, the director of sustainable development for Beaconsfield, Quebec, explored pricing policies that support solid waste management in smaller communities.

In total 39 people participated in the course, which ran between October and December. They included municipal employees from big cities like Vancouver and Toronto, as well as smaller centres like Canmore, Whitehorse, and Wawa. Private sector consultants, researchers, NGOs, and representatives from federal and provincial governments also signed up. Together, they all deepened their understanding of market-based tools, coming away with practical design options.



MUNICIPAL MARKET-BASED TOOLS

Module 1: Making the case for municipal market-based tools
Module 2: Market-based tools for reducing traffic congestion
Module 3: Market-based tools for sustainable water and wastewater management
Module 4: Market-based tools for sustainable solid waste management
Module 5: Securing political and public support for market-based tools (panel discussion)

OUR IMPACT

Over the past year, the Commission has engaged with audiences — online and in person — from coast to coast. And for the first time, we also taught courses to policy-makers. Together, we are making an impact on Canadian policy.

TAKING ECOFISCAL ACROSS CANADA



BY THE NUMBERS: A QUANTITATIVE REVIEW OF OUR IMPACT

PUBLICATIONS 3	CITATIONS 37 GOOGLE SCHOLAR	WEBSITE ACTIVITY 154,613 PAGEVIEWS 49,940 USERS
MEDIA MENTIONS 2,327	BLOG POSTS 42	SOCIAL NETWORKING 1,111 LIKES 7,551 FOLLOWERS 979,637 VIEWS 956 FOLLOWERS

TOP 5 ECOFISCAL POLICY ADVANCES

CARBON PRICING

STRINGENCY OF B.C. CARBON PRICE BRITISH COLUMBIA

In April, British Columbia’s carbon tax rose to \$35 per tonne, under an agreement between the new NDP-Green coalition government. B.C.’s carbon price is again the highest in the country. Stringent climate policy is needed to meet Canada’s targets, and B.C. is once again leading the country.

FEDERAL CARBON PRICING BACKSTOP NATIONAL

On October 23, the Government of Canada released the details of its backstop plan to fill the gaps in policy for provinces that had not yet created their own and sufficiently stringent plans: Ontario, New Brunswick, Manitoba, and Saskatchewan. The carbon revenues generated in these provinces will be returned mostly to households, with the balance used to support schools, hospitals, and small businesses. On average, the money households get back will be larger than their carbon costs.

WATER PRICING

NATURAL ASSETS NATIONAL

The Public Sector Accountability Board (PSAB), responsible for establishing accounting standards for municipalities, is assessing whether to include natural assets within the formal accounting framework. This shift would be consistent with Ecofiscal’s recommendation from our 2017 report, *Only the Pipes Should Be Hidden: Best practices for pricing and improving municipal water and wastewater services*.

WASTE PRICING

STRATEGY ON ZERO PLASTIC WASTE NATIONAL

Plastic waste and marine litter are global environmental priorities. In November 2018 environment ministers agreed to work collectively on a Canada-wide strategy on zero plastic waste, which outlines a vision to keep all plastics in the economy and out of the environment. Canada’s approach will build on existing policy, in particular the Canadian Council of Ministers of the Environment’s (CCME) ramped-up ambition of the Canada-wide Action Plan on Extended Producer Responsibility (CCME, 2009).

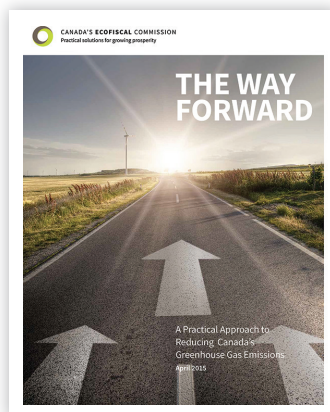
CONGESTION PRICING

MOBILITY PRICING INDEPENDENT COMMISSION BRITISH COLUMBIA

The Mobility Pricing Independent Commission was created to recommend ways to improve transportation pricing in Metro Vancouver. It reports to the TransLink Board of Directors and Mayors’ Council on Transportation. On May 24, the *Metro Vancouver Mobility Pricing Study: Findings and Recommendations for an Effective, Farsighted, and Fair Mobility Pricing Policy* was released. Two main options were proposed: regional congestion point charges and multi-zone distance-based charges.

LOOKING FORWARD

After extensive consultation and consideration, we have decided that 2019 will be the Ecofiscal Commission’s final year.



The Commission was established in 2014 to change the conversation on pollution pricing in Canada, contributing practical fiscal solutions that promote both economic and environmental prosperity.

To a significant degree, we have succeeded. Our reports, consultations, and outreach activities have opened doors to important discussions both in the public realm and the corridors of power. While there is still more to do to push the policy files forward, we feel that work is best undertaken by a different kind of organization. Come the end of 2019, we'll be ready to hand over the baton.

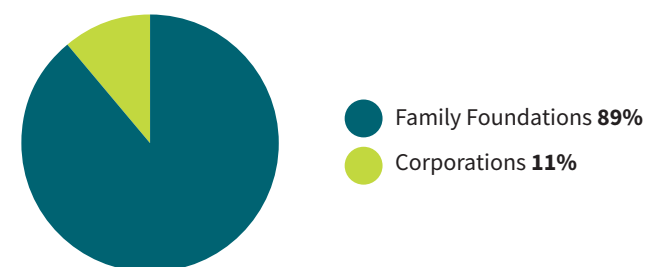
The Ecofiscal Commission’s Advisory Board comprises prominent Canadian leaders from across the political spectrum. We represent different regions, philosophies, and perspectives from across the country. But on this we agree: ecofiscal solutions are essential to Canada’s future.

But we don’t plan to kick back until then. We’ve put together an ambitious agenda for our final year, with carbon pricing at the top of the list.

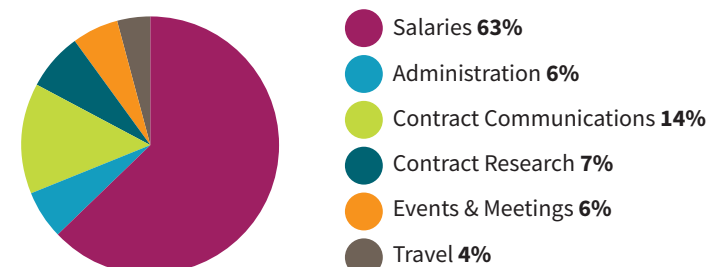
Since we released *The Way Forward: A practical approach to reducing greenhouse gas emissions* in 2015, this has been a hot issue in Canada. So it seems very fitting that we’ll be returning to it in 2019, just in time for a full-throated, pan-Canadian conversation on carbon pricing.

REVENUES AND EXPENDITURES 2018: ~\$1.3 MILLION

REVENUES



EXPENDITURES



WHO WE ARE

COMMISSIONERS

Chris Ragan, Chair
McGill University

Elizabeth Beale
Economist

Paul Boothe
Institute for Competitiveness and Prosperity

Mel Cappe
University of Toronto

Bev Dahlby
University of Calgary

Don Drummond
Queen’s University

Stewart Elgie
University of Ottawa

Glen Hodgson
C.D. Howe Institute

Justin Leroux
HEC Montréal

Richard Lipsey
Simon Fraser University

Nancy Olewiler
Simon Fraser University

France St-Hilaire
Institute for Research on Public Policy

Lindsay Tedds
University of Calgary

ADVISORS

Elyse Allan
Dominic Barton
Gordon Campbell
Jean Charest
Karen Clarke-Whistler
Jim Dinning

Peter Gilgan
Michael Harcourt
Bruce Lourie
Janice MacKinnon*
Preston Manning
Paul Martin

Peter Robinson
Lorne Trottier
Annette Verschuren
Steve Williams

* Served until December 2018.

FUNDERS & SUPPORTERS

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



IVEY foundation



Max Bell Foundation

THE J.W. MCCONNELL
FAMILY FOUNDATION

LA FONDATION DE LA
FAMILLE J.W. MCCONNELL

METCALF
FOUNDATION

NORTH GROWTH
FOUNDATION





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

Find out more and share your views.



Canada's Ecofiscal Commission

c/o Department of Economics

McGill University

855 Sherbrooke Street West

Montréal, QC H3A 2T7

Canada's Ecofiscal Commission was formed by a group of experienced, policy-minded economists from across the country, seeking to broaden the discussion of ecofiscal policy reform beyond the academic sphere and bring it into the realm of practical policy application. The Ecofiscal Commission and its commissioners are fully independent and aim to serve policy-makers across the political spectrum, at all levels of government.