

Case Dismissed

An Evidence-Based Open Letter Rebuttal to 28 Canadian Law Professors on Climate Accountability Law

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These are our opinions, backed up with supporting evidence.

EXECUTIVE SUMMARY

On June 24, 2019, a group of 28 law professors issued an Open Letter on Climate Accountability Legislation, claiming that the production and use of global fossil fuels are causing climate change, that these corporations knew this would happen, that cities and municipalities are being stuck with the costs of extreme weather events caused by climate change, and that fossil fuels are a 'nuisance' under tort law and thus can these corporations be prosecuted. They advocate for the institution of such laws in Canada.

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In this document we rebut these claims with evidence showing that:

- Climate, temperature and weather evidence does not support the law professors' claims
- Official scientific documents by the Intergovernmental Panel on Climate Change (IPCC) does not support the climate claims as presented by these law professors
- The degree of human influence on climate change is uncertain and undetermined
- The global warming 'hiatus' of ~20 years began before the Kyoto Accord on greenhouse gas reductions was ever ratified.
- Consumers voluntarily use fossil fuels and related products to benefit their lives while governments reap huge financial benefits
- The proposed legislation might create risk of serious unintended consequences for cities and taxpaying citizens
- There is no evidence that extreme weather events are related to human causation on climate
- Fossil fuel companies pay exorbitant taxes and engage in substantial charitable donations to universities
- The law professors engage in faulty logic on the law, the Paris Agreement and global emissions
- The case should be dismissed on grounds of nonsense, not pushed forward based on nuisance
- The alleged harm of Canada vs the world is not well understood by these law professors
- Dramatic findings about oil companies' apparent foreknowledge of fossil fuel causation and climate change are divorced from historic context
- Suing a reliable provider of essential services would benefit citizens and cities in what way?
- Human influence on climate is only evident in computer climate models (simulations) so there is no evidence
- The law professors claim their legislative proposal would stimulate 'sensible climate policies' but fail to tell us what those might be.

In conclusion, Canadians must reject the 28 law professors' proposal for climate accountability legislation as the proposal is not founded on evidence and may also result in distressing unintended consequences. Without reliable supply of fossil fuels, modern society would collapse into chaos and anarchy within days.

As the saying goes, "Be careful what you wish for, you might get it."

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1 Introduction

To Whom it May Concern,

We represent the interests of citizens and we are a group of scientists and Professional Engineers. We write to deter any proposal asking for legal or other action at any level of government, to institute any kind of climate accountability legislation, particularly against global fossil fuel companies, or domestic fossil fuel companies, as recently promoted by a group of 28 law professors who signed an "Open Letter on Climate Accountability Litigation" on June 24, 2019 (hereinafter "Open Letter...").

Case Dismissed - An Open Letter to

Law Professors Pushing for Climate

Accountability Legislation in Canada

These are our opinions.

2 EVIDENCE OVER IDEOLOGY

As clearly outlined by Roger Pielke, Jr., in his book "The Rightful Place of Science: Disasters and Climate Change", there are no increasing costs due to changes in climate caused by human activities, nor is there a trend toward more extreme weather events.

We are deeply concerned that this 'taking climate justice into our own hands' approach by lawyers will backfire on citizens and taxpayers, to our great detriment. Please allow us to explain.

If the law is based on evidence beyond a reasonable doubt, these law professors claim a certainty of cause and evidence that is not found in climate science. Further, they impugn the integrity and reputations of legions of scientific and engineering professionals working in industries responsible for taking the developed nations from hand plow and horse cart to the moon...and beyond.

It's important that Canadians realize that foreign-funded activist lawyers like Ecojustice are pressing for emissions targets and climate action to be

¹ https://www.amazon.ca/Rightful-Place-Science-Disasters-Climate/dp/0692297510

² https://www.wcel.org/publication/taking-climate-justice-our-own-hands

enshrined in law,³ as outlined in their Aug. 15, 2019 blog post, but as you will see herein, activists lawyers and law professors are completely misinformed on energy literacy. They did not do their due diligence in the past on how energy powers the modern world, nor do they appreciate that present Paris Agreement targets are unattainable; they are just repeating the economically destructive policies the Canadian Environmental Law Association supported in Ontario, that so hurt Ontario; similar policies devastated the Alberta economy and workforce. Why are they resistant to facts and evidence? What is their motive?

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Increasing fossil fuel use since the beginning of the industrial revolution is largely responsible for, and highly correlated with increasing wealth, human longevity and improving nutrition.

Where once a simple cut or infection or a high fever might mean the end of a person's life, today miraculous modern medicine therapies and surgeries can be performed to save and enhance people's lives, to cure them of cancer or put cancer into remission for decades, to replace damaged limbs and organs, and to provide effective pharmaceuticals for a host of medical conditions. This is made possible by reliable, inexpensive fossil fuels.

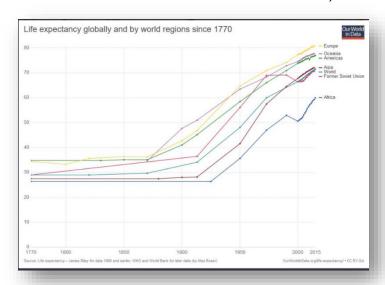
3 POLLUTERS HAVE PAID FOR OVER 50 YEARS IN CANADA

Noxious pollutants have declined dramatically in Canada due to constructive efforts of industry and government. Carbon dioxide is not a noxious pollutant.

Numerous grandiose lawsuits have been launched in the US and elsewhere,

claiming that fossil fuel companies have caused climate change. The premise, as with the "Open Letter..." by law professors of June 24, 2019, is that some kind of 'harm' has been done through the use of fossil fuels and therefore the 'polluter must pay.'

The law professors of the "Open Letter..." are apparently unaware that



³ https://www.ecojustice.ca/five-things-federal-government-climate-change-polling/?utm_medium=email&utm_source=engagingnetworks&utm_campaign=bn_2019.08.15&utm_content=2019.08.15+Climate+polling

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polluters have been paying in Canada for 50 years,⁴ since the 1970's (NAPS – National Air Pollution Surveillance Program)⁵ and the US-Canada Clean Air Act, as well as progressive Fuel Efficiency legislation(s) in Canada. At present, there are some **600 different GHG reduction/regulation measures already in place in Canada** – most based on the 'polluter pays' principle (or in some cases, a polluteless incentive).

"... In a recent report to the United Nations, the government of Canada listed over 300 current policies and measures to reduce greenhouse gas emissions. There are at least as many of these 'complementary measures' in place in the provinces and territories, as described in a 2017 report of the Canadian Council of Ministers of the Environment. Canadian municipalities have added many more. There is no single national inventory of these measures nor any system by which to assess whether they are effective, cost-effective or duplicative. The problem of attribution is especially complex with respect to the transportation sector. Proponents of carbon taxes almost always illustrate their benefits in terms of reduced gasoline consumption or a reduction in the number of cars on the roads. However, current government policies include the heavy sales and excise taxes on motor fuels, as documented by the Canadian Taxpayers Federation. Added to this are motor vehicle fuel efficiency standards of constantly increasing stringency, extensive subsidies for alternative vehicle fuels and for electric vehicle purchases, extremely high subsidies for mass transit systems, and extensive public information programs, all aimed at reducing vehicle use and fuel consumption..."6

The Alberta 2018-19 budget <u>document</u> shows that the sum of the non-renewable resource revenue tax, fuel and freehold taxes is \$6,890 million. The sum of the energy and transportation expenses is \$2,538 million. Assuming that fuels for transportation should pay for transportation infrastructure, the fossil fuel revenues, excluding corporate taxes, exceed related expenditures by 170%. This implies that the price of gasoline and other petroleum products are much higher than justified by their costs due to excessive taxation.

According to the foreign Oak Foundation grant database, in 2005 the Sierra Club of Canada Foundation was granted \$217,893 USD for this purpose:

"To provide overall coordination of Canadian NGOs working on climate change in Canada; to have greenhouse gas emissions classified as

⁴ https://blog.friendsofscience.org/2018/10/06/prime-minister-trudeau-is-wrong-on-polluting-for-free-heres-why/

⁵ https://www.canada.ca/en/environment-climate-change/services/air-pollution/monitoring-networks-data/national-air-pollution-program.html

⁶ https://www.thegwpf.org/content/uploads/2019/06/Lyman-carbontax-1.pdf

pollutants under the Canadian Environmental Protection Act; and to create and administer a Climate Change Action Fund."

This suggests that this legislation was driven by foreign interests associated with the Tar Sands Campaign.

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4 DEGREE OF HUMAN INFLUENCE ON CLIMATE CHANGE IS UNCERTAIN AND UNDETERMINED

First of all, there is no clarity as to what extent fossil fuels affect climate change. The Houghton 1996 definition of human causation of climate change included agriculture, deforestation, land use *and* fossil fuels as factors in human-caused climate change. How shall a distinction be made to what extent which factor drove climate change? And the declaration of the Intergovernmental Panel on Climate Change (IPCC) is that more than 50% of the warming since 1950 was caused by human activity – how shall that 50% be divided among agriculture, deforestation, land use and fossil fuels? And about 50% of climate change is caused by nature. How to determine which 'local climate impact' or alleged damage comes from what source?

With regard to the claim in "Taking Climate Justice into our Own Hands", referenced in the law professors' open letter, the opening statement reads: "Each year, more fossil fuel pollution and other greenhouse gases than the world's natural systems can handle enter the global atmosphere, creating a heat trapping blanket and disrupting weather patterns. Unpredictable and costly flooding, wildfires, droughts and other climate impacts are already occurring in countries around the world – and global temperatures have only increased globally by 0.85 °C."

These statements are false.

The IPCC issued a Special Report on Extreme Weather (IPCC SREX 2012) which indicated that extreme weather is integral to climate patterns and they found little evidence to support the view that either human activity or GHG/CO_2 emissions drove extreme weather events.

A recent review of climate temperature datasets shows that there has been little increase, contrary to what the authors of "Taking Climate Justice..." say:

"Kenneth Richard wrote a good <u>summary</u> of the surface temperature manipulations of the major global datasets. The consensus in the mid-1970s was that "the globe had warmed by +0.6°C from 1880 to 1940, and then cooled by -0.3°C (to -0.4°C) from 1940 to 1970." Then several climate

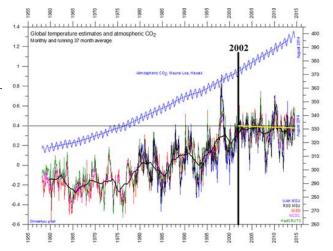
scientists featured in the climate-gate scandal⁷ exchanged emails about changing the temperature data by removing warming of 0.15 deg C from the 1940s because the 1940s were "too warm". The emails said the southern temperature are "mostly made up" due to insufficient coverage and they had "fun" in 1995 "inventing" monthly temperature anomalies. The 1880 to 1940 warming trend has been slashed from +0.6°C (1970s) to +0.1°C today. "The 1949 to 1970 global cooling [-0.3°C] has been transformed into a -0.05 °C hiatus.""

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This despite a significant rise in carbon dioxide (CO₂) concentration in the atmosphere from human industry in the past 50 years, the alleged driver of warming.

5 THE GLOBAL WARMING "HIATUS" BEGAN BEFORE KYOTO WAS RATIFIED

Secondly, since the 2013 IPCC AR5 report, it was declared that <u>despite a significant rise in carbon dioxide from human industrial emissions</u>, global temperatures had flatlined with no statistically significant rise in temperature for 15 years (then to 2012, close of publication of the report).



Source: Climate4You dataset downloads (to 2015) Yellow trend line added. N. Kalmanovitch, P. Geoph.

Evaluation of Climate Models Chapter 9

Box 9.2 | Climate Models and the Hiatus in Global Mean Surface Warming of the Past 15 Years

The observed global mean surface temperature (GMST) has shown a much smaller increasing linear trend over the past 15 years than over the past 30 to 60 years (Section 2.4.3, Figure 2.20, Table 2.7; Figure 9.8; Box 9.2 Figure 1a, c). Depending on the observational data set, the GMST trend over 1998–2012 is estimated to be around one-third to one-half of the trend over 1951–2012 (Section 2.4.3, Table 2.7; Box 9.2 Figure 1a, c). For example, in HadCRUT4 the trend is 0.04°C per decade over 1998–2012, compared to 0.11°C per decade over 1951–2012. The reduction in observed GMST trend is most marked in Northern Hemisphere winter (Section 2.4.3; Cohen et al., 2012). Even with this "hiatus" in GMST trend, the decade of the 2000s has been the warmest in the instrumental record of GMST (Section 2.4.3, Figure 2.19). Nevertheless, the occurrence of the hiatus in GMST trend during the past 15 years raises the two related questions of what has caused it and whether climate models are able to reproduce it.

Source: IPCC 2013 AR5 Working Group I report (Physical Sciences)

⁷ https://www.lavoisier.com.au/articles/greenhouse-science/climate-change/climategate-emails.pdf

This means that there was no statistically significant global warming from before the time of the ratification of the Kyoto Protocol. Current records show no statistically significant rise in temperature (other than a natural El Nino in 2016) for almost 20 years. Numerous scientists, Dr. Judith Curry being one of them, publicly stated that carbon dioxide [from human activity] is not the driver that can fine tune climate change and that efforts to reduce CO_2 might be futile in the face of natural variability (i.e. solar and ocean cycles, volcanoes, atmospheric oscillations, etc.)⁸ Numerous studies in the past 3 years find little to no human causation and the climate sensitivity of CO_2 is now deemed to be nominal, meaning much more CO_2 will have little effect on warming; natural cycles drive changes.⁹

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6 CONSUMERS VOLUNTARILY USE FOSSIL FUEL PRODUCTS TO BENEFIT THEIR LIVES; GOVERNMENTS REAP FINANCIAL BENEFITS AS WELL

Thirdly, **people do not have to buy fossil fuel products**. They buy them because the total benefit of their use greatly exceeds the total cost, so they **want** to buy them. Businesses provide fossil fuel products in response to the consumer demand.

After 2007, due to more detailed analysis carried out largely by the California Air Resources Board and its consultants, the percentages, on average, were revised to:

Crude exploration and production: 8%

Crude and product transport: 1.5 %

Crude refining: 13% Final combustion: 78%

Thus, the entire "upstream" portion of the oil-to-gasoline life cycle is now considered to constitute 22%, and the final consumption by the motorist constitutes 78%, or almost four-fifths. So, if one accepts the thesis that we should blame someone for oil-related emissions, who is it – the producers, refiners, or consumers? Consumers, of course, are not easy to sue.¹⁰

The private (or consumer) benefit of fossil fuels according to a <u>study</u> by Dr. Richard Tol is US\$411/tCO₂ (metric tonne of carbon dioxide). The private benefit of energy use varies greatly among energy types and is largest for electricity at US\$1,877/tCO₂. The social cost of CO₂ according to

⁸ https://curryja.files.wordpress.com/2014/01/curry-senatetestimony-2014-final.pdf

⁹ https://www.sciencedirect.com/science/article/pii/S0012825216300277

¹⁰ https://blog.friendsofscience.org/2019/01/20/blame-canada/

How can this be called a 'nuisance'?

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7 RISK OF SERIOUS UNINTENDED CONSEQUENCES FOR CITIES AND CITIZENS

Thus, it is possible that in the event such 'climate accountability' legislation as proposed by these law professors was to be enacted, a few things might occur:

- a) The oil companies might sue cities, towns, federal or provincial governments (which granted them the right to sell fossil fuels or related energy generation, and which set stringent regulations on fossil fuel use and related energy production) for breach of the terms of agreement to sell.
- b) The producers of fossil fuels might abruptly withdraw their product from market. This would cause the almost immediate collapse of Western industrialized society and modern medicine and would result in mass deaths and total anarchy.
- c) Major fossil fuel companies might counter-sue to recover the 'polluter pays' fuel and government taxes paid to date, perhaps claiming a form of breach of contract. This would bankrupt Canada. After all, these companies were licensed and permitted and allowed to operate and sell the product under stringent regulation and heavy taxation on the presumption that:

 i) polluter pays;
 - ii) provider of fuel must also provide tax funding for road infrastructure; Canadians presently pay the equivalent of \$192/tonne carbon tax through fuel taxes alone. Federal, provincial and municipal governments all take an additional chunk of tax from these companies.
- d) In light of new evidence that global near-surface temperatures are increasing at only half of the average rate projected by climate models, despite a rise in carbon dioxide concentration due to human industry/activity, counter lawsuits suing Environmental Nongovernmental Organizations (ENGOs) or their funders, for their campaigns against fossil fuels, might become par for the course. Governments themselves, which have heavily funded ENGOs for proposals and recommendations, might sue to recover costs for being misled and for having instituted costly, unnecessary GHG reduction/low-carbon policies.

¹¹ https://blog.friendsofscience.org/2019/07/27/the-85-million-tonne-obsession/

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These suits would be costly to taxpayers and society overall. A contemporary case in point is that of Ontario where the Green Energy Act was largely driven by agitation from Greenpeace, WWF, Pembina Institute, Sierra Club, and the David Suzuki Foundation. This is the Ontario government's climate legacy for having taken their advice:

With the current push for public policy to adopt 'green energy' schemes, it is time to reflect on the Ontario experience.

Ontario's disastrous electricity policy has been publicized and commented on extensively by many sources, so this is not news. What is news is to lay the blame squarely at the door of its climate policy motivation, and, perhaps, to remind people of high the bill has been — \$9 billion for poor contracting practices, \$133 billion in global adjustment fees from 2015 to 2032 (at least 20 per cent of which relates to renewables), \$3.6 billion to build the "smart grid and smart meters", up to \$55 billion in deferred costs that will hit future ratepayers, and 75,000 lost industrial jobs. That is quite the tally for zero global environmental benefit.

Lots of evidence there.

The Canadian Environmental Law Association was an influential proponent of the Ontario Green Energy Act. $^{13\ 14\ 15}$

8 NO EVIDENCE THAT EXTREME WEATHER EVENTS ARE RELATED TO HUMAN CAUSATION

The law professors claim that the "litigation may be necessary to protect taxpayers from massive public costs," citing costs of natural disasters and expenses associated with public infrastructure. As Robert Muir, Professional Engineer, has shown, there is no discernable rise in rainstorm intensity and groups like the Insurance Bureau, making such claims, have been forced to retract them. Storm intensity is not increasing. Roger Pielke, Jr.'s book, previously cited, confirms this. Dr. Madhav Khandekar shows that extreme weather is an integral

¹² https://blog.friendsofscience.org/2019/06/28/the-ontario-government-climate-legacy/

¹³ https://www.pembina.org/reports/plugging-in-ontario-report.pdf

https://www.cela.ca/sites/cela.ca/files/uploads/AnnRep2005.pdf

¹⁵ https://www.cela.ca/sites/cela.ca/files/AnnualReport2009.pdf

 $^{{}^{16} \, \}underline{\text{https://business.financialpost.com/opinion/hyped-up-misleading-insurance-myths-about-severe-weather-flooding-distract-us-from-real-problems}$

https://www.slideshare.net/RobertMuir3/storm-intensity-not-increasing-factual-review-of-engineering-datasets

part of climate change worldwide. ¹⁸ For the most part, the damages that occur are due to humans continuing to build high value properties on known high risk areas like flood plains or sea fronts. This is a matter of poor judgement and worse adaptive thinking, not climate change – whether human or naturally caused. Such faulty logic about urban flooding abounds, even among well respected scientists like Dr. Katharine Hayhoe. ¹⁹

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Apparently the proposed legislation would be modelled on that of Ontario's <u>"Liability for Climate-Related Harms Act of 2018"</u> introduced by Peter Tabuns, MPP, in March of 2018. According to an article in Climate Liability News of March 26, 2018:²⁰

Keith Stewart, senior energy strategist for Greenpeace Canada, said the bill is modeled on legislation that enabled the province to pursue \$50 billion in health care costs from the tobacco industry.

"That legislation was enacted because tobacco companies knew about the addictiveness of cigarettes and the health damages they caused, they deceived the public by misrepresenting the risks, they failed to warn the public about the dangers of smoking and they did not take all available steps to reduce the risks caused by their products—all of these things are true with respect to fossil fuel companies and climate change," said Stewart, adding that investigative reporting has revealed the extent to which Exxon and the oil industry engaged in climate deception.

.... "Increasingly, people are going to find they aren't going find to be able to obtain insurance against flooding risk—right now, that's your tough luck," said Stewart, who added that if passed, the bill will change that by making it easier to hold accountable the companies that played a significant role in climate change.

A commonly cited extreme weather event that is often claimed as 'climate change' induced is that of Calgary's 2013 flood. The downtown core was devasted. However, as The Weather Network explains,²¹ this flood could happen again because Calgary's downtown core, like many cities, is built on a flood plain. In fact, eight of the worst floods in Calgary's history occurred before 1933, long before any alleged human influence on climate change from fossil fuel use or Big Oil.

¹⁸ https://youtu.be/Gcv8Mfcnpc0

¹⁹ https://wattsupwiththat.com/2018/03/13/dr-katharine-hayhoe-tries-to-scare-canadians-with-threats-of-warmer-temperatures/

²⁰ https://www.climateliabilitynews.org/2018/03/26/canada-climate-damages-peter-tabuns-toronto/

²¹ https://www.theweathernetwork.com/news/articles/calgary-floods-it-could-happen-again/8295



Aerial view of 2013 Calgary flood. Source: CPS twitter feed

	YEAR	PEAK FLOW	
1	1879	2265 m³/s	(estimate)
2	1897	2265 m³/s	(estimate)
3	2013	1740 m³/s	(estimate)
4	1902	1550 m³/s	(estimate)
5	1932	1520 m³/s	
6	1929	1320 m³/s	
7	1915	1130 m³/s	
8	1923	841 m³/s	
9	1916	810 m³/s	
10	2005	791 m³/s	

The Weather Network list of previous Calgary floods.



Calgary Public Library has a whole website devoted to historic flooding in Calgary. https://floodstory.com/index.php

Obviously if cities continue to build on flood plains, without adaptive measures against the eventuality of flooding, then they will have trouble making insurance claims, and also trouble making claims for damages from "Big Oil". For these nuisance suits, taxpayers will pay - for no benefit and no 'jackpot justice.'

As noted by The Weather Network, the 1879 and 1897 floods in Calgary,²² the flows were much greater by 35% than those of 2013. This predates the discovery and widespread use of modern oil.²³ Likewise, aboriginal people with their very long oral histories which are often accepted as valid court testimonies, warned the North West Mounted Police about building Fort Macleod on an island in the Oldman River. The last diary entry of Mounted Police officer Dr. R.B. Nevitt's

²² Fort Calgary was established in 1875 at the meeting place of First Nations Blackfoot Nation, on the confluence of today's Bow and Elbow Rivers, today's city of Calgary

²³ https://www.ektinteractive.com/history-of-oil/

"A Winter at Fort Macleod"²⁴ [edited by Dr. Hugh Dempsey, published by the Glenbow Museum] of June 14, 1875 says "Nothing in particular going on today. We expect the Kootanie Indians along with the Stonies very soon. **The river is rising** fast, hardly fordable now." [bold emphasis added] The Canadian Encyclopedia reports that the fort was ultimately moved due to damage from annual flooding.²⁵

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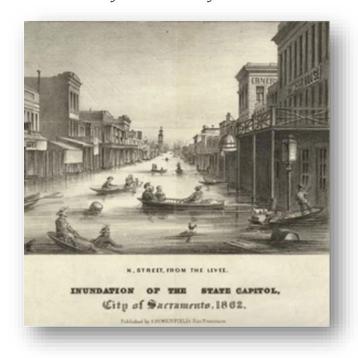
A similar situation (to Calgary's 2013 flood) though on a much more devastating scale occurred in California in December 1861 in a 43-day rain that caused a megaflood.²⁶ Had aboriginal wisdom prevailed, lives might have been saved:

It appears that the Native American populations, who had lived in the region for thousands of years, had deeper insights to the weather and hydrology, and recognized the patterns that result in devastating floods. A piece in the *Nevada City Democrat* described the Native American response on January 11, 1862:

We are informed that the Indians living in the vicinity of Marysville left their abodes a week or more ago for the foothills predicting an unprecedented overflow. They told the whites that the water would be higher than it has been for thirty years, and pointed high up on the trees and houses where it would come. The valley Indians have traditions that the water occasionally rises 15 or 20 feet higher than it has been at any time since the country was settled by

whites, and as they live in the open air and watch closely all the weather indications, it is not improbable that they may have better means than the whites of anticipating a great storm.

In light of this evidence, it is unclear how any 'climate litigation' could untangle what climate change shift (typically measured over 30, 50, 100 or millennial time scales, based on statistical evidence) or extreme weather event could be successfully prosecuted as having been specifically caused either by "Big Oil Company X or Y" or Mother Nature. Cities and citizens are being led down the garden path. Cities should spend taxpayer dollars on mitigation, not nuisance lawsuits.



²⁴ https://www.amazon.ca/Winter-At-Fort-Macleod/dp/B0000E8W4X

²⁵ https://www.thecanadianencyclopedia.ca/en/article/fort-macleod

²⁶ https://www.scientificamerican.com/article/atmospheric-rivers-california-megaflood-lessons-from-forgotten-catastrophe/

9 FOSSIL FUEL COMPANIES PAY EXORBITANT TAXES-ENGAGE IN SUBSTANTIAL CHARITABLE DONATIONS TO UNIVERSITIES

The law professors make an extraordinary claim that - "the alternative to holding fossil fuel companies accountable for a share of climate change costs is that those companies continue to make massive profits from selling fossil fuels while Canadians (and others around the world) bear 100% of the costs."

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To clarify in this part of our response, **Friends of Science Society does not represent any industry.** We are arguing for evidence-based, open, civil debate on climate and related energy policy. **And we must protest the profound ignorance of the law professors making the above claim. According to <u>CAPP:</u>**

9.1 INVESTMENT AND TAX REVENUE

The oil and natural gas industry is Canada's largest private sector investor, with oil sands alone injecting almost \$14 billion into the economy in 2017. The oil sands industry and its suppliers contribute to government revenues through corporate taxes, personal income taxes, property taxes, royalties, land sales and other costs. Over the next 10 years, the oil sands industry is expected to pay an estimated \$17 billion in provincial and federal taxes – including royalties (*Canadian Oil Sands Supply Costs and Development Projects*, 2019 - 2029, CERI). These revenues contribute to government spending on infrastructure, social services and other important programs. A healthy oil sands industry results in higher revenues for governments.

ECONOMIC IMPACT OF THE OIL AND NATURAL GAS INDUSTRY TO THE CANADIAN ECONOMY



Aside from the CDP impact on Canada from the oil sands alone

Aside from the GDP impact on Canada from the oil sands alone (shown above - this was projected prior to the blockading of four major oil pipelines –

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Keystone XL, Energy East, Northern Gateway and Trans Mountain Expansion), every single university in Canada is funded by the federal government's share of oil taxes and the personal/consulting firm taxes from the cadre of expert scientists and Professional Engineers, the journeyman tradespeople, the manufacturing sector, the small businesses and the international supply chain to support the oil sands (in this case), driver of one third of the Canadian economy.

A key ruling in a recent climate accountability case in the United States was made by US District Judge William Alsup.²⁷ As law professors, it is surprising that the open letter from 28 professors made no mention of that suit being rejected by Judge Alsup, on similar grounds to what is being argued herein.²⁸ Alsup required the parties to prepare a brief on the benefits of fossil fuels, so as to weigh the benefits against the claimed damages or 'nuisance.'

Far from "bearing 100% of the costs", <u>most law professors themselves are subsidized by "Big Oil"</u> – its taxes, royalties, charitable donations to their universities and various scholarships.

Unfortunately, looking at the world through a single-minded legal lens on a complex topic like energy and climate science leaves much to be desired in terms of rational conclusions.

10 FAULTY LOGIC ON THE LAW, PARIS AGREEMENT, AND GLOBAL EMISSIONS

In legal terms, the law professors also appear to have erred in their considerations. The 28 law professors are making false comparisons between opioids, tobacco and oil, on the theory that they are all harmful to individuals and therefore increase government spending to offset the harm. Even if that were true, the law professors are asking the courts to use negligence law **in Canada** to regulate **global** climate policy. This is not the role of courts but of legislatures and international accords. Despite the existence of the Paris COP-21 Agreement, this is a non-legally binding accord and major emitting nations like China and India have no intention of adhering to it.²⁹ Furthermore, **the Paris Agreement will have little to no impact on reducing global temperatures, even if all countries meet their Intended Nationally Determined Contributions (INDC) greenhouse gas emissions reductions:**

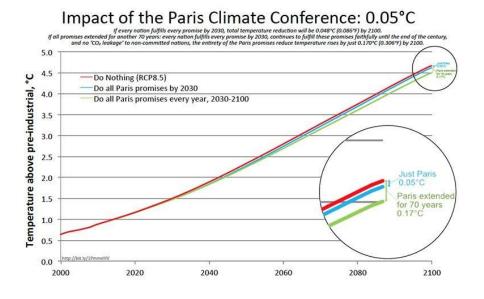
²⁷ https://www.courthousenews.com/judge-skeptical-of-cities-climate-change-suits/

²⁸ https://wattsupwiththat.com/wp-content/uploads/2018/06/California-v.-B.P.-Judge-Alsups-Opinion-Dismissing-the-Case-6-25-18-1.pdf

²⁹ https://blog.friendsofscience.org/2017/06/09/the-cop21-agreement-just-the-facts-please/

"Bjorn Lomborg, a professor at the Copenhagen Business School, has analysed the temperature reduction impact of the INDCs submitted to date, using the standard MAGICC climate model. This model integrates all of the premises and equations of the Intergovernmental Panel on Climate Change (IPCC) that increasing human-related greenhouse gas emissions will cause significant global warming in future, which remains the subject of intense debate. **Even optimistically assuming** that promised emission cuts are maintained throughout the century, the impacts of the Actions to be taken pursuant to COP21 are generally small. All climate policies by the US, China, the EU and the rest of the world, implemented from the early 2000s to 2030 and sustained through the century will <u>likely reduce global</u> temperature rise about 0.17°C in 2100. In effect, these commitments will do little to stabilize the climate and their impact will be undetectable for many decades. The following graph illustrates the difference COP21 would make."

Consequently, what court could decide that any global fossil fuel production company is 'guilty' of producing what nations intend to keep using? Even if the country (ies) met all their reductions, which is very unlikely, **the climate would not change in any significant way.**



11 ALLEGED HARM - CANADA VS THE WORLD

The nexus between the alleged harm to the planet (global warming) and the Canadian companies allegedly causing it is unclear. Accepting the IPCC climate change as given, with over 98.3% of global CO₂ coming from outside

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Canada, more of it produced by coal and gas rather than oil, what is the nexus between the prospective Canadian defendants and the harm caused in Canada? And how much of that harm can be quantified and directly attributed to Anthropogenic Global Warming (AGW – also referred to as Anthropogenic Climate Change/ACC) caused by oil in Canada? The IPCC says in AR5 that it believes "more than half" of the warming (1950-2010) was caused by human activity but never specifies the amount.³⁰ And human activity includes global deforestation, agriculture, cattle raising, cement making, urban heat island effects, etc. all over the planet. Will these law professors be able to quantify what the hundreds of IPCC scientists have not? And if they can't quantify the damages with reasonable certainty how can the court award damages?

Looked at another way, if Canada stopped all CO₂ emissions tomorrow global emissions and the alleged harm would continue to increase, led by China, India, Russia, the USA and several middle eastern oil producers. Are we going to sue them all in a Canadian court for harming Canada, or just pretend that all the increased AGW on the planet is caused by oil companies in Canada, and therefore the lawsuit should be determined by a Canadian court? Should the defendants be every gas station franchisee in Canada, plus refiners, pipeline operators, exploration companies — everyone in the supply chain? If not, who?

12 DRAMATIC FINDINGS - DIVORCED FROM HISTORIC CONTEXT

Finally, the 28 law professors claim that "...there is a large body of evidence ...demonstrating that fossil fuel companies were well aware that their products would cause harmful climate change..." when the instances cited refer to a handful of internal documents by one or two scientists in companies, like Exxon, of some 90,000 employees, and those companies were in the exact same climate *milieu* of the time as other climate change scientists – meaning, if the fossil fuel company scientists used the previously accepted parameters of climate sensitivity (warming effect) of carbon dioxide, they would get very similar modelled results as other climate modellers.

However, some fossil fuel companies advocated for more research in areas that are now proving to be the more relevant drivers of climate change. Exxon (ExxonMobil) was one such company. Let us review what Exxon was asking for in public advertisements placed in the New York Times. ³¹

(See next page)

³⁰ "It is extremely likely that more than half of the observed increase in global average surface temperature from 1951 to 2010 was caused by the anthropogenic increase in GHG concentrations and other anthropogenic forcings together." https://www.ipcc.ch/site/assets/uploads/2018/02/AR5_SYR_FINAL_SPM.pdf

³¹ https://iopscience.iop.org/article/10.1088/1748-9326/aa815f

Directions for climate research

Research

should address

policy needs

Climate science is experiencing rapid development fueled by significant research budgets and spurred by important policy needs. Progress has occurred in generating new knowledge and in better delineating gaps and uncertainties that limit our current ability to know the extent to which humans are affecting climate and to predict future changes caused by both human and natural forces.

Expansion of scientific knowledge will take time and money. It requires extensive long-term data acquisition, breakthroughs in theoretical understanding of key climate processes, efforts to reconstruct better information about past climate, and the

development of more-sophisticated computer models to assess understanding and simulate

future climate changes.

Research should include two major thrusts. One supports curiosity-driven and bluesky research. The pursuit of this type of knowledge will certainly lead to unanticipated results that may help overcome current gaps. Universities will likely take the lead in such research, which is one reason we are supporting climate-related research efforts at major universities, including Stanford and MIT. University programs will also help train students who will be needed to address these challenges over coming decades.

Research should also be designed and

carefully managed to address policy needs. Government agencies should design programs that address the most important major areas of scientific uncertainty. The U.S. should also es-

tablish a structured effort to assess the consequences of climate change (accounting for both facts and uncertainties) and the feasibility and effectiveness of policies to adapt to and mitigate climate change.

Areas of uncertainty that require attention have been identified in numerous reports, including several by the National Research Council. Important areas include the role of

> clouds and aerosols (small particles in the atmosphere). natural climate variability, oceanic currents and heat transfer, the hydrological cycle, and the ability of climate models to predict changes on a regional and local scale.

better quantify levels of uncertainty and explain their relevance for policy decisions, (2) define and conduct studies to resolve uncertainty and (3) report periodically on results and progress. These programs would benefit from well-structured, independent scientific reviews to assure quality and to steer future efforts based on progress. Research does not always eliminate uncertainty, but such programs will lead to better understanding of what we know and do not know and how our knowledge may affect policy decisions.

The U.S. can be proud of its leadership over several administrations - in advancing climate research. Despite differing views on what near-term policies are appropriate for addressing climate concerns, an ongoing investment in research will be essential to informing long-term, science-based decisions.

Agency-led programs should aim to: (1)

ExonMobil

Taking on the world's toughest energy challenges."

Visit exxonmobil.com

Tomorrow's energy needs

;e | 19

The green light for the ExxonMobil merger signals the start of an epic journey. It has been a colossal undertaking. While there's still more to be done to bring everyone and everything together, this union promises excitement and benefits.

In the coming weeks, we want our customers, shareholders, partners and communities where we operate to understand why we merged and what to expect from us.

A major driver of our union was the recognition that the world's appetite for energy continues to grow. Wherever we looked—at the wellhead, the refinery or at the pump—companies were lining up to satisfy those demands. Competition—from players with considerable heft, others with niche expertise—was piling on.

Looking ahead to this competition, we realized that while we were both good individually, we could do a much better job together. An ExxonMobil union would enable us to turn more of tomorrow's energy opportunities into reality with unrivaled efficiency.

Consider tomorrow: World population will climb to more than seven billion by 2020 and could approach nine billion by mid-century. As more nations strive to bring prosperity to their citizens, people are looking beyond basic food, clothing and shelter. They want a bigger share of a growing pie. And energy plays a central role in meeting those expectations. In the developing world, energy growth is strongly linked to economic development even more so than in highly developed service-driven economies.

The U.S. Energy Information Agency projects world energy use to climb by more than 60 percent over the next two decades. Most of the gain will occur in the developing countries of Asia and Latin America, where strong economic growth is forecast. By 2020, developing

countries will consume more energy than the industrialized world.

Fossil fuels—oil, gas and coal—will continue to provide most of the world's energy to 2020 and beyond. Oil tops the charts, largely because of its important role in transportation. The efficiency of fuel cells—a technology we're supporting—is very promising, but considerable time will be required for this technology to penetrate the world's transportation sector. And hydrocarbons will still be the most efficient and practical source for powering the fuel cells.

Use of natural gas is expected to increase, particularly in the power generation sector. And many nations will turn to gas because its lower carbon content is considered an environmental plus. Coal will remain important for new power stations in developing Asia and parts of Latin America, where this low-cost fuel is plentiful, in the next 20 years.

Energy experts agree the world has ample supplies of fossil fuel. And as Improved technology is brought to bear, resources once considered impractical can become economic. Beyond this, whole new areas of hydrocarbon reserves are yet to be identified. While much of tomorrow's energy is likely to come from remote areas, existing energy assets must be worked more smartly. Companies with resource experience, financial resources and technological strength will be needed to satisfy the world's growing energy needs. Such companies must be sensitive to environmental concerns and the growing desire for greater energy efficiency.

New players—like the recently combined multinationals and large state-owned companies looking to expand outside their home areas—are preparing for those tasks.

So are we. ExxonMobil is putting the people and resources together to get the job done.

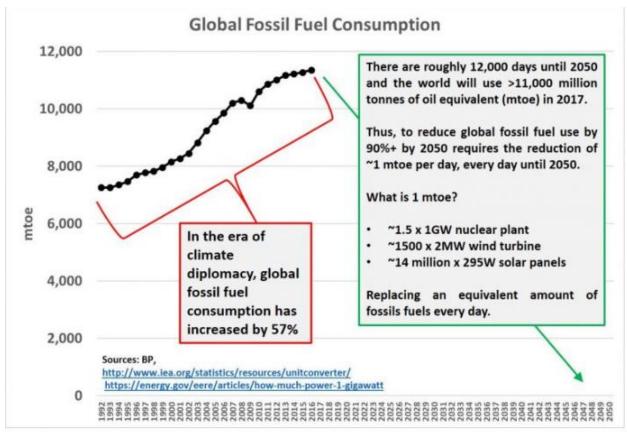
EXonMobil[®]

www.exxon.mobil.com ©1999 Exxon Mabil Corporation

Indeed, the projections of the US EIA from the 1990's referred to in the Exxon advertorial were only off by 3%. Global fossil fuel consumption rose 57% in the age of 'climate diplomacy.'

This was entirely due to **the 'wants' of people to use fossil fuels.**

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Source: Roger Pielke, Jr.

13 SUE A RELIABLE PROVIDER OF ESSENTIAL SERVICES FOR WHAT?...

It is difficult to see how or why cities or municipalities would engage in a law suit against companies that are providing essential services and supplies that maintain law and order – the provision of sufficient fresh food, the operation of wastewater and safe public drinking water, hospitals, private and public transportation, as well as fundamental services for major office buildings like elevator, escalator, HVAC, lighting and safety systems all rely on fossil fuels or fossil fuel powered energy for their operation. Even in jurisdictions with extremely large hydro facilities (i.e. BC and Quebec), fossil fuels still play a major role.

A crucial inter-provincial example of cooperation might be quite relevant here. The exchange of power generation sources between Alberta and British Columbia, for example, might be something unknown to these law professors, but one that has been extremely valuable to both provinces. Alberta's coal-fired power plants have provided power to British Columbia at night when there was a reduction in electricity demand in Alberta (coal-fired power plants are unable to quickly ramp up and down – thus their baseload output typically remains quite stable). The supply of unwanted Alberta coal-fired power allowed BC hydro reservoirs to replenish at night; when Alberta was short on power, due to maintenance or other issues, hydro could be drawn from BC. Though BC is 'rich' in hydro, any natural El Nino situation like that of 2015,32 would leave BC citizens at risk of serious rationing without the friendly intertie exchange of natural resources between the two provinces.³³ Do these law professors want to sue for this friendly and mutually beneficial relationship, going back decades? And to what productive end? Would BC municipalities prefer to be left in the dark and powerless in the event of a year or two of El Nino causing reservoir deficiencies?

14 HUMAN INFLUENCE ON CLIMATE ONLY EVIDENT IN COMPUTER SIMULATIONS — AKA NO EVIDENCE.

The only evidence of human impact on global warming is found in computer models, according to the statement of climate modellers in the American Physical Society.³⁴

```
Well, the only way to tell how
 8
 9
            much global warming is due to human
            or natural is basically through model
10
            simulations because we found out that
11
12
            we can't put a thermometer out
13
            there that will say this much
            was due to Mother Nature and this
14
15
            much was due to Mankind.
16
                  We just don't have instruments
            like that. So, using models is the
17
            way to do this.
18
```

³² https://www.bchydro.com/news/conservation/2015/decreased-snowpack-impacts-bc.html

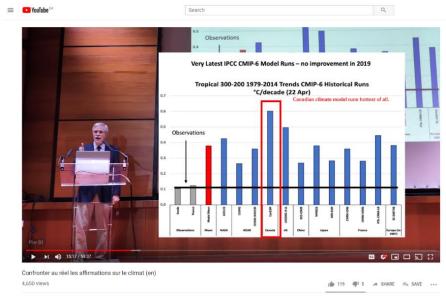
³³ https://www.bchydro.com/news/press centre/news releases/2019/report-reservoir-levels.html

³⁴ https://www.aps.org/policy/statements/upload/climate-seminar-transcript.pdf pg. 333

Consequently, it may be quite difficult to make a case for litigation. There is no evidence. Furthermore, it is clear that for many years, climate modellers have tuned the models 'too hot' – and the much-damned Exxon was one of several organizations that publicly addressed this issue.

In place of responsible admission to the public that climate models were performing poorly in predicting contemporary climate change, the modelers have continued to develop unrealistically hot climate models, the Canadian model being the hottest and most exaggerated.

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Source: https://youtu.be/I8hdE3eZ6vs

Rarely do climate change reports mention the 'margin of error' – meaning that the public hears 'hottest year ever' but the warming might be assessed (not measured) to be as small as *two one-hundredths of a degree*, as it was in 2016. The margin of error might mean there is much more warming OR cooling – but one cannot know without more years of data to establish a trend.



Prof. Dr. Istvan Marko (1956-2017) Université catholique de Louvain

The late Prof. Dr. Istvan Marko remarked on non-scientific statements like these:

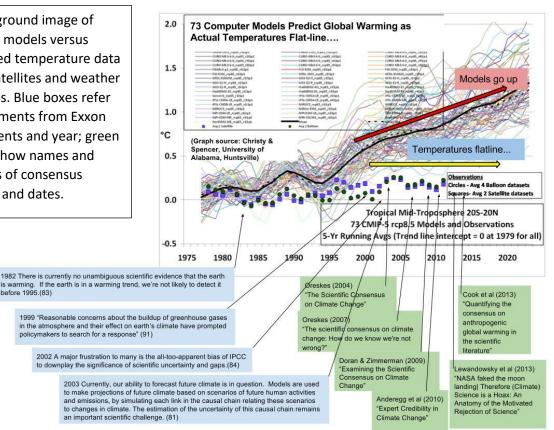
English: "The World Meteorological Organization - another emanation of the United Nations and which is also, like the IPCC, an intergovernmental forum - declares 2016 to be the year the warmest in history. Knowing that 2016 is supposedly hotter by 0,02°C than 2015 and that the margin of error on this value is 0.1°C, we see all the absurdity of this statement. For those who don't immediately understand it, this means that the variation in temperature could be + 0.12°C (global warming) or -0.08°C (global cooling). In short, we can't say anything and the WMO has simply lost its mind."

https://public.wmo.int/en/media/press-release/wmo-confirms-2016-hottest-year-record-aboute-above-pre-industrial-era

By email March 8, 2017 to one of the Friends of Science team.

All the while that climate models have been diverging much higher than observed temperatures, we have been inundated with 'consensus' studies claiming that everything is all on course and "97% of climate scientists agree..."

A background image of climate models versus observed temperature data from satellites and weather balloons. Blue boxes refer to comments from Exxon documents and year; green boxes show names and authors of consensus studies and dates.



Source: Merchants of Consensus: A public battle against Exxon https://papers.srn.com/sol3/papers.cfm?abstract_id=3029939

If lawyers want to sue about something, perhaps they should sue for this misrepresentation to the public by climate modellers, and the trillions of dollars wasted on 'low carbon' initiatives and GHG reduction schemes, based on policies stemming from the predictions of these faulty climate models.

15 SENSIBLE CLIMATE POLICIES — DO TELL?

The law professors make an absurd claim that "It is important to emphasize that exploring climate accountability litigation and related strategies is not an attack on Alberta or the Canadian energy sector. Rather, such strategies can help level the global playing field, rewarding Canadian energy companies that invest in emissions reducing technologies and support sensible climate policies."

The 28 law professors coyly do not state what 'sensible climate policies' they are referring to. The world awaits with bated breath! And Canada and

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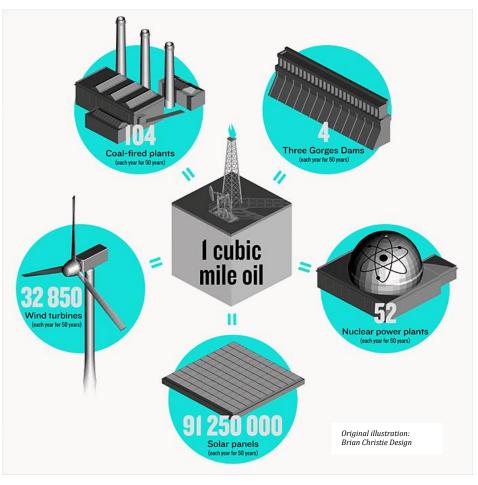
Alberta are in the top seven global competitor suppliers of oil – so of course this is an attack on these energy sectors, by law professors who directly benefit, every day, from the field work by scientific and technical experts. the hundreds of thousands of graduates in the sciences from these law professors' own universities.

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But, in the meantime, let us help these law professors understand what they are up against on energy transition when they refer to 'sensible climate policies'.

The world presently uses three Cubic Miles of Oil Equivalent energy every year. ONE of those Cubic Miles of Oil (CMO) is Oil. What does that mean?³⁵

"One dramatic
way of portraying their
results is to ask how
many alternative energy
sources—say coal-fired
plants or solar panels—
it would take to produce
the equivalent of one
CMO....Prepare for your



mind to be wonderfully sobered. To obtain in one year the amount of energy contained in one cubic mile of oil, each year for 50 years we would need to have produced the numbers of dams, nuclear power plants, coal plants, windmills, or solar panels shown here."

"Assumptions: The Three Gorges Dam is rated at its full design capacity of 18 gigawatts. A nuclear power plant is postulated to be the equivalent of a 1.1-GW unit at the Diablo Canyon plant in California. A coal plant is one rated at 500 megawatts. A wind turbine is one with a 100-meter blade span and rated at 1.65 MW. A solar panel is a 2.1-kilowatt system made for home roofs. In comparing categories, bear in mind that the average amount of time that power is produced varies among them, so that total energy obtained is not a simple function of power rating."

³⁵ https://spectrum.ieee.org/energy/fossil-fuels/joules-btus-quads-lets-call-the-whole-thing-off

16 CASE DISMISSED — ON GROUNDS OF NONSENSE, NOT NUISANCE

There is a strong likelihood that the court will decide the claim is not justiciable (capable of adjudication by a court) and will dismiss the action without going to trial. Still, there would be legal costs to be paid by someone – likely the city plaintiffs – meaning this is just a means of **cashing up** lawyers **at taxpayers' expense, for NO BENEFIT**.

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If the climate is harmed, global climate is not a legal entity subject to the jurisdiction of the Canadian courts. Although oil companies are legal entities and can be sued, all the oil sold in Canada is not the cause of planetary climate change to any appreciable degree, and its benefits far outweigh any harm its use in Canada might cause.

"China's GHG emissions in 2016 were 9,114 Mt (according to British Petroleum data). In other words, China emits more in one month than Canada does all year. The average growth in emissions in China over the past decade is 202 Mt per year. Thus, Canada's total emissions represent about three and a half months of China's emissions growth. If someone one could instantaneously wipe Canada off the map, so that it produced zero emissions forever after, this would have a modest-to-negligible effect on global carbon dioxide concentrations in the atmosphere in 2100, and it would make no difference whatsoever as to whether the IPCC emissions reduction targets (i.e. 1.5 degrees or 2 degrees C.) were met."36

Returning to the law professors' analogy of cigarettes, beyond being addictive, cigarettes are not useful or beneficial or necessary to anyone. Likewise, opioids sold illegally, without prescription. On the other hand, oil is useful, indeed still essential, and is not addictive. No one is addicted to use a car instead of public transit, or to take air flights or heat their homes. "I – a citizen - am personally harmed in my body if I become addicted to opioids or cigarettes, and I become a burden on the health care system, but not if I choose to drive to work or heat my home in winter."

17 CONCLUSION — BE CAREFUL WHAT YOU WISH FOR -YOU MIGHT GET IT

Perhaps instead of suing companies that provide society with essential energy, raw materials and production, these law professors should be sending

³⁶ https://blog.friendsofscience.org/wp-content/uploads/2019/05/Futile-Folly-FINAL.pdf

them thank you notes and teaching their students some gratitude and energy literacy.

We have a number of reports on energy, GHG reduction, energy transition, net-zero, and related topics that we hope people will review. (See links below)

We strongly oppose any climate accountability legislation, except that against those who have hyped and misrepresented climate change and foisted expensive, unreliable wind and solar on unsuspecting taxpayers for the past 40 years. This likely falls under existing laws related to market manipulation, deception and etc. We are not lawyers, but scientists and Professional Engineers, making the case for evidence-based analysis of climate and energy policies...or lawsuits.

FRIENDS OF SCIENCE SOCIETY

Climate Change Your Mind

https://blog.friendsofscience.org/2019/05/01/climate-change-your-mind-rebutting-canadian-governments-climate-report/

The Stakes Are Too High to be Tricked by the Numbers

https://blog.friendsofscience.org/2019/06/19/the-stakes-are-too-high-to-be-tricked-by-the-numbers/

Futile Folly: Canada's Climate Policy Goals in the Global Context https://blog.friendsofscience.org/2019/05/05/futile-folly-canadas-climate-policy-goals-in-the-global-context/

Ontario Government Climate Legacy

https://blog.friendsofscience.org/2019/06/28/the-ontario-government-climate-legacy/

Look Before You Leap into Climate Emergency Mode

https://blog.friendsofscience.org/2019/05/13/look-before-you-leap-into-climate-emergency-mode/

Shocking Reality

https://blog.friendsofscience.org/2019/06/19/shocking-reality-electrification-and-decarbonization-net-zero-pathway-toeconomic-and-energy-catastrophe/

Climate Science Basic Issues

https://blog.friendsofscience.org/2018/09/29/climate-change-some-basic-issues/?highlight=Don%20Morton

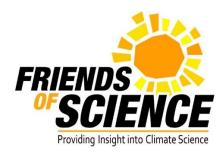
In the Dark on Renewables

https://blog.friendsofscience.org/wp-content/uploads/2018/11/In-the-Dark-on-Renewables-FINAL-Nov-18-2018.pdf

Transition to Reality

https://www.thegwpf.org/energy-policy-needs-to-transition-to-reality/

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About

Friends of Science Society is an independent group of earth, atmospheric and solar scientists, engineers, and citizens who are celebrating its 16th 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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