The Carbon Tax

It’s Just Not Fair!
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THE CARBON TAX – IT’S JUST NOT FAIR

EXECUTIVE SUMMARY

The Trudeau government is facing controversy over a change that it made to its current carbon dioxide pricing system, colloquially known as the “carbon tax”. The change granted a three-year exemption from carbon dioxide taxes for home heating oil in rural areas and higher carbon tax rebates for people in rural areas, changes that will primarily benefit people living in Atlantic Canada. This ignited both a firestorm of protest from those for whom reducing GHG emissions is the preeminent goal of public policy and a small chorus of appeals from others for similar exemptions. The universal call from those seeking expanded exemptions was that “it’s not fair” that they should have to pay the taxes. Much to the surprise of the government and delight of the Opposition Conservative Party, this slogan has caught on.

Fairness is subjective, of course. The dictionary definition is that it is “the quality of treating people equally in a way that is right or reasonable”. Whatever its merits, a claim that something’s “just not fair” still resonates politically.

The problem with applying the test of fairness to the carbon dioxide pricing system in Canada is that almost nothing about it treats people in Canada equally in a way that is right or reasonable. This is largely due to the design of the regime. It differs by province, subject to federal oversight.

The provincial regimes differ in terms of price levels, coverage, exemptions, use of carbon taxes or emissions trading (Quebec alone has chosen emissions trading), output-based systems, and approaches to revenue recycling. The federal government backstop regime now applies in all provinces except Quebec.
The price of emission permits in Quebec has consistently been well below the carbon dioxide tax rates, and the federal government has taken no action publicly to ensure that Quebec meets the equivalency standard.

The climate dioxide tax rebates range from near zero to 90% depending on the province. That alone is a significant departure from the fairness principle of treating people equally. Much larger payments go to certain groups, notably low-income households and indigenous groups.

The revenues from carbon dioxide taxes are not distributed in the same way in each province.

By 2030-31, most households will see a loss in income in 2030-31 as a result of the federal regime. The loss in income will vary considerably by province and household income.

The Clean Fuel Standard, a regulatory system often criticized as the “second carbon tax” because of its effects on refined oil prices, is projected by some studies to add about 50% to the cost of motor fuels by 2030. The compliance costs would range from $5.6 billion in Alberta to virtually nothing in Nova Scotia and Prince Edward Island.

According to a 2021 Fraser Institute study, by 2030 the carbon tax will cause a loss of about $1,540 per employed person in Canada by 2030. The economic costs vary by province. Real GDP will decline by the highest percentage in Alberta (2.4%) and Nova Scotia (2.4%) and by the least in Newfoundland and Labrador (1.2%), and Manitoba (1.2%). Canada will lose 184,000 jobs, with the largest losses coming in Ontario (87,000), Alberta (30,000) and Quebec (39,000).

Objectively, there is little about the current carbon dioxide pricing regime that is fair in the sense of providing equal treatment to Canadians. If the policy may be viewed as a garment, the most effective tactic to undermine the cloth of the garment is to identify each aspect of its “unfair” effects one at a time and to pull on them until they unravel. The cumulative effects of these efforts will be difficult for the government to resist, and so each exemption added will further erode the credibility of the regime.
THE CARBON TAXES – IT’S JUST NOT FAIR

The government of Prime Minister Justin Trudeau is facing almost unprecedented controversy over a change that it made to its current carbon dioxide pricing system, colloquially known as the “carbon tax”. This is the central policy instrument used by the Canadian government to drive down greenhouse gas (GHG) emissions in pursuit of the political goals of reducing GHG emissions by at least 40% from 2005 levels by 2035 and virtually eliminating them by 2050. It is thus a key part of the government’s Healthy Environment and Healthy Economy (HEHE) plan.

The change made in the application of the tax was fairly minor when viewed in context. It involved the establishment of a three-year exemption from carbon dioxide taxes for home heating oil in rural areas and higher carbon tax rebates for people in rural areas, changes that will primarily benefit people living in Atlantic Canada. The government’s justification for the exemption was that, while pursuing the global agenda of reducing GHG emissions, there was a need to “bring relief amid soaring costs of living” and to “support all Canadians”.

This ignited both a firestorm of protest from those for whom reducing GHG emissions is the preeminent goal of public policy and a small chorus of appeals from others for similar exemptions. The universal call from those seeking expanded exemptions was that “it’s not fair” that they should have to pay the taxes. Much to the surprise of the government and delight of the Opposition Conservative Party, this slogan has caught on. Bill C-234, passed months ago by the House of Commons over the opposition of the governing Liberals, would exempt Canadian farmers from the carbon tax on the natural gas and propane used in farm operations like grain drying and climate control of agricultural buildings. It may soon pass in the Senate. Meanwhile,
some provincial governments are calling for the exemption of all residential heating fuels, including oil, natural gas and propane, from the carbon dioxide tax. To refuse to do so, the Conservatives and the provincial governments say, would not be “fair”.

Fairness is subjective, of course. The dictionary definition is that it is “the quality of treating people equally in a way that is right or reasonable”. That definition may still apply in the courts, where each of us demands to be treated impartially by a third party in comparison to others according to legal standards. According to the political correctness standards that are often applied in Canada today, however, what is “fair” is sometimes being stretched far beyond that dictionary or legal definition. It may depend on each group or individual’s self-assessed judgement of who has the greatest grievance, entitlement or perceived privilege. Thus, for example farmers, members of indigenous groups or others may “deserve” to be treated better or taxed less than the average citizen. Further, equality of treatment can be judged differently in terms of whether those affected are individuals, groups, industries or geographic regions. Despite these complexities (and contradictions), a claim that something’s “just not fair” still resonates politically.

The problem with applying the test of fairness to the carbon dioxide pricing system in Canada is that almost nothing about it treats people in Canada equally in a way that is right or reasonable. This is largely due to the design of the regime.
“Carbon pricing” refers to a set of measures by which governments attempt to raise the cost to consumers of fossil fuel products and services to encourage reduced emissions of carbon dioxide and equivalent greenhouse gases. The use of such measures is based upon both economic theory and endorsement of the concept by international institutions. According to the theory, a pricing approach, using taxes or permit prices in an emissions trading system, allows the “social costs” of environmental damage to be reflected in consumer prices, and thus encourages consumers and businesses to seek out the lowest-cost ways to reduce emissions. This is contrasted with regulations and other “direct action” measures by which governments make the decisions as to how energy supply and demand should change to meet environmental objectives.

The government of Canada’s national pricing framework allows each provincial and territorial jurisdiction to decide how it will implement carbon pricing, while at the same time setting certain minimum conditions that must be met. Jurisdictions may use either carbon taxes or emissions trading (“cap and trade”) systems, and for larger industrial emitters, they may
employ output-based pricing systems (OBPS). An OBPS imposes fees on firms that do not meet prescribed levels of emissions intensity in their production processes.

The framework requires that the effective tax, levy or emissions trading price rise from $10 per tonne of CO2 equivalent in 2018 to $65 per tonne in 2023 and go on increasing in steady increments until it reaches at least $170 per tonne in 2030. The systems must include “revenue recycling” to return a portion of the revenues received from carbon pricing directly to the public. If, in the judgment of the federal government, a province or territory’s regime does meet these conditions, the federal government imposes a “backstop” system. The backstop system has two components: a carbon levy applied to fossil fuels and an OBPS.

The provincial regimes differ in terms of price levels, coverage, exemptions, use of


carbon taxes or emissions trading (Quebec alone has chosen emissions trading), output-based systems, and approaches to revenue recycling. The federal government backstop regime now applies in all provinces except Quebec. Quebec has joined with the state of California in an emissions-trading system whereby the price of the emissions permits is set in competitive markets under conditions largely set by the supply and demand for permits in California.

The rate of the carbon dioxide tax is standard across the federal backstop regimes. The federal government’s stated policy is that all regimes, whether based on carbon dioxide pricing or on emissions trading, should yield costs to consumers that are roughly equivalent in their emissions-reduction effects. However, the price of emission permits in Quebec has consistently been well below the carbon dioxide tax rates, and the federal government has taken no action publicly to ensure that Quebec meets the equivalency standard. Today, the price of permits in Quebec is about $46 per tonne, 29% below the rate charged in other provinces. One has to wonder by which standard this is fair.

The output-based pricing system (OBPS) requires certain large industrial emitters (covered facilities) to pay a carbon price if the emissions at their facilities exceed levels set by Environment and Climate Change Canada. It only applies in “backstop jurisdictions” (i.e. Quebec has its own system).
While few economists would object in principle to the view that higher prices are likely to reduce the quantity demanded of a good, it is difficult to distinguish the effects of changes in relative prices caused by carbon taxes from the effects of the over 400 other emission reduction policies and programs in place in Canada. To complement the carbon dioxide pricing regime in oil product markets, the Canadian government has introduced the Clean Fuels Standard, which imposes a regulatory requirement to reduce the carbon intensity of liquid fuels used in transportation in Canada by 15% by 2030. The standard allows for limited trading of “compliance credits” where credit generation can be done through a variety of closely-regulated mechanisms. For example, a covered firm (often an oil refinery) may earn credits by financing electric vehicle charging stations. The backstop credit is $300 per tonne, which is well above the federal carbon charge. Due to its effects on consumer prices, the Clean Fuels Standard has been branded as the “second carbon tax”.

According to theory, the adverse effects of carbon dioxide pricing systems on the overall economy can be offset through the recycling of revenues received by the government from application of the tax back into the economy, ideally through reductions in the rates of other generally applied taxes like corporate income taxes or sales taxes. In fact, the Canadian climate dioxide tax system does not recycle the funds through tax reductions. Instead, rebates of some of the revenues range from near zero to 90% depending on the province. That alone is a significant departure from the fairness principle of treating people equally. Where rebates are provided, the rebate systems are designed to provide much larger payments to certain groups, notably low-income household and indigenous groups. The rebates are an income redistribution program masquerading as an emissions reduction program. It can be debated whether or not it is “fair” to redistribute funds this way when the same objective is already being pursued by the income tax system and multiple social programs.

The revenues from carbon dioxide taxes are not distributed in the same way in each province; in British Columbia, for example, most the funds are retained by the provincial government for use in pursuing its policy objectives. Similarly, the revenues from the sale of emissions permits in Quebec are not returned to households but
spent by the provincial government primarily on transit projects that benefit larger municipalities. Smaller communities lose out. **This, too, departs from the principle of equal treatment.**

### THE IMPACTS OF THE CARBON DIOXIDE PRICING SYSTEM

### IMPACTS ON HOUSEHOLDS

In March 2022, the Parliamentary Budget Office published a distributional analysis of the federal carbon dioxide pricing regime under the assumption that the rate of the taxes will increase to $170 per tonne by 2030. The report assessed the direct impacts of the taxes on households from energy and non-energy consumption, net of rebates. This includes both the financial impacts and the economic or “source side” impacts, reflecting the loss in inflation-adjusted employment and investment income due to carbon pricing.

The results of this analysis are striking, yet they received little media coverage and consequently little public attention:

- **Most households will see a loss in income in 2030-31 as a result of the federal regime.**
- The loss in income will vary considerably by province and income “quintile” (the population is divided into five parts called quintiles ranging from the lowest fifth of average incomes to the highest fifth).
- **Alberta’s population will be the most adversely affected. In 2030-31, the average household will be $2282 worse off, the second-highest quintile will be $3,409 worse off, and the highest quintile will be $7,402 worse off.**
- Ontario’s population will also be adversely affected. By 2030-31, the average Ontario household will be $1,461 worse off, the second-highest quintile will be $1,853 worse off, and the highest quintile will be $4,866 worse off.
IMPACTS ON FEDERAL GOVERNMENT REVENUES

The federal government revenues from the carbon tax, OBPS and GST, even though reduced by lost personal income tax, will rise from about $9.1 billion in 2023-24 to $18.5 billion in 2030-31. After taking into account the funds recycled in rebates, the federal government revenues will be reduced by about $1.7 billion in 2023-24 and $5.2 billion in 2030-31. So, the carbon dioxide pricing system overall will increase the federal deficit. That is only one of several major adverse effects of carbon dioxide pricing and of the entire federal effort to achieve a “net-zero” emissions goal.

IMPACTS OF THE CLEAN FUELS STANDARD

Dr. Jamie Lee, writing on behalf of LFX Associates, published a report in September 2022 analyzing the economic effects of the federal Clean Fuels Standard. His study assumes that, to comply with the standard, Canadian refiners will either blend ethanol into liquid fuels like gasoline and diesel fuel or purchase credits; further, most of the ethanol will be imported at higher cost from the United States. The result by 2030 will be to add about 50% to the cost of motor fuels on an energy-adjusted basis.

Based on the LFX Canadian Model version 5.0, the effects of such an increase in fuel prices would be to reduce Canadian GDP by 2.8% by 2030, and to impose compliance costs of $20.2 billion. The compliance costs would range from $5.6 billion in Alberta to virtually nothing in Nova Scotia and Prince Edward Island. The largest reductions in GDP would be in Newfoundland (5.7%) and New Brunswick (4.6%) and the lowest in Manitoba (1.6%) and British Columbia (1.9%).

Even if half of the emissions reduction were accomplished through the purchase of credits, the result will be a 1.3% reduction in GDP, and a loss of about 93,000 person-years of employment over the course of the 2020s (even after expanding government employment).
The Parliamentary Budget Office report previously described addresses the impacts of the carbon dioxide pricing regime on households in each province, but it did not address the more general economic impacts that will result from either carbon dioxide pricing, or the entire suite of measures intended to eliminate GHG emissions. In 2021, the Fraser Institute published a paper on the “Estimated Impacts of a $170 Carbon Tax in Canada” by 2030. This paper used economic modelling to assess the impacts of the carbon pricing regime on Canada’s GDP nationally and by province, employment and income per worker, among other things.

![Carbon Tax Impacts](https://carbontaximpacts.ca/)

It is sad to note that the federal government had not published a macroeconomic analysis of the effects of the HEHE since 2001, over twenty years ago. The federal government has never published a detailed benefit-cost analysis of the plan either to 2030 or 2050. Officially, the government claims that the carbon tax will have almost no impact on GDP.1

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The Fraser Institute paper found that the carbon tax will cause a 1.8% drop in Canadian GDP, which works out to about $1,540 per employed person by 2030. The economic costs vary by province. Real GDP will decline by the highest percentage in Alberta (2.4%) and Nova Scotia (2.4%) and by the least in Newfoundland and Labrador (1.2%), and Manitoba (1.2%). Canada will lose 184,000 jobs, with the largest losses coming in Ontario (87,000), Alberta (30,000) and Quebec (39,000). This is far from an equal sharing among provinces of the burden of emissions reduction. It is not “fair”.

These adverse impacts are from the carbon pricing regime alone and in 2030. If one included in the assessment the projected impacts of all the HEHE measures to 2050, the adverse ones would fall disproportionately on the provinces most reliant on emissions-intensive resource industries, notably Alberta, Saskatchewan, Ontario and Newfoundland and Labrador.


THE POLITICAL DIMENSION

However much economists use models and other analytical tools to assess the size and distribution of tax effects, it seems clear that the mainstream media and the general public has not been paying attention. The federal government’s Budget 2023 included a statement that over the preceding seven years the Trudeau government spent $120 billion on climate-related
measures and that it planned to spend at least another $121 over the period to 2030. There was little or no comment from the media on the magnitude of the spending or on the disproportionate impacts of the spending on some regions and groups. But when a few thousand households in a region that traditionally votes Liberal and that rely on heating oil complain about an increase in their costs, the government leapt to their rescue.

The political lesson should be clear. The magnitude of the costs and other adverse impacts of climate policies will not be influential in altering the government’s actions, but emotional appeals voiced by groups demanding “fairness” may be, especially if they are in ridings that the Liberal government relies on for seats in Parliament.

Objectively, there is little about the current carbon dioxide pricing regime that is fair in the sense of providing equal treatment to Canadians. If the policy may be viewed as a garment, the most effective tactic to undermine the cloth of the garment is to identify each aspect of its “unfair” effects one at a time and to pull on them until they unravel. If heating oil users deserve exemptions, why not those who heat with natural gas? If farmers deserve exemptions because they produce food, why not fishermen; for that matter, why not grocery stores, and trucking firms that transport food to market? Why not companies that produce and transport medicine? Each special interest group should be encouraged to come forward to make its quite logical case that carbon dioxide taxes are increasing their costs and harming those who rely on
their services. The cumulative effects of these efforts will be difficult for the government to resist, and so each exemption added will further undermine the credibility of the carbon pricing regime.

You see, it’s just not fair.

Dr. Ian Clark explains why carbon dioxide is not the thermostat that controls Earth’s temperature.

*The carbon tax is not based on science.*
ABOUT THE AUTHOR
Robert Lyman is an economist with 27 years’ experience as an analyst, policy advisor and manager in the Canadian federal government, primarily in the areas of energy, transportation, and environmental policy. He was also a diplomat for 10 years. Subsequently he has worked as a private consultant conducting policy research and analysis on energy and transportation issues as a principal for Entrans Policy Research Group. He is a frequent contributor of articles and reports for Friends of Science, a Calgary-based independent organization concerned about climate change-related issues. He resides in Ottawa, Canada. Full bio.

ABOUT FRIENDS OF SCIENCE SOCIETY
Friends of Science Society is an independent group of earth, atmospheric and solar scientists, engineers, and citizens that is celebrating its 21st year of offering climate science insights. After a thorough review of a broad spectrum of literature on climate change, Friends of Science Society has concluded that the sun is the main driver of climate change, not carbon dioxide (CO2).

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