

What Are Climate Policies Costing Canada?

Roughly \$28,000 per household 2020-2030

Contents

EXECUTIVE SUMMARY	2
Financial Costs to Individuals and Businesses	6
of Climate-Policy Inspired Taxes.	6
The Carbon Dioxide Pricing System	6
The Clean Fuel Regulations	7
Federal Government Expenditures	7
Comments	10
Annex 1	11
About the Author	15
About Friends of Science Society	15

 ${\it Cover image licensed from Adobe Stock}.$

What are Climate Policies Costing Canada?

EXECUTIVE SUMMARY

Page | 2

A global <u>survey</u> published in the journal Nature in February 2024 found that less than 40 percent of the people asked in Canada and the United States would be prepared to spend one percent of their income to address climate change. Such findings stand in sharp contrast to what Canadians are already paying.

Most of the climate policy-related revenues to governments (i.e. costs to consumers) will be from the carbon dioxide pricing system. Based on the current schedule, the rate will rise to "at least" \$170 per tonne by 2030. The Parliamentary Budget Office (PBO) <u>estimated</u> that the total direct revenue from carbon pricing over the period 2019-20 to 2023-24 would be \$31.2 billion, but the amount with GST added (i.e. the tax on the tax) could be \$32.3 billion. In Budget 2024, Finance Canada projected that the proceeds from the "pollution pricing framework" will rise from \$10.4 billion in 2023-2024 to \$20.7 billion in 2028-2029. That would place the total proceeds over the decade at over \$80 billion.

The government claims that 90% of the revenues received from the carbon dioxide pricing system are rebated to the provincial governments that, in turn, are supposed to rebate the funds to taxpayers. The Fraser Institute, in its <u>report</u> on the estimated impacts of a \$170 carbon tax in Canada, found that the rising carbon tax will cause pronounced reductions in the revenues from elsewhere in the tax system, such that the government will not be able to sustain the household carbon tax rebates to the extent it has promised without going further into deficit. In fact, the shortfall could add about \$22 billion annually to the consolidated government debt.

While not treated by the federal government as a tax, the Clean Fuel Regulations have a comparable cost effect. Environment and Climate Change Canada (ECCC), in its published analysis of the regulations, estimated that they would decrease real GDP in Canada by up to \$9 billion in 2030.

Surprisingly, there is no authoritative and reliable inventory of climate measures now in place; of past, present and planned expenditures; or of the results achieved. This in itself marks an extraordinary failure of governance and public accountability.

The Canadian Climate Institute contracted with Navius Research to develop what it refers to as the Climate Policy Tracker, a list of current and projected climate measures and related expenditures. According to it, there are 112 federal government climate policy measures and 364 provincial and territorial climate policy measures where funding has been approved or

planned. The grand total of the expenditures made and planned is \$172.8 billion by the federal government alone.

The total federal and provincial expenditures on climate measures over the period 2020 to 2030 as listed by the Carbon Policy Tracker are \$476 billion or \$11,900 per resident of Canada. This equates to roughly \$28,000 per household (i.e. an average of \$2,800 per household per year). This is just what has been announced to date; there remain five more fiscal years before 2030 during which governments may add more initiatives.

Page | 3

Canadians through their taxes and prices paid on energy are already spending far more than one percent of their incomes per year to fund federal government climate policies. The amounts paid will undoubtedly rise further. When the amounts spent by provincial governments are included, the total cost is probably more than double what is spent by the federal government. The public just doesn't know about it.

What are Climate Policies Costing Canada?

Last year, at the peak of the forest fire season, <u>Ipsos Canada</u> conducted a poll to determine public attitudes about climate change. Only 23 percent indicated that they would be willing to pay more tax for climate initiatives. A global <u>survey</u> published in the journal Nature in February 2024 found that less than 40 percent of the people asked in Canada and the United States would be prepared to spend **one percent of their income to address climate change**.

Page | 4

Fig. 1: Widespread global support for climate action.



Globally representative evidence on the actual and perceived support for climate action | Nature Climate Change

Such findings stand in sharp contrast to what Canadians are already paying. In fact, for decades climate policy skeptics have been frustrated in their attempts to find out how much climate policies and measures are costing Canadians. Federal and provincial governments provide no satisfactory accounting. As a cardinal principle of public administration, major policies and the related government expenditures should be assessed in terms of their costs and benefits to society. Where costs exceed benefits, the policies should not be followed. Yet, with respect to climate policy, governments hide this information.

Page | 5



According to Statistics Canada, the median Canadian Income in 2022 was \$43,000. So, one per cent of that income for climate change would be \$431. The total federal and provincial expenditures on climate measures over the period 2020 to 2030 as listed by the Carbon Policy Tracker are \$476 billion, or \$11,900 per resident of Canada. This equates to roughly \$28,000 per household (i.e. an average of \$2,800 per household per year).

Robert Lyman



The purpose of this article is to present the information now available about the financial costs imposed as a result of climate policy-inspired taxes and expenditures of the Canadian federal government.

The <u>major tax measures</u> imposed are the carbon dioxide pricing system and the Clean Fuel Regulations.

The <u>expenditures</u> are of two general types; direct expenditure programs (i.e. programs in which federal government departments and agencies spend funds to achieve certain objectives) and tax expenditures (measures delivered through the tax system that involve credits, deferrals, deductions, exemptions and preferential tax rates). Expenditure measures typically appear as costs in the federal Budget. Tax expenditures are delivered through the tax system and are essentially treated as revenues foregone.

A subsequent article will attempt to shed light on the costs that are imposed on Canadians as a result of regulations, mandates and regulatory systems intended to reduce greenhouse gas (GHG) emissions.



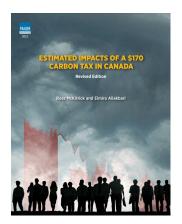


Financial Costs to Individuals and Businesses of Climate-Policy Inspired Taxes.

The Carbon Dioxide Pricing System

Most of the climate policy-related revenues to governments (i.e. costs to consumers) will be from the carbon dioxide pricing system. The centrepiece of that system is the federal fuel charge (the carbon tax) that was implemented in 2018 at the rate of \$10 per tonne of carbon dioxide equivalent and has since risen to \$80 per tonne. Based on the current schedule, the rate will rise to "at least" \$170 per tonne by 2030. The Parliamentary Budget Office (PBO) estimated that the total direct revenue from carbon pricing over the period 2019-20 to 2023-24 would be \$31.2 billion, but the amount with GST added (i.e. the tax on the tax) could be \$32.3 billion. In Budget 2024, Finance Canada projected that the proceeds from the "pollution pricing framework" will rise from \$10.4 billion in 2023-2024 to \$20.7 billion in 2028-2029. That would place the total proceeds over the decade at over \$80 billion.

The government claims that 90% of the revenues received from the carbon dioxide pricing system are rebated to the provincial governments. The provincial governments, in turn, are supposed to rebate the funds to taxpayers. In fact, the amounts actually rebated by provincial governments vary considerably by province. In March 2023, the Parliamentary Budget Office published a <u>study</u> of the distributional effects of the carbon tax. Considering only the fiscal impact, the PBO estimated that most households will see a net gain, receiving more in rebates than the total amount they pay in the federal fuel charge and related GST in Alberta, Saskatchewan, Manitoba, Ontario, Prince Edward Island, and Newfoundland and Labrador. For Nova Scotia, households on the third, fourth- and fifteen-income quintiles (i.e. mid-income to high income groups) will see a net loss. The PBO did not assess the distributional effects in British Columbia and Quebec, neither of which are subject to the federal regime, and which essentially do not provide rebates to the general population of households.



The Fraser Institute, in its report¹ on the estimated impacts of a \$170 carbon tax in Canada, was more pessimistic. It estimated that the federal carbon tax alone will cause a 1.8% drop in Gross Domestic Product by 2030, which works out to about \$1,540 in current dollars per employed person, and the loss of about 184,000 jobs countrywide. The economic costs would vary by province. Alberta will experience a 2.4% reduction in GDP while Quebec and British Columbia will face drops of 1.5% and 1.6%. The largest proportional burden of job losses will fall on Ontario and Alberta, with Quebec and British Columbia close behind. A key finding of the Fraser

Page | 7

Institute analysis is that the rising carbon tax will cause pronounced reductions in the revenues from elsewhere in the tax system, such that the government will not be able to sustain the household carbon tax rebates to the extent it has promised without going further into deficit. In fact, the shortfall could add about \$22 billion annually to the consolidated government debt.

The Clean Fuel Regulations

While not treated by the federal government as a tax, the Clean Fuel Regulations have a comparable cost effect. The regulations require liquid fossil fuel (gasoline and diesel) suppliers to gradually reduce the carbon intensity – or the amount of "pollution" – from the fuels they produce and sell for use in Canada over time, leading to a decrease of approximately 15% (below 2016 levels) in the carbon intensity of gasoline and diesel used in Canada by 2030. This will raise gasoline and diesel fuel prices. Environment and Climate Change Canada (ECCC), in its published analysis of the regulations, estimated that they would decrease real GDP in Canada by up to \$9 billion in 2030. The Parliamentary Budget Office estimated that the cost of the regulations to households will range from \$231 per year for lower income households to \$1,008 per year for higher income households, and that the end-user effects would be "broadly regressive", because lower income households generally spend a larger share of their income on transportation and other energy-intensive goods and services compared to higher income households.

Federal Government Expenditures

In Budget 2022, the federal government stated that over the period 2015 to 2022, it had spent over \$120 billion on climate measures; however, it did not break down the expenditures by measure and year. In Budget 2023, the federal government announced its intention to spend an additional \$121 billion over the period of the fiscal plan (i.e. to fiscal year 2027-2028). Budget 2024 marked a departure in that most of the expenditures announced were planned tax expenditures.

¹ https://www.fraserinstitute.org/sites/default/files/estimated-impacts-of-a-170-dollar-carbon-tax-in-canada.pdf

The Canadian Climate Institute claims to be a non-partisan charity. It received \$20 million from the Trudeau government for its startup and now devotes considerable resources to publicizing the need for more government measures to achieve the "net-zero" GHG emissions target by 2050. The Institute contracted with Navius Research, a climate advocacy organization, to develop what it refers to as the Climate Policy Tracker, a list of current and projected climate measures and related expenditures. The following is a link to the tracker. https://440megatonnes.ca/policy-tracker

Page | 8

There are several problems with the way that Navius Research compiled and presented the information. The dates of inception of the measures included range from 2018 to 2022, but the expenditures listed include mostly ones now approved or planned for the period up to 2030. The funding figures are often speculative. How Navius or its sources define what is and what is not a "climate policy measure" is unclear. For example, Navius's estimates of expenditures by provincial governments include spending on urban transit but not expenditures by provincial electric utilities on renewable energy generation or bulk electricity storage. The measures and expenditures listed do not include those for transfers to foreign governments or international institutions for climate -related aid. The sources used by Navius also are not clear, which makes it impossible for an outside analyst to replicate the inventory so as to confirm its accuracy.

Despite these shortcomings, Navius is to be thanked for having attempted to do something that federal and provincial governments have consistently failed to do since at least the year 2000 — to actually document the number of climate-related programs and the public expenditures on them. Today, there is no authoritative and reliable inventory of climate measures now in place; of past, present and planned expenditures; or of the results achieved. This in itself marks an extraordinary failure of governance and public accountability. Theoretically, the federal government's budget process and its accountability, performance and reporting system should have provided detailed information on how departmental expenditures and the results achieved related to departmental plans and the funds authorized in Parliament's approval of the Main and Supplementary Estimates. Sadly, that kind of information has not been made available in ways that would facilitate parliamentary oversight, a problem that has long afflicted policies that cut across the mandates of several departments. Navius' information, in other words, is more comprehensive than that available from government sources.

The numbers published in the tracker are striking. According to it, there are 112 federal government climate policy measures and 364 provincial and territorial climate policy measures where funding has been approved or planned. The grand total of the expenditures made and planned is \$172.8 billion by the federal government alone.







Heat-or-eat poverty is a serious, growing problem in Canada. Images licensed from Adobe Stock

Table 1 (attached as Annex 1) lists the federal government policy measures noted by the tracker, divided in terms of the sectors targeted including agriculture, buildings, electricity. Industry, oil and gas, transportation, and "multi-sectoral".

Among the points to note about this table are the following:

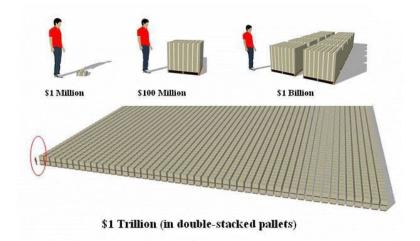
Page | 9

- Dozens of the programs have received almost no public attention, and yet have hundreds of millions of dollars in funding
- Over a dozen federal governments departments and many more provincial government departments and agencies deliver climate programs; the personnel engaged in this effort must run to many tens of thousands (creating vested interests in the continuation of the programs)
- The largest expenditure measures (i.e. costing more than one billion dollars each) are mostly tax expenditures
- The titles of the programs often give only a vague indication of their intended purpose
- On the basis of the titles alone, there is significant overlap and duplication among the measures

The following are the largest expenditure measures:

Investment Tax Credit for Clean electricity	\$25.7 billion
Canada Infrastructure Bank Funding	\$25 billion
Investment Tax Credit for Clean Hydrogen	\$17.7 billion
Canada Growth Fund	\$15 billion
Public Transit Fund	\$14.9 billion
Investment Tax Credit for Clean Technology Manufacturing	\$11 billion
Tax Credits for Investment in Clean Technology	\$6.7 billion
Net-Zero Accelerator	\$5 billion
Canada Greener Homes Loan	\$4.859 billion
Carbon Utilization and Storage	\$4.62 billion
Canada's Critical Minerals Strategy	\$3.8 billion
Canadian Agricultural Partnership	\$3 billion
Investment in Clean electricity Projects	\$3 billion
Canada Greener Homes Grant	\$2.6 billion
Low Carbon Economy Fund	\$2.2 billion
Strategic Innovation Fund	\$2 billion

The total federal and provincial expenditures on climate measures over the period 2020 to 2030 as listed by the Carbon Policy Tracker are \$476 billion, or \$11,900 per resident of Canada. This equates to roughly \$28,000 per household (i.e. an average of \$2,800 per household per year). This is just what has been announced to date; there remain five more fiscal years before 2030 during which governments may add more initiatives.



To offer some perspective, the \$1 million at the feet of the first man is made up of packets of \$100 bills, in packs of \$10,000 each. This is extrapolated to illustrate the relative amounts of money for \$100 million, \$1 billion, and \$1 trillion.

Comments

Canadians, through their taxes and prices paid on energy, are already spending far more than one percent of their incomes per year to fund federal government climate policies. The amounts paid will undoubtedly rise further. When the amounts spent by provincial governments are included, the total cost is probably more than double what is spent by the federal government. The public just doesn't know about it.

Organizations like the Canadian Climate Institute that seek to provide more information do so because their position is that the amounts being spent are not enough. They seek significantly higher expenditures. When the Trudeau government announced in Budget 2023 that it planned to spend at least \$21 billion per year on climate measures, it clearly viewed this as a praiseworthy commitment to a great cause. Nowhere, however, does it publicize what these policies are costing individual Canadian businesses and consumers.

Budget 2024 marked a significant departure in terms of the amount of spending that will be done through tax expenditures. Yet, with annual federal government spending now exceeding half a trillion dollars per year, it is extremely difficult for the House of Commons to provide adequate oversight through the government financial planning and reporting process. This is doubly the case with respect to tax expenditures. Canadians deserve to know more about what climate policy is costing us.



Image licensed from Adobe Stock and colorized.

TABLE 1

FEDERAL GOVERNMENT CLIMATE EXPENDITURES BY PROGRAM (POLICY TRACKER)

SECTOR	TITLE	TOTAL FUNDING
Agriculture	Agriculture Clean Technology Program	\$329 million
Agriculture	Agriculture Climate Solutions Labs	\$50 million
Agriculture	Agriculture Climate Solutions On-Farm	\$704 million
Agriculture	Methane Regulations	
Agriculture	Canadian Agriculture Partnership	\$3 billion
Agriculture	Federal Granting Councils	\$100 million
Agriculture	Fertilizer Emissions Reductions	\$34 million
Agriculture	Resilient Agriculture Landscapes	\$150 million
Agriculture	Transformative Science	\$100 million
Buildings	Canada Green Buildings Strategy	\$150 million
Buildings	Canada Infrastructure Bank Growth	\$2 billion
Buildings	Community Buildings Upgrade	\$1.5 billion
Buildings	Deep Retrofit Accelerator Initiative	\$200 million
Buildings	National Green Infrastructure Program	\$182 million
Buildings	Federal Green Electricity Fund	\$93 million
Buildings	Green and Inclusive Community Buildings	\$1.5 billion
Buildings	Greener Construction	\$183 million
Buildings	Canada Greener Homes Grant	\$2.6 billion
Buildings	Canada Greener Homes Loan	\$4.859 billion
Buildings	Canada Greener Affordable Housing	\$1.2 billion
Buildings	Greener Neighbourhoods Pilot Program	\$33 million
Buildings	Greener Government Buildings	Regulation
Buildings	Reduction in Income Tax Rates for	
	Heat-Pump manufacturers	n/a
Buildings	Rental Construction Financing Initiative	n/a
Buildings	Tax Deductions for Investment in Heat Pumps	n/a
Buildings	Oil to Heat Pumps Affordability Program	\$250 million
Buildings	Clean Electricity Standards for 2035	Regulation

Electricity	Emerging Renewable Power Program	\$200 million
Electricity	Pan Canadian Grid Council	\$2 million
Electricity	Expansion of Clean Electricity	\$250 million
Electricity	Strategic Interties Predevelopment	\$25 million
Electricity	Phase-out of coal-fired electricity	
	Generation	Regulation
Electricity	Limiting Generation from Natural-Gas	
	Fired Generation	Regulation
Electricity	Small Modular Reactor (SMR) Plan	R&D
Electricity	Smart Grids	\$100 million
Electricity	Small Renewables and Electrification	
	Pathways Program	\$1.214 billion
Electricity	Investment Tax Credit for Clean	
	Electricity	\$25.7 billion
Electricity	Budget 2023 investments in clean	
·	Electricity projects	\$3 billion
	, . ,	
Industry	Hydrogen production projects	n/a
Industry	Industrial Energy Management	,
,	Program	\$194 million
Industry	Net-Zero Accelerator	\$5 billion
Industry	Output-based Pricing System	Carbon Pricing
Industry	Returning fuel charge proceeds to	<i></i>
,	SMEs	\$30 million
Industry	Steel Projects Decarbonization	700
	Investments	\$420 million
Industry	Investment Tax Credit for Clean	¥ .= 5
	Hydrogen	\$17.7 billion
Industry	Canada's Critical Minerals Strategy	\$3.8 billion
Industry	Investment Tax Credit for Clean	φ3.0 Simon
maastry	Technology Manufacturing	\$11 billion
Industry	Reduction in income tax rates for	ÇII BIIIION
maastry	Clean Technology Manufacturers	\$1.365 billion
Industry	Strategic Innovation Fund	\$2 billion
maasti y	Strategie iiiiovation runu	ÇZ DIIIION
Multi-Sectoral	Carbon Management Strategy	Plan
Multi-Sectoral	Low-Carbon Economy Fund (for	riaii
ויועונו־שבננטומו	•	\$180 million
Multi-Sectoral	Aboriginals only)	\$25 billion
	Class Fuel Standard Administration	· ·
Multi-Sectoral	Clean Fuels Fund	\$67 million
Multi-Sectoral	Clean Fuels Fund	\$1.567 billion
Multi-Sectoral	Clean Growth Program	\$155 million

Multi-Sectoral Multi-Sectoral Multi-Sectoral Multi-Sectoral	Clean tech project investment CleanBC support Climate Action and Awareness Fund Community Workforce Development	\$1 billion \$35 million \$206 million	
NA INC. A	Program	\$55 million	Page 13
Multi-Sectoral	Energy Innovation Program	\$319 million	rage 15
Multi-Sectoral	Expanding Supply of Critical Minerals	\$46 million	
Multi-Sectoral	Federal Fuel Charge (I.e. Carbon Tax)	Carbon Pricing	
Multi-Sectoral	Future Skills Centre	\$73 million per year	
Multi-Sectoral	Green Procurement	n/a	
Multi-Sectoral	Indigenous Climate Leadership	\$30 million	
Multi-Sectoral	Integrating Climate Into Federal		
	Decisions	\$36 million	
Multi-Sectoral	International Business Development		
	Strategy for Clean Technology	\$21 million	
Multi-Sectoral	Investment Tax Credit for Carbon		
	Capture utilization and Storage	\$4.62 billion	
Multi-Sectoral	Low Carbon Economy Fund	\$2.2 billion	
Multi-Sectoral	Nature Smart Climate Solutions Fund	\$840 million	
Multi-Sectoral	Reduced Reliance on Diesel in Remote		
	Communities	\$300 million	
Multi-Sectoral	Regional Strategic Initiatives	\$25 million	
Multi-Sectoral	Sectoral Workforce Solutions Program	\$960 million	
Multi-Sectoral	Skills for Success Program	\$298 million	
Multi-Sectoral	Small Modular Reactors	\$121 million	
Multi-Sectoral	Strengthening Canada's Climate Plan	\$94 million	
Multi-Sectoral	Supporting clean energy in Northern		
	and Indigenous communities	\$40 million	
Multi-Sectoral	Supporting Sustainable Jobs	\$185 million	
Multi-Sectoral	Sustainable Development Technology		
	Canada	\$750 million	
Multi-Sectoral	Tax credits for investments in Clean		
	Technology	\$6.7 billion	
Multi-Sectoral	Transportation and landfill emissions		
	Reductions	\$105 million	
Multi-Sectoral	Canada Growth Fund	\$15 billion	
Multi-Sectoral	Investing in skills for a net-zero economy	\$250 million	
Multi-Sectoral	Contracts for Differences	Carbon pricing	
Multi-Sectoral	Critical Mineral Exploration Tax Credit	\$414 million	

Oil and Gas	75% reduction in oil and gas methane Emissions	Regulations
Oil and Gas	Eliminate Flow-through share regime For fossil fuel sector	_
Oil and Gas	Emissions Cap on the Oil and Gas Sector	Tax change Regulation
Oil and Gas	Emissions Reduction Fund – Onshore	\$675 million
Oil and Gas	Emissions Reduction Fund – Offshore	\$42 million
Oil and Gas	Offshore R,D&D Program	R&D
Oil and Gas	Oil and Gas Methane Reduction	
	Regulations	Regulation
Oil and Gas	Clean Fuel Standard	Regulation
Transportation	Green Freight Program	\$200 million
Transportation	Greening Government Fleet Program	\$2 million
Transportation	Incentives for Medium and Heavy-Duty	
	Zero-emission Vehicles	\$548 million
Transportation	Large truck retrofits	\$200 million
Transportation	Large-scale urban ZEV refueling	
	Infrastructure	\$500 million
Transportation	Low-Carbon Fuel Procurement Program	\$228 million
Transportation	Public Transit Fund	\$14.9 billion
Transportation	Safety testing for long haul zero emission	
	Trucks	\$34 million
Transportation	Zero-emission vehicles charging station	
	Funding	\$150 million
Transportation	Zero-emission vehicles incentives	\$1.7 billion
Transportation	ZEV charging and fueling infrastructure	\$56 million
Transportation	ZEV infrastructure in suburban and	
	Remote communities	\$400 million
Transportation	ZEV mandate – light-duty vehicle	
	Emissions standards	Regulation
Transportation	ZEV mandate: medium and heavy	
	Duty vehicles standards	Regulation
Transportation	EV mandate – sales target	Regulation
Transportation	ZEV tax write-off	n/a
Transportation	Green Shipping Corridor Program	\$165 million
Waste	Food Waste Reduction Challenge	\$20 million
Waste	Waste methane capture	Regulation



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).

Friends of Science Society PO Box 61172 RPO Kensington Calgary AB T2N 4S6 Canada

Toll-free Telephone: 1-888-789-9597

Web: friendsofscience.org

E-mail: contact(at)friendsofscience(dot)org

Web: climatechange101.ca

