The carbon tax has once again become a policy issue at both the national and provincial levels. Among those who follow this debate, there is a split over whether the federal carbon tax needs reform, or whether it is even possible for governments to implement a well-designed carbon tax, reducing its efficacy as a policy instrument to manage emissions.

Theoretically, mainstream economic thinking holds that a properly structured carbon tax is the most effective way to reduce greenhouse gas (GHG) emissions. It addresses the concern that GHG emissions are an “externality” and that their external costs need to be “internalized” into the prices of goods and services across the economy without causing economic distortions.

The argument is appealing in its simplicity, and draws on a fundamental tenet of economics: that people react to incentives. Thus, if you raise the cost of an activity, this same group of people will do less of that activity. If you raise the cost of emitting greenhouse gases, people will reduce their activities that generate such emissions, and theory suggests you will see a decrease in overall emissions.

But there are many necessary pre-conditions related to an “ideal” carbon tax. Among those pre-conditions is that the ideal carbon tax would be applied uniformly across the economy, be energy- and technology-neutral, be revenue-neutral, and be used in lieu of (or to displace existing) GHG-related regulations. Regulations can distort people’s response to the carbon price of the tax, rendering carbon pricing and the overall regulatory system less effective and efficient (Yunis and Aliakbari, 2020).

This is the intersection where the academically ideal carbon tax collides with the pragmatic realities of Canada’s governance. There are strong incentives built into Canada’s system of governance that exert pressure on policymakers to violate these pre-conditions both at the time of introduction and as the policy evolves through time.¹

Space considerations will limit this discussion to the issues of revenue neutrality and uniformity, and the idea that carbon taxes must displace and avoid regulation, rather than rest on top of it.

**Revenue neutrality and uniformity**

While Canada ostensibly has a uniform carbon tax imposed by the federal government (Government of Canada, 2016), provincial governments are free to implement their own systems (carbon taxation and/or carbon-trading) that can vary widely in design, and violate the ideal principle of price uniformity across the economy. Critically, though, none of the variations observed at the provincial level compared to the federal carbon tax bring the design into alignment with what would be categorized as a well-designed carbon tax. British Columbia, for example, which did implement legislated revenue neutrality when its carbon tax was introduced, diverged from that revenue neutrality only five years later (Lammam and Jackson, 2017). And in 2017, an incoming NDP government formally disavowed the principle of revenue-neutrality in its carbon tax (Government of British Columbia, 2017).

Quebec, which uses an emission trading to price carbon emissions, for example, has their citizens paying a lower carbon price on transportation fuels than the rest of Canada. However, Quebec is exempt from what is called the federal carbon tax “Backstop” (Terrazanno, 2022), resulting in lower fuel prices for its citizens. This exemption reduces the power of the tax to deter consumption, and thus, emissions.

In 2023, the Trudeau government announced that it would exempt home heating oil (largely used in Atlantic provinces) from the federal carbon tax, while imposing the tax on other heating fuels, such as natural gas.
gas, the primary heating source for the vast majority of homes in western Canada and Ontario. This decision is both a regional disparity favouring Atlantic Canada over the rest of Canada (which predominantly uses other heating sources), and a technology-based disparity favouring electric heating and cooling over natural gas technologies (Department of Finance, Canada, 2024).

Finally, in a review of carbon taxes, and of emission trading systems (ETS) in the Organisation for Economic Co-operation and Development (OECD) conducted in 2020, researchers Jairo Yunis and Elmira Aliakbari showed that:

...on average, 74 percent of carbon tax revenues in high-income OECD countries go directly into their general budget with no earmarking for any specific expenditure, while 12 percent are ring-fenced for environmental spending, and only 14 percent for revenue-recycling measures. This means that most governments are using carbon taxes as a revenue-raising tool rather than a mechanism to internalize the negative externalities of emissions in a cost-effective manner. (Yunis and Aliakbari, 2020)

Further, Yunis and Aliakbari showed that the majority of trading-system revenues were used to artificially accelerate the use of renewable energy sources, infrastructure, and technology, violating another necessary tenet of an ideal carbon tax regime. (Yunis and Aliakbari, 2020)

### Carbon tax In lieu of regulation

Imposing a carbon tax instead of regulations would also be anathema to government and industry actors that are heavily invested in the preservation and continuous promulgation of new regulations, as well as technology standards. Indeed, these regulators and pro-regulatory industries could see a significant reduction in their well-being. With regard to the idea that one characteristic of an ideal carbon tax is that it is levied in lieu of regulation, we must ask if this has been the case thus far. Has the federal government eschewed additional regulations on GHG emissions on top of the carbon tax? The answer to this question would clearly be “no.”

Since implementing Canada’s federal carbon tax, the federal government has implemented (or will implement) a vast array of GHG control regulation measures. Among them: Bill C-69, Bill C-48 (known as the Oil Tanker Moratorium Act) (both instituted even as the federal carbon tax was being implemented in 2019), Net-Zero 2050, and Zero Plastic Waste 2030. A wide-ranging set of “clean electricity” regulations are pending.

This behavior has also been matched outside Canada. As Yunis and Aliakbari observe in their study of OECD carbon taxes and trading systems, “no high-income OECD country has used carbon pricing to repeal emission-related regulations, but instead have introduced new ones following the adoption of the carbon tax or the ETS.”

### Conclusion

The idea that Canada’s carbon tax regime can be improved by making simple reforms to repair flaws of implementation is optimistic given the real-world experience of not only Canada but indeed the industrialized world (OECD). The incentives within a democratic, technocratic, mixed economy like Canada’s (as in the OECD) will always encourage distortionary alterations of the ideal carbon tax in all of its needed dimensions: uniform and universal coverage; complete revenue neutrality; and energy-technology neutrality. Further, a key assumption regarding what makes a carbon tax the “most efficient” way to regulate GHG emissions—that the tax will be levied instead of additional distortionary regulations—has never been met, and is unlikely to be met in the future. The federal tax should be abandoned as an idea that is good as an abstract theory, but not in practice.